

Financial reporting developments

A comprehensive guide

Share-based payment

(after the adoption of ASU 2018-07,
*Improvements to Nonemployee Share-
Based Payment Accounting*)

June 2019

To our clients and other friends

This publication is designed to help entities apply the guidance in Accounting Standards Codification (ASC) 718, *Compensation – Stock Compensation*, which addresses the accounting for share-based payment transactions. It reflects our latest guidance on common practice issues.

This edition assumes that an entity has adopted Accounting Standards Update (ASU) 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*. ASU 2018-07 simplified the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions that are highlighted in this publication, and consolidated the guidance for both employees and nonemployees in ASC 718.

This edition also assumes that an entity has adopted ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, and ASU 2017-09, *Scope of Modification Accounting*.


Entities that have not yet adopted ASU 2018-07 should refer to our Financial reporting developments (FRD) publication, *Share-based payment (before the adoption of ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting)*. That publication includes guidance for entities before and after adoption of ASU 2016-09.

This publication is intended to help users understand the accounting for share-based payments and assess the effect that share-based payments may have on an entity's financial statements. Section 1 provides a high-level overview of the accounting for share-based payments. The remainder of this publication describes the accounting for share-based payments in detail.

Throughout this publication, we have included excerpts from ASC 718 and other ASC topics (presented in shaded boxes), followed by our interpretations of that guidance (EY comments made within the guidance are included in bracketed text).

All income tax-related topics, including the income tax accounting considerations related to share-based payments, are included in our FRD on ASC 740, *Income taxes*. All earnings-per-share-related topics, including accounting for the effects of share-based payments on earnings per share, are included in our FRD on ASC 260, *Earnings per share*.

Our accounting, tax, valuation and people advisory services professionals are available to assist you in understanding and complying with the accounting requirements for share-based payments and to help you consider the possible effect on your company's compensation strategy and plan design.

The logo for Ernst & Young LLP, featuring the company name in a stylized, handwritten-style script.

June 2019

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Notice to readers:

This publication includes excerpts from and references to the FASB Accounting Standards Codification (the Codification or ASC). The Codification uses a hierarchy that includes Topics, Subtopics, Sections and Paragraphs. Each Topic includes an Overall Subtopic that generally includes pervasive guidance for the topic and additional Subtopics, as needed, with incremental or unique guidance. Each Subtopic includes Sections that in turn include numbered Paragraphs. Thus, a Codification reference includes the Topic (XXX), Subtopic (YY), Section (ZZ) and Paragraph (PP).

Throughout this publication references to guidance in the codification are shown using these reference numbers. References are also made to certain pre-codification standards (and specific sections or paragraphs of pre-Codification standards) in situations in which the content being discussed is excluded from the Codification.

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1 Overview

1.1 Background

The accounting for share-based payment transactions is codified in the Financial Accounting Standards Board (FASB or Board) Accounting Standards Codification (ASC) Topic 718, *Compensation – Stock Compensation*. ASC 718 addresses the accounting for:

- ▶ Employee share-based compensation (previously addressed in FASB Statement No. 123 (revised 2004), *Share-Based Payment* (Statement 123(R))
- ▶ Nonemployee share-based compensation (previously addressed in ASC 505-50, *Equity – Equity-Based Payments to Non-Employees*)
- ▶ Employee stock ownership plans (ESOPs) (previously addressed in American Institute of Certified Public Accountants (AICPA) Statement of Position 93-6, *Accounting for Employee Stock Ownership Plans*, the accounting for ESOPs is not discussed in this publication)

The guidance in ASC 718 and IFRS 2, *Share-based Payment*, is largely converged. The more significant differences between ASC 718 and IFRS 2 are described in our *US GAAP/IFRS Accounting Differences Identifier Tool* publication, which is updated periodically.

1.1.1 Issuance of ASU 2018-07 (added December 2018)

The FASB issued Accounting Standards Update (ASU) 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*, in June 2018. The guidance expands the scope of ASC 718 to include share-based payments granted to nonemployees in exchange for goods or services used or consumed in an entity's own operations and supersedes the guidance in ASC 505-50. While many aspects of the employee and nonemployee share-based payment models are now aligned, some differences may exist, including the cost attribution model (see section 4.1) and the valuation of options (see section 7.3.2).

The guidance also provides nonpublic entities certain practical expedients that are available for employee awards when accounting for awards to nonemployees, but requires entities to use the same accounting policies for awards to both employees and nonemployees.

The guidance is effective for public business entities (PBEs) in annual periods beginning after 15 December 2018, and interim periods within those annual periods. For all other entities, it is effective in annual periods beginning after 15 December 2019, and interim periods within annual periods beginning after 15 December 2020. See section 12.4 for details on transition.

This publication assumes that ASU 2018-07 has been adopted. See our Financial Reporting Developments (FRD), *Share-based payment (before the adoption of ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting)*, for accounting before the adoption of ASU 2016-09 and ASU 2018-07.

1.2 Scope

ASC 718 applies to share-based payments issued to employees and nonemployees in exchange for goods or services to be used or consumed in a grantor's own operations and share-based payments issued by an investor to employees and nonemployees of an equity method investee in exchange for goods or services used or consumed in the investee's operations. Generally, share-based payments granted to common law employees and most independent directors (for their services as directors) are subject to the accounting model for employee awards in ASC 718. ASC 718 refers to all recipients collectively as grantees, except

when specific provisions apply to employees or nonemployees in which case the applicable noun is used. Throughout this publication, any reference to “employees” or “nonemployees” is applicable only to those specific types of recipients. Otherwise, this publication generically refers to all recipients as “grantees.”

The scope of ASC 718 is discussed in section 2.

1.3 The modified grant-date approach

Under the “modified grant-date” approach described in ASC 718, the fair value of an equity-classified award (the accounting for liability-classified awards is discussed in sections 1.9 and 5) is estimated on the grant date without regard to service or performance conditions. The fair value is recognized (generally as compensation cost¹) over the service period for all awards that vest. The term “vest” is the point in time at which the grantee has earned the rights to receive or retain the award. Compensation cost² is not recognized for awards that do not vest³ because service or performance conditions are not satisfied.

Illustration 1-1: Modified grant-date approach

An entity grants 100 options with a fair value of \$10 per option (\$1,000 in total) subject to a requirement that the individual provides two years of service to earn the award (i.e., vesting is subject to an explicit service condition). The entity’s accounting policy is to estimate the number of forfeitures expected to occur.

Under the modified grant-date approach, the likelihood of the award vesting does not affect the estimated fair value of the award, but it does affect whether that fair value ultimately is recognized in the financial statements. If the award vests, the entity recognizes \$1,000 in compensation cost over the two-year period. If the options qualify for a tax deduction on exercise, the tax benefit associated with the recognized compensation cost is recognized as an income tax benefit and a deferred tax asset over the two-year service period. If the award does not vest (because the grantee fails to provide the two-year service), no compensation cost or tax benefit is recognized.

The measure of compensation cost to be recognized over the service period can be expressed as the price (i.e., fair value) of each award times the quantity of awards expected to vest. While service conditions do not affect the price (\$10 in this example), they do affect the quantity of awards recognized (100 options in this example). The quantity of awards is adjusted as the estimate of the number of awards that will vest changes.

Because the grant involved only one grantee in this example, the quantity of awards that ultimately will be recognized is either zero or 100. However, as discussed in section 1.6.2, if an entity’s accounting policy is to estimate the number of forfeitures expected to occur, the entity must estimate the number of awards that will vest and recognize compensation cost only for those awards.⁴ Those estimates must be evaluated each reporting period and adjusted, if necessary, by recognizing the cumulative effect of the change in estimate on compensation cost recognized in prior periods (to adjust the compensation cost recognized to date to the amount that would have been recognized if the new estimate of forfeitures had been used since the grant date).

¹ ASC 718-10-25-2C requires that fair value of a nonemployee share-based payment be recognized as an asset or expense in the same manner as if the grantor had paid cash for the goods or services.

² We use the term “compensation cost” rather than “compensation expense” throughout this publication because in some cases the compensation cost from a share-based payment to a grantee is capitalized (e.g., in inventory or a self-constructed fixed asset).

³ The stated vesting provisions of an award often establish the employee’s requisite service period or the nonemployee’s vesting period. In certain circumstances, the employee’s requisite service period or nonemployee’s vesting period can differ from the service or performance vesting periods, as discussed later in this section.

⁴ In accordance with ASC 718, entities may elect to account for forfeitures as they occur (e.g., when an employee leaves the entity) or estimate forfeitures and adjust the estimate when it is likely to change.

Some awards will vest or become exercisable only if specified performance conditions are satisfied. The performance condition could be related to the grantee's performance or the grantor's performance (or the performance of a portion of the grantor's operations). Similar to service vesting conditions, performance vesting conditions also generally affect the quantity of awards recognized, rather than price. That is, failure to satisfy the performance condition will result in no compensation cost being recognized by the entity. In some cases, performance conditions may affect other terms of an award (e.g., the exercise price of an option), and in those cases, the achievement of performance conditions could affect the fair value of the award (see section 4.4.2.4).

If exercisability is dependent on the achievement of a specified share price or return on the share price (e.g., share-price appreciation plus dividends), either in absolute terms or relative to the share price or share return of other entities, that condition (defined as a "market" condition in ASC 718) is incorporated into the grant-date valuation of the award but is not used in determining the quantity of awards for which compensation cost is recognized. Compensation cost based on that fair value is recognized even if the market condition is not satisfied and the award never becomes exercisable (as long as the grantee has completed the service underlying the award, if any). This is different from the accounting for awards with service or performance conditions that are not achieved, in which case no compensation cost is recognized. However, the grant-date value of an award with a market condition is less than the value of an otherwise comparable award without a market condition (i.e., the value is discounted for the possibility that the market condition will not be achieved).

The accounting for share-based payments becomes more complex when the terms include a combination of service, performance or market conditions. Section 4 discusses the recognition of share-based payments under ASC 718 in more detail.

1.4 Measurement of share-based awards

The fair value of equity-classified instruments issued to grantees generally should be estimated on the grant date in accordance with ASC 718. Although the objective of ASC 718 is to recognize the value of the goods or services to be received in exchange for the equity instruments granted, the fair value of the share-based payment is generally more readily determinable than the fair value of the goods or services to be received. Further, compensation cost should be measured on the grant date because (1) a conditional promise to issue an equity instrument exists on the grant date, and (2) that is when the parties have a mutual understanding of the terms of the award, among other reasons.

The measurement date for share-based payments is discussed in section 3. The valuation of share-based payments is discussed in section 6. The use of option-pricing models to value options is discussed in section 7.

1.4.1 Option valuation

While fair value may be readily determinable for certain share-based payment awards, market quotes are not available for long-term, nontransferable options. Because observable market prices of identical or similar instruments in active markets are not available, the fair value of an option generally must be estimated using an option-pricing model.

ASC 718 does not prescribe the use of a specific option-pricing model. However, it requires that entities use an option-pricing model that takes into account, at a minimum, the following six inputs:

- ▶ The exercise price of the option

- ▶ The expected term of the option, taking into account both the contractual term of the option and the effects of grantees' expected exercise and post-vesting service termination behavior⁵
- ▶ The current price of the underlying share
- ▶ The expected volatility of the price of the underlying share
- ▶ The expected dividends on the underlying share
- ▶ The risk-free interest rate(s) for the expected term of the option

The requirement to use the six input assumptions above has led many entities to use the Black-Scholes-Merton formula to estimate the fair value of options. However, the Black-Scholes-Merton formula or other closed-form option-pricing models that require the use of single estimates of expected term, expected volatility, the risk-free interest rate and expected dividends may not be the best model to estimate the fair value of certain options.

Closed-form option-pricing models are commonly used to value transferable options. However, when options are not transferable, as is typically the case with employee options, grantees frequently exercise them before expiration for numerous reasons, including a desire to diversify their risk and the need to finance personal expenditures. While closed-form option-pricing models may be adapted to address the characteristics of nontransferable options, such adaptations typically require simplifying assumptions that could result in measurement error.

Additionally, closed-form option-pricing models do not allow for the use of dynamic assumptions about expected term, interest rates, expected volatility or expected dividends. Instead, a single input must be used for each of these assumptions.

Because of the limitations of closed-form models, ASC 718 indicates that the use of a more complex lattice model (e.g., a binomial model) that will take into account expected grantee exercise patterns based on changes in the entity's share price and other variables, and allow for the use of other dynamic assumptions, may result in a better valuation when the data necessary to develop the inputs for the calculations is available.

Lattice models and the Black-Scholes-Merton formula are conceptually the same. The key difference is the flexibility of the lattice models. For example, the likelihood of an option being exercised early increases as the intrinsic value of that option increases. Additionally, many grantees choose to exercise options with significant intrinsic value shortly after those options vest. Also, when the term of an option truncates upon termination (e.g., the grantee may have 90 days to exercise a vested option after termination of employment or ceasing to provide goods or services to the entity), the grantee may exercise the options early upon such event. In addition, some grantees may be subject to "blackout" periods during which the grantee cannot exercise options.

All of these factors can be modeled using a lattice model, which allows for the use of dynamic assumptions about expected exercise behavior and post-vesting service termination behavior, as well as other assumptions used in option-pricing models (e.g., the term structures of interest rates and volatilities can be incorporated into such models). Because of this flexibility, the FASB believes that lattice models often will provide a better estimate of an option's fair value than a closed-form model such as the Black-Scholes-Merton formula.

⁵ As discussed in section 7.3.2, although awards issued to employees are required to be valued using an estimate of the expected term, awards issued to nonemployees can be valued using the expected term or the contractual term. If the grantor cannot estimate the expected term for a nonemployee award, it should use the contractual term.

1.4.1.1 Considerations for nonpublic entities

ASC 718 also requires that nonpublic entities measure equity-classified awards at fair value unless it is not possible to make a reasonable estimate of fair value. If a nonpublic entity cannot reasonably estimate the expected volatility of its shares, it must use an alternative method (defined as “calculated value”) that uses the historical volatility of an appropriate industry sector index. ASC 718 requires measuring the volatility of the appropriate industry sector index based on daily historical values of the index over a period equal to the expected term of the option being valued.

1.5 Employee stock purchase plans

Employee stock purchase plans (ESPPs) generally provide a broad group of employees the right to acquire employer shares through payroll deductions. A typical plan (e.g., one that qualifies for favorable tax treatment under Section 423 of the Internal Revenue Code, also known as a Section 423 Plan) allows employees to buy the employer’s shares over a period of time (e.g., two years) at a discount from the market price at the date of grant. Many ESPPs provide for (1) purchases at a discount from the current share price and (2) option features. ASC 718 provides specific criteria to determine whether an ESPP would be considered compensatory or noncompensatory. These criteria and the accounting for compensatory ESPPs are discussed in section 11.

1.6 Recognition of compensation cost

ASC 718 requires that the cost of share-based payments be recognized over the employee’s requisite service period or the nonemployee’s vesting period. As that cost is recognized, equity or a liability is credited for a like amount. That is, the equity instrument or liability is only recognized as goods are received or services are rendered (recognizing the full fair value of the instrument and an offsetting deferred compensation contra-equity or contra-liability is not permitted).

An employee’s requisite service period is the period of time over which an employee must provide service in exchange for an award under a share-based payment arrangement and generally is presumed to be the vesting period. However, if performance or market conditions (see section 1.3) affect either the exercise price or the vesting date, the service period used for attribution purposes must be consistent with the assumptions used in estimating the fair value of the award (e.g., the estimated timeframe that will be required to achieve the performance or market condition). Estimating an employee’s requisite service period and the recognition of compensation cost are discussed in section 4.

1.6.1 Determining the employee’s requisite service period or nonemployee’s vesting period

The requisite service period for an employee award must be determined based on an analysis of all terms and conditions of an equity-based award. The requisite service period may be:

- ▶ **Explicit** – An explicit service period is directly stated in the terms of the agreement (e.g., if the award vests after three years of continuous service, the explicit service period is three years).
- ▶ **Implicit** – An implicit service period is inferred from the terms of the arrangement, usually from a performance condition (e.g., if the award vests when earnings per share (EPS) increase by a specified amount, and it is expected to take four years to achieve that level of EPS, the implicit service period is four years) or other terms of an award that render the explicit service period nonsubstantive (e.g., an award provides for acceleration of vesting on retirement and the employee currently is eligible for retirement or will become eligible for retirement prior to the end of the explicit service period).
- ▶ **Derived** – A derived service period is based on the valuation technique used to value an award with a market condition (e.g., if an option becomes exercisable when the share price achieves a specified level, and it is expected to take five years to achieve that level, the derived service period is five years).

While an employee share-based payment may have more than one explicit, implicit or derived service period, it will have only one requisite service period for accounting purposes. That is, if an award has multiple conditions and related service periods, the entity must determine the period of time over which compensation cost will be recognized.

When the initial estimate of the requisite service period is based on an explicit or implicit service period, the requisite service period is adjusted for changes in the expected outcomes of the related service or performance conditions. Such a change is recognized prospectively over the remaining requisite service period, unless the fair value or number of awards expected to vest also changes (e.g., as a result of a change in the performance condition expected to be achieved when achievement of different performance conditions results in the vesting of different quantities of shares). In this case, the cumulative effect of the change on past and current periods is recognized in the period of the change in estimate.

However, *derived* requisite service periods are never changed even if the grantor's estimate of the expected period required to achieve the market condition changes, except that if the market condition is achieved (and the award vests or becomes exercisable) before the end of the requisite service period, any remaining unrecognized compensation cost is recognized immediately when the market condition is achieved.

ASC 718 does not address how to determine the vesting period for a nonemployee share-based payment and, therefore, judgment will be required to determine the vesting period over which to recognize compensation cost. The guidance requires that the compensation cost be recognized in the same period as if the grantor had paid cash for the goods or services. We believe the above concepts may also be applied to determine the vesting period for a nonemployee award. That is, the nonemployee award may have an explicit, an implicit or a derived service period.

1.6.2 Accounting for forfeitures

Forfeitures generally result from the failure to satisfy service or performance conditions. A grantor of employee or nonemployee awards may elect to either account for forfeitures as they occur (e.g., when an employee leaves the entity or a nonemployee stops providing goods or services to the entity) or to estimate forfeitures and adjust the estimate when it is likely to change. The accounting policy election only applies to the assessment of whether a service condition will be met.

If a grantor elects to estimate forfeitures, it should adjust the estimates when they are likely to change and when actual forfeitures differ from estimates, resulting in the recognition of compensation cost only for awards that actually vest. The effect of a change in estimated forfeitures is recognized through a cumulative catch-up adjustment (i.e., the cumulative effect of applying the change in estimate retrospectively is recognized in the period of change) and is included in compensation cost in the period of the change in estimate. That is, the cumulative compensation cost recognized to date is adjusted to the amount that would have been recognized if the new estimate of forfeitures had been used since the service inception date.

If a grantor elects to account for forfeitures as they occur, compensation cost previously recognized for an award that is forfeited because of a failure to satisfy a service condition is reversed in the period of the forfeiture.

Entities are required to make this election at the entity level (i.e., for all share-based payments an entity grants), and may elect to make separate accounting policies for employee and nonemployee awards.

1.6.3 Recognition of compensation cost – awards with graded vesting

Many awards are subject to graded vesting (i.e., portions of the award vest at different times during the vesting period, as opposed to cliff vesting, in which all awards vest at the end of the vesting period).

For employee awards, an entity may elect either the accelerated recognition method or a straight-line recognition method for awards subject to graded vesting based only on a service condition, regardless of how the fair value of the award is measured (i.e., each vesting tranche is valued as a separate award or all vesting tranches in the aggregate are valued as one award using an average expected term). However, compensation cost recognized to date must be at least equal to the measured cost of the vested tranches. The choice of attribution method is a policy decision that should be applied consistently to all employee share-based payments subject to service conditions. However, this choice does not extend to awards that are subject to performance or market conditions. The measured compensation cost for an award subject to performance or market conditions must be recognized ratably for each vesting tranche from the service inception date to the end of the employee's requisite service period.

An entity's policy election for recognizing compensation cost for awards with graded vesting does not apply to nonemployee awards because compensation cost for nonemployee awards is recognized in the same period and in the same manner as if the entity paid cash for the goods provided or services rendered (see section 4.1).

1.7 Modifications (updated October 2017)

ASC 718 indicates when an entity must apply modification accounting following a change to the terms and/or conditions of an award. An entity must apply modification accounting to a share-based payment award unless all of the following are the same immediately before and after the change:

- ▶ The award's fair value (or calculated value or intrinsic value, if those measurement methods are used)
- ▶ The award's vesting conditions
- ▶ The award's classification as an equity or a liability instrument

When modification accounting is applied, it should be treated as an exchange of the original award for a new award and generally results in total compensation cost equal to the grant-date fair value of the original award, plus the incremental value of the modification to the award. Under ASC 718, the calculation of the incremental value is based on the excess of the fair value of the new (modified) award based on current circumstances over the fair value of the original award measured immediately before its terms are modified *based on current circumstances*. That is, the original (pre-modification) award will be valued based on current assumptions, without regard to the assumptions made on the grant date.

The model described above must be further expanded to deal with the modification of vesting conditions, which, as discussed earlier, are not incorporated into the estimate of fair value. That model generally provides for the recognition of compensation cost based on the grant-date fair value of the original award or the modification-date fair value of the modified award, depending on whether the original or modified vesting conditions are expected to be met. ASC 718 states that the measured cost of a modified award generally cannot be less than the grant-date fair value of an equity classified award, unless at the modification date the vesting condition under the original terms was not expected to be satisfied. In that case, the fair value of the modified award is recognized if the modified award eventually vests. The fair value of the original award is no longer relevant, even if the original vesting condition is subsequently satisfied.

The accounting for modifications of share-based payments is discussed further in section 8.

1.8 Cash settlements

A cash settlement of a share-based payment award classified as an equity instrument is accounted for as the repurchase of an equity instrument at its fair value. Any excess of the amount paid by the grantor to settle such an award over the settlement-date fair value of the award (*based on current assumptions*, including the current estimated expected term) is recognized as additional compensation cost. Further,

if the settled award was not fully vested, the settlement would effectively accelerate vesting and require the recognition of any unrecognized compensation cost associated with the award. Finally, a pattern of cash settling equity awards may suggest that the substantive terms of the awards provide for cash settlement and, as a result, liability (variable) accounting may be required.

The accounting for settlements and cancellations of share-based payments is discussed in greater detail in sections 8.9 and 8.10, respectively.

1.9 Liabilities

1.9.1 Classification

ASC 718 requires that entities classify as liabilities certain types of awards, including:

- ▶ Awards containing conditions that affect vesting, exercisability or other conditions relevant in measuring fair value that are not market, performance or service conditions (e.g., an award with an exercise price indexed to the price of gold or some other commodity, even if the commodity is used in or is an output of the grantor's operations)
- ▶ Awards that are required to be classified as liabilities under ASC 480, *Distinguishing Liabilities from Equity* (e.g., a freestanding written put option in which the grantor provides the grantee the right to sell shares back to the grantor for a specified price and forward purchase contracts in which the grantor and grantee agree that the grantee will sell and the grantor will purchase the shares for a specified price on a specified date), except as described below
- ▶ Certain awards subject to repurchase features are classified as liabilities. An instrument, or the shares underlying the instrument, may be subject to repurchase as a result of grantee put rights or grantor call rights. The award must be classified as a liability under ASC 718 if either:
 - ▶ The repurchase feature permits the grantee to avoid bearing the risks and rewards normally associated with equity share ownership for a reasonable period of time (i.e., six months or more) from the date the share is issued when an option is exercised or the share vests, or
 - ▶ It is probable that the grantor would prevent the grantee from bearing those risks and rewards for a reasonable period of time (i.e., six months or more) from the date the share is issued when an option is exercised or a share vests

If neither of these conditions is met, the award initially is classified as equity.

If the grantee has the right to require the entity to purchase an award for cash and the award is classified as equity under ASC 718 (e.g., the grantee has a fair value put on shares underlying an option that may not be exercised until six months or more after option exercise), the SEC's guidance in Accounting Series Release No. 268, *Redeemable Preferred Stocks* (ASR 268), and Staff Accounting Bulletin (SAB) Topic 14.E require "temporary equity" classification of the redemption value of that award (see section 5.3).

The determination of whether an award should be classified as a liability and the accounting for such awards is discussed in section 5.

1.9.2 Measurement of liabilities – public entities

ASC 718 requires that public entities measure share-based awards classified as liabilities at *fair value* at each reporting date. For example, a cash-settled stock appreciation right (SAR), a commitment by the grantor to pay the grantee in cash an amount by which the entity's share price on a specified future date exceeds a stated strike price (effectively a net-cash settled written call option), is classified as a liability. The same option-pricing approach is used to estimate the fair value of that cash-settled SAR as is used

for an economically equivalent option. That fair value is remeasured each reporting period and the pro rata vested portion of the award is recognized as a liability. Over its term, the time value of the SAR will decay (i.e., at settlement, the grantee will receive only intrinsic value). Accordingly, under the model in ASC 718, the time value of a liability initially will be recognized as compensation cost, but will be reversed over time (albeit by an irregular pattern reflecting the changes in time and the volatility of the underlying share) as the settlement date approaches. At expiration, the cumulative compensation cost will not differ from that which would result under the intrinsic-value method, although the amounts recognized in each period will differ.

1.9.3 Measurement of liabilities – nonpublic entities

Nonpublic entities may elect to account for liability-classified awards using:

- ▶ The fair-value method (or the calculated-value method described in section 1.4.1.1, using an appropriate industry sector index to estimate volatility if the entity cannot reasonably estimate its own volatility)
- ▶ The intrinsic-value method

Regardless of the method used, liability-classified awards must be remeasured at each reporting date until the award is settled. The choice of measurement method is an accounting policy election and should be applied consistently to all liability-classified awards.

A nonpublic entity's policy election applies to all of its liability-classified awards, including those to both employees and nonemployees. If a nonpublic entity has granted nonemployee liability-classified awards but has not granted employee liability-classified awards, upon the adoption of ASU 2018-07, it can make a one-time policy election to measure liability-classified employee and nonemployee awards at intrinsic value. An evaluation of whether intrinsic value is preferable to fair value is not required.

1.10 Income taxes

Under ASC 718, the income tax effects of share-based payments are recognized for financial reporting purposes only if such awards would result in deductions on the entity's income tax return.⁶ Generally, the amount of income tax benefit recognized in any period is equal to the amount of compensation cost recognized multiplied by the entity's statutory tax rate. A corresponding deferred tax asset also is recognized.

Our FRD, *Income taxes*, includes a comprehensive discussion about the accounting for the income tax effects of share-based payments in section 22.

1.11 Earnings per share

Share-based payments have several unique characteristics that can have a significant effect on EPS calculations. Under ASC 260, *Earnings Per Share*, options and nonvested shares generally are not included in the calculation of basic EPS (even though nonvested shares may be legally outstanding). However, these equity awards are generally factored into the computation of diluted EPS.

Our FRD, *Earnings per share*, includes a comprehensive discussion about the effects of share-based payments on EPS.

⁶ In the US, nonqualified options result in a tax deduction to the grantor, while incentive stock options (ISOs), which can only be issued to employees, typically do not. Under a nonqualified option plan in the US, the grantor generally receives a tax deduction in an amount equal to the excess of the market price of the shares on the date of exercise over the exercise price (i.e., the intrinsic value).

2 Scope

2.1 Transactions subject to ASC 718

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Scope and Scope Exceptions

718-10-15-3

The guidance in the Compensation – Stock Compensation Topic applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in the grantor's own operations by **issuing** (or offering to issue) its shares, share options, or other equity instruments or by incurring liabilities to an **employee** or a nonemployee that meet either of the following conditions:

- a. The amounts are based, at least in part, on the price of the entity's shares or other equity instruments. (The phrase *at least in part* is used because an **award** of share-based compensation may be indexed to both the price of an entity's shares and something else that is neither the price of the entity's shares nor a **market, performance, or service condition**.)
- b. The awards require or may require **settlement** by issuing the entity's equity shares or other equity instruments.

718-10-15-3A

Paragraphs 323-10-25-3 through 25-5 provide guidance on accounting for share-based compensation granted by an investor to employees or nonemployees of an equity method investee that provide goods or services to the investee that are used or consumed in the investee's operations.

718-10-15-5

The guidance in this Topic does not apply to the following payment transactions:

- a. Subparagraph superseded by Accounting Standards Update No. 2018-07.
- b. Transactions involving equity instruments granted to a lender or investor that provides financing to the issuer.
- c. Transactions involving equity instruments granted in conjunction with selling goods or services to customers as part of a contract (for example, sales incentives) accounted for under Topic 606 on revenue from contracts with customers (specifically, the guidance on consideration payable to a customer in paragraphs 606-10-32-25 through 32-27).

718-10-15-5A

If consideration payable to a customer is payment for a distinct good or service from the customer, then an entity shall account for the purchase of the good or service in the same way that it accounts for other purchases from suppliers as described in paragraph 606-10-32-26. Therefore, share-based payment awards granted to a customer for a distinct good or service to be used or consumed in the grantor's own operations are accounted for under this Topic.

718-10-15-7

The guidance in the Overall Subtopic does not apply to equity instruments held by an employee stock ownership plan.

2.1.1 Issued in exchange for goods or services

ASC 718 applies to share-based payments issued to employees and nonemployees in exchange for goods or services to be used or consumed in a grantor's own operations and share-based payments issued by an investor to employees and nonemployees of an equity method investee in exchange for goods or services used or consumed in the investee's operations (refer to section 2.4 for further details on awards granted by an investor to employees and nonemployees of an equity method investee). The grantee's relationship with the grantor determines how certain provisions are applied. The following are the key differences in accounting for employee and nonemployee awards:

- ▶ Attribution of compensation cost – share-based payments to employees are recognized over the service period, whereas share-based payments to nonemployees are recognized in the same period and in the same manner the entity would if it had paid cash for those goods or services, see section 4.1
- ▶ Measurement of options and similar instruments – share-based payments to employees are measured based on the expected term of the award, whereas share-based payments to nonemployees may be measured based on the expected term, or the entity can elect to use the contractual term as the expected term, on an award-by-award basis, see section 7.3.2

Therefore, determining whether the grantee is an employee or nonemployee is important because the grantee's status determines the accounting for the award.

ASC 718 does not apply to equity or liability instruments issued in exchange for cash or other financial assets (e.g., instruments issued to a lender or investor in a financing transaction) and equity instruments granted in conjunction with selling goods or services to customers. These instruments are accounted for under ASC 606, *Revenue from Contracts with Customers*, as consideration payable to a customer. See our FRD, *Revenue from contracts with customers (ASC 606)*, for further details. However, the guidance states that share-based payments granted to a customer in exchange for a distinct good or service to be used or consumed in the grantor's own operations are accounted for under ASC 718.

While not explicitly stated in ASC 718, we do not believe that this guidance would be applied to awards granted by a subsidiary to grantees of another subsidiary in a consolidated group or to grantees of the parent when reported in the subsidiary's separate financial statements, if those awards are not for goods or services consumed in the grantor subsidiary's operations. This matter is addressed fully in section 2.3.3.

Note:

In March 2019, the FASB proposed new guidance that would require entities to classify and measure share-based payments granted to a customer in a revenue arrangement that are not in exchange for a distinct good or service in accordance with ASC 718. The amount recorded as a reduction of the transaction price would be measured using the grant-date fair value of the share-based payment. Subsequent changes in the measurement of the equity instrument that are due to the form of the consideration (e.g., for a liability-classified award) would not be included in the transaction price and would be recorded elsewhere in the income statement.

Share-based payment awards issued to a customer in exchange for a distinct good or service are already accounted for in accordance with ASC 718. We encourage readers to monitor developments in this area.

2.1.2 Based on or settled in the issuer's shares

ASC 718 applies not only to grants of shares or options, but also to liabilities that are based, at least in part, on the price of the issuer's shares (e.g., SARs payable in cash). As a result of the use of the term "in part," we believe that ASC 718 may apply to certain liabilities that are not settled in shares. For example, an entity may agree to pay the grantee \$10,000 if the entity's share price is above \$20 per share in two years. The fixed amount of cash is not based on the fair value of the grantor's shares. However, whether the \$10,000 is paid is based on the fair value of the grantor's shares. Accordingly, we believe that the arrangement in question must be accounted for as a liability under ASC 718. Because the liability is subject to a market condition, the market condition must be incorporated into the estimate of the fair value of the award.

ASC 718 also applies to any obligation to issue equity instruments in exchange for goods or services to be used or consumed in a grantor's own operations. For example, ASC 718 applies to an obligation to grant shares equal in value to a stated monetary amount on the issuance date (e.g., a stated bonus amount, stated amount to be settled in shares or other share-settled debt, which would be classified as a liability as discussed in section 5.2.1).

Finally, the obligation does not have to be indexed solely to the issuer's shares to be subject to ASC 718. For example, an award indexed to both the value of the issuer's shares and the value of a commodity or some other variable would be in the scope of ASC 718. Further, as discussed in section 5.2.4, if the other variable does not meet the definition of a service, performance or market condition, the award would be accounted for as a liability under ASC 718.

2.1.3 Employee stock ownership plans

ASC 718-40 provides guidance on the accounting for ESOPs, which are US tax-qualified employee stock benefit plans designed to invest primarily in the shares of the sponsoring corporation. In effect, an ESOP is a deferred compensation plan (defined contribution pension plan) similar to a profit-sharing plan in that each participant has a separate account. Periodic employer contributions and plan earnings are allocated to those separate accounts. However, ESOP benefits usually are distributable in shares of the employer, which is not always the case with profit-sharing plans. Grants of awards through vehicles that are similar to ESOPs but do not qualify as such under US tax law are not accounted for under ASC 718-40 but under the general share-based payment accounting literature in ASC 718.

2.1.4 Employee stock purchase plans (including look-back options)

ASC 718 provides certain criteria that must be satisfied for an ESPP to be considered noncompensatory. The criteria are described in detail in section 12.1. Shares sold through plans that are noncompensatory are treated as any other sale of the entity's equity instruments. Plans that do not satisfy the criteria and are deemed to be compensatory are accounted for in accordance with the provisions of ASC 718-50.

The accounting for ESPPs is discussed further in section 12 of this publication.

2.2 Definition of 'employee'

While many provisions of ASC 718 in accounting for share-based payments to employees and nonemployees are now aligned, certain differences remain. As a result, an entity must determine whether the recipient is an employee based on the following definition:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Employee

An individual over whom the grantor of a share-based compensation award exercises or has the right to exercise sufficient control to establish an employer-employee relationship based on common law as illustrated in case law and currently under U.S. Internal Revenue Service (IRS) Revenue Ruling 87-41. A reporting entity based in a foreign jurisdiction would determine whether an employee-employer relationship exists based on the pertinent laws of that jurisdiction. Accordingly, a grantee meets the definition of an employee if the grantor consistently represents that individual to be an employee under common law. The definition of an employee for payroll tax purposes under the U.S. Internal Revenue Code includes common law employees. Accordingly, a grantor that classifies a grantee potentially subject to U.S. payroll taxes as an employee also must represent that individual as an employee for payroll tax purposes (unless the grantee is a leased employee as described below). A grantee does not meet the definition of an employee solely because the grantor represents that individual as an employee for some, but not all, purposes. For example, a requirement or decision to classify a grantee as an employee for U.S. payroll tax purposes does not, by itself, indicate that the grantee is an employee because the grantee also must be an employee of the grantor under common law.

Generally, common law employees (see section 2.2.1) and directors that are elected by shareholders (see section 2.2.3), and who are receiving awards for services as directors, are considered to be employees under ASC 718.

The term “grantee” applies generically to recipients of both employee and nonemployee awards. Throughout this publication, the reference to employees or nonemployees, however, applies only to these types of recipients.

2.2.1 Common law employees

The accounting model for employee awards only applies to awards to individuals who qualify as employees under “common law” (with certain exceptions, refer to sections 2.2.2 through 2.2.4), which also is the basis for the distinction between employees and nonemployee service providers under the current US Internal Revenue Code. While meeting the definition of an employee for purposes of US payroll taxes is indicative of employee status, it is not determinative. That is, if an individual is classified as an employee for US payroll tax purposes, that fact alone does not indicate that the individual is an employee under ASC 718 because the individual must also be a common law employee of the entity. In contrast, if an individual is not classified as an employee for US payroll tax purposes, that fact generally indicates that the individual is not an employee under ASC 718 (see section 2.2.2.1 below for a discussion regarding leased employees).

An individual is an employee if the entity exercises (or has the right to exercise) control over that individual to establish an employer-employee relationship. That relationship should be determined in the US based on common law, as illustrated in case law and Internal Revenue Service (IRS) Revenue Ruling 87-41. In other countries, the determination of whether an employee-employer relationship exists should be made based on the laws of those countries. The FASB noted that an entity also should consistently represent an individual as an employee for all other common law purposes, including US payroll taxes, if applicable. Additionally, we believe that to qualify as a common law employee, the employee services provided must be

substantive. For example, if the employer can exercise “control” over an individual prior to the start of full-time employment, but the individual is not expected to be asked to provide significant services, we believe that the individual would not qualify as an employee prior to beginning full-time employment.

Because there are numerous court cases, revenue rulings and private letter rulings that would establish precedence in applying the common law rules in the US, considerable judgment, as well as consideration of all the relevant facts and circumstances, is necessary to determine whether an individual is a common law employee. Therefore, it is recommended that entities consult their legal counsel in making such a determination. IRS Revenue Ruling 87-41 provides 20 factors, designed as guidelines, for determining whether an employer-employee relationship has been established in the US (see Appendix C).

As indicated earlier, the FASB rejected relying solely on the classification of an individual as an employee for payroll tax purposes because the definition for payroll tax purposes includes certain service providers who are not common law employees. For example, many full-time insurance agents do not qualify as employees under the common-law employee definition, even though these agents may qualify as employees for payroll tax purposes and for participation in various entity-sponsored benefit plans. In those circumstances, the awards should be accounted for as nonemployee awards under ASC 718.

2.2.2 Part-time employees

An individual can provide different services for two different employers and qualify as a common law employee for both employers. This may be the case, for example, when an individual works part-time for two different employers. In some circumstances, an individual may qualify as a common law employee of more than one employer for the same set of services (such as in a leased employee situation, which is discussed further in section 2.2.2.1). In this case, the FASB believes that, in substance, only one employer compensates the worker for that set of services. Consequently, when applying ASC 718, only one entity can qualify as the employer for purposes of granting share-based payments for that set of services.

2.2.2.1 Leased employees and other co-employment arrangements

Under lease or co-employment arrangements, an entity (e.g., a professional employer organization) leases employees to another entity (the lessee). In many situations, the lessor organization is the employer of record for payroll tax purposes. It is not uncommon for leased employees to be granted options by the lessee. In some situations, the leased employees originally were employees of the lessee until the co-employment arrangement was executed. The FASB acknowledged that if certain criteria are met, the lessee should be able to grant options to the leased employee and account for them as awards to employees even though all the usual employee-employer attributes are not in place (e.g., the lessee does not remit payroll taxes to the governmental authorities).

In a lease or co-employment arrangement, the classification of an individual as an employee for payroll tax purposes is not relevant in determining whether the individual is an employee of the lessee for purposes of applying ASC 718. Rather, ASC 718 prescribes specific conditions that must be met for the lessee to account for share-based payments to leased or co-employed individuals as awards to employees.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Employee

A leased individual is deemed to be an employee of the lessee if all of the following requirements are met:

- a. The leased individual qualifies as a common law employee of the lessee, and the lessor is contractually required to remit payroll taxes on the compensation paid to the leased individual for the services provided to the lessee.

- b. The lessor and lessee agree in writing to all of the following conditions related to the leased individual:
 1. The lessee has the exclusive right to grant stock compensation to the individual for the employee service to the lessee.
 2. The lessee has a right to hire, fire, and control the activities of the individual. (The lessor also may have that right.)
 3. The lessee has the exclusive right to determine the economic value of the services performed by the individual (including wages and the number of units and value of stock compensation granted).
 4. The individual has the ability to participate in the lessee's employee benefit plans, if any, on the same basis as other comparable employees of the lessee.
 5. The lessee agrees to and remits to the lessor funds sufficient to cover the complete compensation, including all payroll taxes, of the individual on or before a contractually agreed upon date or dates.

If all the above criteria are met, the lessee's relationship with the leased individual is essentially the same as its relationship with its employees, and the leased or co-employed individual is deemed to be an employee for purposes of applying ASC 718.

2.2.3

Issuance of awards to nonemployee directors

Entities frequently grant share-based payments to nonemployee members of their board of directors in exchange for the directors' services. While nonemployee directors do not meet the definition of an employee described above, the FASB provided an exception in ASC 718 under which share-based payments to qualifying nonemployee directors for their services as directors are required to be accounted for as employee awards under certain circumstances.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Employee

A nonemployee director does not satisfy this definition of employee. Nevertheless, nonemployee directors acting in their role as members of a board of directors are treated as employees if those directors were elected by the employer's shareholders or appointed to a board position that will be filled by shareholder election when the existing term expires. However, that requirement applies only to awards granted to nonemployee directors for their services as directors. Awards granted to those individuals for other services shall be accounted for as awards to nonemployees.

Implementation Guidance and Illustrations

718-10-55-91

Nonemployee directors acting in their role as members of an entity's board of directors shall be treated as employees if those directors were elected by the entity's shareholders or appointed to a board position that will be filled by shareholder election when the existing term expires. However, that requirement applies only to awards granted to them for their services as directors. Awards granted to those individuals for other services shall be accounted for as awards to nonemployees in accordance

with Section 505-50-25. Additionally, consolidated groups may have multiple boards of directors; this guidance applies only to either of the following:

- a. The nonemployee directors acting in their role as members of a parent entity's board of directors
- b. Nonemployee members of a consolidated subsidiary's board of directors to the extent that those members are elected by shareholders that are not controlled directly or indirectly by the parent or another member of the consolidated group.

The FASB's exception cannot be extended by analogy to other nonemployees and does not apply to awards granted to individuals for advisory or consulting services in a non-elected capacity or to nonemployee directors for services outside their role as a director (e.g., legal advice, investment banking advice, loan guarantees).

2.2.3.1 Directors of subsidiaries

Based on our discussions with the FASB staff, we understand that the guidance in ASC 718-10-55-91 (see section 2.2.3) only applies to the directors of a subsidiary in the consolidated financial statements of the parent. That is, if the directors of a subsidiary receive share-based payments of the parent or subsidiary for services provided as a *director* of the subsidiary, that individual must have been appointed or elected by the noncontrolling shareholders of the subsidiary for the awards to be accounted for as employee awards in the parent's *consolidated* financial statements. We understand that to conclude that the individual was elected or appointed by the noncontrolling shareholders, the controlling shareholder must be precluded from voting for the director.

If the subsidiary director was not appointed or elected by the noncontrolling shareholders of the subsidiary, the awards for services as a director of the subsidiary should be accounted for as awards to a nonemployee in the parent's consolidated financial statements. However, in the subsidiary's separate financial statements, if that director was elected by the subsidiary's shareholders, who can include the controlling shareholder, the awards to that director for services as a director should be accounted for as awards to an employee.

The fact that an employee of the parent or subsidiary serves as the director of a subsidiary does not necessarily mean that all awards to that individual are required to be accounted for as awards to a nonemployee. Awards to that individual in connection with the individual's responsibilities as an employee of the parent or subsidiary would be accounted for as awards to an employee in the consolidated financial statements, as discussed in section 2.3.3.

2.2.3.2 Example – options granted to nonemployee directors

Illustration 2-1: Grants to nonemployee directors

Entity X has four nonemployee members on its board of directors. Members of the board have several years of business experience, as well as specific knowledge of and expertise in Entity X's industry. The nonemployee directors are elected by Entity X's shareholders for a three-year term and meet four times a year. Entity X grants each nonemployee director 500 options for each meeting he or she attends. Entity X accounts for the options as employee awards because they were granted to elected nonemployee directors for their services as directors.

One of the nonemployee directors is also an environmental attorney. During the year, Entity X is named as a Potentially Responsible Party (PRP) at a Superfund site. Internal counsel has limited experience in environmental remediation and confers numerous times with the nonemployee director. Before presenting the motion to dismiss Entity X as a PRP, the nonemployee director spends approximately 100 hours consulting with internal counsel. Ultimately, Entity X is successful and is dismissed as a PRP. Entity X grants the nonemployee director 7,500 options for his consulting services. Entity X would account for the 7,500 options as nonemployee awards because the nonemployee director received options for services unrelated to his service as a director.

2.2.3.3 Example – awards granted to members of advisory board

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-90

This Topic defines employee as an individual over whom the grantor of a share-based compensation award exercises or has the right to exercise sufficient control to establish an employer-employee relationship based on common law as illustrated in case law and currently under U.S. Internal Revenue Service (IRS) Revenue Ruling 87-41. An example of whether that condition exists follows. Entity A issues options to members of its Advisory Board, which is separate and distinct from Entity A's board of directors. Members of the Advisory Board are knowledgeable about Entity A's industry and advise Entity A on matters such as policy development, strategic planning, and product development. The Advisory Board members are appointed for two-year terms and meet four times a year for one day, receiving a fixed number of options for services rendered at each meeting. Based on an evaluation of the relationship between Entity A and the Advisory Board members, Entity A concludes that the Advisory Board members do not meet the common law definition of employee. Accordingly, the awards to the Advisory Board members are accounted for as awards to nonemployees under the provisions of this Topic.

2.2.3.4 Example – large grants to nonemployee directors

Illustration 2-2: Grants to nonemployee directors for services other than director services

Entity X has three nonemployee members on its board of directors and has recently changed its bylaws to increase that number to four. Members of the board have several years of business experience, as well as knowledge of and expertise in Entity X's industry. The nonemployee directors are elected by Entity X's shareholders for a three-year term. To entice another individual to join its board, Entity X offered the individual 50,000 options in her initial year of service to the board. Entity X otherwise only grants each nonemployee director 10,000 options on an annual basis. Entity X must determine how many of the 50,000 options issued to this nonemployee director were for her services as a director and how many, if any, were for other services that may be provided. Whether Entity X accounts for all or a portion of the options as awards to an employee will depend on the specific facts and circumstances.

Factors that Entity X should consider in determining what portion of the 50,000 options is for services as a nonemployee director or for other services include the following:

- ▶ Whether the nonemployee director provides services in a capacity other than as a director and, if so, the amount of other compensation provided for those services and the fair value of those services
- ▶ Any formal entity policies that establish the number of options that directors are entitled to receive for their services (entities may establish the number of options to be granted based on (1) a specified number per year of service, (2) the number of board meetings attended, (3) the number and nature of board committee meetings attended, or (4) other director responsibilities)
- ▶ The number, terms and timing of option awards received by other directors
- ▶ Management's and the board's understanding and representation of the services to be provided by the director and the approval process required for the award

In this example, if the director does not provide any nonemployee service to the entity, we generally would presume that all the options should be accounted for under the employee model. However, if the director also provides nonemployee services to the entity, the entity would have to consider all the above factors in determining whether and how many of those awards should be accounted for as awards to a nonemployee.

2.2.4 Awards to employees of partnerships and similar entities

ASC 718's definition of share-based payment arrangement is:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Share-Based Payment Arrangements

An arrangement under which either of the following conditions is met:

- a. One or more suppliers of goods or services (including employees) receive awards of equity shares, equity share options, or other equity instruments.
- b. The entity incurs liabilities to suppliers that meet either of the following conditions:
 1. The amounts are based, at least in part, on the price of the entity's shares or other equity instruments. (The phrase at least in part is used because an award may be indexed to both the price of the entity's shares and something other than either the price of the entity's shares or a market, performance, or service condition.)
 2. The awards require or may require settlement by issuance of the entity's shares.

The term shares includes various forms of ownership interest that may not take the legal form of securities (for example, partnership interests), as well as other interests, including those that are liabilities in substance but not in form. Equity shares refers only to shares that are accounted for as equity.

Also called share-based compensation arrangements.

As a result, the definition of shares includes instruments that represent a legal equity interest in a partnership, limited liability partnership or limited liability corporation (LLC). For purposes of accounting for equity-based compensation (e.g., awards of capital interests or profits interests) granted by a pass-through entity (e.g., partnership or LLC), an individual who provides services to the pass-through entity is considered an employee of the pass-through entity if the individual qualifies as a common law employee of that entity. For purposes of making that determination, the fact that the pass-through entity does not classify the individual as an employee for payroll tax purposes (because the grantee is a partner or an owner of such pass-through entities) is not relevant.

Refer to section 5.2.8 for further discussion on awards of profit interests and similar interests granted by a pass-through entity.

2.3

Certain transactions with related parties and other economic interest holders (updated October 2017)

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Scope and Scope Exceptions

718-10-15-4

Share-based payments awarded to a grantee by a related party or other holder of an **economic interest in the entity** as compensation for goods or services provided to the reporting entity are share-based payment transactions to be accounted for under this Topic unless the transfer is clearly for a purpose other than compensation for goods or services to the reporting entity. The substance of such a transaction is that the economic interest holder makes a capital contribution to the reporting entity, and that entity makes a share-based payment to the grantee in exchange for services rendered or goods received. An example of a situation in which such a transfer is not compensation is a transfer to settle an obligation of the economic interest holder to the grantee that is unrelated to goods or services to be used or consumed in a grantor's own operations.

It is difficult to evaluate a related party's intent when it awards a share-based payment to an employee or nonemployee of the entity. When a share-based payment award is issued, entities need to consider whether it is compensation for goods or services provided to the reporting entity and, therefore, should be accounted for under ASC 718. For example, the entity may benefit from the arrangement through retention of the grantee and the grantee's improved performance. Ultimately, the benefits to an economic interest holder and to the entity may be impossible to separate. Therefore, the economic substance of this type of award is the same, regardless of whether the award is granted by the entity, a related party or other economic interest holder. The FASB believes that the concepts described above apply to the holder of *any* economic interest.

Non-authoritative literature

Basis for Conclusions of Statement 123(R)

B110. The Board intends the provision in paragraph 11 of this Statement [codified into ASC 718-10-15-4] to be applied by analyzing transactions in which a related party or a holder of an economic interest in the reporting entity transfers (or offers to transfer) share-based payment of the entity to an employee of the entity to determine whether the entity benefits from the transfer. If so, the transfer should be accounted for as share-based compensation to the employee and a capital contribution received from the transferring party. In broadening that requirement, the Board noted its belief that such a transfer is most likely to be made by a major shareholder or another holder of a significant economic interest in an entity.

The following may be helpful in determining whether the arrangement should be accounted for as compensation in the financial statements of the entity⁷:

- ▶ The relationship between the shareholder and the grantee is one that would normally result in generosity (e.g., an immediate family relationship).
- ▶ The shareholder has an obligation to the grantee that is completely unrelated to the present business relationship (e.g., the shareholder transfers shares to the grantee because of personal business relationships in the past).

⁷ While this guidance was not included in ASC 718, we believe it is consistent with the concepts described in ASC 718 and might be helpful in evaluating transactions between employees and related parties or economic interest holders of the employer.

- ▶ The entity clearly does not benefit from the transaction (e.g., the shareholder transfers shares to a low-level employee with whom he or she has had a close relationship over a number of years).

We also believe that ASC 718 would apply to the purchase of shares from grantees by a related party or economic interest holder. That is, the repurchase of shares would be treated as if the shares were repurchased by the entity itself, consistent with the concepts discussed above. See section 5 for guidance on the repurchase of awards from a grantee.

2.3.1 Definition of 'economic interest'

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Economic Interest in an Entity

Any type or form of pecuniary interest or arrangement that an entity could issue or be a party to, including equity securities; financial instruments with characteristics of equity, liabilities, or both; long-term debt and other debt-financing arrangements; leases; and contractual arrangements such as management contracts, service contracts, or intellectual property licenses.

2.3.2 Definition of 'related parties'

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Related Parties

Related parties include:

- Affiliates of the entity
- Entities for which investments in their equity securities would be required, absent the election of the fair value option under the Fair Value Option Subsection of Section 825-10-15, to be accounted for by the equity method by the investing entity
- Trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of management
- Principal owners of the entity and members of their immediate families
- Management of the entity and members of their immediate families
- Other parties with which the entity may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests
- Other parties that can significantly influence the management or operating policies of the transacting parties or that have an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests.

2.3.3 Awards granted between entities in a consolidated group

Parent companies often grant share-based payments to employees or nonemployees of a subsidiary. Alternatively, a subsidiary may grant share-based payments to employees or nonemployees of the parent entity or to the employees or nonemployees of a brother/sister subsidiary within the consolidated group. ASC 718 applies only to share-based payment awards granted to individuals who qualify as common law employees of the entity or nonemployees who provide goods or services that are consumed in the entity's own operations.

The FASB addressed, in prior accounting literature for share-based payments, whether the employee accounting model applies to awards granted by an entity to the employees of other entities within the same consolidated group and specifically addressed the applicability of the employee accounting model in both the consolidated financial statements, as well as in the separate financial statements of the parent and the subsidiary. While not explicitly addressed in ASC 718, we believe the concepts in the prior accounting literature (Interpretation 44 and EITF 00-23) also should be applied under ASC 718, as discussed below.

2.3.3.1 Consolidated financial statements

The FASB concluded in Interpretation 44 that the employee accounting model applies in the *consolidated financial statements* as long as the recipient of the share-based award qualifies as a common law employee of *any* entity in the consolidated group. When Interpretation 44 was issued, awards to employees and nonemployees were accounted for under different models. Because the ASC 718 model has been extended to awards issued to nonemployees, we believe the same concepts apply to awards issued to nonemployees who provide goods or services that are consumed in the operations of any entity in the consolidated group. Therefore, for the consolidated financial statements, the evaluation of whether the award is subject to ASC 718 is made at the consolidated group level. That is, if the employee or nonemployee provides goods or services to be used in the operations of any entity in the consolidated group, the award would be accounted for under ASC 718 in the consolidated financial statements.

2.3.3.2 Separate financial statements

Even though the FASB concluded that subsidiary employees technically are not employees of a parent, the FASB said in Interpretation 44 that the employee accounting model should apply to parent entity awards issued to employees of a subsidiary in that subsidiary's separate financial statements. As a basis for this limited exception, the FASB acknowledged that some value of a parent entity's award is derived from the subsidiary's results of operations. Furthermore, the FASB observed that employees are frequently transferred between a parent entity and a subsidiary, and may provide services to both entities during the vesting period. We believe the same concepts apply to nonemployee awards when the nonemployee provides goods or services that are consumed in the operations of any entity in the consolidated group.

Therefore, compensation cost related to the grant of parent entity awards to employees or nonemployees of a subsidiary are recognized in the subsidiary's separate financial statements with a corresponding credit to equity, representing the parent entity's capital contribution. The parent entity is considered an economic interest holder in the subsidiary and, therefore, as described in section 2.3, the subsidiary should account for the plan in the same manner as if the subsidiary adopted the compensatory plan.

2.3.3.3 Subsidiary share-based payment awards issued to grantees of another subsidiary in the consolidated group or grantees of the parent

The FASB concluded in Interpretation 44 that the employee accounting model would not apply in the separate financial statements of a subsidiary to awards granted by that subsidiary (in its shares) to (1) the employees of the parent or (2) the employees of another subsidiary in the consolidated group. The employee accounting model also would not apply to the accounting by the subsidiary for share-based payments issued to its employees in the shares of another entity in the consolidated group.

EITF 00-23 clarified the accounting for the grantor and the employer subsidiary in their respective separate financial statements when an entity grants share-based payments to employees of another entity in the same control group. We also believe that the guidance in EITF 00-23 should be applied to awards accounted for under ASC 718 (both employee and nonemployee awards).

Accounting for the entity that grants the awards

Because the controlling entity (parent) always can direct a controlled entity (Subsidiary A) to grant share-based payments to its employees and nonemployees and to employees and nonemployees of other members of the control group (Subsidiary B), the EITF reached a consensus in Issue 21 of EITF 00-23 that the grantor (Subsidiary A) should measure the fair value of the option or award at the grant date (i.e., the same measurement date for equity instruments issued to grantees under ASC 718) and recognize that amount as a dividend to the controlling entity. The EITF believed that recognizing this transaction as a dividend reflects the economics of the arrangement because it may not be clear that the entity granting the awards has received goods or services in return for that grant, or, if the entity has received goods or services, whether the fair value of those goods or services approximates the value of the awards. However, if the parent, the parent's employees or the parent's nonemployees provide goods or services to the subsidiary, the subsidiary would apply the guidance in ASC 718 as the equity instruments are issued in exchange for goods or services to be used or consumed in the subsidiary's own operations.

Accounting for the entity that receives the goods or services

In Issue 22 of EITF 00-23, the EITF concluded that Subsidiary B should account for the options or awards as compensation cost under the fair value model with a corresponding credit to equity to reflect a capital contribution from, or on behalf of, the controlling entity (parent). However, the EITF did not specify how the fair value method should be applied. Specifically, it is not clear whether Subsidiary B should apply the fair value guidance in (1) ASC 718 (fair value measured at the grant date) or (2) ASC 815 (fair value at the date the options are exercised, are forfeited or expire).⁸

Because these awards are not equity of Subsidiary B but represent awards granted by Subsidiary B in the equity of a different entity (see further discussion in section 2.5), ASC 815 would apply when determining the fair value of the award (assuming the award meets the definition of a derivative in ASC 815).

We believe that the guidance in ASC 718 for the accounting for liability-classified awards would apply by analogy to the amount of compensation cost to be recognized during the vesting period. Therefore, the fair value of the award would be remeasured each reporting period and recognized over the employee's requisite service period or nonemployee's vesting period as compensation cost. After the award vests, Subsidiary B would continue to mark it to fair value, with changes in fair value recognized as compensation cost until the award is exercised or expires.

In other instances, the parent or a subsidiary may issue equity instruments to its employees or nonemployees in exchange for goods or services that those grantees provide to another entity in the control group (e.g., Subsidiary A may issue awards to its employees or nonemployees in exchange for goods or services those employees or nonemployees provided to Subsidiary B). When issuing its standalone financial statements, Subsidiary B would apply the guidance in SAB Topic 1.B, *Allocation Of Expenses And Related Disclosure In Financial Statements Of Subsidiaries, Divisions Or Lesser Business Components Of Another Entity*, as the compensation cost recognized by the parent or another subsidiary has been incurred on its behalf. Subsidiary A would apply the grantor's accounting guidance above.

⁸ In Issue 21 of EITF 00-23, the EITF concluded that in its separate financial statements, the grantor should measure the options and resulting dividend at the fair value at the date of grant, without regard to whether the options are subject to vesting provisions. However, with regard to the separate financial statements of the subsidiary, the issue is the measurement of compensation cost, and Issue 21 does not apply.

Given that the subsidiaries are controlled and their results are consolidated in the parent's GAAP financial statements, we believe it is appropriate to account for awards to employees and nonemployees by members of a consolidated group in accordance with ASC 718 in parent-only financial statements, consistent with the accounting for the awards in the parent's consolidated financial statements.

The following table summarizes the above guidance regarding the accounting method for awards granted among entities that are part of a consolidated group in both the entity's consolidated financial statements and the separate financial statements of the parent and its subsidiaries:

	Accounting model to be applied to the share-based payments			
	Consolidated financial statements	Separate financial statements of parent	Separate financial statements of Subsidiary A	Separate financial statements of Subsidiary B
Award based on shares of:				
Parent to employees/nonemployees of Subsidiary A for goods/services consumed in the parent or Subsidiary A's operations	ASC 718 ⁽¹⁾	ASC 718 ⁽²⁾	ASC 718 ⁽¹⁾	N/A
Subsidiary A to employees/nonemployees of parent for goods/services consumed in Subsidiary A's operations	ASC 718 ⁽¹⁾	ASC 718 ⁽²⁾	ASC 718 ⁽⁵⁾	N/A
Subsidiary A to employees/nonemployees of parent for goods/services consumed in parent's operations	ASC 718 ⁽¹⁾	ASC 718 ⁽²⁾	Fair value ⁽³⁾	N/A
Subsidiary A to employees/nonemployees of Subsidiary B for goods/services consumed in Subsidiary A's operations	ASC 718 ⁽¹⁾	ASC 718 ⁽²⁾	ASC 718 ⁽⁵⁾	Fair value ⁽⁴⁾
Subsidiary A to employees/nonemployees of Subsidiary B for goods/services consumed in Subsidiary B's operations	ASC 718 ⁽¹⁾	ASC 718 ⁽²⁾	Fair value ⁽³⁾	Fair value ⁽⁴⁾

⁽¹⁾ The accounting model in ASC 718 applies to share-based payment awards granted to individuals who qualify as common law employees of the grantor entity or nonemployees who provide goods/services consumed in the entity's own operations.

⁽²⁾ In the parent-only financial statements, we believe it is appropriate to account for awards to employees and nonemployees between members of a consolidated group pursuant to ASC 718 in parent-only financial statements, consistent with the accounting for the awards in the group's consolidated financial statements.

⁽³⁾ The share-based payment award would be measured at fair value at the grant date, and that amount would be recognized as a dividend to the parent.

⁽⁴⁾ The EITF did not specify that the subsidiary should apply the fair value method as interpreted by ASC 815. However, we believe that ASC 815-10 generally would apply, as described above (this treatment is consistent with the accounting for options issued to grantees in unrestricted, publicly traded shares of an unrelated entity, as discussed in section 2.5). Subsidiary B will recognize compensation cost at fair value for the awards that are issued by Subsidiary A to its employees. However, if those goods/services are consumed in Subsidiary A's operations (rather than Subsidiary B's operations), Subsidiary B will record a subsequent entry to offset compensation cost otherwise recognized.

⁽⁵⁾ If the employees or nonemployees of another member of the control group provide goods or services to the entity, the entity would apply the guidance in ASC 718 as the equity instruments are issued in exchange for goods or services to be used or consumed in its own operations.

The guidance above only applies to members of a consolidated group, not to noncontrolled investees, even if the investor owns over 50% of an investee but does not consolidate the investee due to participating minority veto rights that preclude consolidation, as discussed in ASC 810-10. In this situation, the accounting described in section 2.4 below would apply.

2.4 Awards granted to employees or nonemployees of an equity method investee

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

323-10-25-3

Paragraphs 323-10-25-4 through 25-6 provide guidance on accounting for share-based payment awards granted by an investor to employees or nonemployees of an equity method investee that provide goods or services to the investee that are used or consumed in the investee's operations when no proportionate funding by the other investors occurs and the investor does not receive any increase in the investor's relative ownership percentage of the investee. That guidance assumes that the investor's grant of share-based payment awards to employees or nonemployees of the equity method investee was not agreed to in connection with the investor's acquisition of an interest in the investee. That guidance applies to share-based payment awards granted to employees or nonemployees of an investee by an investor based on that investor's stock (that is, stock of the investor or other equity instruments indexed to, and potentially settled in, stock of the investor).

323-10-25-4

In the circumstances described in paragraph 323-10-25-3, a contributing investor shall expense the cost of share-based payment awards granted to employees and nonemployees of an equity method investee as incurred (that is, in the same period the costs are recognized by the investee) to the extent that the investor's claim on the investee's book value has not been increased.

505-10-25-3

Paragraphs 323-10-25-3 through 25-5 provide guidance on accounting for share-based compensation granted by an investor to employees or nonemployees of an equity method investee that provide goods or services to the investee that are used or consumed in the investee's operations. An investee shall recognize the costs of the share-based payment incurred by the investor on its behalf, and a corresponding capital contribution, as the costs are incurred on its behalf (that is, in the same period(s) as if the investor had paid cash to employees and nonemployees of the investee following the guidance in Topic 718 on stock compensation.

In some situations, an investor may issue share-based payment awards to employees or nonemployees of an equity method investee or joint venture.

ASC 323-10 provides guidance on accounting for share-based payments issued by an investor to employees or nonemployees in exchange for goods or services that are used or consumed in the investee's operations.

ASC 323-10 requires that an investor recognize its share of the earnings or losses of an investee in the periods that such amounts are reported by the investee in its financial statements. The guidance in ASC 323-10-25-3 through 25-5 addresses share-based payment awards granted to employees and nonemployees of an equity investee when no proportionate funding by the other investors occurs and the grantor does not receive any increase in its relative ownership percentage in the investee. ASC 323-10 further assumes that the compensation cost incurred on behalf of the investee was not agreed to when the investor acquired its interest in the investee. An investee should recognize the compensation costs incurred on its behalf in the same period(s) as if the investor had paid cash to employees and nonemployees of the investee following the guidance in ASC 718.

2.4.1 Accounting by the contributing investor

ASC 323-10-25-4 states that the contributing investor should expense the full cost of share-based payments issued to employees and nonemployees of an investee (that is, 100% of the costs even if the investor holds a 40% equity interest in the investee) as incurred (i.e., in the same period the costs are recognized by the investee, which is discussed in section 2.4.2), to the extent that the investor's claim on the investee's book value has not been increased. The cost of classified share-based payment awards should be measured under ASC 718.

2.4.2 Accounting by the investee

An investee recognizes the costs of the share-based payments granted by an investor to its employees and nonemployees for goods or services that are consumed in the investee's operations and a corresponding capital contribution because the costs are incurred on its behalf. As stated in ASC 505-10-25-3, the contribution should be recognized in the same period(s) and same manner as if the investor had paid cash to employees and nonemployees of the investee. That cost also should be measured under ASC 718.

2.4.3 Accounting by the other investors

An investor that doesn't contribute to the investee also needs to account for the effects of such an award. That is, a noncontributing investor recognizes income equal to the amount by which its interest in the net book value of the investee increases (i.e., its share of the contributed capital recognized by the investee) as a result of the disproportionate funding of the compensation costs. Noncontributing investors also recognize their share of earnings or losses in the investee, including any expense recognized by the investee for the share-based compensation funded on the investee's behalf.

For investors that are SEC registrants, income or expense resulting from the application of this guidance should be classified in the same income statement caption as the equity method earnings or losses.

A detailed example of the accounting for share-based compensation granted to employees of an equity method investee is included in ASC 323-10-55-19 through 55-26 and in section 6.5 of our FRD, *Equity method investments and joint ventures*.

2.5 Awards issued based on another entity's shares

In some cases, an entity may issue awards that are based on the shares of another entity. For example, assume Entity A issues awards of Entity B's shares to its employees or nonemployees. ASC 815-10 excludes from its scope share-based payments issued by an entity and accounted for under ASC 718. However, these awards are not in the scope of ASC 718 because their value is not based wholly, or at least in part, on the issuer's shares and the award is not settled in the issuer's shares.

Therefore, ASC 815-10 applies for grants of options in an unrelated, publicly traded entity's shares because the option meets the definition of a derivative in ASC 815. Therefore, these awards should be accounted for by the issuer as a derivative. Under ASC 815, the award should be recognized at its fair value at inception. Subsequent changes in the fair value would be included in the determination of net income. The option would continue to be accounted for as a derivative under ASC 815 after the vesting date. ASC 815-10-45-10 provides that the issuer should account for the changes in fair value of the option award before the vesting date as compensation cost. We believe it is reasonable to recognize and amortize the recognized value of the award as compensation cost over the employee's requisite service period or the nonemployee's vesting period, similar to the accounting for share-based liabilities subject to service vesting. Changes in fair value after vesting are not required to be recognized as compensation cost (e.g., the changes in fair value could be reported in the statement of operations where other derivatives' gains and losses are reported).

Further, even if the option is outside the scope of ASC 815-10 and does not meet the definition of a derivative (e.g., if the option or award cannot be net settled, and the underlying cannot be readily converted into cash, as would be the case if the unrelated entity is privately owned), the SEC staff has indicated that written options generally should be remeasured at fair value at each balance sheet date, with changes in fair value recognized in earnings. The written option and the underlying security, if owned or acquired by the issuer, should be accounted for separately (i.e., the underlying security is accounted for in accordance with the guidance for equity method investments in ASC 323; certain investments in debt or equity securities in ASC 320 or ASC 321, as applicable; or for derivatives in ASC 815).

2.6 **Placing vesting requirements on previously issued shares (i.e., escrowed share arrangements)**

To facilitate an initial public offering (IPO), an underwriter may request that some or all shareholders of the privately held entity place a portion of their shares in an escrow account or otherwise subject those shares to a vesting requirement. The escrowed or restricted shares generally are legally outstanding and may continue to have voting and dividend rights. The shares are to be released from escrow based either on the (1) attainment by the entity of certain performance measures in subsequent periods, such as specified earnings or market price levels or (2) specific individuals providing goods or services to the entity for a specified period of time. The conditions described in the first case are most common when there are differing views about the value of the entity. The conditions described in the second case are most common when the specified individuals are considered key to the newly public entity's success. In either case, if the conditions are not achieved, the escrowed shares are returned to the entity and canceled.

Even though these shares are legally outstanding and are reported as such on the face of the balance sheet, according to ASC 718-10-S99-2, the SEC staff has historically expressed the view that escrowed share arrangements involving the release of shares based on certain service or performance criteria are presumed to be equivalent to reverse share splits followed by the grant of nonvested shares subject to service, performance or market conditions (see sections 3 and 4). Therefore, these arrangements are presumed to be compensatory. Accordingly, compensation cost generally is measured based on the fair value of the shares at the grant date and recognized over the employee's requisite service period or nonemployee's vesting period (see section 4).

Under ASC 718-10-S99-2, when evaluating whether the presumption of compensation may be overcome for escrowed share arrangements, entities should consider the substance of the transaction(s), including whether the transaction(s) are unrelated to the individuals providing goods or services to the entity. For example, as a condition of the transaction, investors may request that specific significant shareholders who may also be officers or directors participate in an escrowed share arrangement. If the escrowed shares will be released or canceled without regard to their continued services to the entity, the arrangement may be more appropriately viewed as an inducement to facilitate the transaction on behalf of the entity rather than as compensation. In these circumstances, the arrangement generally would be recognized and measured according to its nature and reflected as a reduction of the proceeds allocated to the newly issued securities.

The SEC staff also stated in ASC 718-10-S99-2 that an escrowed share arrangement in which the shares are automatically forfeited if employment terminates is compensation, consistent with the principle articulated in ASC 805-10-55-25(a).

2.7 **Trusts related to employee benefits**

With the exception of qualifying ESOPs (see section 2.1.4), the use of trusts to fund share-based payments generally will not change the measurement or recognition of those payments because, in most cases, the trust will be consolidated by the sponsoring entity or be considered an economic interest holder of the entity (see section 2.3). The following sections provide specific guidance on several arrangements using trusts.

2.7.1 Rabbi trusts (updated October 2017)

Certain deferred compensation arrangements allow amounts earned by employees to be invested in the shares of the employer and placed in a rabbi trust. Additionally, some companies have implemented option deferral transactions in which the receipt of the net shares on exercise of an option is deferred, often by placing those shares into a rabbi trust.

A rabbi trust is a funding vehicle sometimes used to protect promised deferred executive compensation benefits from events other than bankruptcy. The funded benefits would be protected against hostile takeover ramifications and disagreements with management, but not against the claims of general creditors in the event of bankruptcy. Rabbi trusts provide important, although not all-inclusive, protection while deferring income taxes for the executives.

Certain plans that use a rabbi trust allow the employee to immediately diversify into non-employer securities or to diversify after a holding period (e.g., six months or more). Other plans do not allow for diversification. Some plans allow the employee to choose to settle the deferred compensation obligation in one of three ways: (1) cash by having the trust sell the employer shares (or the diversified assets) in the open market, (2) shares of the entity or (3) diversified assets. In other plans, the employee has no option, and the deferred compensation obligation may be settled only by delivery of the employer's shares.

ASC 710-10 includes the following conclusions on the accounting for deferred compensation arrangements where amounts earned are held in a rabbi trust:

1. The accounts of the rabbi trust should be consolidated with the accounts of the employer in the financial statements of the employer. If the rabbi trust is a variable interest entity (VIE), the consolidation guidance in ASC 810 may apply. The consolidation guidance, however, may not apply when financial assets are transferred to the rabbi trust and the financial assets are not derecognized by the employer pursuant to ASC 860. Refer to section 4.3.1.3 of our FRD, **Consolidation – Determination of a controlling financial interest and accounting for changes in ownership interests**, for further details.
2. Similar to treasury stock, employer shares should be classified and accounted for in equity in the consolidated financial statements of the employer (i.e., changes in fair value are not recognized), regardless of whether the deferred compensation obligation may be settled in cash, shares of the employer's shares or diversified assets.
3. Diversified assets should be accounted for in accordance with GAAP for the particular asset (e.g., if the diversified asset is a marketable equity security, that security would be accounted for in accordance with the accounting for certain investments in equity securities in ASC 320 or ASC 321, as applicable). In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall*, which requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value, with changes in fair value recognized in net income. Any changes in the fair value of the assets held by the rabbi trust should be recognized in the income statement separate from any changes in the fair value of the deferred compensation obligation (i.e., no netting allowed).
4. For deferred compensation arrangements in which diversification is not permitted and the deferred compensation obligation is required to be settled by delivery of employer's shares, the deferred compensation obligation should be accounted for as a grant of nonvested shares and accounted for in accordance with ASC 718.

5. Except as noted in No. 4 above and No. 6 below, the deferred compensation obligation should be classified as a liability and adjusted, with a corresponding charge (or credit) to compensation cost, to reflect subsequent changes in the measurement of the corresponding assets held by the rabbi trust (as noted in the No. 3 above). Changes in the measurement of the deferred compensation obligation should not be recorded in other comprehensive income, even if changes in the fair value of the assets held by the rabbi trust are recognized, pursuant to ASC 320 or ASC 321, as applicable, in other comprehensive income.
6. As discussed in section 5.2.3, shares subject to repurchase features are not required to be classified as liabilities as long as the grantee will be subject to the risks and rewards of share ownership for a reasonable period (i.e., six months) after the shares vest. Because shares held in a rabbi trust are not considered to be issued to the employee until they are released from the trust, we believe that liability classification is not required as of the grant of the shares subject to deferral into a rabbi trust if diversification is not permitted until at least six months after share vesting. However, as discussed in SAB Topic 14.E and section 5.3, temporary equity classification is required. In addition, if diversification is permitted within six months of share vesting (but the employee has not requested diversification), liability classification of the shares is required, beginning with the grant of the shares subject to deferral into a rabbi trust. Six months following the vesting of these shares, if the employee has not diversified, the shares should be reclassified from liability to equity (see section 5.2.3.1). Once the employee requests diversification, the obligation no longer meets the definition of an equity instrument, and liability classification is required.

2.7.2

Other employee benefit trusts (e.g., flexitrusts, SECTs)

Investment bankers and others have designed various special purpose grantor trusts to purchase significant blocks of an entity's shares to be used over many years to fund a number of benefit plans (e.g., 401(k) match, other postretirement benefits). Often each plan designer has its own name for the trusts, such as flexitrust or SECT (Stock Employee Compensation Trust). The purchase of shares may be from the open market or from the entity, in which case the entity may contemplate subsequent repurchases from the open market. The trusts generally are financed by a loan, often from the employer, and the shares are released to the designated employee benefit plans as the loan is paid down through contributions or forgiveness from the employer, dividends and other means.

The objectives of forming such a trust might include the pre-funding of benefits, placing a significant number of shares in friendly hands, possibly improving rating agency treatment, and, in some circumstances, increasing certain tax benefits. Although these arrangements resemble leveraged ESOPs, they are not ESOPs, so they generally neither receive the benefits of ESOPs nor are subject to the restrictions of ESOPs. Because these arrangements are not leveraged ESOPs, the SEC staff has stated that the arrangements are not subject to ESOP accounting.

As discussed in section 2.8, the trust generally will be consolidated, and acquired shares would be accounted for as treasury shares. Compensation cost for benefit plans funded by the trust is calculated without reference to the trust (as it is just a funding vehicle). Effectively, this results in measuring compensation cost for shares released from the trust at fair value on the date the shares are granted, assuming the awards qualify for equity classification. Trusts that provide for reallocation of terminated employee shares to the remaining employees in the trust rather than being returned to the entity would result in a new grant with a new grant date on the date that shares are reallocated to remaining employees. These types of trusts are often referred to as "tontine trusts," where the last employee in the trust wins or loses by being the last in line.

Shares in the trust are not treated as outstanding for accounting purposes and, thus, there is no dilution until shares are granted. Dividends on unreleased shares, even if used to reduce trust debt, do not reduce benefit expense otherwise calculated.

2.8 Determining whether an entity is public or nonpublic

ASC 718 provides different measurement and classification alternatives for public and nonpublic entities, which are summarized below:

	Public companies	Nonpublic companies
Measurement of options and similar equity-classified awards (sections 3.2.2 through 3.2.4)	Fair value (if fair value is not reasonably estimable, measure at intrinsic value and remeasure until settlement)	Based on the following hierarchy: <ol style="list-style-type: none"> Fair value If expected volatility is not reasonably estimable, calculated value If neither fair value nor calculated value are reasonably estimable, measure at intrinsic value and remeasure until settlement
Measurement of liability-classified awards (section 5.4)	Fair value (if fair value is not reasonably estimable, measure at intrinsic value and remeasure until settlement)	May elect either fair value (or calculated value, if expected volatility is not reasonably estimable) or remeasurement of intrinsic value until settlement ^{9 10}
Classification of mandatorily redeemable instruments (and options thereon) that are not redeemable on fixed dates for amounts that are fixed or based on an external index (section 5.2.1)	Liabilities	Equity
Formula value share purchase plans (section 5.2.9)	Liabilities	May be classified as equity in certain circumstances

Because of these significant differences, determining whether an entity is public or nonpublic is important to appropriately apply ASC 718.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Nonpublic Entity

Any entity other than one that meets any of the following criteria:

- Has equity securities that trade in a public market either on a stock exchange (domestic or foreign) or in an over-the-counter market, including securities quoted only locally or regionally
- Makes a filing with a regulatory agency in preparation for the sale of any class of equity securities in a public market
- Is controlled by an entity covered by the preceding criteria.

An entity that has only debt securities trading in a public market (or that has made a filing with a regulatory agency in preparation to trade only debt securities) is a nonpublic entity.

⁹ Upon the adoption of ASU 2018-07, nonpublic entities that measure their liability-classified employee awards using intrinsic value must also measure liability-classified nonemployee awards using intrinsic value, see section 1.9.3.

¹⁰ In March 2019, the FASB proposed new guidance that would require entities to classify and measure share-based payments granted to a customer in a revenue arrangement that are not in exchange for a distinct good or service in accordance with ASC 718. The proposal also would require entities to measure these awards at fair value (that is, a nonpublic entity's policy election to value liability awards using intrinsic value would not apply). We encourage readers to monitor developments in this area.

718-10-20**Public Entity**

An entity that meets any of the following criteria:

- a. Has equity securities that trade in a public market, either on a stock exchange (domestic or foreign) or in an over-the-counter market, including securities quoted only locally or regionally
- b. Makes a filing with a regulatory agency in preparation for the sale of any class of equity securities in a public market
- c. Is controlled by an entity covered by the preceding criteria. That is, a subsidiary of a public entity is itself a public entity.

An entity that has only debt securities trading in a public market (or that has made a filing with a regulatory agency in preparation to trade only debt securities) is not a public entity.

Based on this definition, if a public entity has a controlling financial interest (i.e., consolidates) in a nonpublic entity, the nonpublic entity also is considered a public entity. We believe that is the case regardless of whether there are controlled entities in the ownership chain between the reporting entity and the ultimate parent. Refer to our FRD, ***Consolidation – Determination of a controlling financial interest and accounting for changes in ownership interests***, for further details.

The definition of public entity used in ASC 718 is different from the definition of a public business entity as defined in the Master Glossary.

2.8.1 Private equity investees

Normally, control will be evident because the results of the controlled entity will be consolidated by the ultimate parent. However, this may not be the case in some circumstances. For example, a public entity may have a controlling investment in a private equity fund that, in turn, owns a controlling investment in an operating entity that has no publicly traded shares outstanding. The private equity fund may account for its investment in the operating entity at fair value in accordance with the investment industry guidance in ASC 946. Based on current practice, the public parent entity may continue to account for its controlling investment in the operating entity at fair value, rather than by consolidating the results of the private equity fund and its controlled investee. Although the results of the operating entity are not consolidated into those of the public parent entity, the operating entity is nonetheless controlled, albeit indirectly, by the public parent entity and, therefore, is considered to be a public entity as defined in ASC 718. Accordingly, the operating entity must follow the measurement and transition guidance for public entities. Because of the significance of this determination, entities that are controlled by a single entity will have to determine whether that controlling entity, or any entity that controls the controlling entity, is a public entity.

2.8.2 Subsidiaries of entities with equity securities traded on a foreign exchange

The definition of a nonpublic entity makes it clear that if the controlling entity has equity securities traded on any share exchange, whether in the US or in a foreign country, the controlled entity is a public entity for purposes of applying ASC 718. For example, assume a US entity is a subsidiary of a parent entity whose shares are publicly traded in Japan. The parent entity is considered a public entity under ASC 718 and, therefore, the controlled subsidiary also is a public entity for purposes of ASC 718.

2.8.3 Transition from nonpublic to public status

As indicated in the definition of a nonpublic entity in section 2.8, a nonpublic entity becomes a public entity when it makes a filing with a regulatory agency in preparation for an offering of equity securities. Further, as discussed in section 2.8.1, once a public entity acquires a controlling interest in a nonpublic entity, the formerly nonpublic entity becomes a public entity on the date of acquisition. Once an entity files its initial registration statement in connection with an IPO of equity securities (i.e., when the first nonconfidential filing is made), the compensation cost of grants made after the filing date must be measured based on fair value. Similarly, any awards granted after the date a controlling interest in a formerly nonpublic entity is acquired by a public entity must be remeasured based on fair value. The transition from a nonpublic entity to a public entity is discussed further in section 13.1.1.

3 Measurement of equity-classified awards

3.1 Objective

The objective of accounting for equity instruments in the scope of ASC 718 is to measure the compensation cost of goods obtained or services received (compensation cost) in exchange for an award of equity instruments, based on the fair value of the award on the grant date, and to recognize that compensation cost in the financial statements over the employee's requisite service period or the nonemployee's vesting period. ASC 718 requires the use of a modified grant date approach, under which fair value is measured on the grant date without regard to service or performance conditions. Compensation cost generally is recognized only for awards for which the good is delivered or the service is rendered. That is, compensation cost is not recognized in the financial statements for those awards that do not vest because the service or performance conditions are not satisfied.

Compensation cost resulting from share-based payments should be recognized (expensed or capitalized) in the entity's financial statements in the same manner as cash compensation. For example, share-based payments issued to a grantee involved in the production process should be capitalized into inventory to the same extent as any cash compensation paid to the grantee.

The following sections discuss the measurement basis, the measurement date and the effect of service, performance and market conditions on the measurement of compensation cost associated with share-based payments to employees and nonemployees. Section 4 provides detailed guidance on recognizing the measured compensation cost in the entity's financial statements. Sections 6 and 7 provide detailed guidance on estimating the fair value of a share-based payment.

3.2 Measurement basis

3.2.1 Goods or services received versus equity instruments issued

The following excerpt from ASC 718 establishes the objective of accounting for share-based payments under the Topic:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Objectives

718-10-10-1

The objective of accounting for transactions under share-based payment arrangements is to recognize in the financial statements the goods or services received in exchange for equity instruments granted or liabilities incurred and the related cost to the entity as those goods or services are received. This Topic uses the terms *compensation* and *payment* in their broadest senses to refer to the consideration paid for goods or services.

Although ASC 718-10-10-1 establishes that compensation cost recognized in the financial statements should be based on the value of the goods or services received in exchange for the share-based payments, the FASB concluded that it is not feasible to measure directly the fair value of those goods or services (i.e., the amount for which those goods or services would be exchanged in the marketplace).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-2

A share-based payment transaction shall be measured based on the fair value (or in certain situations specified in this Topic, a **calculated value** or **intrinsic value**) of the equity instruments **issued**.

This decision is consistent with the measurement basis for other forms of compensation, including cash and pension benefits, which are measured at the fair value of the asset transferred to the grantee or the liability incurred by the grantor. The FASB concluded that there was no compelling reason to measure share-based compensation on a different basis.

3.2.2 Fair value-based measurement

ASC 718 requires both public and nonpublic entities to value the equity instruments exchanged for goods or services based on the fair value of those instruments. However, certain alternatives (discussed later in this section) are available for instances in which fair value cannot reasonably be estimated. ASC 718-10-30-3 establishes the fair value-based method as the measurement basis for share-based payment arrangements.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-3

An entity shall account for the compensation cost from **share-based payment transactions** in accordance with the fair-value-based method set forth in this Topic. That is, the cost of goods obtained or services received in exchange for **awards** of share-based compensation generally shall be measured based on the grant-date fair value of the equity instruments issued or on the fair value of the liabilities incurred. The cost of goods obtained or services received by an entity as consideration for equity instruments issued or liabilities incurred in share-based compensation transactions shall be measured based on the fair value of the equity instruments issued or the liabilities **settled**. The portion of the fair value of an instrument attributed to goods obtained or services received is net of any amount that a grantee pays (or becomes obligated to pay) for that instrument when it is granted. For example, if a grantee pays \$5 at the **grant date** for an option with a grant-date fair value of \$50, the amount attributed to goods or services provided by the grantee is \$45.

718-10-30-4

However, this Topic provides certain exceptions (see paragraph 718-10-30-21) to that measurement method if it is not possible to reasonably estimate the fair value of an **award** at the grant date. A **nonpublic entity** also may choose to measure its liabilities under share-based payment arrangements at intrinsic value (see paragraphs 718-10-30-20 and 718-30-30-2).

Compensation – Stock Compensation – Awards classified as liabilities

Subsequent Measurement

718-30-35-1

The fair value of liabilities incurred in **share-based payment transactions** shall be remeasured at the end of each reporting period through **settlement**.

ASC 718 refers to the required measurement basis as the fair-value-based method because the measurement method described in the standard conceptually is not fair value. Although the fair-value-based method uses fair value measurement techniques, the required measurement specifically excludes the effects of (1) service conditions, performance conditions and other restrictions that apply before the award vests, (2) reload features that may be included in the terms of the award and (3) contingent features that may require the grantee to return the equity instruments (or the realized gain from the sale of the equity instruments) at some point in the future. Such conditions, restrictions and features would be considered in a true fair value measurement.

ASC 718 and this publication refer to the required measurement as fair value, both for convenience and to distinguish it from other measurements, such as intrinsic value and calculated value. Any reference to fair value in ASC 718 and in this publication should be read to mean a fair value-based measurement determined in accordance with the requirements of ASC 718. This should not be confused with a strict definition of fair value or any other definition of fair value included in other sources of GAAP. Share-based payments are specifically excluded from the scope of ASC 820.

Section 6 of this publication provides guidance on applying the fair value-based method to measure share-based payments. Section 7 describes various valuation techniques (e.g., Black-Scholes-Merton formula and lattice models) for estimating the fair value of options and similar instruments (e.g., SARs).

3.2.3 If an entity cannot reasonably estimate fair value

Although it should be possible to reasonably estimate the fair value of most equity instruments at the grant date, ASC 718 recognizes that in rare circumstances, the terms of an equity instrument may make it impossible to do so. ASC 718-10-30-21 and ASC 718-20-35-1 provide the following guidance for accounting for equity instruments in these situations:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-21

It should be possible to reasonably estimate the fair value of most equity share options and other equity instruments at the date they are granted. Section 718-10-55 illustrates techniques for estimating the fair values of several instruments with complicated features. However, in rare circumstances, it may not be possible to reasonably estimate the fair value of an equity share option or other equity instrument at the grant date because of the complexity of its terms.

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-1

An equity instrument for which it is not possible to reasonably estimate fair value at the **grant date** shall be remeasured at each reporting date through the date of exercise or other settlement. The final measure of compensation cost shall be the **intrinsic value** of the instrument at the date it is **settled**. Compensation cost for each period until settlement shall be based on the change (or a portion of the change, depending on the percentage of the requisite service that has been rendered for an employee award or the percentage that would have been recognized had the grantor paid cash for the goods or services instead of paying with a nonemployee award at the reporting date) in the intrinsic value of the instrument in each reporting period. The entity shall continue to use the intrinsic value method for those instruments even if it subsequently concludes that it is possible to reasonably estimate their fair value.

The FASB considered whether awards for which the fair value could not be estimated at the grant date should be measured at intrinsic value at each reporting date until the fair value could be reasonably estimated. The entity at that time would measure the equity instruments at fair value (i.e., a final measurement of compensation cost would be made when the fair value became estimable). However, the FASB was concerned that permitting the final measurement of compensation cost to occur at the earliest date at which an entity determines fair value can be reasonably estimated could result in unintended consequences. An entity might attempt to justify a measurement date when its share price is lower than at the grant date, thereby reducing reported compensation cost. Additionally, the FASB believes it would be unusual for fair value to become reasonably estimable at some future date when it was not reasonably estimable on the grant date. As a result, the FASB decided to require remeasurement based on intrinsic value until settlement for all equity instruments for which it is not possible to reasonably estimate fair value at the grant date.

3.2.4 Exception for nonpublic entities that cannot estimate expected volatility

3.2.4.1 Calculated value

As described in section 3.2.2, ASC 718 requires both public and nonpublic entities to measure compensation cost associated with equity awards using the fair value-based method. However, ASC 718 provides an exception for nonpublic entities that cannot estimate fair value of equity instruments issued to employees and nonemployees because it is not practicable to estimate the expected volatility of the entity's share price.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-19A

Similar to employee equity share options and similar instruments, a nonpublic entity may not be able to reasonably estimate the fair value of nonemployee awards because it is not practicable for the nonpublic entity to estimate the expected volatility of its share price. In that situation, the nonpublic entity shall account for nonemployee equity share options and similar instruments on the basis of a value calculated using the historical volatility of an appropriate industry sector index instead of the expected volatility of the nonpublic entity's share price (the calculated value) in accordance with paragraph 718-10-30-20. A nonpublic entity's use of calculated value shall be consistent between employee share-based payment transactions and nonemployee share-based payment transactions.

718-10-30-20

A nonpublic entity may not be able to reasonably estimate the fair value of its equity share options and similar instruments because it is not practicable for it to estimate the expected volatility of its share price. In that situation, the entity shall account for its equity share options and similar instruments based on a value calculated using the historical volatility of an appropriate industry sector index instead of the expected volatility of the entity's share price (the calculated value). Throughout the remainder of this Topic, provisions that apply to accounting for share options and similar instruments at fair value also apply to calculated value. Paragraphs 718-10-55-51 through 55-58 and Example 9 (see paragraph 718-20-55-76) provide additional guidance on applying the calculated value method to equity share options and similar instruments granted by a nonpublic entity.

It is important to note that nonpublic entities do not have a free choice between the fair-value-based method and the calculated-value method when measuring share-based payments. The calculated-value method to measure share-based payments may be used only when a nonpublic entity cannot estimate the expected volatility of its share price. ASC 718-10-55-51 provides the following guidance for estimating the expected volatility of a nonpublic entity's share price:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-51

Nonpublic entities may have sufficient information available on which to base a reasonable and supportable estimate of the expected volatility of their share prices. For example, a nonpublic entity that has an internal market for its shares, has private transactions in its shares, or issues new equity or convertible debt instruments may be able to consider the historical volatility, or implied volatility, of its share price in estimating expected volatility. Alternatively, a nonpublic entity that can identify similar public entities for which share or option price information is available may be able to consider the historical, expected, or implied volatility of those entities' share prices in estimating expected volatility. Similarly this information may be used to estimate the fair value of its shares or to benchmark various aspects of its performance (see paragraph 718-10-55-25).

ASC 718 is clear that a nonpublic entity may be able to estimate its share price volatility by considering the historical, implied or expected share price volatility of similar public entities. We expect that in many cases, a nonpublic entity that is able to identify an appropriate industry sector index for purposes of using the calculated-value method would be able to identify similar entities in that index on which to base an estimate of its own share price volatility, and, therefore, it would be required to use the fair-value-based method. When attempting to identify similar public entities in that industry sector index, the nonpublic entity should consider each entity's life cycle stage, size, financial leverage, products and other characteristics that distinguish certain entities from others in the same industry sector. Accordingly, it may be necessary that the peer entities' information obtained for this purpose be modified in order for it to be relevant and comparable to the characteristic of the nonpublic entity.

Section 7.4.2 provides additional guidance for estimating the expected volatility of a nonpublic entity's share price. It also provides additional guidance for selecting an appropriate industry sector index and calculating the historical volatility of that index when using the calculated value method to measure share-based payments.

3.2.4.2 Change from calculated value to fair value

A nonpublic entity may change its measurement method from calculated value to fair value because it either becomes a public entity or determines that it can estimate the expected volatility of its own share price. ASC 718-10-55-27 indicates that the change in either the valuation technique or the method of determining the appropriate assumptions is a change in estimate under ASC 250 that may be only applied prospectively (see section 6.6). That is, compensation cost for nonvested awards granted before the change must continue to be recognized based on the calculated value that was measured on the grant date. All share-based payments granted after the change must be measured using the fair-value-based method.

Because the fair-value-based method is expected to produce a better estimate of fair value and it would be difficult to assert that an entity that previously could estimate its expected share price volatility no longer can do so, an entity generally would not be permitted to change to the calculated-value method from the fair-value-based method to estimate the value of its options.

3.3 Measurement date

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Measurement Date

The date at which the equity share price and other pertinent factors, such as expected volatility, that enter into measurement of the total recognized amount of compensation cost for an award of share-based payment are fixed.

The measurement date is an important concept in the accounting for share-based payments and differs for awards classified as equity and those classified as liabilities. For equity-classified awards, the measurement date is the grant date, while for liability-classified awards, it is the settlement date (as discussed further in section 5.4).

The FASB concluded that equity-classified awards subject to service or performance conditions are not *issued* until the entity receives consideration for those instruments. However, the FASB believes that at the grant date, when the entity becomes obligated to issue the equity instruments (contingent on the grantee's delivery of the goods or services or satisfaction of the performance conditions), the grantee receives an equity interest in the entity. The consideration for the equity instruments is the future goods to be delivered or services to be rendered. The FASB believes that an entity's contingent obligation to issue equity instruments supports measurement of equity-classified awards at the grant date.

In its Basis for Conclusions to Statement 123(R), the FASB indicated that in deciding whether and on what terms to exchange equity instruments for goods or services, both parties to the agreement presumably base their decisions on the current fair value of the instrument to be exchanged, not its possible value at a future date. This conclusion also was an important factor in leading the FASB to conclude that the grant date is the appropriate measurement date for a grant of an equity-classified award.

3.3.1 Definition of 'grant date'

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Grant Date

The date at which a grantor and a grantee reach a mutual understanding of the key terms and conditions of a share-based payment award. The grantor becomes contingently obligated on the grant date to issue equity instruments or transfer assets to a grantee who delivers the goods or renders the requisite service. Awards made under an arrangement that is subject to shareholder approval are not deemed to be granted until that approval is obtained unless approval is essentially a formality (or perfunctory), for example, if management and the members of the board of directors control enough votes to approve the arrangement. Similarly, individual awards that are subject to approval by the board of directors, management, or both are not deemed to be granted until all such approvals are obtained. The grant date for an award of equity instruments is the date that a grantee begins to benefit from, or be adversely affected by, subsequent changes in the price of the grantor's equity shares. Paragraph 718-10-25-5 provides guidance on determining the grant date. See **Service Inception Date**.

We address each of the key requirements of this definition in the sections that follow.

3.3.1.1 Mutual understanding of key terms and conditions

The definition of grant date requires that a grantor and a grantee have a mutual understanding of the key terms and conditions of the share-based payment. That means that both the grantor and the grantee have enough information to understand the nature of the relationship established by the award, including the compensatory relationship *and* the equity relationship after the date of the grant (the equity relationship is discussed further in section 3.3.1.2 below).

3.3.1.1.1 *Practical accommodation regarding the concept of mutual understanding*

Often, the board of directors or other authorized parties approve the grant of share-based payments, but the significant terms of the award (including the number of awards to be granted) are not communicated to the grantees on the same day. Accordingly, ASC 718-10-25-5 provides an exception to the application of the concept of “mutual understanding” in the determination of whether a grant date (and, for an equity-classified award, a measurement date) has occurred. The exception requires entities to presume that a mutual understanding exists and measure compensation cost for equity awards to grantees on the board approval date (or, if awards are approved by a committee of the board or some group other than the full board, when approved by that committee or group) provided that the other requirements of the definition of the grant date are met and:

- ▶ The award is a unilateral grant and, therefore, the grantee does not have the ability to negotiate the key terms and conditions of the award with the grantor.
- ▶ The key terms and conditions of the award are expected to be communicated to the grantee within a relatively short time period from the date of approval.

The FASB made it clear that this exception must be applied only to share-based payment arrangements. It should not be applied by analogy to transactions other than share-based payments.

For a grant date to occur on the approval date, the terms of specific awards to individual employees must be approved. For example, approving an aggregate number of awards that subsequently will be allocated to individual employees in the future is not sufficient to establish a grant date. In this circumstance, the grant date would occur when those with the appropriate authority approve a final allocation of awards to individual employees and the significant terms of those awards have been established.

Regarding the criterion in the first bullet above, as related to employee awards, the number and other terms of a share-based payment to an employee normally are established by the appropriate levels of management and approved by the board of directors, its compensation committee or another authorized committee. These terms normally are not negotiated with individual employees, but in certain circumstances, employees may be in a position to negotiate them. For example, senior executives may be in a position to negotiate the terms of their awards with the board or compensation committee. Similarly, new hires may be in a position to negotiate the terms of their initial awards. In such circumstances, we do not believe a grant date can occur for an equity-classified award before the date when the terms of the award are agreed to by both parties. Accordingly, management, with the assistance of the appropriate personnel (e.g., human resources), must evaluate the entity’s procedures for granting share-based payments to determine which employees, if any, are entitled to negotiate the terms of their awards. However, we generally expect that senior executives likely would negotiate the terms of their award before approval is sought and would be informed of the terms of their awards at the time of the board or compensation committee meeting (or shortly thereafter). Similarly, new hires that can negotiate the terms of their initial awards likely would have negotiated the terms before the necessary approvals are obtained. In those circumstances, a grant date occurs when approval is communicated to the grantee (and for an employee award, when the grantee meets the definition of an employee in ASC 718-10-20). As related to nonemployee awards, we would expect that the grantee would be in a position to negotiate the terms and conditions of the award before necessary approvals are obtained, especially if the grantee is selling goods or services to the grantor.

Regarding the criterion in the second bullet above, ASC 718 provides the following guidance on what constitutes a “relatively short time period.”

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-5

[...] A relatively short time period is that period in which an entity could reasonably complete all actions necessary to communicate the awards to the recipients in accordance with the entity’s customary practices. [...]

Accordingly, the duration of a “relatively short time period” is dependent on the manner in which an entity communicates the terms of awards to grantees. For an entity that communicates them through the grantee’s supervisor in connection with an annual performance evaluation, a reasonable period of time may be several weeks. However, for an entity that communicates them through an employee benefits website, the period likely would be limited to the time that the entity could reasonably post and announce the availability of the information, which may take just a few days.

We believe that the determination of whether the time period is relatively short is a matter of judgment that should consider all of the relevant facts and circumstances (e.g., communication methods, locations of grantees, number of grantees receiving awards). When an entity has established a reasonable communication method and continues to make adequate progress in completing its communications, we generally believe the time period would be considered reasonable. On the other hand, if, for example, an entity has taken no action to begin the communication process during the two weeks after the terms of the awards have been approved, we believe it is unlikely that the communication period would be viewed as “relatively short,” and therefore, the approval date is not the grant date.

While not explicitly addressed in ASC 718, if a grantor meets the above requirements for concluding that a grant date has occurred on the approval date, any change to the terms of the award between the approval date and the communication date would be accounted for under the modification model in ASC 718 (because a measurement date had occurred on the approval date). See section 8 for a detailed discussion of the accounting for modifications of share-based payments.

3.3.1.1.2

Substantive terms of the plan

ASC 718-10-55-81 provides that the key terms of the share-based payment arrangement “may be established through a formal, written agreement; an informal, oral arrangement; or established by an entity’s past practice.” Generally, formal written agreements provide the best evidence of the key terms of an award. However, oral agreements or past practices also may suggest that the terms of an award differ from the formal arrangement. For example, an entity may grant options that provide only for physical settlement (i.e., the grantee pays the full exercise price and receives the specified number of shares). However, if the entity has reached an oral agreement to cash settle an option, or has a practice of cash settling an option award whenever a grantee requests cash settlement, the oral agreement or past practice may suggest that the award is a liability award rather than an equity instrument (see section 5.2.5). However, if an option agreement does not specify the exercise price, the number of shares or the vesting conditions, we do not believe that informal agreements or past practices could provide an appropriate basis for concluding that the key terms are understood. Under those circumstances, neither the grant date, nor the measurement date, has occurred.

Additional guidance on the requirement to have a mutual understanding of the terms and conditions of an award that includes performance conditions is provided in section 3.4.3.4.

3.3.1.2

Grantee begins to benefit from or be adversely affected by a change in the share price

The FASB recognized that entities will have to apply the concept of “a mutual understanding of key terms and conditions” to a wide variety of share-based payments, and that for some awards, it may be difficult to determine when the grantee and grantor have reached such an understanding. To clarify the application of this concept, the definition of grant date requires that the grant date not occur before the grantee begins to benefit from or be adversely affected by changes in the price of the equity underlying the share-based award.

To meet this criterion, the grantee must either benefit from *or* be adversely affected by subsequent changes in the price of the grantor’s shares. The following example from the implementation guidance in ASC 718 illustrates how this concept is applied to determine whether the parties have a mutual understanding of the key terms and conditions.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-83

The determination of the grant date shall be based on the relevant facts and circumstances. For instance, a look-back share option may be granted with an exercise price equal to the lower of the current share price or the share price one year hence. The ultimate exercise price is not known at the date of grant, but it cannot be greater than the current share price. In this case, the relationship between the exercise price and the current share price provides a sufficient basis to understand both the compensatory and equity relationship established by the award; the recipient begins to benefit from subsequent changes in the price of the grantor’s equity shares. However, if the award’s terms call for the exercise price to be set equal to the share price one year hence, the recipient does not begin to benefit from, or be adversely affected by, changes in the price of the grantor’s equity shares until then. Therefore, grant date would not occur until one year hence. Awards of share options whose exercise price is determined solely by reference to a future share price generally would not provide a sufficient basis to understand the nature of the compensatory and equity relationships established by the award until the exercise price is known.

Although the grantee receiving the look-back option would not be adversely affected by a decrease in the share price, the grantee would benefit from an increase in the share price because the exercise price will be set at the lower of the current share price or the share price one year from that date. This provides sufficient basis for the grantee and the grantor to understand both the compensatory and equity relationship established by this award.

The second example in ASC 718-10-55-83 illustrates when an equity relationship has not been established and, therefore, there is not a grant date or a measurement date. In this example, the exercise price will be set equal to the share price in one year. The FASB indicated that the grantee neither benefits from increases nor is adversely affected by decreases in the share price during the initial one-year period. While this is true from an intrinsic-value perspective (because the intrinsic value will be zero on the grant date), it is not true from a fair-value perspective. All other things being equal, the fair value of an at-the-money option on a \$50 share is worth more than an at-the-money option on a \$10 share. Because of the FASB’s conclusion in this regard, we believe in determining whether an equity relationship exists (and a grant date has occurred), the assessment of the equity relationship must be made on an intrinsic-value basis.

3.3.1.3 All necessary approvals must be obtained

By definition, the grant date cannot occur before all necessary approvals have been obtained, including shareholder approval for the share-based compensation plan (if required) and board approval for individual awards in accordance with a share-based compensation plan. However, this requirement can be overcome if shareholder, board or compensation committee approval is deemed to be a formality or perfunctory.

For example, if the management team and the board of directors that developed the share-based compensation plan control enough votes to obtain shareholder approval, such approval would be deemed perfunctory. In addition, shares held by outsiders (e.g., a single shareholder owning a large block of shares) can be included in the assessment that approval is essentially a formality only if an irrevocable proxy is obtained.

However, if approval is essentially a formality, an entity also should consider whether there is any evidence that would contradict the expectation that management and the board members will continue to control the entity through the date of the shareholder vote. For example, the ownership percentage of management and the board members could be diluted if the entity anticipates a secondary offering before the shareholder vote or if those individuals plan to sell shares of the grantor before the shareholder vote.

An assessment that it is probable that shareholder approval will be obtained is not sufficient to consider approval essentially a formality. That is, even if prior experience indicates that it is rare that proposed plans or awards are not approved through a shareholder vote, the entity cannot conclude that approval is essentially a formality absent control of the outcome. Control should be based on all shares eligible to vote, not solely on those expected to vote. Consequently, in most cases, required shareholder approval must be obtained to conclude that a grant date and, therefore, a measurement date, for an award has occurred.

If the board of directors or compensation committee has *formally* delegated authority and responsibility for granting awards to specific board or management members, subsequent approval by these groups may be considered perfunctory, and therefore not delay the grant date, in the following limited circumstances:

- ▶ The compensation committee has approved at a duly-called meeting a pool of options to be granted to nonexecutive employees and approved the terms of specific grants to individual executives. The total number of options that can be granted to nonexecutive employees is specified, and the date of grant may be specified. However, how the awards will be allocated to specific employees is not indicated. The compensation committee at the same meeting formally delegates to management the responsibility to allocate the awards to nonexecutive employees and, provided that the resulting grants do not exceed the approved pool, indicates that it will approve management's allocation without change. The subsequent approval is viewed as ratification of management's actions and may be required to comply with the entity's bylaws, articles of incorporation or state corporate law. The compensation committee has never challenged management's allocation of the pool of options to individual employees.

It may be appropriate to conclude in this situation that the grant date is not delayed to the subsequent compensation committee ratification date but rather the grant date would be the date that management finalizes the allocation to individual employees and, therefore, the terms of the awards, including the number of underlying options and exercise price, are known for each individual employee.

- ▶ The compensation committee formally has delegated the authority to management to grant options to new hires and newly promoted employees based on standard terms. Such grants are priced on the second Monday after their employment start or promotion date. The compensation committee has established bands of employee ranks and a range of individual permitted grant amounts within those bands. The compensation committee has advised management that as long as new hire and

promotion grants are within the specified ranges, the grant will be approved by the compensation committee. The subsequent approval is viewed as ratification of management's actions and may be required to comply with the entity's bylaws, articles of incorporation or state corporate law. The compensation committee has never failed to approve grants made within the specified ranges.

In this situation, it may be appropriate to conclude that the grant date is the date that management determines with finality all the terms of individual grants, provided that the grants are within the parameters specified by the compensation committee. The grant date for awards in excess of those approved ranges generally would be the date the grant is approved by the compensation committee. If shareholder or other required approvals have not been obtained, ASC 718-10-55-108 clarifies that "compensation cost would not be recognized before receiving all necessary approvals unless approval is essentially a formality (or perfunctory)."

3.3.1.4 Must meet the definition of an employee

ASC 718-10-55-82 states that "to have a grant date for an award to an employee, the recipient of that award must meet the definition of employee." For example, upon signing an employment agreement on 1 January 20X9, an individual is granted options that are subject to a three-year service condition. However, the individual does not begin to work for the employer until 15 February 20X9. The individual does not meet the definition of an employee, and the grant date cannot occur until 15 February 20X9. Compensation cost relating to the options granted on 1 January 20X9 would be measured on 15 February 20X9, and recognized ratably over the period from 15 February 20X9, through 31 December 20Y1, because the service inception date, as discussed in section 4.3, cannot occur before service is being provided.

In some circumstances, an award may be granted to an individual that vests based on service either as a nonemployee consultant or as an employee. If that were the case in the example in the previous paragraph, and the employee was providing substantive consulting services during the period from 1 January 20X9 to 15 February 20X9, we believe it would be appropriate to account for the award as an award to a nonemployee through 15 February 20X9 and then account for it as an award to an employee after 15 February 20X9. The accounting implications of changes in employee status are discussed in section 3.9.

The definition of *employee* for purposes of applying the provisions of ASC 718 is discussed in section 2.2.

3.3.1.5 Service inception date

ASC 718-10-20 defines the service inception date as "the date at which the employee's requisite service period or nonemployee's vesting period begins." ASC 718 requires compensation cost to be recognized over the requisite service period for awards to employees and in the same period(s) and in the same manner as if the entity had paid cash for the goods or services for awards to nonemployees. Therefore, the service inception date (as opposed to the grant date) is the date on which the entity begins to recognize compensation cost relating to the share-based payment. The service inception date generally is the same as the grant date; however, under certain circumstances, it may precede or occur after the grant date (see sections 4.3.1 and 4.3.3, respectively).

3.4 Effect of service, performance and market conditions on measurement

3.4.1 Overview

Equity instruments transferred to a grantee in a share-based payment arrangement may include market, performance or service conditions, which could affect the award's exercise price, contractual term, quantity or conversion ratio. The effect of these conditions on the accounting for share-based payments is described below.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-12

Awards of share-based compensation ordinarily specify a **performance condition** or a **service condition** (or both) that must be satisfied for a grantee to earn the right to benefit from the award. No compensation cost is recognized for instruments forfeited because a service condition or a performance condition is not satisfied (for example, instruments for which the good is not delivered or the service is not rendered). [...]

718-10-30-14

Some awards contain a **market condition**. The effect of a market condition is reflected in the grant-date fair value of an award. (Valuation techniques have been developed to value path-dependent options as well as other options with complex terms. Awards with market conditions, as defined in this Topic, are path-dependent options.) Compensation cost thus is recognized for an award with a market condition provided that the good is delivered or the service is rendered, regardless of when, if ever, the market condition is satisfied.

718-10-30-27

Performance or service conditions that affect vesting are not reflected in estimating the fair value of an award at the grant date because those conditions are restrictions that stem from the forfeitability of instruments to which grantees have not yet earned the right. However, the effect of a market condition is reflected in estimating the fair value of an award at the grant date (see paragraph 718-10-30-14). For purposes of this Topic, a market condition is not considered to be a vesting condition, and an award is not deemed to be forfeited solely because a market condition is not satisfied.

Subsequent Measurement

718-10-35-4

An entity shall reverse previously recognized compensation cost for an award with a **market condition** only if the requisite service is not rendered.

Market, performance and service conditions included in the terms of an equity-based award must be analyzed to (1) determine whether the conditions should be considered when measuring fair value, (2) determine whether compensation cost should be reversed if the condition is not met (or should not be recognized if the condition is not expected to be met) and (3) identify an employee's requisite service period or nonemployee's vesting period over which compensation cost is to be recognized. The following sections describe service, performance and market conditions and address when those conditions, or a combination of those conditions, affect the estimate of fair value and the recognition of compensation cost. The effect of service, performance and market conditions on the period over which to recognize compensation cost is described in section 4.

3.4.2 Service conditions

A service condition is a condition that requires the grantee to provide goods or render services to the entity for a stated period of time to earn the right to the related equity instrument (i.e., to vest). ASC 718 defines a service condition as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Service Condition

A condition affecting the vesting, exercisability, exercise price, or other pertinent factors used in determining the fair value of an award that depends solely on an employee rendering service to the employer for the requisite service period or a nonemployee delivering goods or rendering services to the grantor over a vesting period. A condition that results in the acceleration of vesting in the event of a grantee's death, disability, or termination without cause is a service condition.

As previously discussed, service conditions (and performance conditions) that affect whether an award vests or becomes exercisable are not directly incorporated into the estimate of fair value at the grant date (although the length of the vesting period can indirectly affect the fair value of an option because the expected term of the option cannot be less than the vesting period). However, substantive service conditions usually affect whether measured compensation cost is recognized. If the right to vest in an award is based on a service condition, compensation cost will be recognized only if the service condition is satisfied. If it is not satisfied, compensation cost will not be recognized, and any previously recognized compensation cost will be reversed.

Illustration 3-1: Accounting for awards with service conditions

An entity grants 100 shares with a fair value of \$1,000 to an employee subject to a requirement that the individual remain employed for one year to earn the award (i.e., vesting is subject to an explicit service condition). The likelihood of the award vesting does not affect the estimated fair value of the award, but it does affect whether that fair value ultimately is recognized in the financial statements as compensation cost. If the award vests, the employer recognizes \$1,000 in compensation cost. If the award does not vest, no compensation cost is recognized. The measure of total compensation cost to be recognized over the requisite service period can be expressed as the price (i.e., fair value) of the individual instruments times the quantity of the instruments that vest. For equity-classified awards, service conditions affect the quantity of the instruments that may ultimately vest but not their price (see section 4.4.1.3). The price is not adjusted for equity-classified awards after the initial grant date measurement (unless the terms and conditions of the award are modified, the award is settled or the fair value of the award cannot be reasonably estimated).

Section 4 describes the determination of the employee's requisite service period or nonemployee's vesting period and the recognition of compensation cost for awards that include explicit service conditions.

3.4.3 Performance conditions

3.4.3.1 Definition

A performance condition is a condition of service or delivery of goods that is also based on the operations or activities of the grantor or by references to the grantee's performance related to the grantor's own operations or activities. The condition may relate to the performance of the entire entity, a division or an individual grantee. ASC 718 defines a performance condition as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Performance Condition

A condition affecting the vesting, exercisability, exercise price, or other pertinent factors used in determining the fair value of an award that relates to both of the following:

- a. Rendering service or delivering goods for a specified (either explicitly or implicitly) period of time
- b. Achieving a specified performance target that is defined solely by reference to the grantor's own operations (or activities) or by reference to the grantee's performance related to the grantor's own operations (or activities).

Attaining a specified growth rate in return on assets, obtaining regulatory approval to market a specified product, selling shares in an initial public offering or other financing event, and a change in control are examples of performance conditions. A performance target also may be defined by reference to the same performance measure of another entity or group of entities. For example, attaining a growth rate in earnings per share (EPS) that exceeds the average growth rate in EPS of other entities in the same industry is a performance condition. A performance target might pertain to the performance of the entity as a whole or to some part of the entity, such as a division or to the performance of the grantee if such performance is in accordance with the terms of the award and solely relates to the grantor's own operations (or activities).

It is important to carefully assess conditions (other than service conditions) inherent in an award to determine whether they meet the definition of performance conditions. If they do not, they likely will represent either market conditions (see section 3.4.4) or other conditions (see section 3.4.5), which are subject to different accounting.

3.4.3.1.1 ***Requires the grantee to deliver goods or render service***

A condition meets the definition of a performance condition only if the grantee must deliver goods or provide service to the grantor for a specified period of time. Typically, a performance award will specify such a service period either explicitly (by specifying a period of time that the grantee must deliver goods or provide services in order to vest) or implicitly (by providing for forfeiture of the award on termination prior to the achievement of the performance condition). Although not common in practice, an award could specify that a performance target that affects vesting could be met regardless of whether the employee or nonemployee is providing service on the date the performance condition is achieved.

For example, consider an entity that grants an award that will vest on the satisfaction of a performance condition. The entity determines that it is probable that the performance condition will be achieved. The terms of the award state that when the employee retires, any nonvested awards will continue to vest based on the original terms of the award. That is, if the performance condition is achieved after the employee retires, the award will vest. If the performance condition is never satisfied, the award will not vest.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-28

In some cases, the terms of an award may provide that a performance target that affects vesting could be achieved after an employee completes the requisite service period or a nonemployee satisfies a vesting period. That is, the grantee would be eligible to vest in the award regardless of whether the grantee is rendering service or delivering goods on the date the performance target is achieved. A performance target that affects vesting and that could be achieved after an employee's requisite service period or a nonemployee's vesting period shall be accounted for as a performance condition. As such, the performance target shall not be reflected in estimating the fair value of the award at the grant date. Compensation cost shall be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the service or goods already have been provided. If the performance target becomes probable of being achieved before the end of the employee's requisite service period or the nonemployee's vesting period, the remaining unrecognized compensation cost for which service or goods have not yet been provided shall be recognized prospectively over the remaining employee's requisite service period or the nonemployee's vesting period. The total amount of compensation cost recognized during and after the employee's requisite service period or the nonemployee's vesting period shall reflect the number of awards that are expected to **vest** based on the performance target and shall be adjusted to reflect those awards that ultimately vest. An entity that has an accounting policy to account for forfeitures when they occur in accordance with paragraph 718-10-35-1D or 718-10-35-3 shall reverse compensation cost previously recognized, in the period the award is forfeited, for an award that is forfeited before completion of the employee's requisite service period or the nonemployee's vesting period. The employee's requisite service period and the nonemployee's vesting period end when the grantee can cease rendering service or delivering goods and still be eligible to vest in the award if the performance target is achieved. As indicated in the definition of vest, the stated vesting period (which includes the period in which the performance target could be achieved) may differ from the employee's requisite service period or the nonemployee's vesting period.

The performance target is not reflected in the determination of the grant date fair value of the award. Compensation cost attributable to the period for which the goods have been delivered or services rendered would be recognized in the period when it becomes probable that the performance condition will be achieved. The total amount of compensation cost recognized during and after the vesting period would reflect the number of awards that is expected to vest. That is, before the service condition is met, compensation cost would reflect the number of awards that are probable of vesting under the performance condition (less estimated forfeitures due to the service requirement, if the entity estimates forfeitures). After the service condition is met, compensation cost would reflect the number of awards that is probable of vesting under the performance condition. Compensation cost would be adjusted to reflect those awards that ultimately vest.

This guidance applies to all share-based payments with performance targets that affect vesting and that can be achieved after goods have been delivered or service has been rendered. This would include an award that vests when an entity completes an IPO (i.e., the performance target), even if the IPO occurs after a grantee delivered the required goods or rendered the required service. The guidance also applies to an award granted to an employee who is eligible to retire (without losing the ability to vest in the award) before the end of the period in which a performance target could be achieved.

3.4.3.1.2

Based on the operations or activities of the grantor or by reference to the grantee's performance

To qualify as a performance condition, the condition must be based on one of the following:

- ▶ ***Grantor's operations or activities*** – The grantor's operations could include financial metrics (e.g., revenues, earnings, EPS, operating cash flows, earnings before interest, taxes, depreciation, amortization), operating metrics (e.g., number of stores opened, number of items produced, number of defects in output, regulatory approval of a product) or specific actions of the entity (e.g., an IPO, change in control). The metrics or targets may be based on the consolidated entity or any component of that entity (e.g., subsidiary, segment, product line).

We believe that for a grant date (and measurement date) to occur for an award with a performance condition based on the operations or activities of the grantor, the metrics or targets (including any future adjustments to those metrics or targets during the vesting period) should be objectively determinable. If metrics or targets are subjective or may be adjusted at the discretion of management, the board of directors or the compensation committee, a mutual understanding of the performance condition may not have occurred, and, therefore, a grant date (and measurement date) would not occur until the earlier of the vesting date or when the discretionary adjustment feature has lapsed. However, as discussed in section 4.3.1, the service inception date may precede the grant date in certain circumstances. In that case, "variable" accounting (i.e., remeasurement of the fair value of the award each reporting period) would be applied until the grant date occurs. If the service inception date does not precede the grant date, no compensation cost is recognized until the grant date.

- ▶ ***Grantee's performance related to the grantor's own operations or activities*** – Performance conditions based on the grantee's activities could include conditions based on sales by the grantee, volume of goods produced or services provided, or performance evaluations.

We believe that for a grant date (and measurement date) to occur for an award with a performance condition based on the grantee's individual performance evaluation, the performance evaluation process must be well-controlled, reasonably objective and serve as a basis for promotion and/or other compensation decisions. If that is not the case, we believe that the performance evaluation condition may be overly subjective and not provide for a mutual understanding of the terms and conditions of the award and, therefore, a grant date (and measurement date) would not occur until the performance evaluation is completed. However, as discussed in section 4.3.1, the service inception date may precede the grant date in certain circumstances. In that case, "variable" accounting (i.e., remeasurement of the fair value of the award each reporting period) would be applied until the grant date occurs. If the service inception date does not precede the grant date, no compensation cost is recognized until the grant date.

Conditions that do not meet one of the above requirements (e.g., an award with a payout indexed to the rate of inflation) or the definition of a market condition would in most cases be considered an "other" condition that causes liability classification (see section 5.2.4).

3.4.3.1.3

May be defined by reference to other groups or entities (updated October 2017)

The requirement that a performance condition be based on the operations or activities of the grantor or grantee does not preclude defining the target by reference to other entities or groups. For example, we believe the following conditions are performance conditions:

- ▶ A target based on exceeding the EPS of a peer group of entities by a specified percentage
- ▶ A target based on defect rates below an industry average
- ▶ A target based on an individual grantee's production exceeding the mean production of a specified group of grantees

However, as discussed in the definition of a performance condition, the designated metric of the reference entity or group must be the same metric specified for the grantor or grantee. For example, we do not believe that a condition requiring the grantor's *net income* to exceed 10% of the *revenues* of a competitor would meet the requirements to be considered a performance condition. Instead, it would be subject to the accounting for "other conditions" discussed in section 3.4.5.

Under the definition of grant date (as discussed in section 3.3.1.1), a grantor and a grantee are required have a mutual understanding of the key terms and conditions of the share-based payment. For an award with a performance condition that is based on a target by reference to other entities, groups or an industry average, a grant date occurs when the grantee has a reasonable expectation of the expected performance of that entity, group or industry to have enough information to understand the nature of the relationship established by the award. However, this does not require that the target amount or other related quantity be known in advance of the ultimate outcome. Judgment should be applied to make this determination based on the facts and circumstances.

A performance condition may affect (1) the vesting (or exercisability) of an award or (2) other terms of an award. The accounting differs for each of these two types of performance conditions, as discussed further below.

3.4.3.2

Performance conditions that affect vesting (or exercisability) of an award

If performance conditions affect the vesting or exercisability of an award, the conditions should not be considered when determining the fair value of the award. However, if the performance condition must be met for the award to vest, compensation cost will be recognized only if the performance condition is satisfied. Otherwise, compensation cost will not be recognized, and any previously recognized compensation cost will be reversed. The estimated quantity of awards for which it is probable that the performance conditions will be achieved must be reevaluated each reporting period and adjusted as discussed in section 4.4.2.3.

The following example illustrates the accounting for an award that contains a performance condition that affects the number of options that will vest:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-20-55-35A

This Example (see paragraphs 718-20-55-36 through 55-40) describes employee awards. However, the principles on how to account for the various aspects of employee awards, except for the compensation cost attribution and certain inputs to valuation, are the same for nonemployee awards.

Consequently, all of the following are equally applicable to nonemployee awards with the same features as the awards in this Example (that is, the number of options earned varies on the basis of the achievement of particular performance conditions):

- a. Certain valuation assumptions in paragraph 718-20-55-36
- b. Total compensation cost considerations provided in paragraphs 718-20-55-37 through 55-39 (that is, an entity must consider if it is probable that specific performance conditions will be achieved for an award with a specified time period for vesting and performance conditions)
- c. Forfeiture adjustments in paragraph 718-20-55-40.

Therefore, the guidance in those paragraphs may serve as implementation guidance for similar nonemployee awards.

718-20-55-36

This Example shows the computation of compensation cost if Entity T grants an award of share options with multiple performance conditions. Under the award, employees vest in differing numbers of options depending on the amount by which the market share of one of Entity T's products increases over a three-year period (the share options cannot vest before the end of the three-year period). The three-year **explicit service period** represents the requisite service period. On January 1, 20X5, Entity T grants to each of 1,000 employees an award of up to 300 10-year-term share options on its common stock. If market share increases by at least 5 percentage points by December 31, 20X7, each employee vests in at least 100 share options at that date. If market share increases by at least 10 percentage points, another 100 share options vest, for a total of 200. If market share increases by more than 20 percentage points, each employee vests in all 300 share options. Entity T's share price on January 1, 20X5, is \$30 and other assumptions are the same as in Example 1 (see paragraph 718-20-55-4) [See section 4.4.1.6]. The grant-date fair value per share option is \$14.69. While the vesting conditions in this Example and in Example 1 (see paragraph 718-20-55-4) are different, the equity instruments being valued have the same estimate of grant-date fair value. That is a consequence of the modified grant-date method, which accounts for the effects of vesting requirements or other restrictions that apply during the vesting period by recognizing compensation cost only for the instruments that actually vest. (This discussion does not refer to awards with market conditions that affect exercisability or the ability to retain the award as described in paragraphs 718-10-55-60 through 55-63.)

718-20-55-37

The compensation cost of the award depends on the estimated number of options that will vest. Entity T must determine whether it is **probable** that any **performance condition** will be achieved, that is, whether the growth in market share over the 3-year period will be at least 5 percent. Accruals of compensation cost are initially based on the probable outcome of the performance conditions – in this case, different levels of market share growth over the three-year vesting period – and adjusted for subsequent changes in the estimated or actual outcome. If Entity T determines that no performance condition is probable of achievement (that is, market share growth is expected to be less than 5 percentage points), then no compensation cost is recognized; however, Entity T is required to reassess at each reporting date whether achievement of any performance condition is probable and would begin recognizing compensation cost if and when achievement of the performance condition becomes probable.

Section 4 describes how to determine the employee's requisite service period or the nonemployee's vesting period and discusses the recognition of compensation cost for awards with performance conditions in greater detail.

3.4.3.3**Performance (or service) conditions that affect factors other than vesting or exercisability**

ASC 718 provides the following guidance on accounting for awards with performance conditions that affect factors other than vesting or exercisability:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall*****Initial Measurement*****718-10-30-15**

Market, performance, and service conditions (or any combination thereof) may affect an award's exercise price, contractual term, quantity, conversion ratio, or other factors that are considered in measuring an award's grant-date fair value. A grant-date fair value shall be estimated for each possible outcome of such a performance or service condition, and the final measure of compensation cost shall be based on the amount estimated at the grant date for the condition or outcome that is actually satisfied. [...]

Performance conditions and, less commonly, service conditions may affect the exercise price, contractual term or other factors that may affect the fair value of an award. ASC 718 requires that all performance conditions that affect terms other than vesting or exercisability be accounted for in a similar manner. A grant-date fair value must be estimated for each possible outcome (i.e., if the condition affects any of the inputs used to determine fair value, a separate valuation is performed for each possible variation in the input based upon the operation of the condition). The compensation cost recognized in the financial statements will be based on the grant-date fair value of the award that ultimately vests (i.e., based on the performance condition that is ultimately satisfied). The probability that the performance condition will be satisfied is not taken into account when estimating fair value, but it is taken into account when determining which award is probable of vesting, and, therefore, which award (and related fair value) must be recognized as compensation cost.

The following example illustrates the accounting for an award that contains a performance condition that affects the exercise price of the award:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-20-55-41A

This Example (see paragraphs 718-20-55-42 through 55-46) describes employee awards. However, the principles on how to account for the various aspects of employee awards, except for the compensation cost attribution and certain inputs to valuation, are the same for nonemployee awards.

Consequently, both of the following are equally applicable to nonemployee awards with the same features as the awards in this Example (that is, an immediately vested and exercisable award with an exercise price that varies on the basis of the achievement of particular performance conditions):

- a. Certain valuation assumptions in paragraphs 718-20-55-42 through 55- 43
- b. The total compensation cost considerations provided in paragraphs 718-20-55-44 through 55-46 (that is, an entity must consider if it is probable that specific performance conditions will be achieved).

Therefore, the guidance in those paragraphs may serve as implementation guidance for similar nonemployee awards.

718-20-55-42

This Example shows the computation of compensation cost if Entity T grants a share option award with a performance condition under which the exercise price, rather than the number of shares, varies depending on the level of performance achieved. On January 1, 20X5, Entity T grants to its chief executive officer 10-year share options on 10,000 shares of its common stock, which are immediately vested and exercisable (an explicit service period of zero). The share price at the grant date is \$30, and the initial exercise price also is \$30. However, that price decreases to \$15 if the market share for Entity T's products increases by at least 10 percentage points by December 31, 20X6, and provided that the chief executive officer continues to be employed by Entity T and has not previously exercised the options (an explicit service period of 2 years, which also is the requisite service period).

718-20-55-43

Entity T estimates at the grant date the expected level of market share growth, the exercise price of the options, and the expected term of the options. Other assumptions, including the risk-free interest rate and the service period over which the cost is attributed, are consistent with those estimates. Entity T estimates at the grant date that its market share growth will be at least 10 percentage points over the 2-year performance period, which means that the expected exercise price of the share

options is \$15, resulting in a fair value of \$19.99 per option. Option value is determined using the same assumptions noted in paragraph 718-20-55-7 except the exercise price is \$15 and the award is not exercisable at \$15 per option for 2 years.

718-20-55-44

Total compensation cost to be recognized if the performance condition is satisfied would be \$199,900 (10,000 × \$19.99). Paragraph 718-10-30-15 requires that the fair value of both awards with service conditions and awards with performance conditions be estimated as of the date of grant. Paragraph 718-10-35-3 also requires recognition of cost for the number of instruments for which the requisite service is provided. For this performance award, Entity T also selects the expected assumptions at the grant date if the performance goal is not met. If market share growth is not at least 10 percentage points over the 2-year period, Entity T estimates a fair value of \$13.08 per option. Option value is determined using the same assumptions noted in paragraph 718-20-55-7 except the award is immediately vested.

718-20-55-45

Total compensation cost to be recognized if the performance goal is not met would be \$130,800 (10,000 × \$13.08). Because Entity T estimates that the performance condition would be satisfied, it would recognize compensation cost of \$130,800 on the date of grant related to the fair value of the fully vested award and recognize compensation cost of \$69,100 (\$199,900 – \$130,800) over the 2-year requisite service period related to the condition. Because of the nature of the performance condition, the award has multiple requisite service periods that affect the manner in which compensation cost is attributed.

718-20-55-46

During the two-year requisite service period, adjustments to reflect any change in estimate about satisfaction of the performance condition should be made, and, thus, aggregate cost recognized by the end of that period reflects whether the performance goal was met.

Section 4 describes in further detail how to recognize the compensation cost associated with share-based payment awards that contain performance conditions that affect factors other than vesting or exercisability.

3.4.3.4

Performance conditions to be established at a future date

In some cases, an entity may wish to grant performance awards that will vest or become exercisable based on the achievement of performance targets that will be specified in the future.

Illustration 3-2: Performance conditions to be established at a future date

An entity may grant options on 300 shares that vest in three tranches of 100 options based on the achievement of earnings targets for each year. Initially, only the first year's earnings target is established, while the targets for years 2 and 3 will be established before the beginning of each period in which the performance condition will be measured. In this example, we believe that a grant date has been achieved only for the first vesting tranche (100 options). Because vesting conditions are significant terms of an award, and the vesting terms for the second and third years are not initially known, we believe that a grant date does not occur (see discussion in section 3.3.1.1) until the vesting conditions for the remaining 200 options are established and communicated to the employee.

Similarly, if the performance condition is described in the award as a requirement to exceed budgeted earnings by a designated amount and budgets for the second and third years have not been established when the employee is informed of the award, the grant date cannot occur until the budgets are established.

In both cases, compensation cost for the second and third tranches is not measured until the vesting conditions are determined (based on establishing an explicit vesting condition or the budget that drives the vesting condition). As a result, compensation cost will be measured based on the fair value of the options on the date that the specific vesting terms are established and mutually understood.

See section 4.3.1 for discussion on whether the service inception date may precede the grant date.

3.4.3.5 Implied performance conditions (added October 2017)

Some awards may have an implied performance condition. An implied performance condition is not explicitly stated in the plan document, but an event that meets the definition of a performance condition (e.g., liquidity event) is required for the award to vest. Entities should carefully consider the provisions of these awards to understand the vesting conditions. Refer to section 4.4.5.2.4 for an example of the accounting for awards with an implied performance condition.

3.4.4 Market conditions

The exercisability or other terms of share-based payment may be dependent on achieving a specified share price or a specified return on the share price (e.g., price appreciation plus dividends). ASC 718 refers to such conditions as market conditions. ASC 718 defines a market condition as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Market Condition

A condition affecting the exercise price, exercisability, or other pertinent factors used in determining the fair value of an award under a share-based payment arrangement that relates to the achievement of either of the following:

- a. A specified price of the issuer's shares or a specified amount of intrinsic value indexed solely to the issuer's shares
- b. A specified price of the issuer's shares in terms of a similar (or index of similar) equity security (securities). The term similar as used in this definition refers to an equity security of another entity that has the same type of residual rights. For example, common stock of one entity generally would be similar to the common stock of another entity for this purpose.

Examples of market conditions include those in which exercisability is dependent on or other terms are affected by:

- ▶ The grantor's share price achieving a specified level
- ▶ Achieving a specified return on the grantor's shares, the calculation of which is based on both share price appreciation and dividends on the shares
- ▶ The grantor's share price increasing by a greater percentage than the average increase of the share price of a group of peer entities
- ▶ A specified share return, which is based on both share-price appreciation and dividends on the shares that exceed the average return on the S&P 500

Another example is an option with an exercise price that is indexed to the share prices of a group of entities in the same industry (an example of such an award is provided in section 7.4.5).

Market conditions must be included in the determination of the estimated grant-date fair value of share-based payments (i.e., the price in the previously discussed compensation cost measurement of “price × quantity”). As discussed in section 7.2.3, it is often necessary to use a lattice model to estimate the value of many awards with market conditions. When used appropriately, lattice models generally can be used to estimate the fair value of an award because it can incorporate the possibility that the market condition may not be satisfied.

Compensation cost related to an award with a market condition will be recognized regardless of whether the market condition is satisfied, if the related goods have been delivered or service has been provided. That is, the compensation cost will not be reversed solely because the market condition is not satisfied. The recognition of compensation cost for awards with market conditions is described in greater detail in section 4.

3.4.5 Other conditions

If a condition that affects the terms of a share-based payment is not a service, performance or market condition, the award is classified as a liability. For example, if the exercise price were indexed to the price of gold, the instrument would be classified as a liability, even if the grantor were a gold producer. ASC 718 requires that liability-classified awards be remeasured at fair value at each reporting date with changes in fair value recognized in earnings. The accounting for share-based payments classified as liabilities is described in detail in section 5.

3.4.6 Multiple conditions

The accounting for share-based payment awards becomes more complex when the terms include a combination of service, performance or market conditions. The basic principle is that compensation cost is recognized if the goods are delivered or the service is rendered, and no compensation cost is recognized if the goods are not delivered or the service is not rendered. While that concept appears to be a simple one, complexity arises in determining when the goods have been delivered or the service is rendered. ASC 718 requires that all terms and conditions (including any service, performance or market conditions) must be considered when determining the period over which compensation cost is to be recognized.

The following is an example provided in ASC 718 of how the existence of multiple conditions can affect an employee’s requisite service period:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-102

On January 1, 20X5, Entity T grants an executive 200,000 share options on its stock with an exercise price of \$30 per option. The award specifies that vesting (or exercisability) will occur upon the earlier of the following for Case A or both are met for Case B:

- a. The share price reaching and maintaining at least \$70 per share for 30 consecutive trading days [and/or]
- b. The completion of eight years of service.

718-10-55-103

The award contains an explicit service period of eight years related to the service condition and a derived service period related to the market condition.

When an award has multiple conditions that affect vesting or exercisability, the entity must assess all conditions when determining the requisite service period. Although the above example is related to determining an employee's requisite service period, we believe the concepts also apply to determining a nonemployee's vesting period. Section 4.4.5 describes how to determine the requisite service period and nonemployee's vesting period for an award that contains multiple service, performance and market conditions.

3.5 Reload options and contingent features

3.5.1 Reload options

Some share-based payment awards contain reload features that provide for a new grant of at-the-money options in an amount equal to the number of shares tendered to satisfy the exercise price of an existing option. ASC 718 provides the following guidance for accounting for awards that contain reload features:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-23

The fair value of each award of equity instruments, including an award of options with a reload feature (reload options), shall be measured separately based on its terms and the share price and other pertinent factors at the grant date. The effect of a reload feature in the terms of an award shall not be included in estimating the grant-date fair value of the award. Rather, a subsequent grant of reload options pursuant to that provision shall be accounted for as a separate award when the reload options are granted.

The FASB's Option Valuation Group¹¹ indicated that the reload feature (i.e., the possibility that additional options may be issued in the future) is a feature of the original option that can be incorporated into the estimate of the grant-date fair value of an option using a lattice model. However, because the exercise price of a reload option is not established until the original option is exercised, the FASB concluded that the reload option does not establish an equity relationship (see section 3.3.1.2) and therefore has not been granted until the original option is exercised and the reload option's terms are known. Accordingly, the fair value of a reload feature is not incorporated into the estimate of the grant-date fair value of an award. Instead, subsequent grants of reload options under the reload feature must be accounted for as new awards and measured at fair value on the grant date of each new award. The effect of reload features on the value of options is discussed further in section 7.4.3.

3.5.2 Contingent features

Some share-based payments contain provisions that require the grantee to return equity instruments or any gains from the sale of equity instruments on the occurrence of certain future events. These provisions, commonly characterized as "clawback provisions," are usually triggered by noncompete, nonsolicitation or fraudulent behavior provisions. Clawback provisions may also be triggered by other events, such as a restatement of financial statements, which might arise after a share-based payment has already been earned.

¹¹ The Option Valuation Group is a group of valuation experts and compensation consultants established by the FASB to provide information and advice on measuring the fair value of options and similar instruments.

ASC 718 provides the following accounting treatment for this type of contingent feature:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-24

A contingent feature of an award that might cause a grantee to return to the entity either equity instruments earned or realized gains from the sale of equity instruments earned for consideration that is less than fair value on the date of transfer (including no consideration), such as a clawback feature (see paragraph 718-10-55-8), shall not be reflected in estimating the grant-date fair value of an equity instrument.

Implementation Guidance and Illustrations

718-10-55-47

[...] Instead, the effect of such a contingent feature shall be accounted for if and when the contingent event occurs. For instance, a share-based payment arrangement may stipulate the return of vested equity shares to the issuing entity for no consideration if the grantee terminates the employment or vendor relationship to work for a competitor. The effect of that provision on the grant-date fair value of the equity shares shall not be considered. If the issuing entity subsequently receives those shares (or their equivalent value in cash or other assets) as a result of that provision, a credit shall be recognized in the income statement upon the receipt of the shares. That credit is limited to the lesser of the recognized compensation cost associated with the share-based payment arrangement that contains the contingent feature and the fair value of the consideration received. [...]

If a clawback feature is triggered and the employee or nonemployee (or former employee or former vendor or service provider) must return shares in exchange for consideration in an amount less than their current fair value, or must return the gain realized on exercise of an option or sale of shares, the consideration received by the entity should be recognized with a debit in the appropriate balance sheet account (e.g., cash or treasury shares) based on the fair value of the consideration received. ASC 718-10-55-47 provides that a credit, which represents a contingent gain, should be recognized in the income statement in an amount equal to the lesser of (1) the recognized compensation cost related to the share-based payment that contains the contingent feature or (2) the fair value of the consideration received. Any difference between the fair value of the consideration received and the amount recorded in the income statement must be recorded as additional paid-in capital. ASC 718 provides the following basis for recognizing a contingent gain:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

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[...] The event is recognized in the income statement because the resulting transaction takes place with a grantee as a result of the current (or prior) employment or vendor relationship rather than as a result of the grantee's role as an equity owner. [...]

While the FASB does not explicitly prescribe the appropriate income statement classification of a gain recognized for the exercise of a clawback, the illustration in ASC 718-20-55-84A and ASC 718-20-55-85 (included below) shows the credit being recognized in the income statement as "other income." We believe this presentation is appropriate because the grantee previously provided the service. Otherwise, the

clawback would have been accounted for as a forfeiture, and the grantor would have continued to recognize compensation cost through the clawback expiration date (see further discussion in section 4.4.1.2.2). Accordingly, the compensation cost associated with that service should not be reversed.

The following example from ASC 718-20-55-84A and ASC 718-20-55-85 illustrates the accounting for nonemployee awards and employee awards with a clawback feature when the contingent event occurs:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-84A

This Example (see paragraphs 718-20-55-85 through 55-86) describes employee awards. However, the principles on how to account for the various aspects of employee awards, except for the compensation cost attribution and certain inputs to valuation, are the same for nonemployee awards.

Consequently, the accounting for a contingent feature (such as a clawback) of an award that might cause a grantee to return to the entity either equity instruments earned or realized gains from the sale of the equity instruments earned is equally applicable to nonemployee awards with the same feature as the awards in this Example (that is, the clawback feature). Therefore, the guidance in this Example also serves as implementation guidance for similar nonemployee awards.

718-20-55-85

On January 1, 20X5, Entity T grants its chief executive officer an award of 100,000 shares of stock that vest upon the completion of 5 years of service. The market price of Entity T's stock is \$30 per share on that date. The grant-date fair value of the award is \$3,000,000 (100,000 × \$30). The shares become freely transferable upon vesting; however, the award provisions specify that, in the event of the employee's termination and subsequent employment by a direct competitor (as defined by the award) within three years after vesting, the shares or their cash equivalent on the date of employment by the direct competitor must be returned to Entity T for no consideration (a clawback feature). The chief executive officer completes five years of service and vests in the award. Approximately two years after vesting in the share award, the chief executive officer terminates employment and is hired as an employee of a direct competitor. Paragraph 718-10-55-8 states that contingent features requiring an employee to transfer equity shares earned or realized gains from the sale of equity instruments earned as a result of **share-based payment arrangements** to the issuing entity for consideration that is less than fair value on the date of transfer (including no consideration) are not considered in estimating the fair value of an equity instrument on the date it is granted. Those features are accounted for if and when the contingent event occurs by recognizing the consideration received in the corresponding balance sheet account and a credit in the income statement equal to the lesser of the recognized compensation cost of the share-based payment arrangement that contains the contingent feature (\$3,000,000) and the fair value of the consideration received. This guidance does not apply to cancellations of awards of equity instruments as discussed in paragraphs 718-20-35-7 through 35-9. The former chief executive officer returns 100,000 shares of Entity T's common stock with a total market value of \$4,500,000 as a result of the award's provisions. The following journal entry accounts for that event:

Treasury stock	\$ 4,500,000	
Additional paid-in capital		\$ 1,500,000
Other income		\$ 3,000,000

To recognize the receipt of consideration as a result of the clawback feature.

718-20-55-86

If instead of delivering shares to Entity T, the former chief executive officer had paid cash equal to the total market value of 100,000 shares of Entity T's common stock, the following journal entry would have been recorded:

Cash	\$ 4,500,000	
Additional paid-in capital		\$ 1,500,000
Other income		\$ 3,000,000

To recognize the receipt of consideration as a result of the clawback feature.

In the above example, the requisite service period was determined to be a function of the five-year vesting period. The clawback feature in this example is not deemed to establish a service or performance condition (and is not reflected in the determination of grant-date fair value). However, a contingent feature such as a clawback for violation of a noncompete agreement may, in rare circumstances, represent a substantive service condition that would be incorporated into the determination of an employee's requisite service period or nonemployee's vesting period. If that were the case, the actual clawback generally would be accounted for as a forfeiture, rather than as a contingent gain. The effect of noncompete clawback provisions is discussed further in section 4.4.1.2.2.

Finally, a provision of an award may be characterized as a clawback but actually meet the definition of a performance or market condition (e.g., awards must be returned if a grantor performance metric or targeted share price is not achieved). In that case, the "clawback" is accounted for as a performance or market condition as described in sections 3.4 and 4.4.

It is important to distinguish objectively determinable clawback features from provisions in a share-based payment arrangement that may allow those charged with corporate governance to adjust the actual payout of compensation on or after the vesting date based on their discretion. Discretionary clauses may be included in an award as a precautionary measure to allow a reduction to the number of awards that vested in certain circumstances or because an entity does not want to finalize the number of awards a grantee can earn until the end of the performance or service period. While traditional clawback features should not be accounted for prior to the occurrence of the contingent event, discretionary clauses can significantly affect the measurement of compensation cost. As discussed in section 3.3.1.1, under the definition of a grant date, there must be a mutual understanding between grantor and grantee over the key terms and conditions of an award. If the vesting conditions have not been finalized or can be discretionarily adjusted at a future date, a mutual understanding of the terms of the award likely does not exist and a grant date likely would not be achieved until the provisions are later specified and communicated to the grantee, or the contingency has lapsed. The accounting for awards with a delayed grant date is discussed further in section 4.3.

Once a grant date has been established, any discretionary change to the terms of an award would be accounted for as a modification (see section 8). If a discretionary change is made subsequent to fulfillment of the vesting conditions present in an award (e.g., if the number of awards is reduced), the discretionary change would be treated as a cancellation and previously recognized compensation cost for the award would not be reversed.

3.6 Dividend-protected awards

This section discusses the accounting for share-based payments that include dividend-protection features, such as dividend payments or adjustments to the exercise price for dividends declared. Dividend-protection features also have implications for the valuation of awards, which are discussed in section 7.4.8.

3.6.1 Dividend equivalents paid on equity instruments prior to vesting

The effect of a dividend feature on the calculation of EPS is discussed in section 3.6.4. ASC 718 describes the accounting for dividends on share-based payments classified as equity as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-45

In certain situations, grantees may receive the dividends paid on the underlying equity shares while the option is outstanding. Dividends or dividend equivalents paid to grantees on the portion of an award of equity shares or other equity instruments that vests shall be charged to retained earnings. If grantees are not required to return the dividends or dividend equivalents received if they forfeit their awards, dividends or dividend equivalents paid on instruments that do not vest shall be recognized as additional compensation cost. If an entity's accounting policy is to estimate the number of awards expected to be forfeited in accordance with paragraph 718-10-35-1D or 718-10-35-3, the estimate of compensation cost for dividends or dividend equivalents paid on instruments that are not expected to vest shall be consistent with an entity's estimates of forfeitures. Dividends and dividend equivalents shall be reclassified between retained earnings and compensation cost in a subsequent period if the entity changes its forfeiture estimates (or actual forfeitures differ from previous estimates). If an entity's accounting policy is to account for forfeitures when they occur in accordance with paragraph 718-10-35-1D or 718-10-35-3, the entity shall reclassify to compensation cost in the period in which the forfeitures occur the amount of dividends and dividend equivalents previously charged to retained earnings relating to awards that are forfeited.

In some cases, a grantee will receive dividends on an award from the date the award is granted, even though the award is subject to vesting requirements. Dividends or dividend equivalents on the portion of the equity instruments that vest are recognized as charges to retained earnings. Nonforfeitable dividend equivalents and similar payments on the portion of an equity instrument that does not vest are recognized as additional compensation cost.

The reason for the difference in accounting for dividends on equity instruments that vest and those that do not vest stems from the present value of future dividends being reflected in the estimate of the grant-date fair value of an award. For example, the fair value of a share conceptually is equal to the present value of payments to be received on that share, including dividend payments and any payments on liquidation. Accordingly, recognizing dividends as compensation cost and recognizing the grant-date fair value of the instrument as compensation cost would effectively double-count the dividends paid during the vesting period as compensation cost. Therefore, if the grant-date fair value of the award is recognized as compensation cost, the dividends are recognized as charges to retained earnings. If the grant-date fair value is not recognized as compensation cost (because the instrument is forfeited or is expected to be forfeited), dividends on those awards are charged to compensation cost and there is no double-counting of expense. This principle applies to dividends paid on any form of share-based payment classified as an equity instrument, including dividends paid on options and "restricted stock units." Valuation principles for dividend paying awards are discussed in section 7.4.8.

When an entity elects to estimate forfeitures (see section 4.1.2.2), it must make estimates for awards that are expected to vest in accordance with the accounting model for dividends, which will possibly require adjustments between retained earnings and compensation cost. For example, a reclassification to compensation cost from retained earnings may be necessary to reflect the amount of dividends on awards originally expected to vest that ultimately are forfeited. As described in ASC 718-10-55-45, the

estimate of the number of awards that will vest for purposes of accounting for nonforfeitable dividends must be consistent with the estimate of awards that will vest for purposes of recognizing compensation cost (i.e., forfeitures).

When an entity elects to account for forfeitures when they occur, it initially recognizes nonforfeitable dividends and dividend equivalents in retained earnings and reclassifies amounts previously charged to retained earnings to compensation cost in the period the award is forfeited.

Forfeitable dividends must be returned (or are never paid) unless the underlying shares vest. For awards that provide for forfeitable dividends, the entity always charges the dividends to retained earnings since they will only ultimately be paid on awards that vest. Therefore, the incremental fair value is not double-counted.

We believe that the accounting model described above would apply when the dividends are in the form of cash dividends or in the form of share-based awards of equivalent value. For example, assume an entity grants 10,000 nonvested shares that will cliff vest at the end of five years, and the awards provide for the payment of dividend equivalents that will be settled with awards that will vest on the same date as the original award. If at the end of year 1, a \$1 per share dividend is paid to all shareholders (and the share price is \$50 per share on the record date), the grantee would receive an additional 200 nonvested shares that would vest over the remaining four years. If the dividends are settled in shares with a fair value on the record date of the dividend equal to the cash that otherwise would have been paid, we believe the dividends would be accounted for in a manner similar to cash dividends (except that instead of a credit to cash, the credit would be to capital shares and APIC).

3.6.2 Dividend equivalents paid on liability instruments

While not explicitly addressed in ASC 718, we believe that, consistent with the requirements of ASC 480, all dividend equivalents paid on share-based liabilities must be accounted for as compensation cost.

3.6.3 Dividend equivalents that reduce the exercise price

Rather than requiring cash dividends to be directly remitted to the option holder, the terms of some share-based payment arrangements provide for a reduction in the exercise price equal to the per-share dividends paid on issued shares during the term of the option. Changes in the exercise price resulting from dividends are not recognized in the financial statements because it is incorporated into the initial valuation of the option and so is not double-counted. However, such provisions affect the valuation of an option, as discussed in section 7.4.8.

3.6.4 Implications of dividend equivalents on EPS

ASC 260 requires entities with multiple classes of common shares or with securities other than common shares that participate in dividends (participating securities) to use the two-class method of computing EPS. The two-class method is an earnings allocation approach that determines EPS for each class of common shares and participating security according to dividends declared (or accumulated) and participation rights in undistributed earnings. In some cases, a dividend protection feature may cause a share-based payment to be subject to the two-class method, with the potential for significant dilution to both basic and diluted EPS. ASC 260-10-65-1 further clarifies that nonvested share-based payment awards containing nonforfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are considered participating securities and are included in the computation of EPS in accordance with the two-class method. The implications of share-based payments on the calculation of EPS, including the two-class method, are discussed in our FRD, *Earnings per share*.

3.7 Nonrecourse notes

Sometimes an employer may provide financing to grantees for the purchase of shares or the exercise of options. These loans may be structured in a number of ways, but the accounting for these loans (and the shares sold) differs significantly based on whether the loans are considered recourse or nonrecourse.

Loans made to grantees for the purchase of shares or the exercise of options often are nonrecourse, meaning that the loan is collateralized only by the shares purchased and the grantor's only recourse is to the shares. If the loan is nonrecourse, the grantee could choose not to pay the loan and return the shares in full satisfaction of the loan. The purchase of shares in exchange for a nonrecourse loan effectively is the same as granting an option because if the value of the underlying shares falls below the loan amount, the grantee will relinquish the shares in lieu of repaying the loan. In that event, the grantee is in the same position as if he or she never exercised the original option or purchased the shares. ASC 718 includes the following guidance on accounting for notes received in exchange for issuing shares or share options:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-3

The accounting for all share-based payment transactions shall reflect the rights conveyed to the holder of the instruments and the obligations imposed on the issuer of the instruments, regardless of how those transactions are structured. For example, the rights and obligations embodied in a transfer of equity shares for a note that provides no recourse to other assets of the grantee (that is, other than the shares) are substantially the same as those embodied in a grant of equity share options. Thus, that transaction shall be accounted for as a substantive grant of equity share options.

718-10-25-4

Assessment of both the rights and obligations in a share-based payment **award** and any related arrangement and how those rights and obligations affect the **fair value** of an award requires the exercise of judgment in considering the relevant facts and circumstances.

Initial Measurement

718-10-30-5

The **terms of a share-based payment award** and any related arrangement affect its value and, except for certain explicitly excluded features, such as a **reload feature**, shall be reflected in determining the fair value of the equity or liability instruments granted. For example, the fair value of a substantive option structured as the exchange of equity shares for a nonrecourse note will differ depending on whether the grantee is required to pay nonrefundable interest on the note.

The accounting for and valuation of shares sold in exchange for a nonrecourse note can be complicated because the amount of nonrecourse principal and interest is considered part of the exercise price of an option. For example, if shares are sold subject to a nonrecourse note that charges nonrecourse interest at 6% of the loan balance, that option has an exercise price that increases over time at a rate of 6%. The grantor should not recognize interest income on the note since that "interest" is included in the exercise price of the option. However, the valuation of the option should incorporate this increasing exercise price (see the discussion of indexed options in section 7.4.5).

Further, because the shares sold subject to the nonrecourse note are considered an option for accounting purposes, the grantor would not record a note or shares outstanding on the balance sheet (except perhaps for a reclassification of the par amount of the shares from additional paid-in capital to common shares, and an indication in the disclosure of shares authorized, issued and outstanding that such shares are legally issued), but instead would measure compensation cost for the option based on its fair value on the grant date and recognize that compensation cost over an employee's requisite service period or nonemployee's vesting period with an offsetting credit to additional paid-in capital.

The maturity date of the nonrecourse note received in exchange for the grantee's share purchase will generally not affect the determination of the employee's requisite service period or nonemployee's vesting period of the option. Rather, the maturity date would represent the expiration of the term of the option and affect the estimated fair value of the option. For example, if a nonrecourse note issued in exchange for shares matures in six years but the grantee can prepay the note at any time (and is not required to deliver future goods or provide future service), the compensation cost for the option should be immediately recorded. The maximum term of that option would be six years (see section 7.3.1 for a discussion of estimating the expected term of an option). However, if the note was not prepayable and the grantee was required to continue to deliver goods or provide services at the maturity of the note to be able to pay the note and retain the shares, the vesting period and the expected term of the option would be six years.

3.7.1 Recourse notes may be substantively nonrecourse

When a grantee purchases shares in exchange for a recourse loan, the transaction may not be subject to the guidance referenced in section 3.7, because an exercise of an option or purchase of shares with a recourse note is considered to be a substantive exercise or purchase. A recourse note receivable for the issuance of equity should be presented in accordance with the guidance in ASC 505-10-45 as discussed in section 3.2.5.1 of our FRD, *Issuer's accounting for debt and equity financings*. However, while the form of a loan may be that of a recourse note (i.e., it does not limit the lender's recourse to the underlying share), in some cases, the substance of the loan may be that of a nonrecourse note. This happens frequently with loans to employees because the employer may not intend to collect on the "recourse" loan in full if the share is worth less than the loan balance.

To characterize a loan as a recourse loan, the entity must be able and clearly intend to foreclose on the grantee's other assets in the event of default by the grantee, including situations in which the market price of the shares has declined below the face amount of the loan. In addition, any significant practice of not collecting on recourse loans renders the recourse provisions of the loan nonsubstantive, and any recourse loans may be more appropriately characterized as nonrecourse.

While ASC 718 superseded EITF 00-23, we believe that the concepts described in Issue 34 of EITF 00-23 should be considered when accounting for grantee loans. Therefore, we believe the legal form of a recourse note should be respected (i.e., the option is considered to be exercised in exchange for a recourse note), unless any one of the following conditions is met:

- ▶ The grantor has legal recourse to the employee's other assets but does not intend to seek repayment beyond the shares issued.
- ▶ The grantor has a history of not demanding repayment of the loan amounts in excess of the fair value of the shares.
- ▶ The grantee does not have sufficient assets or other means (e.g., future cash flows) beyond the value of the shares to justify the recourse nature of the loan.
- ▶ The grantor has accepted a recourse note on exercise and subsequently converted the recourse note to a nonrecourse note.

If any of the above conditions is met, the recourse character of the note is not considered substantive (i.e., the grantor's only recourse is against the shares). In this case, the arrangement should be accounted for based on its substance (i.e., as an option) because the note should be viewed as nonrecourse. However, in addition to the above criteria, all relevant facts and circumstances should be evaluated in determining whether the note should be considered nonrecourse.

3.8 Early exercise of employee options and similar share purchases

Option plans may permit grantees to “early exercise options (i.e., remit cash consideration or a recourse note to the entity for the exercise price) in exchange for shares before the goods are delivered or service is rendered (e.g., before the grantee vests in the award). Usually, early exercise is used to achieve a more favorable tax position (i.e., for US federal income tax purposes, exercising nonvested options for cash generally results in deemed ownership of all shares received when the exercise occurs). Under US tax law, the holding period begins on the exercise date. Once the shares are held for the required period, any realized appreciation on shares sold is taxed at the capital gains rate rather than the ordinary income rate, which may be beneficial to the grantee.

While the grantee is deemed to own the shares resulting from an early exercise of an option for tax purposes, the option was exercised before the grantee actually vested in the award under its original terms. Consequently, the restricted shares received by the grantee contain a repurchase provision (i.e., a grantor call option) contingent on the grantee’s forfeiture of the award (e.g., employee’s termination). The call option enables the entity to recover the shares without transferring any appreciation to the grantee if the grantee forfeits the award before the end of the original vesting period. These arrangements may be structured such that the repurchase price is the original exercise price or the lesser of the original exercise price or fair value of the shares on the call date (i.e., if the shares decline in value and the employee terminates before the vesting period expires, the employer is able to repurchase the shares at their fair value at the termination date). The latter structure establishes a stronger tax argument that the grantee is the owner of the underlying shares from the date the option award is exercised because the grantee shares in the risks of share ownership.

Similar economics result from the outright sale of shares subject to repurchase rights similar to those discussed above. Essentially, such a sale is equivalent to the grant and immediate early exercise of an option.

The accounting for early exercises and other sales of shares subject to repurchase features is addressed in ASC 718-10-55-31, which states that “[u]nder some share option arrangements, an option holder may exercise an option prior to vesting (usually to obtain a specific tax treatment); however, such arrangements generally require that any shares received on exercise be returned to the entity (with or without a return of the exercise price to the holder) if the vesting conditions are not satisfied. Such an exercise is not substantive for accounting purposes.”

Although it is superseded by ASC 718, Issue 33 of EITF 00-23 provides useful analogous guidance that generally is consistent with ASC 718-10-55-31 and states the grantor is expected to exercise the repurchase right when the employee terminates regardless of whether the share price is greater or less than the exercise price at the date the employee terminates. Consequently, the early exercise is not considered to be a substantive exercise for accounting purposes, and, therefore, the payment received by the grantor for the exercise price should be recognized as a liability.¹² Additionally:

- ▶ The contingent grantor call essentially is a forfeiture provision that enables the grantor to reacquire shares if the grantee does not meet the vesting conditions in the original award (i.e., the grantee is not subject to the risk or rewards of share ownership), if the grantee early exercises the option and the resulting grantor call:
 - ▶ Expires at the end of the original vesting period for the option
 - ▶ Becomes exercisable only if an event occurs (e.g., termination) that would have caused the option to be forfeited
 - ▶ Has an exercise price equal to the original exercise price or the lower of the original exercise price or fair value at the time of the repurchase

¹² Liability classification may not be required in rare situations where an employer is not required to return the early exercise payment.

- ▶ For accounting purposes, the grantor call provisions should be considered in combination with the grantee's purchase of the shares, resulting in a nonvested option.
- ▶ We believe the estimate of the fair value of the option subject to the repurchase at cost or fair value should incorporate the likelihood of early exercise into the expected term. However, because the grantee's exercise subject to repurchase at cost is not considered an exercise for accounting purposes until the repurchase feature expires, the expected term cannot be less than the repurchase/vesting term. However, if all options were expected to be early exercised (perhaps an unlikely scenario), the expected term of the options would be equal to the repurchase/vesting term.
- ▶ A modification of an option to permit early exercise is not an acceleration of vesting because the options are not deemed exercised for accounting purposes.
- ▶ Shares issued in an early exercise of an option are not considered outstanding (before the grantor call lapses) because the grantee is not entitled to the rewards of share ownership. Those shares are not shown as outstanding on the balance sheet (except perhaps for a reclassification of the par amount of the shares from additional paid-in capital to common shares, and an indication in the disclosure of shares authorized, issued and outstanding that such shares are legally issued) and are excluded from basic EPS until the grantor call lapses and the shares are no longer subject to a repurchase feature.
- ▶ However, if the shares receive nonforfeitable dividends during the vesting period, those shares may be viewed as participating securities subject to the two-class method of allocating earnings for purposes of calculating EPS (see further discussion in our FRD, *Earnings per share*). Further, the shares are included in the calculation of diluted EPS using the treasury stock method. If the grantee has already paid the exercise price in cash, we believe that the exercise price should not be included in the proceeds when applying the treasury stock method.

If the grantee does not provide the required goods or service and the grantor exercises its repurchase right, the option has been forfeited and the grantor simply returns the exercise price they had paid. If the grantor fails to exercise its call, it effectively represents a modification to accelerate vesting. The employer should account for such a modification as a "Type III" modification (i.e., a modification of a vesting condition that was improbable of achievement to a vesting condition that is probable of achievement). As a result, compensation cost should be recognized for the modified award based on its fair value on the modification date, even if the fair value on the modification date is less than the grant date fair value (see section 8.3.3).

3.9

Changes in employment status

The concepts discussed in this section relate to awards granted to an individual who changes status from an employee to a nonemployee service provider¹³ or vice versa. Sometimes an employee terminates from an entity but continues to provide services as a consultant, for example. In other circumstances, an outside consultant who was granted options may subsequently be hired by an entity as an employee. In both cases, a change in employment status has occurred.

A change in employment status also can arise due to a change in status of the entity granting the option to or from an employer. For example, assume an entity reduces its ownership interest in a subsidiary (e.g., from 80% to 25%) and the entity now accounts for its investment using the equity method. In this situation, a change in status occurs with respect to the employees of the investee because the individuals no longer are considered employees of the entity.

¹³ The accounting guidance for a change in status does not apply when a modification is made to an award after an employee is terminated and he or she will not provide future service as a nonemployee. In that situation, the modification is considered compensation for prior service as an employee.

Because there are differences between employee and nonemployee awards, including cost attribution methods, it is important to determine whether the recipient of an award is an employee (see section 2.2).

Because of the different cost attribution guidance for awards to employees and nonemployees, a change in the recipient's employment status may have an accounting consequence. We do not believe, however, that a change in employment status will affect the fair value of an option (if the original award provides for continuity in vesting upon a change in status), since the grantee would not be expected to behave any differently with respect to the options earned as a nonemployee from those earned as an employee and vice versa.

3.9.1 Individual changes employment status and continues to vest under the original terms of the award

The provisions of a share-based payment may allow the recipient to continue to vest after a change in status. For example, an individual may be granted options in exchange for consulting services under an arrangement that permits the individual to continue vesting in that award if he or she becomes an employee. Alternatively, the individual may be granted options in exchange for services as an employee under an arrangement that permits the individual to continue vesting in that award if the individual ceases to be an employee but continues to provide specified services as a nonemployee.

If a grantee (who continues to provide goods or services) changes status to or from that of an employee and an outstanding option or award is retained by the grantee without a modification to the award's original terms, the award will not require remeasurement on the date of the status change. However, because the pattern of recognition of compensation cost differs for employee and nonemployee awards (see section 4), the entity will have to recognize compensation cost according to the grantee's status. The change in the recognition pattern will be accounted for prospectively. That is, the amount of compensation cost recognized under the grantee's original status would not be adjusted. However, when the grantee's status changes, the unrecognized compensation cost at that date will need to be recognized over the remaining vesting period according to the grantee's new status.

Illustration 3-3: Change in employment status

On 1 January 20X6, an entity grants to an employee an award valued at \$300 that will cliff vest after three years of service. The original award stipulates that it will continue to vest if the grantee terminates employment but continues to provide services as a consultant to complete a specific project.

As an employee award, the entity will recognize the compensation cost ratably over the three-year service period. Therefore, in 20X6, it recognizes \$100 of compensation cost (\$300 grant date fair value x 1/3 of 3 year vesting period).

On 1 January 20X7, the grantee terminates employment and continues to perform as a consultant. For a nonemployee award, the entity will recognize the remaining compensation cost (\$200) as if the entity had paid cash for the consulting services. The grantee completes the project by 31 December 20X7, and the entity recognizes the remaining compensation cost of \$200 during that year.

However, if the grantee continued to provide services consistently over the two-year period after the change in status, there would be no effect of the change in status, and the entity would recognize \$100 in each 20X7 and 20X8, as it would have if the grantee had remained an employee.

3.9.1.1 **An individual ceases to provide substantive service and continues to vest in an award**

In the example in ASC 718-10-55-87 and 55-88 (as discussed in section 4.4.1.2), the FASB concluded that because an employee is eligible to retire at the grant date and retain the award, the award's explicit service condition is nonsubstantive. Consequently, the entity has granted an award that does not contain a service condition for vesting. That is, the award is effectively vested, and thus, the award's entire fair value should be recognized as compensation cost on the grant date. All of the terms of a share-based payment award and other relevant facts and circumstances must be analyzed when determining the period over which to recognize compensation cost. We believe this guidance applies broadly to all grants of share-based payments that allow the grantee to vest in the award without satisfying the stated vesting conditions.

3.9.2 **A modification is required for the individual to continue to vest in the award**

If the entity modifies the award to allow the individual to continue vesting subsequent to a change in status (i.e., the individual would have forfeited the award absent the modification), the modified award will be treated as a new award, and the original award is considered to be forfeited (and any compensation cost is reversed when the award is no longer expected to vest). Since the original grant date measurement of compensation cost is no longer relevant, the fair value of the new award on the modification date must be recognized over the remaining service period. Such a modification is essentially a Type III modification of a vesting condition, which is discussed further in section 8.3.3.

3.10 **Balance sheet presentation of equity awards**

An equity instrument is not recognized until the compensation cost related to that instrument is recognized. These journal entries are illustrated in section 4.4.1.6.

Under Rule 5-02 of Regulation S-X, an SEC registrant must disclose on the face of its balance sheet the number of issued or outstanding shares for each class of shares. When an entity issues nonvested shares, a question arises about whether the nonvested shares should be considered issued or outstanding for disclosure purposes under Rule 5-02. While we believe this is a legal determination, the payment of dividends and the conveyance of voting rights may indicate that the nonvested shares are issued or outstanding. Further, while the nonvested shares are not considered issued or outstanding for accounting purposes, they may be considered issued or outstanding for legal purposes. The nonvested shares are excluded from the computation of basic EPS (unless they are considered participating securities) but included in the computation of diluted EPS. See our FRD, *Earnings per share*, for details.

4 Recognition of compensation cost

4.1 Overview

The cost attribution guidance in ASC 718 differs for share-based payments issued to employees and nonemployees. Compensation cost for awards issued to employees is recognized over the requisite service period, whereas cost for awards issued to nonemployees is recognized in the same period and in the same manner as if the entity had paid cash for the goods or services. This is one of the key differences between the accounting for awards issued to employees and nonemployees.

Employee awards

Consistent with how other forms of compensation (e.g., cash, benefits) are recognized, ASC 718 requires that compensation cost relating to share-based payments exchanged for employee services be recognized over the period in which the employee provides the required services. ASC 718 calls that period the requisite service period:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-2

The compensation cost for an **award** of share-based **employee** compensation classified as equity shall be recognized over the **requisite service period**, with a corresponding credit to equity (generally, paid-in capital). The requisite service period is the period during which an employee is required to provide service in exchange for an award, which often is the vesting period. The requisite service period is estimated based on an analysis of the **terms of the share-based payment award**.

The requisite service period for an employee award is important because it not only determines the period over which compensation cost is recognized, but, as discussed in section 4.1.2, it also determines whether compensation cost is ultimately recognized (i.e., whether an award has been forfeited and, therefore, no compensation cost is recognized for it).

An employee's requisite service period generally is presumed to be the stated vesting period (an explicit service condition) and begins on the service inception date (discussed in section 4.3). However, if performance or market conditions (see section 3 for the definitions of these types of conditions) affect the terms of the award, the service period used for recognition purposes must be consistent with the assumptions used in estimating the fair value of the award (i.e., consistent with the estimated time frame that will be required to achieve the performance or market condition). Most of this section discusses how to estimate the requisite service period and recognize compensation cost over that service period.

Nonemployee awards

ASC 718 requires a grantor to recognize compensation cost from a share-based payment transaction with a nonemployee in the same period and in the same manner as if the entity had paid cash for the goods or services. In other words, compensation cost is recognized by the grantor over what is referred to as the nonemployee's vesting period as the goods are received or services are rendered. The determination of a nonemployee's vesting period is not required for cost attribution purposes, as compensation cost is recognized as the goods are received or services are performed. However, if an entity is estimating the expected term to value a nonemployee option (see section 7.3.2), it may have to estimate the nonemployee's

vesting period as it may affect the entity's assumptions about the grantee's exercise behavior and therefore the value of the award. ASC 718 does not provide guidance on how to determine the vesting period for a nonemployee award, but it says that judgment is required. We believe the concepts discussed in section 4 on how to determine an employee's requisite service period may also be applied to determine the vesting period for a nonemployee award for valuation purposes.

If an entity grants fully vested, nonforfeitable equity instruments to a nonemployee at the date the parties enter into an agreement for goods or services and the nonemployee has no obligation to deliver goods or render services in the future to retain those equity instruments, the entity must recognize the compensation cost when the awards are granted (in most cases, when the agreement is entered into).

4.1.1 Deferred compensation cost not recognized

Under ASC 718, an equity instrument is not considered to be issued until it vests.¹⁴ As a result, compensation cost is recognized over the employee's requisite service period or nonemployee's vesting period with an offsetting credit to equity (generally, additional paid-in capital), and the full fair value of the share-based payment is not recognized until the instrument is vested. ASC 718 prohibits this "gross-up" of stockholders' equity. That is, entities cannot record the full fair value of the shares in stockholders' equity and an offsetting deferred compensation balance within equity for the unrecognized compensation cost (see further discussion in section 3.10).

4.1.2 Compensation cost recognized only if goods delivered/services provided

As previously indicated, compensation cost relating to share-based payments is recognized only for instruments for which the goods are delivered or services are provided.

4.1.3 When to capitalize compensation cost

Compensation cost should be recognized in a manner similar to all other forms of compensation paid to the recipient of the share-based payment (e.g., cash, benefits). Compensation cost generally is recognized as compensation expense; however, in some instances, share-based payment awards may represent a cost to acquire or construct another asset. In these cases, the compensation cost may be capitalized as part of an asset (e.g., inventory, loan origination costs, deferred acquisition costs in the insurance industry, internally developed software costs, capitalized exploration costs in the oil and gas industry). In SAB Topic 14.I, the SEC staff addressed certain questions about the processes and related internal controls that entities may implement to capitalize costs of share-based payments.

Excerpt from SAB Topic 14.I

Facts: Company K is a manufacturing company that grants share options to its production employees. Company K has determined that the cost of the production employees' service is an inventoriable cost. As such, Company K is required to initially capitalize the cost of the share option grants to these production employees as inventory and later recognize the cost in the income statement when the inventory is consumed.⁹⁴

Question: If Company K elects to adjust its period end inventory balance for the allocable amount of share-option cost through a period end adjustment to its financial statements, instead of incorporating the share-option cost through its inventory costing system, would this be considered a deficiency in internal controls?

¹⁴ Throughout this section, we will use the term "vest" to indicate that the goods have been delivered or the service has been provided. Some equity compensation plans use this term to mean that the grantee obtains the right to exercise an option or receive a share. However, as discussed in section 3, a market condition is not considered a vesting condition, although the plan document may characterize it as such. While a market condition may affect the determination of an employee's requisite service period or a nonemployee's vesting period, the failure to achieve a market condition does not result in the reversal of recognized compensation cost. This concept is discussed in greater detail later in this section.

Interpretive Response: No. FASB ASC Topic 718, Compensation – Stock Compensation, does not prescribe the mechanism a company should use to incorporate a portion of share-option costs in an inventory-costing system. The staff believes Company K may accomplish this through a period end adjustment to its financial statements. Company K should establish appropriate controls surrounding the calculation and recording of this period end adjustment, as it would any other period end adjustment. The fact that the entry is recorded as a period end adjustment, by itself, should not impact management's ability to determine that the internal control over financial reporting, as defined by the SEC's rules implementing Section 404 of the Sarbanes-Oxley Act of 2002,⁹⁵ is effective.

[Footnotes 94 and 95 omitted.]

4.1.4 Recognizing the change in fair value or intrinsic value for certain awards

Certain share-based payment awards must be remeasured (at fair value, calculated value or intrinsic value) at each reporting date (e.g., instruments classified as liabilities as discussed in section 5, instruments for which fair value cannot be reasonably estimated as discussed in section 3.2.3). In general, the compensation cost relating to awards that are remeasured at each reporting date is recognized in a manner similar to awards measured at grant-date fair value. ASC 718-30-35-2 provides the following guidance on accounting for the change in fair value, calculated value or intrinsic value at each reporting date:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

Subsequent Measurement

718-30-35-2

Changes in the fair value (or **intrinsic value** for a **nonpublic entity** that elects that method) of a liability incurred under a share-based payment arrangement that occur during the **employee's** requisite service period or the nonemployee's vesting period shall be recognized as compensation cost over that period. The percentage of the fair value (or intrinsic value) that is accrued as compensation cost at the end of each period shall equal the percentage of the requisite service that has been rendered for an employee award or the percentage that would have been recognized had the grantor paid cash for the goods or services instead of paying with a nonemployee award at that date. Changes in the fair value (or intrinsic value) of a liability that occur after the end of the employee's requisite service period or the nonemployee's vesting period are compensation cost of the period in which the changes occur. Any difference between the amount for which a liability **award** is settled and its fair value at the settlement date as estimated in accordance with the provisions of this Subtopic is an adjustment of compensation cost in the period of settlement. Example 1 (see paragraph 718-30-55-1) [see section 5.4.1] provides an illustration of accounting for a liability award from the **grant date** through its settlement.

As discussed in sections 1 and 3, the measurement of the fair value (i.e., the price) of the award incorporates market conditions, while the quantity of awards for which compensation cost will be recognized is based on service and performance conditions (and when those conditions affect terms other than quantity of awards, they determine which possible award is recognized). Accordingly, when remeasuring a liability-classified award, an entity also remeasures the effect of the market condition each reporting period and estimates the quantity expected to vest separately so new prices and new quantities are estimated each reporting period. The accounting for liability-classified awards is discussed in greater detail in section 5.4, which also includes an example that illustrates this remeasurement process.

4.2 Employee's requisite service period and nonemployee's vesting period

4.2.1 Definition of requisite service period and requisite service

Employee awards

As discussed in section 4.1, ASC 718 requires that compensation cost be recognized over the employee's requisite service period. For an employee award, requisite service period and requisite service are defined as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Requisite Service Period

The period or periods during which an employee is required to provide service in exchange for an award under a share-based payment arrangement. The service that an employee is required to render during that period is referred to as the requisite service. The requisite service period for an award that has only a service condition is presumed to be the vesting period, unless there is clear evidence to the contrary. If an award requires future service for vesting, the entity cannot define a prior period as the requisite service period. Requisite service periods may be explicit, implicit, or derived, depending on the terms of the share-based payment award.

The requisite service period is not the same as the expected term used in the valuation of an option. Rather, it is the period of time during which the employee must provide service to earn the right to exercise the options or receive the shares. On the other hand, the expected term is the period of time from the grant date to the expected exercise date of an option. By definition, the expected term must be equal to or longer than the requisite service period of an option.

An entity must examine all service, performance and market conditions included in the terms of an award to determine whether an employee award has one or more explicit, implicit or derived service periods. Although an employee award may have multiple explicit, implicit or derived service periods, generally it can only have one requisite service period over which compensation cost is recognized, as further explained below.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-5

The requisite service period for employee awards may be explicit or it may be implicit, being inferred from an analysis of other terms in the award, including other explicit service or performance conditions. The requisite service period for an award that contains a market condition can be derived from certain valuation techniques that may be used to estimate grant-date **fair value** (see paragraph 718-10-55-71). An award may have one or more explicit, implicit, or derived service periods; however, an award may have only one requisite service period for accounting purposes unless it is accounted for as in-substance multiple awards. An award with a graded vesting schedule that is accounted for as in-substance multiple awards is an example of an award that has more than one requisite service period (see paragraph 718-10-35-8). Paragraphs 718-10-55-69 through 55-79 and 718-10-55-93 through 55-106 provide guidance on estimating the requisite service period and provide examples of how that period shall be estimated if an award's terms include more than one **explicit, implicit, or derived service period**.

An explicit service period is usually characterized as a vesting period in the award agreement or plan document. An award may not have an explicit service period, but it may include a performance condition that requires the employee to be employed at the time the performance condition is achieved. This is what is meant by an “implicit” service period, and it generally is the period of time that is expected to take to satisfy the performance condition. Alternatively, an award may include a market condition, which typically is a condition based on the employer’s share price or other share prices. If the market condition is a specific share price, and if an employee must be employed by the entity on the date the market condition is achieved for the award to vest or become exercisable, the estimated period that it will take, on average, for the market condition to be achieved is the “derived” service period, which is derived from the valuation technique (usually a lattice model) used to estimate the fair value of the award.

When an award has multiple conditions, the analysis can be complex. The accounting for awards with multiple conditions is discussed in section 4.4.5.

Nonemployee awards

As discussed in section 4.1, ASC 718 states that judgment is required to determine a nonemployee’s vesting period, but it does not provide specific guidance. However, we believe the guidance on how to determine an employee’s requisite service period may also be applied to determine a nonemployee’s vesting period.

4.2.2 Recognizing cost of an award with a service condition

The definition of an employee’s requisite service period states that “if an award requires future service for vesting, the entity cannot define a prior period as the requisite service period.” Even if an award is for past services, compensation cost should be recognized entirely over the explicit, substantive service vesting period that extends after the grant date. If there is no required future service (i.e., the employee is granted a vested award), the fair value of the award is recognized as compensation cost on the grant date.

4.2.3 Consideration of employment agreements and other arrangements when determining the employee’s requisite service period

Share-based payment agreements and related plan documents often specify all the terms of a share-based payment. However, other agreements between the employee and employer also should be reviewed to determine whether those agreements affect the terms of a share-based payment. For example, an executive may have an employment contract that effectively amends the share-based payment. The employment contract may specify that vesting will be accelerated in certain circumstances (e.g., a change in control) or may provide for “clawbacks” on violation of noncompete agreements (see discussion in section 4.4.1.2.2). A separate retirement plan agreement may provide for the acceleration of or continuation of vesting on retirement for employees meeting certain conditions (see discussion in section 4.4.1.2). Other agreements should be carefully evaluated to determine whether they affect the employee’s requisite service period.

4.2.4 Requisite service period for employee stock purchase plans

Determining the requisite service period for ESPPs is discussed in section 12.3.

4.3 Service inception date

The service inception date is defined as the date on which the employee’s requisite service period or nonemployee’s vesting period begins and, therefore, the date that the grantor begins to recognize compensation cost. However, the FASB provided further guidance on the definition and stated that although the service inception date is generally the grant date, in certain circumstances it may precede or follow the grant date. This section provides guidance to facilitate the determination of the service inception date.

4.3.1 Service inception date may precede the grant date

Employee awards

The grant date, which is discussed in detail in section 3.3.1, is defined in ASC 718-10-20 as “the date at which a grantor and a grantee reach a mutual understanding of the key terms and conditions of a share-based payment award ... The grant date for an award of equity instruments is the date that a grantee begins to benefit from, or be adversely affected by, subsequent changes in the price of the grantor’s equity shares.”

For employee awards, ASC 718-10-55-108 states that the service inception date may precede the grant date only if the following three criteria are satisfied:

1. The award is authorized. This concept is illustrated in section 4.3.1.1 (as discussed in section 3.3.1.3, if an award is not authorized, neither a grant date nor a service inception date has occurred, and no compensation cost is recognized for the award). However, we understand that in certain circumstances, the SEC staff will not object to a broader interpretation of the “authorization” requirement when, for purposes of applying the guidance in ASC 718-10-55-108, the overall plan that determines the pool of consideration for employees is approved. That is, under this broad interpretation of “authorized,” the specifics of an individual award do not need to be authorized. This is true only for purposes of determining the service inception date, not the grant date. This broader interpretation of the “authorization” requirement is described in section 4.3.1.4.
2. The recipient of the award begins providing service before there is a mutual understanding of the key terms and conditions of the award (e.g., the exercise price will be established based on a future share price and the employee provides service before that date).
3. Either of the following criteria is satisfied:
 - a. The terms of the award do not include a substantive future service period that exists at the grant date (i.e., the award is vested on the grant date). See section 4.3.1.2 for discussion on this criterion.
 - b. The award contains a market or performance condition that, if not satisfied during the service period between the inception of the arrangement and the grant date, results in the forfeiture of the award. See section 4.3.1.3 for discussion on this criterion.

Section 4.3.1.4 discusses how to apply the requirements of ASC 718-10-55-108 for a bonus plan that will be settled at least partially in shares.

Nonemployee awards

A nonemployee may provide goods or render services and begin to vest in an award before the requirements for a grant date are met. However, ASC 718 does not provide criteria that must be met for the service inception date to precede the grant date for a nonemployee award. If the award is authorized before the nonemployee provides the goods or services, the award would be subject to ASC 718. See section 4.3.2 for further discussion on accounting for such a nonemployee award. However, if the nonemployee provides goods or services before the award is authorized, the transaction would not be subject to the guidance in ASC 718 but should be accounted for under other expense guidance assuming the entity will have to pay cash for the goods or service.

4.3.1.1 Service inception date cannot occur before obtaining all necessary approvals

ASC 718-10-55-108 states that when an entity is determining whether an employee’s service inception date precedes the grant date, the service inception date cannot occur until all necessary approvals have been obtained. The following example illustrates this concept when the entity issues an award of shares

to an employee. In the following illustration, in conjunction with a new employment offer, Entity T offers to grant 10,000 shares that vest upon the completion of five years of service. The employee begins substantive employment on June 2, 20X5.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-111

If necessary board approval of the award described in the preceding paragraph was obtained on August 5, 20X5, two months after substantive employment begins (June 2, 20X5), both the service inception date and the grant date would be August 5, 20X5, as that is the date when all necessary authorizations were obtained. If the market price of Entity T's stock was \$38 per share on August 5, 20X5, the grant-date fair value of the share award would be \$380,000 (10,000 × \$38). Additionally, Entity T would not recognize compensation cost for the shares for the period between June 2, 20X5, and August 4, 20X5, neither during that period nor cumulatively on August 5, 20X5, when both the service inception date and the grant date occur. This is consistent with the definition of requisite service period, which states that if an award requires future service for vesting, the entity cannot define a prior period as the requisite service period. Future service in this context represents the service to be rendered beginning as of the service inception date.

In limited circumstances, a service inception date may occur before an award to a specific employee is approved if the terms of the overall plan have been approved. See further discussion in section 4.3.1.4.

4.3.1.2

No substantive service requirement subsequent to the grant date

If an employee award does not contain a substantive service requirement after the grant date, the service inception date may precede the grant date. The following example illustrates the application of this rule.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-113

If an award's terms do not include a substantive future requisite service condition that exists at the grant date, the service inception date can precede the grant date. For example, on January 1, 20X5, an employee is informed that an award of 100 fully vested options will be made on January 1, 20X6, with an exercise price equal to the share price on January 1, 20X6. All approvals for that award have been obtained as of January 1, 20X5. That individual is still an employee on January 1, 20X6, and receives the 100 fully vested options on that date. There is no substantive future service period associated with the options after January 1, 20X6. Therefore, the requisite service period is from the January 1, 20X5, service inception date through the January 1, 20X6, grant date, as that is the period during which the employee is required to perform service in exchange for the award. The relationship between the exercise price and the current share price that provides a sufficient basis to understand the equity relationship established by the award is known on January 1, 20X6. Compensation cost would be recognized during 20X5 in accordance with the preceding paragraph.

The grant date is 1 January 20X6 in the above example because the exercise price of the options is not established until that date and, therefore, the employee is not subject to the risks and rewards of share price changes between 1 January 20X5, and 1 January 20X6 (see further discussion in section 3.3.1.2).

The conclusion that the service inception date is 1 January 20X5 is based on the fact that service must be provided for a period to earn the award and that the service period must be before the grant date since the award is vested as of the grant date.

It could be argued that the entity should reach a similar conclusion on the service inception date in the above example if one year of service were required after the 1 January 20X6 grant date. That is, the requisite service period might be the two-year period from 1 January 20X5 to 31 December 20X6. However, due in part to challenges in articulating a principle that would result in consistent practice, the FASB established a rule to address circumstances in which the service inception date precedes the grant date. Therefore, under our alternative example of a post-grant-date service period of one year, the service inception date is the grant date (1 January 20X6). However, as noted in the following section, if the pre-grant-date period includes a performance or market condition that must be satisfied before the grant date in addition to the service condition, the service inception date may precede the grant date (again, as a result of a rule rather than a consistent principle).

4.3.1.3 Performance or market condition must be satisfied before the grant date

The service inception date may precede the grant date if the award requires substantive future service after the grant date only if the award also contains a performance or market condition that must be satisfied during the period between the inception of the arrangement and the grant date for the employee to retain the award. The following example illustrates the application of this rule.

If the service inception date precedes the grant date, entities must recognize compensation cost for any service provided before the grant date, based on the estimated fair value of the award at the reporting date. Once the grant date occurs, entities must remeasure the award at its grant-date fair value, and recognize a cumulative catch-up adjustment to reflect the grant-date fair value.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-114

If an award contains either a market or a performance condition, which if not satisfied during the service period preceding the grant date and following the date the award is given results in a forfeiture of the award, then the service inception date may precede the grant date. For example, an authorized award is given on January 1, 20X5, with a two-year cliff vesting service requirement commencing on that date. The exercise price will be set on January 1, 20X6. The award will be forfeited if Entity T does not sell 1,000 units of product X in 20X5. In this Example, the employee earns the right to retain the award if the performance condition is met and the employee renders service in 20X5 and 20X6. The requisite service period is two years beginning on January 1, 20X5. The service inception date (January 1, 20X5) precedes the grant date (January 1, 20X6). Compensation cost would be recognized during 20X5 in accordance with paragraph 718-10-55-112.

718-10-55-115

In contrast, consider an award that is given on January 1, 20X5, with only a three-year cliff vesting explicit service condition, which commences on that date. The exercise price will be set on January 1, 20X6. In this Example, the service inception date cannot precede the grant date because there is a substantive future requisite service condition that exists at the grant date (two years of service). Therefore, there would be no attribution of compensation cost for the period between January 1, 20X5, and December 31, 20X5, neither during that period nor cumulatively on January 1, 20X6, when both the service inception date and the grant date occur. This is consistent with the definition of requisite service period, which states that if an award requires future service for vesting, the entity cannot define a prior period as the requisite service period. The requisite service period would be two years, commencing on January 1, 20X6.

The employee in the example in ASC 718-10-55-115 clearly must provide service during 20X5 to ultimately vest in the award. However, the rule described in ASC 718-10-55-108 prohibits the employer from designating a date before the grant date as the service inception date, because there is a substantive future service condition existing at the grant date and there was no market or performance condition that had to be satisfied before the grant date, as in the example in ASC 718-10-55-114.

4.3.1.4 **Bonuses settled partly or entirely in shares**

Under certain compensation arrangements, the compensation committee may elect to settle an obligation to pay a monetary amount in a combination of cash and shares. For example, an entity may have a bonus program under which it pays grantees a certain percentage (e.g., 5%) of its annual profits in bonuses at the end of the period in a combination of cash and shares (the bonus payment may be subject to further service vesting). The amount of bonus to be paid to individual grantees will be determined by the compensation committee (or its designee) at the end of the performance period and, therefore, a grant date normally does not occur until the compensation committee approves specific awards to individual grantees.

The portion of the arrangement to be settled in cash would be subject to other GAAP, including ASC 710 and ASC 270, if the value of the cash to be paid is not affected by the issuer's share price. The portion of the arrangement to be settled in equity would be subject to ASC 718. If the portion to be settled in shares has not been determined at the inception of the arrangement, an entity with a history with this type of compensation arrangement should first estimate the portion of the fixed monetary amount of compensation that will be settled in equity, considering factors such as the terms of the arrangement and past settlement practices.

The portion of the arrangement expected to be settled in shares is subject to ASC 718 and should be analyzed using the criteria in ASC 718-10-55-108 to assess whether a service inception date has been established at the inception of the arrangement. We discussed examples of these arrangements with the SEC staff, and the SEC staff did not object to the analysis of ASC 718-10-55-108 that certain registrants suggested as described below.

ASC 718-10-55-108(a) – The award is authorized

The SEC staff accepted a view that the authorization requirement may be interpreted “narrowly” or “broadly,” as described below. An entity's decision about the interpretation of the authorization requirement is an accounting policy election that should be applied consistently to all awards. Professional judgment, based on the relevant facts and circumstances, is necessary under either approach to determine whether the authorization requirement has been met.

Under a “narrow” interpretation of authorization, consistent with ASC 718-10-55-108, an award is authorized on the date that all approval requirements are completed (e.g., action by the compensation committee approving the award and the number of options, restricted shares or other equity instruments to be issued to individual employees). Under the narrow interpretation of authorization for these awards, the requirements for authorization are consistent with the approvals required to achieve a grant date.

Under a “broad” interpretation of authorization, the specific terms at the individual employee level do not need to be known to conclude that the award has been authorized. The SEC staff believes the following factors, at a minimum, should be present to conclude that the awards have been authorized:

- ▶ The board of directors or compensation committee has approved an overall compensation plan or strategy that includes the share-based compensation awards.
- ▶ The employees understand the compensation plan or strategy, including an awareness that the employees are working toward certain goals and an expectation that awards will be granted (e.g., granting of the awards is dependent on the entity achieving performance metrics and the employees have an understanding of those performance metrics).

Additional factors that may be important to the analysis might include:

- ▶ Whether the compensation plan or strategy summarizes the process of how awards will be allocated to the employees and how the number of awards or monetary amount of the awards will be determined (e.g., based on certain performance metrics that are defined or understood by the compensation committee either through a formally authorized policy or established practices).
- ▶ The substance of the approval process subsequent to the performance period, including the amount of discretion that the compensation committee uses to deviate from the compensation strategy previously approved and understood (as described in the preceding bullets). That is, the more discretion involved in determining each employee's compensation, the less likely that the "authorized" criterion has been met.

ASC 718-10-55-108(b) – Recipient begins to provide services

Generally, if the conditions described above to achieve authorization are met (specifically, that the employee has an understanding of the compensation plan or strategy), the requirements of ASC 718-10-55-108(b) would be met because the individual understands the goals or expectations that they are working toward in order to vest in the award.

ASC 718-10-55-108(c) – One of two conditions applies

Either one of the following conditions may apply to an award:

(1) The award's terms do not include a substantive future requisite service condition that exists at the grant date (718-10-55-108 (c) (1))

This condition will be met for awards that do not have a post-grant vesting period or if the post-grant vesting period is not substantive (e.g., the awards were made to retirement-eligible employees and the awards "continue to vest" after retirement – see further discussion in section 4.4.1.2.1).

(2) The award contains a market or performance condition that if not satisfied during the service period preceding the grant date and following the inception of the arrangement results in forfeiture of the award (718-10-55-108 (c) (2))

For awards that do not meet the first condition in ASC 718-10-55-108(c)(1) above, it is necessary to perform an analysis of whether the awards contain a market or performance condition. This analysis includes consideration of whether the value of the award is based on the entity's performance or share price and, if so, whether the performance measure or market condition is sufficiently defined on the authorization date to create a performance or market condition that must be met before the grant date.

The analysis of whether an award meets this condition requires judgment. In the SEC staff's view, the application of either a "broad" or "narrow" interpretation of this requirement would be acceptable and, consistent with ASC 718-10-55-108(a), would represent an accounting policy election that must be applied consistently. Under a narrow interpretation, awards to individual employees must contain a performance or market condition, as defined in ASC 718, to meet this criterion. Under a broad view, the performance or market condition, as defined in ASC 718, can be contained in the terms of the overall compensation plan to meet this criterion and does not have to describe how the allocation to individuals will be determined. Rather, the criterion could be met if the performance or market condition determines the pool of awards that will be allocated to eligible employees. However, under both views, a specified performance target or market condition, as defined by ASC 718, is necessary to conclude that a performance or market condition exists.

Because some portion of the employee population (e.g., retirement-eligible employees) may satisfy the criterion in ASC 718-10-55-108(c)(1), while others (e.g., employees who are not retirement-eligible) may be required to meet the criterion in ASC 718-10-55-108(c)(2), it is possible for an entity to reach a conclusion that awards to retirement-eligible employees have a service inception date in advance of the grant date (broad interpretation of the criterion in ASC 718-10-55-108(a)) while awards to non-retirement-eligible employees do not (e.g., because the entity uses the narrow interpretation of the criterion in ASC 718-10-55-108(c)(2) and concludes that the award does not have a market or performance condition). Entities could also elect to apply the broad interpretation of both criteria ASC 718-10-55-108(a) and ASC 718-10-55-108(c)(2) and, therefore, awards to both retirement-eligible and non-retirement-eligible employees may have a service inception date in advance of the grant date.

If an entity elected the narrow interpretation accounting policy for the criterion in ASC 718-10-55-108(a) for awards that are not subject to a substantive post-grant-date service requirement, the entity would immediately recognize the fair value of the equity awards as compensation cost on the grant date. However, if the entity has elected the broad interpretation accounting policy for the criterion in ASC 718-10-55-108(a), it would recognize the compensation cost over the period from the service inception date to the grant date (ultimately measured on the grant date).

If an entity elected the “broad-broad” accounting policy for awards subject to substantive post-grant-date service requirements (i.e., a broad interpretation of both criteria ASC 718-10-55-108(a) and ASC 718-10-55-108(c)(2)), the requisite service period would begin with the service inception date and end when the requisite service period ends. Because the broad-broad view is based on a conclusion that the award includes a performance or market condition, an entity with a broad-broad policy under ASC 718-10-55-108 would be precluded from electing a straight-line attribution accounting policy under ASC 718-10-35-8 for awards with graded vesting (i.e., the straight-line method of attribution is not available for awards with performance or market conditions). In this scenario, the entity would be required to use the attribution model outlined in section 4.4.2.5 under which compensation cost for each vesting tranche is recognized as if each vesting tranche were a separate award.

4.3.2 Accounting for an award when the service inception date precedes the grant date

Employee awards

When the employee’s requisite service period begins before the grant date and the criteria in ASC 718-10-55-108 are met (see section 4.3.1), the entity must begin recognizing compensation cost before there is a measurement date (i.e., the grant date). ASC 718 provides the following guidance for accounting for an employee share-based payment when the service inception date precedes the grant date:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-6

The **service inception date** is the beginning of the requisite service period. If the service inception date precedes the **grant date** (see paragraph 718-10-55-108), accrual of compensation cost for periods before the grant date shall be based on the fair value of the award at the reporting date. In the period in which the grant date occurs, cumulative compensation cost shall be adjusted to reflect the cumulative effect of measuring compensation cost based on fair value at the grant date rather than the fair value previously used at the service inception date (or any subsequent reporting date). Example 6 (see paragraph 718-10-55-107) illustrates the concept of service inception date and how it is to be applied.

Compensation cost recognized in periods before the grant date will be based on the fair value of the award at the end of each reporting period and will be remeasured at each reporting date until the grant date occurs. For example, often the service inception date will precede the grant date when the exercise price of an option is to be established based on the underlying share price at a specific date in the future. When the grantor measures (and remeasures) the fair value of the award, that measurement should be based on an exercise price assuming the measurement date is the reporting date (e.g., if the exercise price is to be set equal to the share price on the grant date, the valuation should assume an exercise price equal to the share price at each reporting date prior to the grant date).

The fair value of the award will be fixed once the grant date occurs. Total recognized compensation cost for an award in which the service inception date precedes the grant date will be based on the grant-date fair value for those instruments for which the requisite service is provided.

Nonemployee awards

If the award is authorized and a nonemployee begins to provide goods or render services before the grant date, the entity will recognize compensation cost under ASC 718 before the grant date as if it had paid cash for the goods or services based on the fair value of the award at the end of each reporting period, and it will remeasure the compensation cost at each reporting date until the grant date occurs.

4.3.3 Grant date may precede the service inception date

Under rare circumstances, the grant date of an employee award may precede the service inception date. Section 4.4.2.4.3 illustrates an example where the grant date may precede the service inception date.

4.4 Effect of service, performance and market conditions on recognition of compensation cost

The terms and conditions included in a share-based payment award affect the determination of the employee's requisite service period or nonemployee's vesting period. All conditions must be considered when determining the employee's requisite service period or nonemployee's vesting period over which compensation cost will be recognized.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-21

If an award requires satisfaction of one or more market, performance, or service conditions (or any combination thereof), compensation cost shall be recognized if the good is delivered or the service is rendered, and no compensation cost shall be recognized if the good is not delivered or the service is not rendered. Paragraphs 718-10-55-60 through 55-63 provide guidance on applying this provision to awards with market, performance, or service conditions (or any combination thereof).

Implementation Guidance and Illustrations

718-10-55-61

Analysis of the market, performance, or service conditions (or any combination thereof) that are explicit or implicit in the terms of an award is required to determine the employee's requisite service period or the nonemployee's vesting period over which compensation cost is recognized and whether recognized compensation cost may be reversed if an award fails to vest or become exercisable (see paragraph 718-10-30-27). If exercisability or the ability to retain the award (for example, an award of equity shares may contain a market condition that affects the grantee's ability to retain those shares) is based solely on one or more market conditions compensation cost for that award is recognized if the grantee delivers the

promised good or renders the service, even if the market condition is not satisfied. If exercisability (or the ability to retain the award) is based solely on one or more market conditions, compensation cost for that award is reversed if the grantee does not deliver the promised good or render the service, unless the market condition is satisfied prior to the end of the employee's requisite service period or the nonemployee's vesting period, in which case any unrecognized compensation cost would be recognized at the time the market condition is satisfied. If vesting is based solely on one or more performance or service conditions, any previously recognized compensation cost is reversed if the award does not vest (that is, the good is not delivered or the service is not rendered or the performance condition is not achieved). Examples 1 through 4 (see paragraphs 718-20-55-4 through 55-50) provide illustrations of awards in which vesting is based solely on performance or service conditions.

Each type of condition affects the recognition of compensation cost:

- ▶ Awards that have only service conditions (see section 4.4.1)
- ▶ Awards that have only performance conditions (see section 4.4.2)
- ▶ Awards that have only market conditions (see section 4.4.3)

Conditions that affect terms other than vesting or exercisability are discussed in section 4.4.4, awards with multiple conditions are discussed in section 4.4.5, and changes in estimates of the requisite service period are discussed in section 4.5.

4.4.1 Service conditions

A service condition (described more fully in section 3.4.2) is a condition that requires an employee to remain employed for a stated period of time or a nonemployee to deliver goods or render service to the grantor to earn the right to the share-based payment (i.e., vest). Service conditions that affect whether an award vests or becomes exercisable will also affect the determination of the employee's requisite service period or nonemployee's vesting period, as well as the determination of whether compensation cost ultimately is recognized. Compensation cost for an award that contains only a service condition will be recognized only if the goods are delivered or the service is provided.

4.4.1.1 Period over which to recognize compensation cost

Employee awards

The requisite service period for an employee share-based payment with only a service condition generally is the vesting period. That is, if the terms of the award state that the award will vest after three years of continued service, and the award does not contain any other service, performance or market conditions (and other agreements, such as employment agreements or retirement plans do not affect the terms of the award), the employee's requisite service period over which compensation cost will be recognized is three years. ASC 718 defines an explicit service period as:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Explicit Service Period

A service period that is explicitly stated in the terms of a share-based payment award. For example, an award stating that it vests after three years of continuous employee service from a given date (usually the grant date) has an explicit service period of three years.

A service condition that requires vesting to be accelerated in the event of an employee's death, disability or termination without cause will not affect the estimated requisite service period until the event that causes the acceleration of the award becomes probable. For example, if the award in the prior example vested after three years of continued service or immediately upon death, the employee's requisite service period would initially be estimated as three years and would not be adjusted unless the employee dies during the three-year service period.

Nonemployee awards

As discussed in section 4.1, compensation cost for a nonemployee award is recognized in the same period and in the same manner as if the entity had paid cash for the goods or services.

4.4.1.2

Nonsubstantive service conditions

An explicit service vesting condition is not the employee's requisite service period or the nonemployee's vesting period if the stated service period is nonsubstantive. For example, assume a share-based payment has an explicit vesting condition (e.g., the award will vest in three years), and the terms of the award do not include any performance or market conditions. If the terms of the award provide that the individual will continue to "vest" in the award over the same vesting schedule even if the individual is no longer providing goods or services to the entity, the vesting condition is not a service condition but is merely a delayed exercisability provision. In this example, since the award does not have a service, performance or market condition, the compensation cost must be fully recognized on the grant date.

4.4.1.2.1

Nonsubstantive service periods due to retirement provisions

ASC 718 provides the following example of an explicit service period that is considered nonsubstantive due to retirement provisions:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-87

Assume that Entity A uses a point system for retirement. An employee who accumulates 60 points becomes eligible to retire with certain benefits, including the retention of any nonvested share-based payment awards for their remaining contractual life, even if another explicit service condition has not been satisfied. In this case, the point system effectively accelerates vesting. On January 1, 20X5, an employee receives at-the-money options on 100 shares of Entity A's stock. All options vest at the end of 3 years of service and have a 10-year contractual term. At the grant date, the employee has 60 points and, therefore, is eligible to retire at any time.

718-10-55-88

Because the employee is eligible to retire at the grant date, the award's explicit service condition is nonsubstantive. Consequently, Entity A has granted an award that does not contain a service condition for vesting, that is, the award is effectively vested, and thus, the award's entire fair value should be recognized as compensation cost on the grant date. All of the **terms of a share-based payment award** and other relevant facts and circumstances must be analyzed when determining the requisite service period.

Many entities grant share-based payments with terms that are affected by retirement or other events. For example, an award may specify that vesting accelerates, in part or in full, upon an employee's retirement. Alternatively, an award may "continue to vest" after retirement, even though the employee is no longer providing services to the employer (essentially, the award is vested at retirement, but delivery of shares or exercisability of the option is delayed). In such cases, the explicit service period is considered

“nonsubstantive” for any portion of the award that vests on or “continues to vest” after retirement, and compensation cost is recognized over the period through the date that the employee first becomes eligible to retire and is no longer required to provide services to earn part or all of the award.

If an employee is eligible for retirement on the grant date, compensation cost should be recognized immediately because the employee is not required to work during the explicit service period to earn the right to exercise the award. If the employee is eligible to retire one year after the grant date and the award includes a three-year cliff vesting service condition, compensation cost would be recognized over a one-year period (i.e., the period that the employee is required to provide service to retain the benefits of the award).

Entities should review their share-based payment plans to determine whether they include a feature that provides for acceleration of vesting or “continued vesting” upon retirement (or an employee’s eligibility to retire). Because agreements to accelerate vesting upon retirement or a change in control are not always included in the document relating to a specific award or compensation plan, the review should include all employment agreements, collective bargaining agreements and any other contracts between the employer and the employees to determine whether features of those other contracts should be considered in accounting for a share-based payment.

4.4.1.2.2

Noncompete arrangement as an in-substance service condition

Some share-based payment awards to employees contain noncompete provisions that require the recipient to return the equity instruments (or the gain from the sale of equity instruments) if the employee goes to work for a competitor within a specified period of time (often characterized as a clawback). As discussed in section 6.3, the accounting for share-based payments should reflect all the rights conveyed to the recipient of the award and all the obligations imposed on the issuer of the award. While clawbacks generally are ignored in the initial measurement and recognition of a share-based payment (see section 3.5.2), ASC 718 requires that the entity consider whether a clawback feature relating to a noncompete agreement results in an in-substance employee service condition, which must then be considered in determining the requisite service period.

The following examples from ASC 718 illustrate how an entity would consider the relevant facts and circumstances to determine the appropriate requisite service period for an award that is subject to a noncompete arrangement:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-88

Entity K is a professional services firm in which retention of qualified employees is important in sustaining its operations. Entity K’s industry expertise and relationship networks are inextricably linked to its employees; if its employees terminate their employment relationship and work for a competitor, the entity’s operations may be adversely impacted.

718-20-55-89

As part of its compensation structure, Entity K grants 100,000 restricted share units to an employee on January 1, 20X6. The fair value of the restricted share units represents approximately four times the expected future annual total compensation of the employee. The restricted share units are fully vested as of the date of grant, and retention of the restricted share units is not contingent on future service to Entity K. However, the units are transferred to the employee based on a 4-year delayed-transfer schedule (25,000 restricted share units to be transferred beginning on December 31, 20X6, and on December 31 in each of the 3 succeeding years) if and only if specified noncompete conditions are satisfied. The restricted share units are convertible into unrestricted shares any time after transfer.

Although the terms of the award state that the restricted share units are fully vested (i.e., no service is required), Entity K must examine all other terms of the award when determining the requisite service period (i.e., whether the explicit service period is nonsubstantive).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-90

The noncompete provisions require that no work in any capacity may be performed for a competitor (which would include any new competitor formed by the employee). Those noncompete provisions lapse with respect to the restricted share units as they are transferred. If the noncompete provisions are not satisfied, the employee loses all rights to any restricted share units not yet transferred. Additionally, the noncompete provisions stipulate that Entity K may seek other available legal remedies, including damages from the employee. Entity K has determined that the noncompete is legally enforceable and has legally enforced similar arrangements in the past.

718-20-55-91

The nature of the noncompete provision (being the corollary condition of active employment), the provision's legal enforceability, the employer's intent to enforce and past practice of enforcement, the delayed-transfer schedule mirroring the lapse of noncompete provisions, the magnitude of the award's fair value in relation to the employee's expected future annual total compensation, and the severity of the provision limiting the employee's ability to work in the industry in any capacity are facts that provide a preponderance of evidence suggesting that the arrangement is designed to compensate the employee for future service in spite of the employee's ability to terminate the employment relationship during the service period and retain the award (assuming satisfaction of the noncompete provision). Consequently, Entity K would recognize compensation cost related to the restricted share units over the four-year substantive service period.

The following is an example provided in ASC 718 of a circumstance in which a noncompete period is not considered a substantive service period:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-85

On January 1, 20X5, Entity T grants its chief executive officer an award of 100,000 shares of stock that vest upon the completion of 5 years of service. The market price of Entity T's stock is \$30 per share on that date. The grant-date fair value of the award is \$3,000,000 (100,000 × \$30). The shares become freely transferable upon vesting; however, the award provisions specify that, in the event of the employee's termination and subsequent employment by a direct competitor (as defined by the award) within three years after vesting, the shares or their cash equivalent on the date of employment by the direct competitor must be returned to Entity T for no consideration (a clawback feature). The chief executive officer completes five years of service and vests in the award. Approximately two years after vesting in the share award, the chief executive officer terminates employment and is hired as an employee of a direct competitor. Paragraph 718-10-55-8 states that contingent features requiring an employee to transfer equity shares earned or realized gains from the sale of equity instruments earned as a result of share-based payment arrangements to the issuing entity for consideration that is less than fair value on the date of transfer (including no consideration) are not considered in

estimating the fair value of an equity instrument on the date it is granted. Those features are accounted for if and when the contingent event occurs by recognizing the consideration received in the corresponding balance sheet account and a credit in the income statement equal to the lesser of the recognized compensation cost of the share-based payment arrangement that contains the contingent feature (\$3,000,000) and the fair value of the consideration received. This guidance does not apply to cancellations of awards of equity instruments as discussed in paragraphs 718-20-35-7 through 35-9. The former chief executive officer returns 100,000 shares of Entity T's common stock with a total market value of \$4,500,000 as a result of the award's provisions. The following journal entry accounts for that event.

Treasury stock	\$ 4,500,000	
Additional paid-in capital		\$ 1,500,000
Other income		\$ 3,000,000

To recognize the receipt of consideration as a result of the clawback feature.

718-20-55-92

Example 10 (see paragraph 718-20-55-84) provides an illustration of another noncompete agreement. That Example and this one are similar in that both noncompete agreements are not contingent upon employment termination (that is, both agreements may activate and lapse during a period of active employment after the vesting date). A key difference between the two Examples is that the award recipient in that Example must provide five years of service to vest in the award (as opposed to vesting immediately). Another key difference is that the award recipient in that Example receives the shares upon vesting and may sell them immediately without **restriction** as opposed to the restricted share units, which are transferred according to the delayed-transfer schedule. In that Example, the noncompete provision is not deemed to be an in-substance service condition. In making a determination about whether a noncompete provision may represent an in-substance service condition, the provision's legal enforceability, the entity's intent to enforce the provision and its past practice of enforcement, the employee's rights to the instruments such as the right to sell them, the severity of the provision, the fair value of the award, and the existence or absence of an explicit employee service condition are all factors that shall be considered. Because noncompete provisions can be structured differently, one or more of those factors (such as the entity's intent to enforce the provision) may be more important than others in making that determination. For example, if Entity K did not intend to enforce the provision, then the noncompete provision would not represent an in-substance service condition.

Based on discussions with the FASB staff at a Resource Group meeting, the concept of a noncompete arrangement representing an in-substance service condition in certain circumstances (as shown in the excerpt above) was intended to be an anti-abuse provision that would apply only in limited circumstances. In a subsequent communication, the FASB staff provided the following additional guidance on this issue:

Non-authoritative guidance

A principle underlying ASC 718 is that the cost of employee services received in exchange for an award of equity instruments should be recognized over the period during which an employee is required to provide service in exchange for the award. Vesting periods are generally indicative of this requisite service period. However, some awards may contain provisions that act like vesting periods while not being nominally called vesting periods. *Such provisions may compel an employee to remain in active service to receive the award, despite the absence of an explicit vesting period, beyond any compulsion normally associated with such provisions.* [Emphasis added]

ASC 718-20-55-89 through 91 includes an example of such a provision. In this example, an entity issues a fully vested award with a 4-year delayed transfer schedule that mirrors the lapsing of non-compete provisions included therein. Considering this structure along with, among other indicators, the nature of the entity's operations, industry, and employee relationships, the magnitude of the award's value in relation to the employee's other compensation, and the severity of the non-compete provision on the employee's ability to find work elsewhere, the Board concluded that the non-compete provision was, in-substance, a vesting provision. *The fact that the non-compete provision was considered substantive, by itself, would not have been enough to reach this conclusion.* But rather, consideration of all of the facts of the example together led the Board to the conclusion that an in-substance service period existed. [Emphasis added]

The evaluation of whether a non-compete provision creates an in-substance service period, by its nature, requires the application of professional judgment. The staff would like to emphasize that evaluations of specific fact patterns should be performed considering the spirit of ASC 718-20-55-89 through 91.

We understand that although neither ASC 718 nor the FASB staff's communications addresses this explicitly, the concept behind ASC 718-20-55-89 through 55-91 is that it is unlikely that the employee will earn the right to exercise or retain an award unless that employee remains employed by the grantor during the entire noncompete period, and the award is clearly compensation for future employee services. That is, the noncompete provisions are so restrictive that the employee is unlikely to be able to terminate and retain the award because any new employment opportunity the individual would reasonably pursue would result in forfeiture of the award.

For example, if the employee could reasonably obtain employment consistent with the employee's qualifications and expertise in an industry that is not subject to the noncompete agreement, the noncompete period would not likely represent a substantive employee service condition. This is the case for chief executive officers, chief financial officers and other executives who often accept positions in industries outside that of their most recent employer. Similarly, if the employee is expected to retire and not seek to compete with the former employer, the noncompete period would not likely represent a substantive employee service condition.

As indicated in the FASB staff's communication, a noncompete provision could be considered "substantive" without representing a substantive *employee service* period. That is, the fact that a noncompete provision has value to the employer and the employer intends to enforce its provisions is not sufficient by itself to conclude that the noncompete period represents a substantive employee service period. The factors discussed in ASC 718 and in the preceding paragraph also must be considered. Further, an expectation that the employee will remain employed by the grantor during the service period is not relevant. If the employee has the *reasonable ability* to terminate and retain the award, the service condition would likely not be considered a substantive employee service requirement.

The above interpretation is consistent with comments made by Shan Benedict, a professional accounting fellow in the SEC's Office of the Chief Accountant, at the 2005 AICPA National Conference on Current SEC and PCAOB Developments.

We believe that the facts and circumstances of the individual employee and related agreements must be considered when determining whether a noncompete agreement imposes a substantive employee service period. For employees who are eligible to retire, we believe that in most cases a noncompete provision, no matter how restrictive, would not represent the requisite employee service period. That is because there is a reasonable likelihood that an employee eligible for retirement would in fact retire rather than obtain employment with a competitor and, therefore, could retain the award without being required to provide additional employee service. In those circumstances, any forfeiture or clawback as a result of the violation of a noncompete provision would be accounted for under ASC 718 when the contingent event occurs. This accounting is illustrated in ASC 718-20-55-85 above and discussed further in section 3.5.2.

4.4.1.3 Policy election for forfeitures

An entity may elect to account for forfeitures as they occur (e.g., when an employee leaves the entity) or to estimate forfeitures at the service inception date and adjust the estimate when it is likely to change. The entity makes the policy election for employee awards and the policy election for nonemployee awards separately. For example, an entity may elect to estimate forfeitures of employee awards but account for forfeitures of nonemployee awards as they occur.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-1D

The total amount of compensation cost recognized for share-based payment awards to nonemployees shall be based on the number of instruments for which a good has been delivered or a service has been rendered. To determine the amount of compensation cost to be recognized in each period, an entity shall make an entity-wide accounting policy election for all nonemployee share-based payment awards to do either of the following:

- a. Estimate the number of forfeitures expected to occur. The entity shall base initial accruals of compensation cost on the estimated number of nonemployee share-based payment awards for which a good is expected to be delivered or a service is expected to be rendered. The entity shall revise that estimate if subsequent information indicates that the actual number of instruments is likely to differ from previous estimates. The cumulative effect on current and prior periods of a change in the estimates shall be recognized in compensation cost in the period of the change.
- b. Recognize the effect of forfeitures in compensation cost when they occur. Previously recognized compensation cost for a nonemployee share-based payment award shall be reversed in the period that the award is forfeited.

718-10-35-3

The total amount of compensation cost recognized at the end of the requisite service period for an award of share-based compensation shall be based on the number of instruments for which the requisite service has been rendered (that is, for which the requisite service period has been completed). Previously recognized compensation cost shall not be reversed if an employee **share option** (or **share unit**) for which the requisite service has been rendered expires unexercised (or unconverted). To determine the amount of compensation cost to be recognized in each period, an entity shall make an entity-wide accounting policy election for all employee share-based payment awards to do either of the following:

- a. Estimate the number of awards for which the requisite service will not be rendered (that is, estimate the number of forfeitures expected to occur). The entity shall base initial accruals of compensation cost on the estimated number of instruments for which the requisite service is expected to be rendered. The entity shall revise that estimate if subsequent information indicates that the actual number of instruments is likely to differ from previous estimates. The cumulative effect on current and prior periods of a change in the estimated number of instruments for which the requisite service is expected to be or has been rendered shall be recognized in compensation cost in the period of the change.
- b. Recognize the effect of awards for which the requisite service is not rendered when the award is forfeited (that is, recognize the effect of forfeitures in compensation cost when they occur). Previously recognized compensation cost for an award shall be reversed in the period that the award is forfeited.

In paragraph BC12 in the Basis for Conclusions of ASU 2016-09, the FASB stated, “The Board concluded that the accounting policy election for forfeitures only applies to service conditions. For an award with a performance condition, an entity would continue to assess at each reporting period whether it is probable that the performance condition will be achieved.” For awards that vest based on satisfying a service condition, grantees do not vest in the awards if the goods are not provided or the service is not rendered.

Estimating forfeitures and adjusting the estimate

If an entity’s accounting policy is to estimate forfeitures, compensation cost initially is recognized based on an estimate of instruments for which the service condition is expected to be met. Entities’ estimates of forfeitures should be adjusted throughout the employee’s requisite service period or nonemployee’s vesting period based on the extent to which actual forfeitures differ, or are likely to differ, from their previous estimates. At the end of the employee’s requisite service period or nonemployee’s vesting period, compensation cost will have been recognized only for those awards for which the grantee has delivered the goods or provided the service.

For example, assume an entity estimates that 10 out of 100 (10%) employees will forfeit nonvested share-based payment awards. Further assume one employee terminates employment and forfeits nonvested share-based payment awards. The compensation cost for the forfeited awards is reversed at the employee’s termination date. The entity should estimate how many of the remaining 99 employees will forfeit their awards. If the employee’s forfeiture was expected (part of the original estimate of 10), and the entity does not believe that any additional forfeitures will occur beyond the original estimate of 10 employees, the entity should revise its forfeiture estimate to reflect 9% expected forfeitures (9 out of the remaining 99 employees). Alternatively, if the employee’s forfeiture was not originally expected, and the entity continues to expect the original forfeiture estimate of 10 employees to occur, the entity would continue to reflect 10% expected forfeitures (10 out of the remaining 99 employees).

Unlike certain changes in the estimated requisite service period discussed in section 4.5.5, changes in estimated forfeitures are recognized through a cumulative catch-up adjustment (i.e., the cumulative effect of applying the change in estimate retrospectively is recognized in the period of change). The accounting for this change in estimate is illustrated in the examples in section 4.4.1.6.

At the end of the employee’s requisite service period or nonemployee’s vesting period, the entity must true up the estimate of forfeitures to reflect actual forfeitures. Compensation cost will have been recognized only for awards for which the goods have been delivered or service was provided.

The process of estimating pre-vesting forfeitures is similar to the process of estimating post-vesting terminations described in section 7.3.1. Generally, entities should start the process of estimating future forfeitures by analyzing their historical forfeiture and termination information and considering how future forfeiture rates are expected to differ from historical forfeiture rates. Entities also should consider whether termination rates differ materially from one grantee group (e.g., pay level, nonemployee versus employee) to another and, if so, derive different estimated forfeiture assumptions for each grantee group. Entities using a forfeiture methodology prescribed by third-party software should carefully consider whether the methodology is representative of their historical and expected future forfeiture rates. New entities with insufficient forfeiture information should consider looking to published information or information derived from similar grantee groups from similar entities to derive a forfeiture estimate, as discussed further in section 7.3.1.

Account for forfeitures as they occur

If an entity’s policy is to account for forfeitures as they occur, compensation cost is initially recognized for awards with service and market conditions and for awards with performance conditions that are probable of being achieved. Under ASC 718-10-25-20, an entity that has granted an award with a

performance condition will continue to assess the probability that the condition will be achieved at each reporting period to determine whether and when to recognize compensation cost, regardless of the entity's accounting policy elections. When forfeitures occur, previously recognized compensation cost is reversed in the period of the forfeiture. Compensation cost is recognized only for awards for which the goods were delivered or service was provided. Alternatively, entities could elect to recognize forfeitures as they occur until they have sufficient historical experience to make a reasonable estimate, at which time they would evaluate the change in accounting policy under ASC 250.

Under either method of accounting for forfeitures, compensation cost is *not* reversed if an award is forfeited due to a market condition (see section 3.4.4 for the definition of a market condition) that was not satisfied, if the service was rendered. Similarly, compensation cost is not reversed for vested awards that are canceled or that expire unexercised, provided that the goods have been delivered or the service has been rendered (see section 8.10 for cancellation of awards).

Requirement to estimate forfeitures in modification accounting

Regardless of its policy elections for forfeitures, an entity must estimate forfeitures (i.e., determine whether or not all or some of the awards being modified were probable of vesting) when it accounts for the modification of a share-based payment (see section 8.3).

4.4.1.4 Accounting for employee awards subject to graded vesting

Many employee awards are subject to graded vesting, rather than cliff vesting. If an award is subject to graded vesting, portions of it vest at different dates throughout the vesting period, while in cliff vesting, the entire award vests at the end of the vesting period. The fair value of awards subject to graded vesting is typically determined based on either (1) separate awards corresponding with each vesting tranche, each with a different expected term or (2) a single award with an expected term equal to the average expected term of the component vesting tranches.

Under ASC 718, an entity may elect either the accelerated recognition method or a straight-line recognition method only for employee awards subject to graded vesting **that vest based solely on a service condition**. The guidance in ASC 718-20-55-25 and 55-26 permits an entity to choose either attribution method regardless of how the fair value of the employee award is measured.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-8

An entity shall make a policy decision about whether to recognize compensation cost for an employee award with only service conditions that has a graded vesting schedule in either of the following ways:

- a. On a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in-substance, multiple awards
- b. On a straight-line basis over the requisite service period for the entire award (that is, over the requisite service period of the last separately vesting portion of the award).

However, the amount of compensation cost recognized at any date must at least equal the portion of the grant-date value of the award that is vested at that date. Example 1, Case B (see paragraph 718-20-55-25) provides an illustration of the accounting for an award with a graded vesting schedule.

The choice of attribution method is an accounting policy decision that should be applied consistently to all employee share-based payments subject to graded service vesting and should be disclosed, if significant. **However, this choice does not extend to awards that are subject to vesting or exercisability based on achieving performance or market conditions.** For example, the compensation cost for each vesting tranche in an award subject to performance vesting must be recognized ratably from the service inception date to the vesting date for each tranche (see further discussion in sections 4.4.2.5 and 4.4.3.4). Additionally, the choice of attribution method does not extend to nonemployee awards because compensation cost for such awards is recognized as if the entity had paid cash for the goods or services (see section 4.1).

We believe that the accounting policy under ASC 718 for awards subject to graded vesting must be applied consistently to all employee awards subject to service vesting. While the FASB considered whether either the accelerated or straight-line recognition approach was preferable for employee awards subject to graded vesting, it did not reach a decision. We believe that to justify a future change in recognition policy after the adoption of ASC 718, an entity generally would need to base that decision on changes in circumstances that suggest one attribution policy is clearly preferable to the other in their specific circumstances.

If an entity elects to recognize compensation cost using the straight-line attribution method, compensation cost recognized as of any date must be at least equal to the portion of the grant-date fair value that is vested at that date. For example, if an award vests 30%, 30%, 20% and 20% in years one, two, three and four, respectively, an entity using the straight-line attribution method must recognize 30% of the total measured compensation cost in each of the first two years, not 25% as would be calculated by a strict application of the straight-line method.

If an entity uses a forfeiture rate estimate that is based on forfeitures expected to occur over the period until the last tranche vests, the entity may not recognize enough compensation cost to meet this requirement. This is because fewer options in earlier tranches will be forfeited than later tranches (e.g., if an award is subject to four-year graded annual vesting, and 10% of employees terminate each year, only 10% of the first tranche will be forfeited, while 40% of the fourth tranche will be forfeited). Accordingly, entities using the straight-line attribution approach should carefully monitor actual forfeitures during the period to make sure they are recognizing sufficient compensation cost so that at the vesting date for each tranche, it will have recognized compensation cost for all awards that vested.

The straight-line and accelerated attribution methods are the only two permitted attribution methods specified in ASC 718 for employee awards. Other methods, including the method sometimes characterized as the “ratable method” (compensation cost is recognized for each tranche solely in the period of vesting for the individual tranche), are not permitted. Examples of the accounting for awards subject to graded vesting using the accelerated and straight-line attribution methods are provided in section 4.4.1.6.

4.4.1.5 Accounting for an employee award with graded vesting and all substantive terms are not known at the agreement date

The discussion in section 4.4.1.4 focuses on employee awards that conceptually have multiple service periods (for each vesting tranche) and describes the accounting alternatives available for those awards (i.e., the FASB permits treating the award as an award with multiple service periods or a single service period). That model is only applicable when the service inception date for the overall award and the grant date are the same (i.e., on the date the employer and the employee agree to the terms). In some cases, an award may have multiple service vesting periods, and the grant dates for those vesting tranches may not correspond to the date the employer and the employee reached their agreement.

The following example from the implementation guidance in ASC 718 illustrates the determination of the service inception date and the grant date in that circumstance:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-98

The chief executive officer of Entity T enters into a five-year employment contract on January 1, 20X5. The contract stipulates that the chief executive officer will be given 10,000 fully vested share options at the end of each year (50,000 share options in total). The exercise price of each tranche will be equal to the market price at the date of issuance (December 31 of each year in the five-year contractual term). In this Case, there are five separate grant dates. The grant date for each tranche is December 31 of each year because that is the date when there is a mutual understanding of the key terms and conditions of the agreement – that is, the exercise price is known and the chief executive officer begins to benefit from, or be adversely affected by, subsequent changes in the price of the employer's equity shares (see paragraphs 718-10-55-80 through 55-83 for additional guidance on determining the grant date). Because the awards' terms do not include a substantive future requisite service condition that exists at the grant date (the options are fully vested when they are issued), and the exercise price (and, therefore, the grant date) is determined at the end of each period, the service inception date precedes the grant date. The requisite service provided in exchange for the first award (pertaining to 20X5) is independent of the requisite service provided in exchange for each consecutive award. The terms of the share-based compensation arrangement provide evidence that each tranche compensates the chief executive officer for one year of service, and each tranche shall be accounted for as a separate award with its own service inception date, grant date, and one-year service period; therefore, the provisions of paragraph 718-10-35-8 would not be applicable to this award because of its structure.

The FASB did not clearly articulate the basis for its conclusion that the service inception dates for each tranche in the above example are one year before the grant date. Specifically, the chief executive officer in the example cannot vest in the second tranche of the award unless the chief executive officer vests in the first tranche. Accordingly, one might argue that the service inception dates for all the tranches is the same (i.e., the agreement date). That conclusion, rejected by the FASB, would result in accelerated attribution of the awards, similar to the alternative provided for awards subject to graded vesting in which the agreement date is the grant date.

ASC 718-10-55-99 states that if the exercise price for all 50,000 options had been established when the arrangement was first entered into, the award would not only have one grant date, but also just one service inception date. In this instance, ASC 718-10-35-8 would permit the entity to apply either the straight-line attribution method or the accelerated attribution method as discussed in section 4.4.1.4. The fact that each tranche in the example has a separate grant date at one-year intervals appears to be the basis for the FASB's conclusion that the service inception dates also are separated by one-year intervals. Accordingly, we believe the accounting described in the example in ASC 718-10-55-98 should only be applied when there are different grant dates for each vesting tranche.

The measurement of awards for which the service inception date precedes the grant date is discussed in section 4.3.2.

4.4.1.6

Comprehensive examples of the accounting for awards subject to service vesting

The following example from ASC 718-20-55-6 through 55-24 illustrates how an entity accounts for a share-based payment award with a service condition. The award in this example vests in full at the end of the stated service period (cliff vests). That is, if the grantee does not satisfy the entire service condition, no part of the award will vest. The example illustrates the accounting for estimated forfeitures and a

change in that estimate (as described in section 4.4.1.3). In addition, the example illustrates the accounting for deferred tax assets since compensation cost is recognized during the vesting period, as well as the accounting for deferred tax assets on exercise (discussed in section 22 of our FRD, *Income taxes*). Although the example illustrates the accounting for an employee award, ASC 718-20-55-4A states that certain aspects of the example also apply to a nonemployee award with the same features. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

Example 1: Accounting for Share Options with Service Conditions

718-20-55-6

Entity T, a **public entity**, grants at-the-money **employee** share options with a contractual term of 10 years. All share options **vest** at the end of three years (cliff vesting), which is an explicit service (and requisite service) period of three years. The share options do not qualify as incentive stock options for U.S. tax purposes. The enacted tax rate is 35 percent. In each Case, Entity T concludes that it will have sufficient future taxable income to realize the deferred tax benefits from its share-based payment transactions.

718-20-55-7

The following table shows assumptions and information about the share options granted on January 1, 20X5 applicable to all Cases, except for expected forfeitures per year, which does not apply in Case C.

Share options granted	900,000
Employees granted options	3,000
Expected forfeitures per year	3.0%
Share price at the grant date	\$30
Exercise price	\$30
Contractual term (CT) of options	10 years
Risk-free interest rate over CT	1.5 to 4.3%
Expected volatility over CT	40 to 60%
Expected dividend yield over CT	1.0%
Suboptimal exercise factor	2

718-20-55-8

A suboptimal exercise factor of two means that exercise is generally expected to occur when the share price reaches two times the **share option's** exercise price. Option-pricing theory generally holds that the optimal (or profit-maximizing) time to exercise an option is at the end of the option's term; therefore, if an option is exercised before the end of its term, that exercise is referred to as suboptimal. Suboptimal exercise also is referred to as early exercise. Suboptimal or early exercise affects the expected term of an option. Early exercise can be incorporated into option-pricing models through various means. In this Case, Entity T has sufficient information to reasonably estimate early exercise and has incorporated it as a function of Entity T's future stock price changes (or the option's **intrinsic value**). In this Case, the factor of 2 indicates that early exercise would be expected to occur, on average, if the stock price reaches \$60 per share ($\30×2). Rather than use its weighted average suboptimal exercise factor, Entity T also may use multiple factors based on a distribution of early exercise data in relation to its stock price.

718-20-55-9

This Case assumes that each employee receives an equal grant of 300 options. Using as inputs the last 7 items from the table in paragraph 718-20-55-7, Entity T's lattice-based valuation model produces a fair value of \$14.69 per option. A **lattice model** uses a suboptimal exercise factor to calculate the expected term (that is, the expected term is an output) rather than the expected term being a separate input. If an entity uses a Black-Scholes-Merton option-pricing formula, the expected term would be used as an input instead of a suboptimal exercise factor.

Case A: Share Options with Cliff Vesting and Forfeitures Estimated in Initial Accruals of Compensation Cost**718-20-55-10**

Total compensation cost recognized over the **requisite service period** (which is the vesting period in this Case) shall be the grant-date fair value of all share options that actually vest (that is, all options for which the requisite service is rendered). This Case assumes that Entity T's accounting policy is to estimate the number of forfeitures expected to occur in accordance with paragraph 718-10-35-3. As a result, Entity T is required to estimate at the **grant date** the number of share options for which the requisite service is expected to be rendered (which, in this Case, is the number of share options for which vesting is deemed **probable**). If that estimate changes, it shall be accounted for as a change in estimate and its cumulative effect (from applying the change retrospectively) recognized in the period of change. Entity T estimates at the grant date the number of share options expected to vest and subsequently adjusts compensation cost for changes in the estimated rate of forfeitures and differences between expectations and actual experience. This Case also assumes that none of the compensation cost is capitalized as part of the cost of an asset.

718-20-55-11

The estimate of the number of forfeitures considers historical employee turnover rates and expectations about the future. Entity T has experienced historical turnover rates of approximately 3 percent per year for employees at the grantees' level, and it expects that rate to continue over the requisite service period of the awards. Therefore, at the grant date Entity T estimates the total compensation cost to be recognized over the requisite service period based on an expected forfeiture rate of 3 percent per year. Actual forfeitures are 5 percent in 20X5, but no adjustments to cumulative compensation cost are recognized in 20X5 because Entity T still expects actual forfeitures to average 3 percent per year over the 3-year vesting period. As of December 31, 20X6, management decides that the forfeiture rate will likely increase through 20X7 and changes its estimated forfeiture rate for the entire award to 6 percent per year. Adjustments to cumulative compensation cost to reflect the higher forfeiture rate are made at the end of 20X6. At the end of 20X7 when the award becomes vested, actual forfeitures have averaged 6 percent per year, and no further adjustment is necessary.

718-20-55-12

The first set of calculations illustrates the accounting for the award of share options on January 1, 20X5, assuming that the share options granted vest at the end of three years. (Case B illustrates the accounting for an award assuming graded vesting in which a specified portion of the share options granted vest at the end of each year.) The number of share options expected to vest is estimated at the grant date to be 821,406 ($900,000 \times .97^3$). Thus, the compensation cost to be recognized over the requisite service period at January 1, 20X5, is \$12,066,454 ($821,406 \times \14.69), and the compensation cost to be recognized during each year of the 3-year vesting period is \$4,022,151 ($\$12,066,454 \div 3$). The journal entries to recognize compensation cost and related deferred tax benefit at the enacted tax rate of 35 percent are as follows for 20X5.

Compensation cost	\$ 4,022,151	
Additional paid-in capital		\$ 4,022,151
To recognize compensation cost.		
Deferred tax asset	\$ 1,407,753	
Deferred tax benefit		\$ 1,407,753
To recognize the deferred tax asset for the temporary difference related to compensation cost (\$4,022,151 × .35 = \$1,407,753).		

718-20-55-13

The net after-tax effect on income of recognizing compensation cost for 20X5 is \$2,614,398 (\$4,022,151 – \$1,407,753).

718-20-55-14

Absent a change in estimated forfeitures, the same journal entries would be made to recognize compensation cost and related tax effects for 20X6 and 20X7, resulting in a net after-tax cost for each year of \$2,614,398. However, at the end of 20X6, management changes its estimated employee forfeiture rate from 3 percent to 6 percent per year. The revised number of share options expected to vest is 747,526 (900,000 × .94³). Accordingly, the revised cumulative compensation cost to be recognized by the end of 20X7 is \$10,981,157 (747,526 × \$14.69). The cumulative adjustment to reflect the effect of adjusting the forfeiture rate is the difference between two-thirds of the revised cost of the award and the cost already recognized for 20X5 and 20X6. The related journal entries and the computations follow.

At December 31, 20X6, to adjust for new forfeiture rate.

Revised total compensation cost		<u>\$ 10,981,157</u>
Revised cumulative cost as of December 31, 20X6 (\$10,981,157 × ⅔)		\$ 7,320,771
Cost already recognized in 20X5 and 20X6 (\$4,022,151 × 2)		<u>8,044,302</u>
Adjustment to cost at December 31, 20X6		<u>\$ (723,531)</u>

718-20-55-15

The related journal entries are as follows.

Additional paid-in capital	\$ 723,531	
Compensation cost		\$ 723,531
To adjust previously recognized compensation cost and equity to reflect a higher estimated forfeiture rate.		
Deferred tax expense	\$ 253,236	
Deferred tax asset		\$ 253,236
To adjust the deferred tax accounts to reflect the tax effect of increasing the estimated forfeiture rate (\$723,531 × .35 = \$253,236).		

718-20-55-16

Journal entries for 20X7 are as follows.

Compensation cost	\$ 3,660,386	
Additional paid-in capital		\$ 3,660,386
To recognize compensation cost (\$10,981,157 ÷ 3 = \$3,660,386).		

Deferred tax asset	\$ 1,281,135
Deferred tax benefit	\$ 1,281,135
To recognize the deferred tax asset for additional compensation cost ($\$3,660,386 \times .35 = \$1,281,135$).	

718-20-55-17

As of December 31, 20X7, the entity would examine its actual forfeitures and make any necessary adjustments to reflect cumulative compensation cost for the number of shares that actually vested. [...]

The table below presents the calculation of cumulative compensation cost that would be recognized by the end of each year of the requisite service period. The calculation takes into account (1) the grant-date fair value, (2) the number of instruments expected to vest based on estimated forfeitures and (3) the amount of previously recognized compensation cost.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity***Implementation Guidance and Illustrations***718-20-55-17**

Year	Total Value of Award	Pretax Cost for Year	Cumulative Pretax Cost
20X5	\$12,066,454 ($821,406 \times \14.69)	\$4,022,151 ($\$12,066,454 \div 3$)	\$ 4,022,151
20X6	\$10,981,157 ($747,526 \times \14.69)	\$3,298,620 [$(\$10,981,157 \times \frac{2}{3}) - \$4,022,151$]	\$ 7,320,771
20X7	\$10,981,157 ($747,526 \times \14.69)	\$3,660,386 ($\$10,981,157 \div 3$)	\$ 10,981,157

718-20-55-18

All 747,526 vested share options are exercised on the last day of 20Y2. Entity T has already recognized its income tax expense for the year without regard to the effects of the exercise of the employee share options. In other words, current tax expense and current taxes payable were recognized based on income and deductions before consideration of additional deductions from exercise of the employee share options. Upon exercise, the amount credited to common stock (or other appropriate equity accounts) is the sum of the cash proceeds received and the amounts previously credited to additional paid-in capital in the periods the services were received (20X5 through 20X7). In this Case, Entity T has no-par common stock and at exercise, the share price is assumed to be \$60.

The following journal entry illustrates the accounting for the exercise of options. In this example, the grantees pay the exercise price in cash, and the entity issues common shares.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity***Implementation Guidance and Illustrations***718-20-55-19**

At exercise the journal entries are as follows.

Cash ($747,526 \times \$30$)	\$ 22,425,780
Additional paid-in capital	\$ 10,981,157
Common stock	\$ 33,406,937

To recognize the issuance of common stock upon exercise of share options and to reclassify previously recorded paid-in capital.

The accounting for income taxes associated with share-based payments is discussed in our FRD, [Income taxes](#). We have included the following paragraphs related to the income tax effects as part of this example to present a complete illustration:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-20

In this Case, the difference between the market price of the shares and the exercise price on the date of exercise is deductible for tax purposes pursuant to U.S. tax law in effect in 2004 (the share options do not qualify as incentive stock options). Paragraph 718-740-35-2 requires that the tax effect be recognized as income tax expense or benefit in the income statement for the difference between the deduction for an award for tax purposes and the cumulative compensation cost of that award recognized for financial reporting purposes. With the share price of \$60 at exercise, the deductible amount is \$22,425,780 [$747,526 \times (\$60 - \$30)$], and the tax benefit is \$7,849,023 ($\$22,425,780 \times .35$).

718-20-55-21

At exercise the journal entries are as follows.

Deferred tax expense	\$ 3,843,405	
Deferred tax asset		\$ 3,843,405

To write off the deferred tax asset related to deductible share options at exercise ($\$10,981,157 \times .35 = \$3,843,405$).

Current taxes payable	\$ 7,849,023	
Current tax expense		\$ 7,849,023

To adjust current tax expense and current taxes payable to recognize the current tax benefit from deductible compensation cost upon exercise of share options.

718-20-55-23

If instead the share options expired unexercised, previously recognized compensation cost would not be reversed. There would be no deduction on the tax return and, therefore, the entire deferred tax asset of \$3,843,405 would be charged to income tax expense.

718-20-55-23A

If employees terminated with out-of-the-money vested share options, the deferred tax asset related to those share options would be written off when those options expire.

The following example illustrates the accounting for an employee award that vests in full at the end of the stated service period (cliff vests). That is, if the employee does not satisfy the entire service condition, no part of the award will vest. Assume the same facts as in Example 1 (ASC 718-20-55-6 through 55-9), except that the example below illustrates the accounting for forfeitures when they occur (as described in section 4.4.1.3). Although the example illustrates the accounting for an employee award, ASC 718-20-55-4A states that it also applies to a nonemployee award with the same features. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity****Implementation Guidance and Illustrations****Case C: Share Options with Cliff Vesting and Forfeitures Recognized When They Occur****718-20-55-34A**

This Case uses the same assumptions as Case A except that Entity T's accounting policy is to account for forfeitures when they occur in accordance with paragraph 718-10-35-3. Consequently, compensation cost previously recognized for an employee share option is reversed in the period in which forfeiture of the award occurs. Previously recognized compensation cost is not reversed if an employee share option for which the requisite service has been rendered expires unexercised. This Case also assumes that none of the compensation cost is capitalized as part of the cost of an asset.

718-20-55-34B

In 20X5, 20X6, and 20X7, share option forfeitures are 45,000, 47,344, and 60,130, respectively.

718-20-55-34C

The compensation cost to be recognized over the requisite service period at January 1, 20X5, is \$13,221,000 ($900,000 \times \14.69), and the compensation cost to be recognized (excluding the effect of forfeitures) during each year of the 3-year vesting period is \$4,407,000 ($\$13,221,000 \div 3$). The journal entries for 20X5 to recognize compensation cost and related deferred tax benefit at the enacted tax rate of 35 percent are as follows.

Compensation cost	\$4,407,000	
Deferred tax benefit		\$4,407,000

To recognize compensation cost excluding the effect of forfeitures for 20X5.

Deferred tax asset	\$ 1,542,450	
Deferred tax benefit		\$ 1,542,450

To recognize the deferred tax asset for the temporary difference related to compensation cost ($\$4,407,000 \times .35$).

718-20-55-34D

During 20X5, 45,000 share options are forfeited; accordingly, Entity T remeasures compensation cost to reflect the effect of forfeitures when they occur and recognizes compensation costs for 855,000 ($900,000 - 45,000$) share options (net of forfeitures) at an amount of \$12,559,950 ($855,000 \times \14.69) over the 3-year vesting period, or \$4,186,650 each year ($\$12,559,950 \div 3$). Therefore, Entity T reverses recognized compensation cost of \$220,350 ($45,000 \text{ share options} \times \$14.69 \div 3$) to account for forfeitures that occurred during 20X5. The journal entries to recognize the effect of forfeitures during 20X5 and the related reduction in the deferred tax benefit are as follows.

Additional paid-in capital	\$ 220,350	
Compensation cost		\$ 220,350

To recognize the effect of forfeitures on compensation cost when they occur for 20X5.

Deferred tax benefit	\$ 77,123	
Deferred tax asset		\$ 77,123

To reverse the deferred tax asset related to the forfeited awards ($\$220,350 \times .35$).

718-20-55-34E

As of January 1, 20X6, Entity T determines the compensation cost and related tax effects to recognize during 20X6. The journal entries for 20X6 to recognize compensation cost and related deferred tax benefit at the enacted tax rate of 35 percent are as follows (excluding the effect of forfeitures in 20X6).

Compensation cost	\$ 4,186,650	
Additional paid-in capital		\$ 4,186,650

To recognize compensation cost excluding the effect of awards that forfeited during 20X6.

Deferred tax asset	\$ 1,465,328	
Deferred tax benefit		\$ 1,465,328

To recognize the deferred tax asset for the temporary difference related to compensation cost ($\$4,186,650 \times .35$).

718-20-55-34F

In 20X6, 47,344 share options are forfeited (that is, 92,344 share options in total have been forfeited by December 31, 20X6); accordingly, Entity T would recognize compensation cost for 807,656 share options over the 3-year vesting period. On the basis of actual forfeitures in 20X5 and 20X6, Entity T should recognize a cumulative compensation cost of \$11,864,467 ($807,656 \times \14.69) for the 3-year vesting period, or \$3,954,822 a year ($\$11,864,467 \div 3$ years). Therefore, Entity T reverses recognized compensation cost of \$231,828 ($\$4,186,650 - \$3,954,822$) for 20X5 and 20X6, or \$463,656 in total, to account for forfeitures that occurred during 20X6. The journal entries to recognize the effect of forfeitures during 20X6 and the related reduction in the deferred tax benefit are as follows.

Additional paid-in capital	\$ 463,656	
Compensation cost		\$ 463,656

To recognize the effect of forfeitures on compensation cost when they occur for 20X6.

Deferred tax benefit	\$ 162,280	
Deferred tax asset		\$ 162,280

To reverse the deferred tax asset related to the forfeited awards ($\$463,656 \times .35$).

718-20-55-34G

Entity T follows the same approach in 20X7 as it applied in 20X6 to recognize compensation cost and related tax effects.

The following example illustrates the accounting for an employee award subject to graded vesting when the entity has elected accounting policies of accelerated attribution for such awards and estimating forfeitures. Because the accounting policy election for accelerated attribution is not applicable for nonemployee awards, ASC 718-20-55-4C states that this example is not applicable to nonemployee awards.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

Case B: Share Options with Graded Vesting

718-20-55-28

Entity T awards 900,000 share options on January 1, 20X5, that vest according to a graded schedule of 25 percent for the first year of service, 25 percent for the second year, and the remaining 50 percent for the third year. Each employee is granted 300 share options. The following table shows the calculation as of January 1, 20X5, of the number of employees and the related number of share options expected to vest. Using the expected 3 percent annual forfeiture rate, 90 employees are expected to terminate during 20X5 without having vested in any portion of the award, leaving 2,910 employees to vest in 25 percent of the award (75 options). During 20X6, 87 employees are expected to terminate, leaving 2,823 to vest in the second 25 percent of the award. During 20X7, 85 employees are expected to terminate, leaving 2,738 employees to vest in the last 50 percent of the award. That results in a total of 840,675 share options expected to vest from the award of 900,000 share options with graded vesting. [...]

The following table presents the calculation of the number of employees expected to vest in each tranche and the number of shares that will become vested at the vesting date for each tranche. The calculation of the number of employees expected to vest is based on the entity's estimate of forfeitures. The number of options expected to vest at each vesting date is a function of the expected forfeitures and the vesting schedule.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-28

Year	Number of Employees	Number of Vested Share Options
	Total at date of grant	3,000
20X5	$3,000 - 90 (3,000 \times .03) =$	$2,910 \times 75 (300 \times 25\%) =$
	2,910	218,250
20X6	$2,910 - 87 (2,910 \times .03) =$	$2,823 \times 75 (300 \times 25\%) =$
	2,823	211,725
20X7	$2,823 - 85 (2,823 \times .03) =$	$2,738 \times 150 (300 \times 50\%) =$
	2,738	410,700
Total vested options		<u>840,675</u>

718-20-55-29

The value of the share options that vest over the three-year period is estimated by separating the total award into three groups (or tranches) according to the year in which they vest (because the expected life for each tranche differs). The following table shows the estimated compensation cost for the share options expected to vest. The estimates of expected volatility, expected dividends, and risk-free interest rates are incorporated into the lattice, and the graded vesting conditions affect only the earliest date at which suboptimal exercise can occur (see paragraph 718-20-55-8 for information on suboptimal exercise). Thus, the fair value of each of the 3 groups of options is based on the same lattice inputs for expected volatility, expected dividend yield, and risk-free interest rates used to determine the value of \$14.69 for the cliff-vesting share options (see paragraphs 718-20-55-7 through 55-9). The different vesting terms affect the ability of the suboptimal exercise to occur sooner (and affect other factors as well, such as volatility), and therefore there is a different expected term for each tranche. [...]

The following table presents the calculation of the compensation cost for each separate vesting tranche. The fair value per option was calculated separately for each vesting tranche. The primary difference in the valuation is the expected term for each vesting tranche. If the award is being valued using a closed-form model, such as the Black-Scholes-Merton formula, a different expected term would be used as an input in the valuation of each vesting tranche. If the award is being valued using a lattice model, the effect of the different vesting dates will be reflected in the early-exercise assumptions (described above as suboptimal exercise).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

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Year	Vested Options	Value per Option	Compensation Cost
20X5	218,250	\$ 13.44	\$ 2,933,280
20X6	211,725	14.17	3,000,143
20X7	410,700	14.69	6,033,183
	<u>840,675</u>		<u>\$ 11,966,606</u>

718-20-55-30

Compensation cost is recognized over the periods of requisite service during which each tranche of share options is earned. Thus, the \$2,933,280 cost attributable to the 218,250 share options that vest in 20X5 is recognized in 20X5. The \$3,000,143 cost attributable to the 211,725 share options that vest at the end of 20X6 is recognized over the 2-year vesting period (20X5 and 20X6). The \$6,033,183 cost attributable to the 410,700 share options that vest at the end of 20X7 is recognized over the 3-year vesting period (20X5, 20X6, and 20X7).

718-20-55-31

The following table shows how the \$11,966,606 expected amount of compensation cost determined at the grant date is attributed to the years 20X5, 20X6, and 20X7.

	Pretax Cost to Be Recognized		
	20X5	20X6	20X7
Share options vesting in 20X5	\$ 2,933,280	\$ -	\$ -
Share options vesting in 20X6	1,500,071	1,500,072	-
Share options vesting in 20X7	2,011,061	2,011,061	2,011,061
Cost for the year	<u>\$ 6,444,412</u>	<u>\$ 3,511,133</u>	<u>\$ 2,011,061</u>
Cumulative cost	<u>\$ 6,444,412</u>	<u>\$ 9,955,545</u>	<u>\$ 11,966,606</u>

If the initial estimate of forfeitures was adjusted in 20X6, as described in section 4.4.1.3, the compensation cost to be recognized in 20X6 and 20X7 would have to be recalculated. However, because the first tranche (the options that vested at the end of 20X5) is fully vested, the compensation cost recorded in 20X5 for those awards will not be adjusted (the amount of compensation cost recognized in 20X5 for the tranche that vested in that year would have been based on the number of options that actually vested). Additionally, recognized compensation cost must be adjusted to reflect actual forfeitures as each tranche vests.

The following tables present the calculation of the number of options for which the requisite service is expected to be provided, and the calculation of the compensation cost to be recognized in each period, assuming the estimated forfeiture rate increased from 3% to 6%.

Year	Number of employees	Number of vested share options	
	Total at date of grant	3,000	
20X5	3,000 – 90 (3,000 × .03) =	2,910	2,910 × 75 (300 × 25%) = 218,250
20X6	2,910 – 175 (2,910 × .06) =	2,735	2,735 × 75 (300 × 25%) = 205,125
20X7	2,735 – 164 (2,735 × .06) =	2,571	2,571 × 150 (300 × 50%) = 385,650
Total vested options			<u>809,025</u>

Year	Vested options	Value per option	Compensation cost
20X5	218,250	\$ 13.44	\$ 2,933,280
20X6	205,125	14.17	2,906,621
20X7	<u>385,650</u>	14.69	<u>5,665,199</u>
	<u>809,025</u>		<u>\$ 11,505,100</u>

Because the change in estimate occurred in 20X6, the amounts recognized in 20X5 are the same as in the previous example, but amounts recognized in 20X6 reflect the adjustment necessary to recognize cumulative compensation cost based on the new estimate [cumulative compensation cost of \$2,906,621 for the 20X6 vesting tranche and \$3,776,799 (\$5,665,199 × $\frac{2}{3}$) for the 20X7 vesting tranche].

	Pretax Cost to Be Recognized		
	20X5	20X6	20X7
Share options vesting in 20X5	\$ 2,933,280	\$ -	\$ -
Share options vesting in 20X6	1,500,071	1,406,604	-
Share options vesting in 20X7	2,011,061	1,765,738	1,888,400
Cost for the year	\$ 6,444,358	\$ 3,172,342	\$ 1,888,400
Cumulative cost	\$ 6,444,358	\$ 9,616,700	\$ 11,505,100

ASC 718 permits entities to make an accounting policy election to use the straight-line recognition method for employee awards with only service conditions, even if each tranche is valued as a separate award. The following example illustrates the straight-line recognition method:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

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Entity T could use the same computation of estimated cost, as in the preceding table, but could elect to recognize compensation cost on a straight-line basis for all graded vesting awards. In that case, total compensation cost to be attributed on a straight-line basis over each year in the 3-year vesting period is approximately \$3,988,868 (\$11,966,606 ÷ 3). Entity T also could use a single weighted-average expected life to value the entire award and arrive at a different amount of total compensation cost. Total compensation cost could then be attributed on a straight-line basis over the three-year vesting period. However, this Topic requires that compensation cost recognized at any date must be at least equal to the amount attributable to options that are vested at that date. For example, if 50 percent of this same option award vested in the first year of the 3-year vesting period, 436,500 options [2,910 × 150 (300 × 50%)] would be vested at the end of 20X5. Compensation cost amounting to \$5,866,560 (436,500 × \$13.44) attributable to the vested awards would be recognized in the first year.

718-20-55-33

Compensation cost is adjusted for awards with graded vesting to reflect differences between estimated and actual forfeitures as illustrated for the cliff-vesting options, regardless of which method is used to estimate value and attribute cost.

718-20-55-34

Accounting for the tax effects of awards with graded vesting follows the same pattern illustrated in paragraphs 718-20-55-20 through 55-23. However, unless Entity T identifies and tracks the specific tranche from which share options are exercised, it would not know the recognized compensation cost that corresponds to exercised share options for purposes of calculating the tax effects resulting from that exercise. If an entity does not know the specific tranche from which share options are exercised, it should assume that options are exercised on a first-vested, first-exercised basis (which works in the same manner as the first-in, first-out [FIFO] basis for inventory costing).

4.4.2**Performance conditions**

A performance condition (described more fully in section 3.4.3) is a condition that is based on the operations or activities of the grantor or the grantee, and it requires the grantee to provide services or deliver goods for a specified period of time. The condition may relate to the performance of the entire entity, a division or an individual grantee related to the grantor's operations (including an award issued by a vendor to a customer in exchange for goods or services that are distinct). Like a service condition, a performance condition is not incorporated into the grant-date fair value (or price) of an award, but it affects the quantity of awards recognized or, in some cases, which award (and corresponding fair value) is recognized. ASC 718 describes the accounting for awards with performance conditions as follows:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall****Recognition****718-10-25-20**

Accruals of compensation cost for an award with a **performance condition** shall be based on the **probable** outcome of that performance condition – compensation cost shall be accrued if it is probable that the performance condition will be achieved and shall not be accrued if it is not probable that the performance condition will be achieved. If an award has multiple performance conditions (for example, if the number of options or shares a grantee earns varies depending on which, if any, of two or more performance conditions is satisfied), compensation cost shall be accrued if it is probable that a performance condition will be satisfied. In making that assessment, it may be necessary to take into account the interrelationship of those performance conditions. Example 2 (see paragraph 718-20-55-35) provides an illustration of how to account for awards with multiple performance conditions.

4.4.2.1**Period over which to recognize compensation cost****Employee awards**

An employee share-based payment award with a performance condition may have an explicit service period (e.g., based on performance over a specified period) or it may have an implicit service period. ASC 718 defines an implicit service period as follows:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall****Glossary****718-10-20****Implicit Service Period**

A service period that is not explicitly stated in the terms of a share-based payment award but that may be inferred from an analysis of those terms and other facts and circumstances. For instance, if an award of share options vests upon the completion of a new product design and it is probable that the design will be completed in 18 months, the implicit service period is 18 months.

The implicit service period generally is the period of time it is expected to take to achieve the performance condition (assuming the performance condition will be achieved). If the award is not subject to any other conditions, the implicit service period generally will be the employee's requisite service period over which the compensation cost will be recognized if it is probable that the performance condition will be achieved (see section 4.4.2.2).

Nonemployee awards

As discussed in section 4.1, compensation cost for a nonemployee award is recognized over the vesting period in the same period and in the same manner as if the entity had paid cash for the goods or services. When an award is subject to a performance condition, compensation cost is recognized if it is probable that the performance condition will be achieved (see section 4.4.2.2).

4.4.2.2

Compensation cost is recognized if it is probable that the performance condition will be achieved

Compensation cost must be recognized over the employee's requisite service period or the nonemployee's vesting period if it is probable that the performance condition will be satisfied. As discussed in section 4.4.1.3, the accounting policy elections for forfeitures only apply to service conditions. Therefore, when an award contains a service condition and a performance condition that is probable of being satisfied, an entity must either estimate forfeitures for the service that may not be rendered or goods that may not be delivered, or account for them as they occur in accordance with its accounting policy elections.

Entities that account for forfeitures as they occur would continue to assess whether it is probable that performance conditions will be satisfied in order to recognize compensation cost. ASC 718 defines the term "probable" as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Probable

The future event or events are likely to occur.

Accordingly, the trigger for recognition under ASC 718 is higher than the "more likely than not" or "best estimate" trigger that may be applied in other accounting areas. We believe that practice generally interprets the term "probable" to represent a likelihood of greater than 70% that an event will occur.

ASC 718-20-55-40 states that "the amount of compensation cost recognized (or attributed) when achievement of a performance condition is probable depends on the relative satisfaction of the performance condition based on performance to date." We believe that in almost all cases, compensation cost must be recognized for each tranche on a ratable basis over the employee's requisite service period when the requisite service period is based on a performance condition. Our view is based on the concept that the services are being provided ratably over the requisite service period and, accordingly, the compensation cost associated with those services also should be recognized ratably (using the accelerated attribution model).

While ASC 718-20-55-40 suggests that there may be circumstances in which the performance condition will not be satisfied ratably over the employee's requisite service period and it may be appropriate to recognize compensation cost based on the achievement of the performance condition, we understand

that the FASB staff believes that it would be extremely rare for compensation cost to be recognized other than ratably over the employee's service period. In such circumstances, the FASB staff believes that the amount of compensation cost recognized to date should never be less than that which would have been recognized if the expense were recognized ratably over the service period. As described in section 4.1, compensation cost for nonemployee share-based payment awards is recognized in the same period and in the same manner as if the entity had paid cash for the goods provided or services rendered, which may or may not result in ratable compensation cost attribution.

A performance condition does not affect measurement of the award, similar to a service condition. An entity also will recognize compensation cost for employee awards that cliff vest based on a performance condition generally in the same way it does for awards that cliff vest based only on a service condition.

For example, assume the same fact pattern described in Example 1 (ASC 718-20-55-6 through 55-9, see section 4.4.1.6), except that instead of the award vesting at the end of three years, the award will vest if the market share for one of the entity's products increases by 10%. To vest in the award, the recipient must remain employed by the entity until the performance condition is satisfied. The entity estimates that it is probable that the market share of the product will increase by 10% by the end of year three.

Based on the terms of the performance condition, the award has a three-year implicit service period, and therefore has a three-year requisite service period. The accounting for this award, assuming no change in the estimate of the requisite service period, will be essentially the same as the accounting described in Example 1 (ASC 718-20-55-6 through 55-9, see section 4.4.1.6). However, if an employee award is subject to graded vesting, the timing of expense recognition will differ between a performance-based award (which would require recognition on an accelerated basis) and an award containing only a service condition (for which either straight-line or accelerated attribution methods would be acceptable).

4.4.2.2.1 *Performance conditions based on IPOs, change in control and other liquidity events*

As discussed in section 4.4.2.2, we believe that "probable" is generally interpreted as in excess of a 70% likelihood of occurrence. Historically, compensation cost related to performance awards that only vest on consummation of a business combination was recognized when the business combination was consummated. Accordingly, recognition of compensation cost was deferred until consummation of the transaction, even when it became likely that the business combination would be consummated. This position is based on the principle established in the guidance on business combinations in ASC 805-20-55-50 and 55-51. We believe a similar approach should be applied under ASC 718 and it also should be applied to other types of liquidity events, such as IPOs and changes in control.

4.4.2.2.2 *Performance conditions based on regulatory approval (added October 2017)*

As stated in ASC 718-10-20, obtaining regulatory approval to market a specified product is one kind of a performance condition. In the life sciences industry, an example of this is an award that may vest when regulatory approval for a drug candidate is obtained. Entities need to carefully evaluate whether approval is probable to determine when compensation cost should be recognized. The determination of whether regulatory approval is probable should be based on the facts and circumstances, and an entity should consider the guidance in section 4.4.2.2.1, as well as its application of the term "probable" in other areas of US GAAP when making this evaluation. For instance, an entity that has evaluated the probability of regulatory approval to apply other guidance (e.g., to apply the variable consideration constraint under ASC 606 to milestone payments due when regulatory approval is obtained) should consider this information when evaluating whether it is probable that a performance condition will occur under ASC 718.

4.4.2.3 Changes in estimate of the probability of achievement of the performance condition

If an entity initially determines that it is not probable that the performance condition will be satisfied and later determines that the performance condition likely will be satisfied (or vice versa), it should account for the effect of the change in estimate in the period of the change by recording a cumulative catch-up adjustment to retroactively apply the new estimate. Essentially, the change in estimated quantity of awards expected to vest is recognized by truing up cumulative compensation cost recognized as if the new estimate had been applied since the service inception date.

Illustration 4-1: Change in estimate of probability of achievement of performance condition

Assume the same facts described in the example in section 4.4.2.2 (which uses the same fact pattern in Example 1 from ASC 718-20-55-6 through 55-9 in section 4.4.1.6), except that initially the entity does not expect the performance condition to be satisfied. If it is not probable that the award will vest, the entity will not recognize any compensation cost.

In year two, sales of the product begin to increase, and the entity estimates that it is now probable that market share will increase 10% by the end of year three. The entity must recognize the change in estimate in year two (by truing up compensation cost in year two as if the employer had estimated at the grant date that the performance condition would be achieved) and recognize the remaining compensation cost over the remaining requisite service period. Based on the current estimate of forfeitures (in this example, the entity has elected to estimate forfeitures for employee awards, and the forfeiture rate estimate at the end of year two is 6%),¹⁵ the entity estimates the number of awards that will vest is 747,526 ($900,000 \times .94$). Accordingly, the revised estimated compensation cost to be recognized over the requisite service period is \$10,981,157 ($747,526 \times \14.69). By the end of year two, the employees have provided two-thirds of the requisite service. The entity must record a cumulative adjustment to record two-thirds of the measured compensation cost. The required journal entries at the end of year two are:

Dr. Compensation cost	\$ 7,320,771	
Cr. Additional paid-in capital		\$ 7,320,771

To recognize compensation cost ($\$10,981,157 \times (2/3 \text{ vesting period}) = \$7,320,771$)

Dr. Deferred tax asset	\$ 2,562,270	
Cr. Deferred tax benefit		\$ 2,562,270

To recognize the deferred tax asset for compensation cost ($\$7,320,771 \times \text{statutory tax rate of } 35\%^{16} = \$2,562,270$)

After recording the cumulative adjustment in year two, the accounting in year three and upon exercise will be the same as the accounting for the award with the service condition illustrated in the example of an award subject to cliff vesting in section 4.4.1.6. Although this example is for an employee award, the concepts also apply to a nonemployee award, but the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

¹⁵ As discussed in section 4.4.2.2, if the award contains a performance condition that is probable of being satisfied, the entity would apply its forfeiture accounting policy election to the service condition in the award.

¹⁶ The tax rate of 35% is consistent with the example included ASC 718-20-55-6 through 55-9 in section 4.4.1.6.

4.4.2.4 Performance conditions that affect factors other than vesting or exercisability

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-48

While performance conditions usually affect vesting conditions, they may affect exercise price, contractual term, quantity, or other factors that affect an award's fair value before, at the time of, or after vesting. This Topic requires that all performance conditions be accounted for similarly. A potential grant-date fair value is estimated for each of the possible outcomes that are reasonably determinable at the grant date and associated with the performance condition(s) of the award (as demonstrated in Example 3 [see paragraph 718-20-55-41]). Compensation cost ultimately recognized is equal to the grant-date fair value of the award that coincides with the actual outcome of the performance condition(s).

4.4.2.4.1 Multiple performance conditions that affect the number of instruments that will vest

Some share-based payments contain performance conditions that affect the number of instruments that will vest. That is, the grantee will vest in a different number of instruments depending on the outcome of the performance condition. Compensation cost relating to the number of awards that will vest, based on the performance condition that is probable of achievement that would result in the vesting of the most shares, is to be recognized over the employee's requisite service period or the nonemployee's vesting period.

If it continues to be probable that one of the performance conditions will be satisfied, but a different performance condition becomes probable of achievement, the cumulative effect of the change in estimate is recognized in the period of the change. Additionally, the employee's requisite service period or the nonemployee's vesting period must be adjusted if the newly probable performance condition has a different requisite service period or vesting period from the performance condition that previously was considered probable. As discussed further in section 4.5.4.2, the effect of the change in both the number of awards expected to vest and the estimated requisite service period of an employee award or vesting period of a nonemployee award is reflected by recognizing the cumulative effect of adjusting the cumulative compensation cost as if both the new quantity and new requisite service period or vesting period had been estimated from the grant date. This accounting is different than that applied to a change that is not accompanied by a change in the quantity or value (as discussed in section 4.4.2.4.2) of awards that will vest, which is recognized prospectively (see section 4.5.5).

The following example illustrates the accounting for an award that contains a performance condition that affects the number of options that will vest. Although the example illustrates the accounting for an employee award, ASC 718-20-55-35A states that certain aspects of the example also apply to a nonemployee award with the same features. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-36

This Example shows the computation of compensation cost if Entity T grants an award of share options with multiple performance conditions. Under the award, employees vest in differing numbers of options depending on the amount by which the market share of one of Entity T's products increases over a three-year period (the share options cannot vest before the end of the three-year period). The three-year **explicit service period** represents the requisite service period. On January 1, 20X5, Entity T grants to each of 1,000 employees an award of up to 300 10-year-term share options on its common

stock. If market share increases by at least 5 percentage points by December 31, 20X7, each employee vests in at least 100 share options at that date. If market share increases by at least 10 percentage points, another 100 share options vest, for a total of 200. If market share increases by more than 20 percentage points, each employee vests in all 300 share options. Entity T's share price on January 1, 20X5, is \$30 and other assumptions are the same as in Example 1 (see paragraph 718-20-55-4). The grant-date fair value per share option is \$14.69. While the vesting conditions in this Example and in Example 1 (see paragraph 718-20-55-4) are different, the equity instruments being valued have the same estimate of grant-date fair value. That is a consequence of the modified grant-date method, which accounts for the effects of vesting requirements or other restrictions that apply during the vesting period by recognizing compensation cost only for the instruments that actually vest. (This discussion does not refer to awards with market conditions that affect exercisability or the ability to retain the award as described in paragraphs 718-10-55-60 through 55-63.)

Although the vesting conditions of this award are different than those of the award with a service condition described in section 4.4.1.6, the grant-date fair value of each option is the same. The modified grant-date approach, described in section 3.3, requires that the fair value of an award be measured on the grant date without regard to service or performance conditions. Compensation cost generally is recognized only for awards for which the service is rendered or expected to be rendered or goods have been delivered or are expected to be delivered (i.e., if the service or performance condition is satisfied or expected to be satisfied).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-37

The compensation cost of the award depends on the estimated number of options that will vest. Entity T must determine whether it is **probable** that any **performance condition** will be achieved, that is, whether the growth in market share over the 3-year period will be at least 5 percent. Accruals of compensation cost are initially based on the probable outcome of the performance conditions – in this case, different levels of market share growth over the three-year vesting period – and adjusted for subsequent changes in the estimated or actual outcome. If Entity T determines that no performance condition is probable of achievement (that is, market share growth is expected to be less than 5 percentage points), then no compensation cost is recognized; however, Entity T is required to reassess at each reporting date whether achievement of any performance condition is probable and would begin recognizing compensation cost if and when achievement of the performance condition becomes probable.

718-20-55-38

Paragraph 718-10-25-20 requires accruals of cost to be based on the probable outcome of performance conditions. Accordingly, this Topic prohibits Entity T from basing accruals of compensation cost on an amount that is not a possible outcome (and thus cannot be the probable outcome). For instance, if Entity T estimates that there is a 90 percent, 30 percent, and 10 percent likelihood that market share growth will be at least 5 percentage points, at least 10 percentage points, and greater than 20 percentage points, respectively, it would not try to determine a weighted average of the possible outcomes because that number of shares is not a possible outcome under the arrangement.

718-20-55-39

The following table shows the compensation cost that would be recognized in 20X5, 20X6, and 20X7 if Entity T estimates at the grant date that it is probable that market share will increase at least 5 but less than 10 percentage points (that is, each employee would receive 100 share options). That estimate remains unchanged until the end of 20X7, when Entity T's market share has increased over the 3-year period by more than 10 percentage points. Thus, each employee vests in 200 share options.

In addition to vesting being conditional on satisfying one of the performance conditions, the instruments will only vest for those employees who remain employed by the entity for the three-year explicit service period. If an entity estimates forfeitures,¹⁷ it must estimate the number of instruments that will be forfeited, as illustrated below:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-40

As in Example 1, Case A (see paragraph 718-20-55-10), Entity T experiences actual forfeiture rates of 5 percent in 20X5, and in 20X6 changes its estimate of forfeitures for the entire award from 3 percent to 6 percent per year. In 20X6, cumulative compensation cost is adjusted to reflect the higher forfeiture rate. By the end of 20X7, a 6 percent forfeiture rate has been experienced, and no further adjustments for forfeitures are necessary. Through 20X5, Entity T estimates that 913 employees ($1,000 \times .97^3$) will remain in service until the vesting date. At the end of 20X6, the number of employees estimated to remain in service is adjusted for the higher forfeiture rate, and the number of employees estimated to remain in service is 831 ($1,000 \times .94^3$). The compensation cost of the award is initially estimated based on the number of options expected to vest, which in turn is based on the expected level of performance and the fair value of each option. That amount would be adjusted as needed for changes in the estimated and actual forfeiture rates and for differences between estimated and actual market share growth. The amount of compensation cost recognized (or attributed) when achievement of a performance condition is probable depends on the relative satisfaction of the performance condition based on performance to date. Entity T determines that recognizing compensation cost ratably over the three-year vesting period is appropriate with one-third of the value of the award recognized each year. [...]

The table below presents the calculation of cumulative compensation cost that would be recognized by the end of each year of the requisite service period. The calculation takes into account (1) the grant-date fair value, (2) the number of instruments expected to vest based on the probable outcome of the performance condition, (3) the number of instruments expected to vest based on estimated forfeitures and (4) the amount of previously recognized compensation cost.

The effects of the change in estimated forfeitures in 20X6 and the change in the estimate of the performance condition being satisfied are both accounted for by recording a cumulative-effect adjustment in the period that the estimate changes.

¹⁷ As discussed in section 4.4.2.2, if the award contains a performance condition that is probable of being satisfied, the entity would apply its forfeiture accounting policy election to the service condition in the award.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity***Implementation Guidance and Illustrations***718-20-55-40**

Year	Total Value of Award	Pretax Cost for Year	Cumulative Pretax Cost
20X5	\$1,341,197 (\$14.69 × 100 × 913)	\$447,066 (\$1,341,197 ÷ 3)	\$ 447,066
20X6	\$1,220,739 (\$14.69 × 100 × 831)	\$366,760 [(\$1,220,739 × ⅔) – \$447,066]	\$ 813,826
20X7	\$2,441,478 (\$14.69 × 200 × 831)	\$1,627,652 (\$2,441,478 – \$813,826)	\$2,441,478

4.4.2.4.2***Performance conditions that affect the fair value of instruments that vest***

The following example illustrates the accounting for a share-based payment that contains a performance condition that affects the exercise price of the options. Similar to the accounting for the performance condition that affected the number of options that vest, this award should be accounted for as two separate awards. Although the example illustrates the accounting for an employee award, ASC 718-20-55-41A states that certain aspects of the example would also be applicable for a nonemployee award with the same features. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity***Implementation Guidance and Illustrations***718-20-55-42**

This Example shows the computation of compensation cost if Entity T grants a share option award with a performance condition under which the exercise price, rather than the number of shares, varies depending on the level of performance achieved. On January 1, 20X5, Entity T grants to its chief executive officer 10-year share options on 10,000 shares of its common stock, which are immediately vested and exercisable (an explicit service period of zero). The share price at the grant date is \$30, and the initial exercise price also is \$30. However, that price decreases to \$15 if the market share for Entity T's products increases by at least 10 percentage points by December 31, 20X6, and provided that the chief executive officer continues to be employed by Entity T and has not previously exercised the options (an explicit service period of 2 years, which also is the requisite service period).

The chief executive officer in the example effectively was granted two awards: (1) 10,000 options that are fully vested and exercisable on the date of grant with an exercise price of \$30 and (2) the right to exchange award (1) for 10,000 options with an exercise price of \$15 if the performance condition is satisfied. The awards are mutually exclusive (i.e., the chief executive officer cannot vest in both awards). The chief executive officer is not required to provide any future service relating to award (1), and as such, compensation cost must be recognized on the grant date, based on the grant-date fair value of that award. However, if the entity determines that it is probable that the performance condition will be satisfied, the incremental compensation cost related to the satisfaction of that performance condition (i.e., the fair value of award (2)) must be recognized over the requisite service period (two years).

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Entity T estimates at the grant date the expected level of market share growth, the exercise price of the options, and the expected term of the options. Other assumptions, including the risk-free interest rate and the service period over which the cost is attributed, are consistent with those estimates. Entity T estimates at the grant date that its market share growth will be at least 10 percentage points over the 2-year performance period, which means that the expected exercise price of the share options is \$15, resulting in a fair value of \$19.99 per option. Option value is determined using the same assumptions noted in paragraph 718-20-55-7 except the exercise price is \$15 and the award is not exercisable at \$15 per option for 2 years.

718-20-55-44

Total compensation cost to be recognized if the performance condition is satisfied would be \$199,900 (10,000 x \$19.99). Paragraph 718-10-30-15 requires that the fair value of both awards with service conditions and awards with performance conditions be estimated as of the date of grant. Paragraph 718-10-35-3 also requires recognition of cost for the number of instruments for which the requisite service is provided. For this performance award, Entity T also selects the expected assumptions at the grant date if the performance goal is not met. If market share growth is not at least 10 percentage points over the 2-year period, Entity T estimates a fair value of \$13.08 per option. Option value is determined using the same assumptions noted in paragraph 718-20-55-7 except the award is immediately vested.

718-20-55-45

Total compensation cost to be recognized if the performance goal is not met would be \$130,800 (10,000 x \$13.08). Because Entity T estimates that the performance condition would be satisfied, it would recognize compensation cost of \$130,800 on the date of grant related to the fair value of the fully vested award and recognize compensation cost of \$69,100 (\$199,900 – \$130,800) over the 2-year requisite service period related to the condition. Because of the nature of the performance condition, the award has multiple requisite service periods that affect the manner in which compensation cost is attributed. Paragraphs 718-10-55-67 through 55-79 provide guidance on estimating the requisite service period.

718-20-55-46

During the two-year requisite service period, adjustments to reflect any change in estimate about satisfaction of the performance condition should be made, and, thus, aggregate cost recognized by the end of that period reflects whether the performance goal was met.

4.4.2.4.3

Multiple independent performance conditions established at the inception of the arrangement

The following example illustrates the determination of the grant date, service inception date and requisite service period for an employee award with multiple service periods resulting from separate performance conditions. This example also illustrates the concept of the grant date preceding the service inception date (discussed in section 4.3.2).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-93

Cases A, B, and C share the following assumptions:

- a. On January 1, 20X5, Entity T enters into an arrangement with its chief executive officer relating to 40,000 share options on its stock with an exercise price of \$30 per option.
- b. The arrangement is structured such that 10,000 share options will vest or be forfeited in each of the next 4 years (20X5 through 20X8) depending on whether annual performance targets relating to Entity T's revenues and net income are achieved.

718-10-55-94

All of the annual performance targets are set at the inception of the arrangement. Because a mutual understanding of the key terms and conditions is reached on January 1, 20X5, each tranche would have a grant date and, therefore, a measurement date, of January 1, 20X5. However, each tranche of 10,000 share options should be accounted for as a separate award with its own service inception date, grant-date fair value, and 1-year requisite service period, because the arrangement specifies for each tranche an independent performance condition for a stated period of service. The chief executive officer's ability to retain (vest in) the award pertaining to 20X5 is not dependent on service beyond 20X5, and the failure to satisfy the performance condition in any one particular year has no effect on the outcome of any preceding or subsequent period. This arrangement is similar to an arrangement that would have provided a \$10,000 cash bonus for each year for satisfaction of the same performance conditions. The four separate service inception dates (one for each tranche) are at the beginning of each year.

We believe that the above example should not be applied by analogy and that the use of different service inception dates is only appropriate in fact patterns that are exactly as described above. In this example, the grant-date criteria are satisfied on 1 January 20X5 for all tranches because all of the terms (including the exercise price) are established on that date (as discussed in section 4.4.2.4.4, if the performance condition for a specific tranche was not established on the agreement date, the agreement date would not be the grant date for that tranche). The performance condition for each tranche is independent of the performance condition for the other tranches. That is, the chief executive officer can vest in the second tranche (on satisfying that performance condition) even if the performance condition relating to the first tranche was not satisfied. As a result of each tranche being determined to be independent, each is considered to have a separate service inception date (i.e., the beginning of the year during which the performance condition is measured) and a separate requisite service period (i.e., the one-year period from service inception date to the vesting date for that tranche). However, the entire award would be measured at the grant-date fair value on 1 January 20X5.

As described in section 4.4.2.2, the entity must determine whether it is probable that each separate performance condition will be satisfied. However, that assessment does not have to be made until the service inception date because no compensation cost will be recognized for a tranche before the service inception date. Compensation cost should be recognized only for those tranches that the entity expects to vest, based on satisfying the performance conditions, over the requisite service period of the respective tranche.

When applying the guidance above, entities must challenge whether the performance conditions of each tranche are independent. For example, even though the award specifies that the performance condition for year two can be met without the performance condition being met in year one, if the performance conditions build upon each other (e.g., growth in revenue), the entity may determine that the performance conditions are not actually independent, and the service inception date for both tranches is the grant date (see section 4.4.2.4.5 below).

4.4.2.4.4 *Multiple performance conditions established subsequent to the inception of the arrangement*

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-95

If the arrangement had instead provided that the annual performance targets would be established during January of each year, the grant date (and, therefore, the measurement date) for each tranche would be that date in January of each year (20X5 through 20X8) because a mutual understanding of the key terms and conditions would not be reached until then. In that case, each tranche of 10,000 share options has its own service inception date, grant-date fair value, and 1-year requisite service period. The fair value measurement of compensation cost for each tranche would be affected because not all of the key terms and conditions of each award are known until the compensation committee sets the performance targets and, therefore, the grant dates are those dates.

The grant date for each vesting tranche does not occur until the performance condition is established (i.e., January of each year), and until then the employee and the employer do not have a mutual understanding of the key terms of the award. Each vesting tranche will have a separate service inception date and requisite service period (similar to the example in the preceding section). Additionally, each tranche will have a different grant date and measurement date and, as a result, will have a different fair value.

4.4.2.4.5 *Performance conditions dependent on satisfaction of previous performance conditions*

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-96

If the arrangement in Case A instead stated that the vesting for awards in periods from 20X6 through 20X8 was dependent on satisfaction of the performance targets related to the preceding award, the requisite service provided in exchange for each preceding award would not be independent of the requisite service provided in exchange for each successive award. In contrast to the arrangement described in Case A, failure to achieve the annual performance targets in 20X5 would result in forfeiture of all awards. The requisite service provided in exchange for each successive award is dependent on the requisite service provided for each preceding award. In that circumstance, all awards have the same service inception date and the same grant date (January 1, 20X5); however, each award has its own explicit service period (for example, the 20X5 grant has a one-year service period, the 20X6 grant has a two-year service period, and so on) over which compensation cost would be recognized. Because this award contains a performance condition, it is not subject to the attribution guidance in paragraph 718-10-35-8.

Because each successive performance condition can only be satisfied if the previous performance condition was satisfied, the service required for each condition cannot be separated from the service required to be performed to satisfy the previous conditions. As a result, each vesting tranche has the same service inception date. However, each vesting tranche has a different vesting date and, therefore, has a separate requisite service period over which the related compensation cost must be recognized. As described in section 4.4.2.2, the entity must determine whether it is probable that each separate performance condition will be satisfied. Compensation cost should only be recognized for those tranches that the entity expects to vest based on probable satisfaction of the cumulative performance conditions.

4.4.2.5 **Effect of performance conditions on cost attribution (accelerated attribution)**

As discussed in section 4.4.1.4, for an employee award subject to graded vesting based only on a service condition, an entity may elect an accounting policy on adoption of ASC 718 to recognize compensation cost for the award either over the employee's requisite service period for each separately vesting tranche of the award (i.e., as if the award is, in-substance, multiple awards), or over the requisite service period for the entire award, regardless of how the fair value of the award is measured. This policy election must be applied consistently for all employee awards subject to graded vesting.

However, ASC 718-20-55-26 expressly limits the choice of attribution method to awards with service conditions. Therefore, compensation cost for employee awards that are subject to performance conditions must be attributed separately for each vesting tranche of the award (with one exception when the performance condition is an event that accelerates vesting, discussed below).

The compensation cost for each vesting tranche in an employee award subject to performance vesting must be recognized ratably from the service inception date to the vesting date for each tranche. We believe compensation cost for any employee award with a performance condition must be recognized on a tranche-by-tranche basis, including awards subject to vesting based on multiple conditions. Accordingly, straight-line attribution is not permitted for employee awards with performance conditions even when such conditions do not affect the employee's requisite service period, as may be the case for an award subject to multiple conditions.

For example, an award may be subject to a performance vesting condition in which the performance period is the initial year after the grant (e.g., a targeted amount of revenues must be achieved during the fiscal year). The award may also require future service to vest in the award, with tranches of the award vesting each period (e.g., each year for four years after the performance period, one-fourth of the total award vests). Although the performance condition does not change the period the employee must provide service to earn the award, the FASB staff has advised us that compensation cost for each tranche of the award must be recognized as a separate award (i.e., the accelerated attribution method).

Certain awards may vest based on service conditions, but vesting accelerates upon a change in control or an IPO. Although a change in control or an IPO is considered a performance condition (see section 4.4.2.2.1), we do not believe it would affect attribution for these types of awards until the event becomes probable of occurring (generally when that event occurs). By contrast, an award that vests solely upon a change in control or an IPO would be treated as a performance-based award from the date of grant (although compensation cost would not be recognized until the change in control or the IPO occurs).

4.4.3 **Market conditions**

As described in section 3.4.4, the exercisability or other terms of a share-based payment may change based on the achievement of a market condition, which may be a specified share price or a return on the share price (e.g., price appreciation plus dividends). The market condition may also require a comparison of the grantor's share price or share return to those of one or more competitors or an index. Market conditions must be considered when determining the employee's requisite service period or nonemployee's vesting period over which compensation cost will be recognized. However, as discussed in section 3.4.4, if the service is rendered or goods are delivered, compensation cost must be recognized even if a market condition is not achieved and the award is therefore not exercisable or retained by the grantee.

4.4.3.1 **Period over which to recognize compensation cost**

Unlike service and performance conditions, the probability of satisfying a market condition must be considered in the estimate of the grant-date fair value. As discussed in section 7.2.3, fair value of many awards with market conditions cannot be reasonably estimated using a closed-form model like the Black-

Scholes Merton formula, but it can be estimated using other models, such as a lattice model or Monte Carlo simulation. Used appropriately, these models generally can incorporate into the valuation the possibility that the market condition may not be satisfied.

Employee awards

The derived service period, which may be the requisite service period for an employee award with a market condition, can be inferred from the use of a lattice model. ASC 718 defines a derived service period as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Derived Service Period

A service period for an award with a market condition that is inferred from the application of certain valuation techniques used to estimate fair value. For example, the derived service period for an award of share options that the employee can exercise only if the share price increases by 25 percent at any time during a 5-year period can be inferred from certain valuation techniques. In a lattice model, that derived service period represents the duration of the median of the distribution of share price paths on which the market condition is satisfied. That median is the middle share price path (the midpoint of the distribution of paths) on which the market condition is satisfied. The duration is the period of time from the service inception date to the expected date of satisfaction (as inferred from the valuation technique). If the derived service period is three years, the estimated requisite service period is three years and all compensation cost would be recognized over that period, unless the market condition was satisfied at an earlier date. Compensation cost would not be recognized beyond three years even if after the grant date the entity determines that it is not **probable** that the market condition will be satisfied within that period. Further, an award of fully vested, deep out-of-the-money share options has a derived service period that must be determined from the valuation techniques used to estimate fair value.

An employee award with a market condition generally has a derived service period because it typically requires the employee to be employed when the market condition is achieved to vest in or exercise the award. That is, if the employee terminates before the market condition is achieved, the award is forfeited. However, if the employee is not required to be employed at the time the market condition is achieved to vest in or exercise the award, we believe that the market condition does not affect the requisite service period of the award. For example, assume that an employee option has an explicit service period of three years, a contractual term of 10 years and does not become exercisable until the share price achieves a level that is twice the exercise price. Further, assume that if the employee terminates after three years, the award retains the full contractual term. Although the employer may expect six years to pass before the market condition is achieved, we believe that there is no derived service period in this option because the employee does not have to be employed at that time to exercise the option. Accordingly, the employee's requisite service period is equal to the explicit service period of three years.

Conceptually, the employee's derived service period is the estimated period of time that would be required to satisfy the market condition, assuming the market condition will be satisfied. As discussed in Appendix E, a lattice model is used to create a large number of share-price paths over time. On some of those paths the share price will increase, and on others it will decrease. Assume an option includes a condition that the share price must achieve 150% of the grant-date share price to become exercisable. To determine the employee's derived service period, the lattice model would be used to determine on which paths the specified share price is achieved (other paths would be ignored). Then, the path representing the median (i.e., 50% of the paths take longer to achieve the market condition and 50% of

the paths take less time to achieve the market condition) would be selected. The time period on that median path from the service inception date (usually the grant date) to the first time the market condition is achieved is the derived service period.

If an employee share-based payment award has a derived service period and does not have any explicit or implicit service periods, the derived service period is the employee's requisite service period over which the compensation cost will be recognized. As discussed further in section 4.5.2, if there are no explicit or implicit service periods, the requisite service period is not revised subsequently unless the market condition is satisfied before the end of the derived service period.

Nonemployee awards

As discussed in section 4.1, compensation cost for a nonemployee award is recognized in the same period and in the same manner as if the entity had paid cash for the goods or services. Compensation cost for an award with a market condition is not reversed if the market condition is not satisfied, as long as the nonemployee provides the goods or services. Therefore, if the award states a service period (i.e., it does not specify a date that the market condition is evaluated), an entity must assess during what period the nonemployee must provide goods or services to determine whether compensation cost is ultimately recognized for an award with a market condition. Although ASC 718 does not explicitly address this concept for nonemployee awards, we believe it is appropriate to analogize to the guidance for determining an employee's derived service period.

For example, consider an award that vests if the nonemployee is providing goods or services to the entity when its share price increases by 10% at any time during a five-year period. Based on its lattice model, the entity expects that the market condition will be satisfied in three years. If the nonemployee is providing goods or services at the end of the three-year period, the entity should have recognized the fair value of the award as compensation cost (even if the market condition is not met). That is, if the service is provided, the compensation cost will not be reversed solely because the market condition is not satisfied. Compensation cost is attributed during that period as if the entity paid cash for the goods or services. However, if the nonemployee ceases to provide goods or services before the three-year period has ended and the market condition has not been met, the nonemployee has forfeited the award and no compensation cost is recognized.

4.4.3.2 Deeply out-of-the-money options

ASC 718 states that when determining the requisite service period of an award, an entity must evaluate all of its terms and conditions and ignore nonsubstantive conditions.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-67

Paragraph 718-10-35-2 requires that compensation cost be recognized over the requisite service period. The requisite service period for an award that has only a service condition is presumed to be the vesting period, unless there is clear evidence to the contrary. The requisite service period shall be estimated based on an analysis of the terms of the award and other relevant facts and circumstances, including co-existing employment agreements and an entity's past practices; that estimate shall ignore nonsubstantive vesting conditions. For example, the grant of a deep out-of-the-money share option award without an explicit service condition will have a derived service period. Likewise, if an award with an explicit service condition that was at-the-money when granted is subsequently modified to accelerate vesting at a time when the award is deep out-of-the-money, that **modification** is not substantive because the explicit service condition is replaced by a derived service condition. If a

market, performance, or service condition requires future service for vesting (or exercisability), an entity cannot define a prior period as the requisite service period. The requisite service period for awards with market, performance, or service conditions (or any combination thereof) shall be consistent with assumptions used in estimating the grant-date fair value of those awards.

The award of deeply out-of-the-money options without an explicit service condition described in ASC 718-10-55-67 includes a derived service period because the employee must provide service after the grant date to benefit from the option. This conclusion assumes that the term of a vested option truncates on termination of employment, generally 60 or 90 days, which is a common feature in employee option awards. Effectively, the award has a market condition because the share price has to rise to a specified level above the grant-date share price before it becomes exercisable and it will take some period of time to achieve that share price (see the discussion in section 4.4.3.1). Because of the term truncation feature in most employee options, the employee is required to provide service during that period, which is the derived service period. Because the award in the example above has an explicit service period of zero and no other vesting conditions, the requisite service period equals the derived service period.

An option can be out-of-the-money without being deeply out-of-the-money. ASC 718 provides no additional guidance on what is meant by “deeply out-of-the-money.” We believe that all the facts and circumstances must be considered in determining whether an out-of-the-money option has a derived service period. Generally, the longer the required explicit or implicit service period (if any) is, the less likely a derived service condition would become the requisite service period. If an award has substantive service or performance conditions, we generally believe the option must be further out-of-the-money to suggest that the award has a derived service period. We believe it would be most appropriate to estimate a derived service period for all options that are out-of-the-money at the grant date, and, if the derived service period is significantly longer than the explicit or implicit service period, the requisite service period should be based on that derived service period.

4.4.3.2.1

Modifications of deeply out-of-the-money options

If an option that was granted at the money and subsequently becomes deeply out-of-the-money is modified by the grantor to accelerate vesting, the entity must continue to recognize compensation cost over the requisite service period of the original option if the modification to accelerate vesting is not substantive (i.e., immediate recognition of compensation cost is not permitted). Similar to the grant of a deeply out-of-the-money option, an employee must continue to provide service after the modification date to benefit from the option, assuming that the term of the vested option truncates on termination of employment.

We believe that the determination of whether an accelerated option is deeply out-of-the-money will likely depend on several factors, including the expected volatility of the entity’s share price, the exercise price of the modified option, the option’s remaining requisite service period and its comparison to the derived service period, and the risk-free interest rate at the modification date. We do not believe it is appropriate to establish arbitrary bright-lines (e.g., 20%) to determine whether an option is deeply out-of-the-money. In many cases, it will be clear with little analysis that an out-of-the-money option is a deeply out-of-the-money option at the time of acceleration.

We believe that if the derived service period of the option represents a significant portion of or is longer than the remainder of the original requisite service period, such a modification would be considered nonsubstantive and would not be accounted for as a modification. Any unrecognized compensation cost at the date of the modification should continue to be recognized over the option’s remaining requisite service period as if the modification had never occurred.

The recognition of compensation cost for the modified option over the remaining requisite service period

of the original option is different than the requirement to recognize compensation cost over the derived service period of a newly granted deeply out-of-the-money option, as discussed in section 4.4.3.2. This difference is because the modified option previously had an explicit service period, and a nonsubstantive modification should not change the recognition of compensation cost over that explicit service period. For a newly granted option, there is no explicit service period, so the derived service period is the only indicator of the period of time an employee is required to provide service in exchange for the option.

A detailed discussion of the accounting for modifications of share-based payments is provided in section 8.

4.4.3.3

Recognizing compensation cost for an award with a market condition

Compensation cost for an employee award with a market condition will be recognized ratably for each vesting tranche (i.e., using the accelerated attribution method if the award is subject to graded vesting) over the requisite service period in a similar manner as an award with a performance condition (see section 4.4.2.5). Compensation cost for a nonemployee award with a market condition will be recognized in the same period and in the same manner as if the entity had paid cash for the goods or services. However, unlike awards with a service or performance condition, the compensation cost for an award with a market condition will not be reversed solely because the market condition is not satisfied.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-27

Performance or service conditions that affect vesting are not reflected in estimating the fair value of an award at the grant date because those conditions are restrictions that stem from the forfeitability of instruments to which grantees have not yet earned the right. However, the effect of a market condition is reflected in estimating the fair value of an award at the grant date (see paragraph 718-10-30-14). For purposes of this Topic, a market condition is not considered to be a vesting condition, and an award is not deemed to be forfeited solely because a market condition is not satisfied.

Subsequent Measurement

718-10-35-4

An entity shall reverse previously recognized compensation cost for an award with a **market condition** only if the requisite service is not rendered.

Illustration 4-2: Recognition of compensation cost for an employee award with a market condition

An employee option becomes exercisable only if the entity's common shares trade above \$25 at any point in the next five years. Based on the results of the lattice model used to value the award, the derived service period is estimated to be three years. That is, three years is the period from the grant date to the date that the \$25 share price is achieved on the path in the lattice that represents the median duration of all paths that achieved the \$25 share price. The three-year derived service period is the requisite service period over which compensation cost will be recognized. If the recipient of the award terminates prior to providing three years of service, any previously recognized compensation cost would be reversed. However, if the individual remains employed for three years but the award does not become exercisable because the entity's share price does not reach \$25, compensation cost would not be reversed.

4.4.3.4 Effect of market conditions on cost attribution (accelerated attribution)

As discussed in section 4.4.1.4, the accounting policy under ASC 718 for employee awards subject to graded vesting must be applied consistently for all awards subject to graded vesting.

However, ASC 718-20-55-26 expressly limits the choice of attribution method to employee awards with service conditions. Therefore, compensation cost for employee awards that are subject to market conditions must be attributed separately for each vesting tranche of the award.

For example, the compensation cost for each vesting tranche in an employee award subject to a market condition must be recognized ratably from the service inception date to the vesting date for each tranche. We believe compensation cost for any employee award with a market condition must be recognized on a tranche-by-tranche basis, including those awards subject to vesting based on multiple conditions. Accordingly, straight-line attribution is not permitted for employee awards with market conditions even when the market condition does not affect the requisite service period, as may be the case for an award subject to multiple conditions. For example, an award may be subject to a market vesting condition in which the market condition is measured over the initial year after the grant (e.g., a targeted amount of share price appreciation must be achieved during the fiscal year). The award may also require future service to vest in the award, with tranches of the award vesting each period (e.g., each year for four years after the market performance period, one-fourth of the total award vests). Although the market condition does not change the period the employee must provide service to earn the award, the FASB staff has advised us that compensation cost for each tranche of the award must be recognized as a separate award (i.e., the accelerated attribution method).

4.4.4 Service, performance and market conditions that affect factors other than vesting or exercisability

The examples included in section 4.4.2.4 illustrate the accounting for share-based payments that include performance conditions that affect the quantity of instruments that will vest and the exercise price of the instruments that vest. Those concepts apply similarly to awards that have service or performance conditions that affect an award's exercise price, contractual term, quantity, conversion ratio or other factors that are considered in measuring an award's grant-date fair value.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-15

Market, performance, and service conditions (or any combination thereof) may affect an award's exercise price, contractual term, quantity, conversion ratio, or other factors that are considered in measuring an award's grant-date fair value. A grant-date fair value shall be estimated for each possible outcome of such a performance or service condition, and the final measure of compensation cost shall be based on the amount estimated at the grant date for the condition or outcome that is actually satisfied. Paragraphs 718-10-55-64 through 55-66 provide additional guidance on the effects of market, performance, and service conditions that affect factors other than vesting or exercisability. Examples 2 (see paragraph 718-20-55-35); 3 (see paragraph 718-20-55-41); 4 (see paragraph 718-20-55-47); 5 (see paragraph 718-20-55-51); and 7 (see paragraph 718-20-55-68) provide illustrations of accounting for awards with such conditions.

For an award subject to market conditions that affect terms other than vesting, all possible outcomes are factored into the grant-date fair value of the award that is recognized over the employee's requisite service period or nonemployee's vesting period. As discussed in section 4.5.2, the employee's requisite

service period for an award that includes only market conditions and, therefore, is based on the derived service period is not subsequently adjusted unless the market condition is satisfied before the end of the derived service period; therefore, the award becomes exercisable or is retained by the employee without any other potential changes to the terms from other market conditions.

4.4.5 Multiple conditions

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-62

Vesting or exercisability may be conditional on satisfying two or more types of conditions (for example, vesting and exercisability occur upon satisfying both a market *and* a performance or service condition). Vesting also may be conditional on satisfying one of two or more types of conditions (for example, vesting and exercisability occur upon satisfying either a market condition *or* a performance or service condition). Regardless of the nature and number of conditions that must be satisfied, the existence of a market condition requires recognition of compensation cost if the good is delivered or the service is rendered, even if the market condition is never satisfied.

718-10-55-63

Even if only one of two or more conditions must be satisfied and a market condition is present in the terms of the award, then compensation cost is recognized if the good is delivered or the service is rendered, regardless of whether the market, performance, or service condition is satisfied (see example 5 [paragraph 718-10-55-100] [section 4.4.5.2.1] provide an example of such an employee award).

4.4.5.1 Determining the employee's requisite service period for an award that has multiple conditions

If an award contains multiple service, performance and market conditions, and *all* conditions must be satisfied for the award to vest, the employee's requisite service period will be the longest explicit, implicit or derived service period. Because the employee must achieve all the conditions to obtain the award, the employee must continue to provide service until the last condition is achieved.

If an award contains multiple service or performance conditions and the award vests if *any one* of the conditions is satisfied, the employee's requisite service period will be the shortest explicit or implicit service period. That is, because the employee must work only long enough to satisfy a single condition, the requisite service period is the shortest service period. If it is not probable that a performance condition will be achieved, that condition is ignored for purposes of estimating the employee's requisite service period (i.e., even if it is the shortest of the identified service periods, it would not be the employee's requisite service period).

4.4.5.2 Accounting for an award that has multiple conditions (updated June 2019)

If an award contains multiple service, performance and market conditions, and *all* conditions must be satisfied for the award to vest, compensation cost recognition is based on expected achievement of the vesting conditions present in the award (only service and performance conditions are included in the definition of "vest" in ASC 718-20-20). Therefore, if the vesting conditions are met (i.e., the performance and service conditions), compensation cost is recognized even if the market condition is not achieved (because a market condition is not a vesting condition).

ASC 718 does not explicitly address how to value or recognize expense for an award that requires satisfaction of a performance and a market condition. Performance (or service conditions) that affect vesting are not reflected in the grant-date fair value, whereas market conditions are reflected in the grant-date fair value. For example, if an award contains a performance and a market condition and both conditions must be satisfied for the award to vest, the market condition is incorporated into the fair value of the award, and that fair value is recognized over the employee's requisite service period or nonemployee's vesting period if it is probable the performance condition will be met. If the performance condition is ultimately not met, compensation cost related to the award should not be recognized (or should be reversed) because the vesting condition in the award has not been satisfied.

Further, an award may contain varying levels of performance and market conditions that when satisfied in combination determine the award that vests. In this case, each outcome of the performance condition must be valued (incorporating the market condition into the fair value if applicable for that outcome). Compensation cost is recognized over the employee's requisite service period or nonemployee's vesting period based on the level of the performance condition with the highest fair value that is considered probable of being met.

Illustration 4-3: Award with performance and market conditions

Entity A issues an award to an employee who vests at the end of a three-year service period if an earnings target (performance condition) and total shareholder return target (market condition) are met. The number of awards that will vest depends on the performance compared to targets outlined in the award agreement as follows:

		Total shareholder return		
		Minimum	Target	Maximum
Operating earnings	Minimum	80%	90%	100%
	Target	90%	100%	110%
	Maximum	100%	110%	120%

If the minimum threshold for the performance or market condition is not met, the award will not vest. At the grant date, Entity A values the award that would be paid out under each outcome of the performance condition (which incorporates the likelihood of the market condition being met for that outcome) and determines the following total fair values:

Operating earnings target	Fair value
Minimum	\$ 8,500
Target	\$ 10,500
Maximum	\$ 13,500

Entity A determines that it is probable that the performance condition will be achieved at the target and will recognize \$10,500 as compensation cost over the requisite service period.

In this example, there are three outcomes of the performance condition and therefore three fair values estimated. However, if results can be interpolated between the thresholds, each possible outcome must have an estimated fair value. For example, if operating earnings is halfway between the minimum and the target and the total shareholder return is at the minimum, the employee would receive 85% of the target number of awards. However, since the valuations may not be symmetrical, Entity A cannot assume that the value of this award is \$9,500 (the average between the minimum outcome's fair value of \$8,500 and the target outcome's fair value of \$10,500). Instead, Entity A must value each outcome that could be interpolated between the defined thresholds and recognize compensation cost for the highest value outcome that is deemed probable of occurring.

Although the above example illustrates the valuation of an employee award, the same concepts apply to a nonemployee award. However, the timing of cost attribution may differ as compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1). For an award that requires satisfaction of multiple conditions or for awards in which vesting is based on a combination of the outcomes of performance and market conditions (the performance and market conditions are interdependent), the valuation of the award may be complex. Entities should carefully consider these awards and determine whether an external valuation specialist is needed.

ASC 718 does not clearly address the accounting for awards that vest or become exercisable based on achievement of either (1) a service or performance condition or (2) a market condition. Complexities arise in determining (1) whether and how the market condition should be incorporated into the valuation of the award, since the award can vest based solely on the achievement of the service or performance condition, and (2) the appropriate service period(s) for the award.

With respect to recognition, the FASB indicates through the following example that the attribution period should correspond to the shorter of the derived service period or the explicit/implicit service period (consistent with the discussion in the preceding paragraph). However, the example does not address the issue of how the market condition should affect the fair value of the award.

4.4.5.2.1

Example – employee share-based payment award with market and service conditions (TARSAP)

The award in the following example has an eight-year cliff vesting schedule that is accelerated if the target share price is achieved. These structures are often characterized as TARSAPs (i.e., time accelerated restricted stock award plans, although the term may be used generically to address any award with service vesting and a market or performance based trigger that could accelerate vesting). The example describes such an award as one with two conditions, a service condition and a market condition, the latter of which results in a derived service period that represents the requisite service period in the example below.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-102

On January 1, 20X5, Entity T grants an executive 200,000 share options on its stock with an exercise price of \$30 per option. The award specifies that vesting (or exercisability) will occur upon the earlier of the following for Case A or both are met for Case B:

- a. The share price reaching and maintaining at least \$70 per share for 30 consecutive trading days
- b. The completion of eight years of service.

718-10-55-103

The award contains an explicit service period of eight years related to the service condition and a derived service period related to the market condition.

Case A: When Only One Condition Must Be Met

718-10-55-104

An entity shall make its best estimate of the **derived service period** related to the market condition (see paragraph 718-10-55-71). The derived service period may be estimated using any reasonable methodology, including Monte Carlo simulation techniques. For this Case, the derived service period is assumed to be six years. As described in paragraphs 718-10-55-72 through 55-73, if an award's vesting (or exercisability) is conditional upon the achievement of either a market condition or performance or service conditions, the requisite service period is generally the shortest of the explicit,

implicit, and derived service periods. In this Case, the requisite service period over which compensation cost would be attributed is six years (shorter of eight and six years). (An entity may grant a fully vested deep out-of-the-money share option that would lapse shortly after termination of service, which is the equivalent of an award with both a market condition and a service condition. The explicit service period associated with the explicit service condition is zero; however, because the option is deep out-of-the-money at the grant date, there would be a derived service period.)

718-10-55-105

Continuing with this Case, if the market condition is actually satisfied in February 20X9 (based on market prices for the prior 30 consecutive trading days), Entity T would immediately recognize any unrecognized compensation cost because no further service is required to earn the award. If the market condition is not satisfied as of that date but the executive renders the six years of requisite service, compensation cost shall not be reversed under any circumstances.

Case B: When Both the Market and Service Condition Must Be Met

718-10-55-106

The initial estimate of the requisite service period for an award requiring satisfaction of both market and performance or service conditions is generally the longest of the explicit, implicit, and derived service periods (see paragraphs 718-10-55-72 through 55-73). For example, if the award described in Case A required both the completion of 8 years of service and the share price reaching and maintaining at least \$70 per share for 30 consecutive trading days, compensation cost would be recognized over the 8-year explicit service period. If the employee were to terminate service prior to the eight-year requisite service period, compensation cost would be reversed even if the market condition had been satisfied by that time.

The above example does not address how compensation cost would be measured for this award. Specifically, the issue arises when determining whether or how the effect of the market condition should be reflected in the estimate of the fair value of the award. If the award included only a market condition and no separate explicit service condition, its fair value would incorporate the likelihood that the market condition would never be achieved and the award would not become exercisable (and would be less than the fair value of a \$30 option with no market condition). However, in this case, the award will become exercisable as long as the individual provides employee services for the specified eight-year period. The fair value of that award would be greater than the award with the market condition. However, because the award includes both conditions, it is unclear which value should be used and under what circumstance.

The Resource Group reached a consensus at a May 2005 meeting that the fair value of the award can be appropriately measured using a lattice model. The fair value of the award would not be discounted due to a market condition that may not be satisfied because the employee would still retain the award (or the award would become exercisable) based on the achievement of the explicit service condition. However, the timing of when the market condition is expected to be satisfied (as determined by the lattice model) will affect the expected term of an employee option (by potentially making the option exercisable earlier, which could reduce the expected term), and in turn will be considered when measuring the grant-date fair value of the award (because there is no term for nonvested shares, the market condition would have no effect on the value of nonvested shares subject to vesting on achieving a market condition or a performance/service condition).

We discussed the Resource Group conclusion described above with the FASB staff and its applicability to other circumstances where there are multiple service, performance or market conditions. The FASB staff believes, and we agree, that the conclusion described for an award that “vests” based on the achievement of a market condition or a service condition is appropriate only if the service condition is probable of being achieved (i.e., the grantee can stay long enough to achieve the market condition but leave prior to the end of the explicit service period). If the service condition were not expected to be achieved, the fair value of the award would essentially ignore the service condition and be accounted for as an award with only a market condition (and a corresponding reduction in fair value associated with the possibility that the market condition will not be achieved). Compensation cost associated with such an award would be recognized over the derived service period.

4.4.5.2.2

Example – award that ‘vests’ based on the achievement of a performance condition or a market condition

Some awards may “vest” or become exercisable if either a performance condition or a market condition is satisfied.

Illustration 4-4: Awards that vest based on achievement of a performance or market condition

An entity grants 1,000 options that will become exercisable if during the period from the grant date to the fourth anniversary of the grant date (1) the compound annual EPS growth rate is at least 10% or (2) total annual shareholder return (share price appreciation plus dividends) exceeds 12%. The grantee must be employed on the fourth anniversary to exercise the award (service condition). Assume that the fair value of the options without considering the effect of the market condition is \$5,000. The fair value of the options considering the possibility that the total shareholder return target might not be met, which would be estimated using a lattice model or Monte Carlo simulation, is \$3,000. Both the implied and derived service periods are four years because both the performance and market conditions, respectively, are measured at the end of four years.

To appropriately measure compensation cost, the entity must first determine whether it is probable that the performance condition will be satisfied. The options can be viewed as two separate awards: (1) an award that becomes exercisable only if the total shareholder return target is achieved and (2) a more valuable award that vests regardless of whether the market condition is achieved, provided that the performance condition is achieved. If the entity believes it is not probable that the performance condition will be achieved, it will recognize \$3,000 in compensation cost over the four-year derived service period. However, if the entity believes that the performance condition will be achieved, it will recognize \$5,000 over the four-year implied service period, regardless of whether the market condition is achieved. No compensation cost would be recognized for employees who do not complete the four years of required service.

We believe this approach is similar to that described in ASC 718-20-55-42 through 55-46 for an award under which the achievement of a performance condition results in a lower exercise price for an option. Both the elimination of the market condition and the reduction in the exercise price increase the fair value of the award. Accordingly, if the achievement of a performance condition results in a higher fair value of an award, the entity would estimate the fair value of both awards (one assuming the performance condition is achieved and another assuming the performance condition is not achieved) and recognize the award with the highest fair value that is probable of vesting.

Although the example illustrates the accounting for an employee award, the same concepts apply to a nonemployee award with similar features. However, the timing of cost attribution may differ because compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

4.4.5.2.3

Example – options that become exercisable on a liquidity event resulting in a specified return to shareholders**Illustration 4-5: Awards that vest based on achievement of a performance condition and market condition**

In some cases, nonpublic entities grant options or other awards to grantees that become exercisable (or vest) only if (1) a liquidity event occurs (often defined as an IPO, change in control or other transaction that allows the initial investors to monetize all or a portion of their investment) while the grantee is providing goods or rendering services and (2) the internal rate of return to shareholders resulting from the liquidity event is at least a specified rate. These types of awards are most common when a significant portion of the entity's equity is held by financial investors.

The award includes a performance condition (the occurrence of a liquidity event while the grantee is providing goods or rendering services to the entity) and a market condition (the internal rate of return is based on the appreciation of the grantor's shares and dividends paid on those shares between the grant date and the date of the liquidity event). Accordingly, the market condition is incorporated into the valuation of the options, and that resulting fair value is only recognized if the liquidity event (the performance condition) occurs while the grantee is providing goods or delivering services (see section 4.4.2.2.1 for discussion on how liquidity events are not considered probable until they occur).

Because the internal rate of return condition is a market condition, the probability of it being achieved (ignoring the likelihood of the liquidity event, which is separately accounted for as a performance condition) affects the fair value of the award but does not determine whether that fair value is recognized. For example, if the liquidity event occurs, but the internal rate of return condition is not met (and, therefore, the options do not become exercisable), the grant-date fair value of the award still must be recognized as compensation cost.

4.4.5.2.4

Example – award that 'vests' based on the achievement of market condition and an implied performance condition (added October 2017)

The performance condition for some awards may not be explicitly stated. For example, some awards "vest" only if a market condition is satisfied, but an event that meets the definition of a performance condition (e.g., liquidity event) needs to occur for the entity to achieve the market condition. That is, it is unlikely (or impossible) that the market condition could be met without the event that meets the definition of a performance condition occurring. Judgment about the facts and circumstances is necessary to determine whether an implied performance condition exists.

Illustration 4-6: Awards that vest based on achievement of a market condition and an implied performance condition

An entity (pre-IPO) grants options that will be exercisable if a majority shareholder achieves a stated internal rate of return on the contributed capital, based on cash proceeds received by the investor. When the awards are granted, the entity determines that there is a market condition (the internal rate of return), as discussed in section 4.4.5.2.3, and an implied performance condition because the market condition could not be achieved without the occurrence of a liquidity event (such as an IPO). The entity determines at the grant date that the implied performance condition (the IPO) is not probable, and therefore no compensation cost is recognized.

At the grant date, the entity must determine the derived service period for the award by estimating how long it will take to satisfy the market condition (which is dependent upon when the performance condition (the IPO) is expected to occur). Assume that the IPO occurs one year after the awards are granted. Since the implied performance condition has been satisfied at the IPO date, the entity recognizes compensation cost at that date based on the proportion of the requisite service period already completed and recognizes the remaining cost over the estimated derived service period of the market condition, regardless of whether the market condition is ultimately satisfied. See section 4.5.3 for further discussion.

4.5 Accounting for changes in the employee's requisite service period

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-7

An entity shall adjust that initial best estimate in light of changes in facts and circumstances. Whether and how the initial best estimate of the requisite service period is adjusted depends on both the nature of the conditions identified in paragraph 718-10-30-26 and the manner in which they are combined, for example, whether an award vests or becomes exercisable when either a market or a **performance condition** is satisfied or whether both conditions must be satisfied. Paragraphs 718-10-55-69 through 55-79 provide guidance on adjusting the initial estimate of the requisite service period.

Compensation cost is recognized over the employee's requisite service period initially estimated based on a thorough review of all terms and conditions in the award. Section 4.4 discusses how service, performance or market conditions, or a combination of such conditions, affect the determination of the employee's requisite service period. This section discusses the accounting result when those estimates change.

4.5.1 Adjusting the employee's requisite service period based on a service or performance condition

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-77

As indicated in paragraph 718-10-55-75, the initial estimate of the requisite service period based on an explicit or implicit service period shall be adjusted for changes in the expected and actual outcomes of the related service or performance conditions that affect vesting of the award. Such adjustments will occur as the entity revises its estimates of whether or when different conditions or combinations of conditions are probable of being satisfied. Compensation cost ultimately recognized is equal to the grant-date fair value of the award based on the actual outcome of the performance or service conditions (see paragraph 718-10-30-15). [...]

If the initial estimate of the employee's requisite service period is based on a service or performance condition (i.e., an explicit or implicit service period), the employee's requisite service period must be adjusted if the estimate of the expected outcome of the conditions changes.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-78

How a change to the initial estimate of the requisite service period is accounted for depends on whether that change would affect the grant-date fair value of the award (including the quantity of instruments) that is to be recognized as compensation. For example, if the quantity of instruments for which the requisite service is expected to be rendered changes because a vesting condition becomes probable of satisfaction or if the grant-date fair value of an instrument changes because another performance or service condition becomes probable of satisfaction (for example, a performance or service condition that affects exercise price becomes probable of satisfaction), the cumulative effect on current and prior periods of those changes in estimates shall be recognized in the period of the change. In contrast, if compensation cost is already being attributed over an initially estimated requisite service period and that initially estimated period changes solely because another market, performance, or service condition becomes the basis for the requisite service period, any unrecognized compensation cost at that date of change shall be recognized prospectively over the revised requisite service period, if any (that is, no cumulative-effect adjustment is recognized).

As discussed in sections 4.5.4 and 4.5.5, some changes in the estimate of the employee's requisite service period are recognized prospectively (the remaining unrecognized compensation cost is simply recognized over the newly estimated requisite service period), while others are recognized by recording a cumulative catch-up adjustment (so that the cumulative recognized compensation cost is equal to what would have been recognized had the new estimate been used since the service inception date). The distinction between these two accounting approaches lies in whether the number or fair value of the instruments expected to vest changes as a result of the change in estimate. If it does not, the change in estimate is recognized prospectively, similar to the change in the estimated useful life of a depreciable asset. If it does, the change in estimate is recognized as a cumulative effect adjustment.

4.5.2 Adjusting the employee's requisite service period based on a market condition

The accounting for changes in the estimate of a derived service period differs significantly from changes in estimated explicit or implicit service periods. If the employee's requisite service period is based on a market condition (i.e., a derived service period) and the award does not include a service or performance condition, the employee's requisite service period is not adjusted for changes in the estimate of the derived service period. However, if the market condition is satisfied prior to the end of the employee's requisite service period, any remaining measured but unrecognized compensation cost should be recognized (i.e., accelerated) at that time.

The logic behind this change in estimate model is based on the overall accounting model for awards with market conditions. As previously discussed, compensation cost for an award with a market condition is not reversed if the market condition is not satisfied, as long as the employee's requisite service is provided. If the estimate of the time required to meet a market condition increases, increasing the employee's requisite service period would result in a lower amount of compensation cost recognized in each period and effectively cause compensation cost not to be recognized in full if the market condition is never achieved because the entity would continue to increase the estimate of the employee's requisite service period.

While the FASB considered providing for recognition of decreases in the estimated derived service period, it ultimately concluded that it is inappropriate to adjust the employee's requisite service period because of changes in the entity's share price. However, because the award becomes exercisable or

vested when the market condition is actually achieved, the FASB concluded that it would be inappropriate to continue to defer compensation cost for that award to periods during which the employee does not need to provide service to vest in the award. That remaining cost should be recognized in full in the period the market condition is met.

4.5.3 Adjusting the employee's requisite service period for awards with a market condition and a performance or service condition

Because the accounting models for awards with market conditions are different than those for awards with service and performance conditions, the determination of the effect of changes in the employee's requisite service period becomes more complicated when an award has a market condition and a service or performance condition:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-77

[...] If an award contains a market condition and a performance or a service condition and the initial estimate of the requisite service period is based on the market condition's derived service period, then the requisite service period shall not be revised unless either of the following criteria is met:

- a. The market condition is satisfied before the end of the derived service period
- b. Satisfying the market condition is no longer the basis for determining the requisite service period.

If an award has a market condition and a performance (or service) condition, and the award becomes exercisable on the satisfaction of *either* condition, the employee's requisite service period will be based on the *shorter* of the derived service period or the implied (or explicit) service period.¹⁸ If the entity initially estimates that the market condition will be satisfied in four years and the performance condition will be satisfied in five years, the employee's requisite service period over which compensation cost will be recognized is four years.

At the end of year one, assume the entity determines that the performance condition will be satisfied during year three. The employee's requisite service period would be adjusted, and the unrecognized compensation cost would be recognized prospectively over the remaining two years of the revised requisite service period (as discussed in the sections that follow, because neither the number nor the grant-date fair value of the awards expected to vest has changed, the change in estimated requisite service period is recognized prospectively). This accounting for the change is required because a different service period has become the basis for the employee's requisite service period.

However, if at the end of year one, the entity determines that the market condition would be satisfied in year three, the requisite service period would not be adjusted. This is because, as described in ASC 718-10-55-77 and in section 4.4.3.1, a requisite service period based on a derived service period does not change unless (1) the market condition is satisfied before the end of the derived service period, or (2) the market condition no longer determines the employee's requisite service period.

¹⁸ Determining the requisite service period for an award that has multiple service, performance and market conditions is discussed in section 4.4.5.

If an award has a market condition and a performance (or service) condition, and the award becomes exercisable on the satisfaction of *both* conditions, the employee's requisite service period will be based on the *longer* of the derived service period or the implied (or explicit) service period. If the entity initially estimates that the market condition will be satisfied in four years and the performance condition will be satisfied in five years, the employee's requisite service period over which compensation cost will be recognized is five years. At the end of year one, the entity determines that the performance condition will be satisfied during year three. The employee's requisite service period is now four years, the longer of the originally estimated derived service period and the new implied service period. The employee's requisite service period would be adjusted, and the unrecognized compensation cost would be recognized prospectively over the remaining three years of the revised requisite service period because the aggregate compensation cost expected to be recognized has not changed.

4.5.4 **Changes in the employee's requisite service period that are recognized in the current period**

If the change in the employee's requisite service period affects the estimate of the total compensation cost that will ultimately be recognized due to a change in the grant-date fair value of the instruments or due to a change in the number of instruments that are expected to vest, the effect of the change will be recognized in the period in which the change occurs (i.e., as a cumulative catch-up adjustment). Cumulative compensation cost recognized at the end of the period of the change in estimate is equal to the amount that would have been recognized had the currently estimated outcomes been used since the service inception date. The following sections include examples of changes in the requisite service period that would be accounted for by recognizing a cumulative catch-up adjustment.

4.5.4.1 **Condition becomes probable of being satisfied**

If the entity changes its assessment of whether the award will vest (i.e., whether the relevant service or performance condition will be satisfied), the effect of the change is recognized as a cumulative catch-up adjustment (see 4.4.2.3). If the entity originally estimated that it was not probable that the performance condition would be satisfied, compensation cost would not have been recognized. If the entity later determines that it is probable that the performance condition will be satisfied, the entity will recognize a cumulative catch-up adjustment to reflect the portion of the employee's requisite service that has been provided to date and will continue to recognize compensation cost over the remaining requisite service period.

4.5.4.2 **A different condition becomes probable of being satisfied resulting in a different number of instruments expected to vest**

If an entity determines it is probable that a different service or performance condition will be satisfied and satisfying that condition results in a different number of awards that will vest, the effect of the change in estimate is recognized as a cumulative catch-up adjustment.

For example, assume an employee award has a performance condition whereby a different number of shares will vest depending on the outcome of the condition. If the entity records cumulative net income of \$25 million over a three-year period, 500 options will vest, but if cumulative net income over that period is \$40 million, 1,000 options will vest.

The grant-date fair value of the options was estimated to be \$3 each. Assume the entity originally estimates that it will satisfy the lower threshold and only 500 options will vest. Compensation cost recognized in the first year would be \$500 (500 options × \$3 × 1 year ÷ 3 years). During the second year, the entity determines that it is probable that it will recognize cumulative net income of \$40 million over the three-year period. Because the estimate of total recognized compensation cost has changed, the effect of the change must be recognized in the current year. In year two, the entity will recognize

compensation cost of \$1,500 [(1,000 options × \$3 × 2 years ÷ 3 years) – \$500 recognized in year one]. If the estimate does not change again, the entity will recognize \$1,000 (1,000 options × \$3 × (1 year ÷ 3 years)) of compensation cost in year three.

4.5.4.3 **A different condition becomes probable of being satisfied resulting in a different grant-date fair value**

If an entity determines it is probable that a different service or performance condition will be satisfied and as a result of satisfying that condition, the employees will vest in awards with a different grant-date fair value (e.g., an award with a performance condition that affects the exercise price of the awards depending on the outcome of the condition, as illustrated in section 4.4.2.4.2), the effect of the change in estimate is recognized as a cumulative catch-up adjustment in the period in which the change occurs. The compensation cost recognized in the year of the change would be calculated as described in the preceding paragraph.

4.5.5 **Changes in the employee's requisite service period that are recorded prospectively**

The effect of a change in the employee's requisite service period that does not change the estimate of the total compensation cost (i.e., it doesn't affect the grant-date fair value or quantity of awards to be recognized) must be recognized prospectively over the remaining requisite service period. Examples of such a change are:

- ▶ The entity determines it is probable that the performance condition will be satisfied earlier or later than initially estimated.
- ▶ The entity determines it is probable that a different performance condition will be satisfied, and the related explicit or implicit service period differs from the original requisite service period (and does not change the estimate of the number of instruments expected to vest or the grant-date fair value that must be recognized).

For example, assume the grant-date fair value of an employee award subject to a performance condition is estimated to be \$5,000. The entity estimates that the performance condition will be satisfied in five years (a five-year implicit service period) and recognizes \$1,000 of compensation cost in year one. During year two, the entity determines that although it is still probable that the performance condition will be satisfied, it will take an estimated total of six years to satisfy the condition. The remaining \$4,000 of measured compensation cost will be recognized prospectively over the remaining five years of the revised requisite service period, or \$800 per year.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-79

To summarize, changes in actual or estimated outcomes that affect either the grant-date fair value of the instrument awarded or the quantity of instruments for which the requisite service is expected to be rendered (or both) are accounted for using a cumulative effect adjustment, and changes in estimated requisite service periods for awards for which compensation cost is already being attributed are accounted for prospectively only over the revised requisite service period, if any.

5 Accounting for liability instruments

This chapter was reorganized from the 2018 edition. See Appendix G for a concordance.

5.1 Overview (added June 2019)

Entities are required to evaluate whether certain share-based payment awards that are equity in legal form should be liability-classified. In some instances, determining the appropriate classification of an award requires significant judgment.

Unlike most equity-classified awards, liability-classified awards must be remeasured at each reporting date until settlement (see section 5.4). Ultimately, the compensation cost recognized for a liability-classified award will equal the amount for which the award is settled (e.g., the cash paid to settle an award or the value of the instruments transferred to the grantee to settle the award).

While a repurchase or other cash settlement feature may not result in liability classification of an award, SEC registrants may be required to classify awards with these features in temporary equity (see section 5.3).

Although public entities are required to measure liability-classified awards at fair value (see section 5.4.1), nonpublic entities have the choice of measuring liability-classified awards at fair value (or calculated value if expected volatility is not reasonably estimable) or at intrinsic value (see section 5.4.2). In the remainder of this section, unless otherwise noted, references to fair value include both fair value and calculated value.

5.2 Awards that are classified as liabilities (updated June 2019)

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-6

This paragraph through paragraph 718-10-25-19A provide guidance for determining whether certain financial instruments awarded in share-based payment transactions are liabilities. In determining whether an instrument not specifically discussed in those paragraphs shall be classified as a liability or as equity, an entity shall apply generally accepted accounting principles (GAAP) applicable to financial instruments issued in transactions not involving share-based payment.

The guidance on share-based payments requires that entities classify the following instruments as a liability:

- ▶ Certain instruments that would be classified as liabilities under ASC 480 (see section 5.2.1)
- ▶ Options or similar instruments that are required to be settled in cash or other assets (e.g., cash-settled share appreciation rights), including instances when the award is puttable by the grantee to the grantor based on a contingent event that is within the control of the grantee (see section 5.2.2.1)
- ▶ Options or similar instruments that require cash settlement on the occurrence of a contingent event that is not within the control of the grantee and is considered probable (see section 5.2.2.2)
- ▶ Options or similar instruments to acquire liability-classified shares (see section 5.2.2.4)
- ▶ Instruments that include share repurchase features, and the grantee is not expected to be subject to the normal risks and rewards of share ownership (see section 5.2.3)

- ▶ Instruments that include conditions other than service, performance or market conditions that affect their fair value, exercisability or vesting (see section 5.2.4)
- ▶ Instruments that can be settled in cash or shares at the option of the grantee (e.g., tandem options) (see section 5.2.5)
- ▶ Instruments that are equity in form but the grantor either has a past practice or an intention of cash-settling the instruments (see section 5.2.5)
- ▶ Instruments for which the grantor can choose cash or share settlement but cannot control delivery of shares (see section 5.2.5.1)
- ▶ Awards where the aggregate fair value of the shares withheld (or that may be withheld at the employee's election) to cover the employer's statutory tax withholding requirements exceeds the employee's maximum statutory rate (see section 5.2.6)
- ▶ Awards that may be settled partially in cash (see section 5.2.7)
- ▶ Awards of profits interest and similar interests that are liabilities in substance (see section 5.2.8)
- ▶ Instruments for which the fair value differs from the formula price (see section 5.2.9)

Also, under ASR 268 (codified in ASC 480-10-S99-1), registrants must classify in temporary equity awards classified as equity instruments under ASC 718 that may require the grantor to redeem the award for cash or other assets (see section 5.3).

5.2.1 Applying the classification criteria in ASC 480 (updated October 2017)

Certain concepts in ASC 480 apply to share-based payments accounted for under ASC 718. ASC 480 provides guidance for classifying and measuring as liabilities certain financial instruments that embody the issuer's obligations and have characteristics of both liabilities and equity. ASC 480 generally requires that the issuer classify as liabilities financial instruments that represent, or are indexed to, an obligation to buy back the issuer's shares (e.g., written put options, forward purchase contracts), regardless of whether the instrument is settled on a net-cash or a gross-physical basis. In addition, ASC 480 requires liability classification for certain instruments that represent obligations that can be settled in shares (e.g., net share-settled written put options, forward purchase contracts, "stock-settled debt"). Our FRD, *Issuer's accounting for debt and equity financings*, addresses the guidance in ASC 480.

While ASC 480 excludes share-based payments from its scope, ASC 718 states that share-based payments that would be classified as liabilities under ASC 480 (absent ASC 480's exemption for share-based payments) must be classified as liabilities under ASC 718, unless ASC 718 specifically requires equity classification. ASC 718 allows equity classification for options to purchase shares subject to certain repurchase features (section 5.2.3) and options that permit shares to be tendered (i.e., put) to the grantor to satisfy the employee's maximum tax withholding obligation (section 5.2.6.2). Absent specific guidance in ASC 718, these instruments would be classified as liabilities under ASC 480.

Examples of instruments that are required to be classified as liabilities under ASC 480 include:

- ▶ Contracts for which the monetary value is predominantly fixed, sometimes characterized as "stock-settled debt" (e.g., an award in which the grantee will receive a variable number of shares with a fair value equal to a predominantly fixed dollar amount on the delivery date) – Awards with predominantly fixed monetary values arise most frequently in connection with ESPPs that provide a fixed discount from the share price on the purchase date (with no look-back features), which are discussed in section 11.5, and bonus plans that are settled in shares, which are discussed in section 4.3.1.4.

- ▶ A freestanding written put option that provides the grantee the right to sell the shares back to the issuer for a specified price – The written put option must be freestanding to be classified as a liability under ASC 480. However, that guidance does not apply to repurchase rights embedded in shares (see section 5.2.3). We believe share repurchase features generally would be viewed as embedded in shares because they typically are provided for in the share-based payment agreement, and the repurchase right is not “legally detachable or separately exercisable” from the underlying shares.
- ▶ A freestanding forward purchase contract in which the grantor and grantee agree that the grantee will sell the shares back to the grantor for a specified price on a specified date – See discussion of embedded repurchase features above.
- ▶ Shares that are mandatorily redeemable – Shares that are subject to an unconditional obligation for the grantor to transfer assets to redeem the shares are liability classified under ASC 480, unless redemption is required only upon liquidation of the grantor. For example, preferred shares that must be redeemed by transferring assets on a specified date or upon an event certain to occur (e.g., when an employee stops providing services to the entity). However, certain requirements of ASC 480 do not apply to nonpublic entities.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-8

In determining the classification of an instrument, an entity shall take into account the classification requirements as established by Topic 480. In addition, a **call option** written on an instrument that is not classified as a liability under those classification requirements (for example, a call option on a mandatorily redeemable share for which liability classification is not required for the specific entity under the requirements) also shall be classified as equity so long as those equity classification requirements for the entity continue to be met, unless liability classification is required under the provisions of paragraphs 718-10-25-11 through 25-12.

ASC 718-10-25-8 clarifies that the classification criteria in ASC 480 also apply to share-based payments, including the scope exception in ASC 480 for certain mandatorily redeemable financial instruments issued by nonpublic entities that are not SEC registrants.¹⁹ For example, common shares issued by a nonpublic entity that are mandatorily redeemable at a formula value on an employee’s termination (see example in section 5.2.9), as well as any options on such shares, generally would not be subject to the requirements of ASC 480. See section A.3.5.1 of our FRD, *Issuer’s accounting for debt and equity financings*, for guidance on the issuers and instruments subject to the scope exception in ASC 480.

5.2.2

Options and similar instruments (updated June 2019)

ASC 718 requires that options and similar instruments be classified as liabilities if the underlying shares are liability-classified or if the grantor can be required under any circumstances to settle the award by transferring cash or other assets.

¹⁹ Part II of ASU 2017-11, *Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*, recharacterized the indefinite deferral of the guidance in ASC 480-10-65-1 to a scope exception in ASC 480-10. The amendments made in Part II of ASU 2017-11 do not have an accounting effect.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-11

Options or similar instruments on shares shall be classified as liabilities if either of the following conditions is met:

- a. The underlying shares are classified as liabilities.
- b. The entity can be required under any circumstances to **settle** the option or similar instrument by transferring cash or other assets. A cash settlement feature that can be exercised only upon the occurrence of a contingent event that is outside the grantee's control (such as an initial public offering) would not meet this condition until it becomes probable that event will occur.

718-10-25-12

For example, a **Securities and Exchange Commission (SEC) registrant** may grant an option to a grantee that, upon exercise, would be settled by issuing a mandatorily redeemable share. Because the mandatorily redeemable share would be classified as a liability under Topic 480, the option also would be classified as a liability.

Subsequent Measurement

718-10-35-15

An option or similar instrument that is classified as equity, but subsequently becomes a liability because the contingent cash settlement event is probable of occurring, shall be accounted for similar to a modification from an equity to liability award. That is, on the date the contingent event becomes probable of occurring (and therefore the award must be recognized as a liability), the entity recognizes a share-based liability equal to the portion of the award attributed to past performance (which reflects any provision for acceleration of vesting) multiplied by the award's fair value on that date. To the extent the liability equals or is less than the amount previously recognized in equity, the offsetting debit is a charge to equity. To the extent that the liability exceeds the amount previously recognized in equity, the excess is recognized as compensation cost. The total recognized compensation cost for an award with a contingent cash settlement feature shall at least equal the fair value of the award at the grant date. The guidance in this paragraph is applicable only for options or similar instruments issued as part of compensation arrangements. That is, the guidance included in this paragraph is not applicable, by analogy or otherwise, to instruments outside **share-based payment arrangements**.

Options or similar instruments are classified as liabilities if:

- ▶ The grantor may be obligated to redeem the option or similar instrument by transferring cash or other assets, including instances when the award is redeemable (puttable to the grantor) based on a contingent event that is in the control of the grantee (see section 5.2.2.1).
- ▶ The grantor may be obligated to redeem the option or similar instrument by transferring cash or other assets upon the occurrence of a contingent event outside the grantee's control that is probable of occurring (see section 5.2.2.2).
- ▶ The grantor has the right to redeem the option or similar instrument by transferring cash or other assets, and the grantor intends to do so (see section 5.2.2.3).
- ▶ The grantor is permitted to settle the option by transferring cash or other assets upon the occurrence of a contingent event that is probable of occurring, and the grantor intends to settle the award for cash or other assets (see section 5.2.2.3).
- ▶ The share underlying the option is classified as a liability (see section 5.2.2.4).

5.2.2.1 **Grantee has the right to require redemption of options and similar instruments (added June 2019)**

ASC 718-10-25-11(b) requires options and similar instruments to be classified as liabilities if the grantor can be required under any circumstances to settle the option or similar instrument by transferring cash or other assets. Therefore, liability classification is required if the grantee can require the grantor to redeem the option for cash or other assets (i.e., a put right). Liability classification is required even if it is unlikely that the grantee will exercise the put right. Under this guidance, a share appreciation right (SAR) that can be required to be cash settled also is classified as a liability.

Further, if the grantor can be required (e.g., the grantee has a put right) to settle the option or similar instrument by transferring cash or other assets upon a contingent event that is in the grantee's control, the option is liability-classified. This is because the grantee may trigger the contingent event at any time and the grantor may be required to settle the award.

5.2.2.2 **Grantee has contingent right to require redemption of options and similar instruments (updated June 2019)**

If the grantee can require a grantor to cash settle an award on the occurrence of a contingent event, under ASC 718-10-25-11(b) the grantor must consider the probability of the event occurring when the contingent event is outside the grantee's control (e.g., change in control) in determining the classification of an option or similar instrument.

ASC 718 requires entities to classify options and similar instruments with contingent cash settlement features as equity awards if the contingent event that can require cash settlement (1) is not considered probable of occurring,²⁰ (2) is not within the control of the grantee and (3) the award includes no other features that would require liability classification. That is, if the grantor can be required to settle the option by transferring cash or other assets when a contingent event that is outside the grantee's control is probable of occurrence, the option is liability-classified.

Liquidity events, such as IPOs and changes in control, are common examples of contingent events. They are considered to be outside the grantee's control and not probable until they occur.²¹ Therefore, an option or similar instrument that requires cash settlement on a change in control would be classified as equity until the change in control occurs, assuming the award includes no other features that require liability classification.

The requirement to consider the probability of the occurrence of an event that can require a grantor to redeem an award is consistent with the assessment required for shares with put options that are contingent on the occurrence of events that are outside the grantee's control (see section 5.2.3.2). Probability must be assessed each reporting period. The reclassification of an option or similar instrument due to a change in the probability of the contingent event occurring is accounted for similar to a modification of an award that requires reclassification from equity to liability (see section 8.6.1). Total compensation cost is the greater of the original fair value of the equity award or the fair value of

²⁰ While this is not specifically addressed in ASC 718, we believe the guidance in paragraph 85 of EITF 00-23 applies, which stated that "an employer should assess whether the contingent event is expected to occur (that is, whether occurrence is probable) on an *individual grantee-by-grantee basis*." [Emphasis added.] Accordingly, while it may be probable that some portion of a large grantee group may pass away or become disabled while in service, it is infrequent that a grantor would identify specific grantees for which it is probable that either of those events would occur.

²¹ As discussed in section 4.4.5.2.3, historically, compensation cost related to performance options that only vest on consummation of a business combination was recognized when the business combination was consummated. Recognition was deferred until consummation of the transaction, even when it became likely that the business combination would be consummated. We believe a similar approach applies under ASC 718 and to other types of liquidity events, including IPOs. Similarly, practice has developed such that when such an event would permit cash redemption of an award, the reclassification to a liability does not occur until the event occurs.

the liability award (remeasured until settlement, or until the occurrence of the contingent event is no longer considered probable). A reclassification from liability to equity is accounted for as a modification that changes the classification from a liability to equity (see section 8.6.2), in which compensation cost is equal to the fair value of the award on the modification date.

Even if an option subject to a put right is classified as equity under ASC 718, public entities are required to classify such awards as temporary equity under ASR 268, as discussed in section 5.3.

5.2.2.3 Grantor has right to redeem options and similar instruments (added June 2019)

If an option or similar instrument permits but does not require cash settlement (i.e., the grantor has a call option), its classification as either a liability- or equity-classified award is assessed in a manner similar to how a share with a call feature is assessed, as discussed in 5.2.3.3. If the option or similar instrument permits but does not require cash settlement upon the occurrence of a contingent event, its classification as either a liability- or equity-classified award is assessed similarly to a share with a call feature contingent on the occurrence of an event as discussed in section 5.2.3.4. However, because an unexercised option or similar instrument cannot become a mature share (i.e., the option holder is not exposed to the risks and rewards of share ownership until the option is exercised and the share is held for six months or more), the expectation that a grantor will exercise a call on an option always will result in the classification of the option or similar instrument as a liability.

5.2.2.4 Share underlying option is a liability instrument

ASC 718-10-25-11(a) requires awards for which the underlying instrument is a liability to be classified also as a liability. For example, an option on an SEC registrant's mandatorily redeemable preferred shares or convertible debt is classified as a liability under ASC 718.

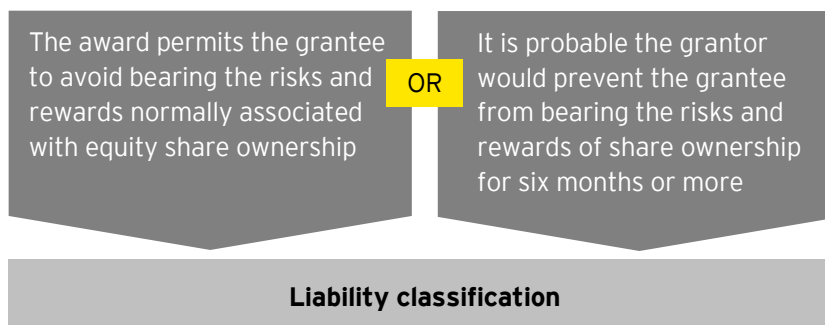
5.2.3 Awards that include share repurchase features (updated June 2019)

Compensation arrangements may:

- ▶ Give the grantee the right to sell shares back to the grantor (a put option)
- ▶ Give the grantor the right to repurchase shares (a call option)
- ▶ Give the grantor the right to repurchase shares from the grantee instead of the grantee's sale of the shares to a third party (a right of first refusal)

Puts, calls and rights of first refusal are collectively referred to in this publication as share repurchase features. These rights are common in grants by nonpublic entities or nonpublic subsidiaries of public entities and are used to provide liquidity to the grantee and enable the grantor to limit the dispersion of share ownership.

When there is a repurchase feature, the share-based payment must be classified as a liability if either of the following conditions is met:



ASC 718²² states the following on the classification of shares subject to repurchase features:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-9

Topic 480 does not apply to outstanding shares embodying a conditional obligation to transfer assets, for example, shares that give the grantee the right to require the grantor to repurchase them for cash equal to their fair value (puttable shares). A put right may be granted to the grantee in a transaction that is related to a share-based compensation arrangement. If exercise of such a put right would require the entity to repurchase shares **issued** under the share-based compensation arrangement, the shares shall be accounted for as puttable shares. A puttable (or callable) share awarded to a grantee as compensation shall be classified as a liability if either of the following conditions is met:

- a. The repurchase feature permits the grantee to avoid bearing the risks and rewards normally associated with equity share ownership for a reasonable period of time from the date the good is delivered or the service is rendered and the share is issued. A grantee begins to bear the risks and rewards normally associated with equity share ownership when all the goods are delivered or all the service has been rendered and the share is issued. A repurchase feature that can be exercised only upon the occurrence of a contingent event that is outside the grantee's control (such as an initial public offering) would not meet this condition until it becomes **probable** that the event will occur within the reasonable period of time.
- b. It is probable that the grantor would prevent the grantee from bearing those risks and rewards for a reasonable period of time from the date the share is issued.

For this purpose, a period of six months or more is a reasonable period of time.

718-10-25-10

A puttable (or callable) share that does not meet either of those conditions shall be classified as equity (see paragraph 718-10-55-85).

This guidance relates to grants of shares or options in which the underlying share may be put back to the grantor. If the option itself can be put back to the grantor, the guidance discussed in section 5.2.2 applies.

5.2.3.1

Grantee has the right to put shares (updated June 2019)

For embedded put options, liability classification is required if the award permits the grantee to avoid the risks and rewards normally associated with share ownership or those risks and rewards are not retained for a reasonable period of time (i.e., six months or more). Liability classification is required even if it is unlikely that the grantee will exercise his or her put right prior to holding the shares for a reasonable period of time. However, if the grantee can put the shares only upon an event that is not probable of occurring, the put would not trigger liability accounting if the contingent event is outside the grantee's control or if the grantee has been subject to the risk and rewards of ownership for a reasonable period of time before the put option is exercisable (i.e., six months or more after option exercise or share vesting). See section 5.2.3.2 for further discussion.

²² The FASB's intent was to provide guidance that generally was consistent with practice under Opinion 25 (as interpreted by Interpretation 44 and EITF 00-23) and Statement 123 (which analogized to the guidance in Interpretation 44 and EITF 00-23).

Even if an award subject to a put right is classified as equity under ASC 718, public entities are required to classify such an award as “temporary equity” under ASR 268, as discussed in section 5.3.

An award is classified as a liability if *either* of the following conditions is met:

1. The award permits the grantee to avoid bearing the risks and rewards normally associated with equity share ownership.

Fair value repurchase – If the put option provides for a repurchase of the shares at fair value on the date of purchase, the grantee generally would bear the risks and rewards of ownership. However, those risks and rewards must be held by the grantee for a minimum period (six months or more) to avoid liability classification (see Condition 2 below).

Fixed price repurchase – If the put option provides for a repurchase at a fixed dollar amount, the grantee generally would not bear the risks and rewards of share ownership (even if the award is held for a period of six months or more), and liability classification would be required. We generally believe that an award subject to a fixed price put option would be accounted for as an award with a liability and equity component similar to a tandem award described in ASC 718-10-55-120 through 55-130 (see section 7.4.6). However, as discussed in section 5.2.3.5, a share repurchase feature at the original share purchase price that is exercisable only if the grantee stops providing goods or services prior to vesting in the shares may in substance be a forfeiture provision and would be accounted for as such (not as a repurchase feature).

Repurchase at fixed premium over fair value – If the put option requires a repurchase price equal to the fair value of the shares on the repurchase date plus a fixed premium, the grantee would bear the risks and rewards of ownership (a change in the value of the shares results in a corresponding change in the repurchase price). However, ASC 718-10-55-85 states that “paragraph 718-20-35-7 requires that the fixed amount over the fair value be recognized as additional compensation cost over the requisite service period (with a corresponding liability being accrued).” The accounting for the portion of the award that is repurchased at fair value would be accounted for as an equity-classified award as described above (if Condition 2 is met below).

We generally believe that the “fixed premium” classified as a liability applies to premiums stated as a fixed dollar amount and not to premiums stated as a percentage in excess of fair value. For example, if a put option has a repurchase price equal to the fair value of the shares on the repurchase date plus \$100, then the \$100 fixed premium is recognized as compensation cost over the employee’s requisite service period or nonemployee’s vesting period along with a corresponding liability.

If the premium was expressed as a fixed or variable percentage over fair value (e.g., 10%), the award is not considered to contain a fixed premium over fair value because the amount received by the grantee will vary based solely on changes in the grantor’s share price. In this case, the grantee would not bear the risks and rewards of share ownership, and liability classification would be required for the entire award as stated in EITF 00-23 Issue 23(d). Entities would then reclassify the award to equity at the earlier of (1) the expiration of the put feature or (2) the exercise of the put feature.

Formula repurchase price – If the put option provides for a repurchase price based on something other than the fair value of the grantor’s shares (e.g., a formula based on book value or EBITDA), the award generally will be accounted for as a liability. As discussed in ASC 718-10-55-131 through 55-133, a public entity would account for the award as a liability because “book value [or other formula value] shares of public entities generally are not indexed to their stock prices.” A nonpublic entity also would account for the award as a liability unless substantially all shares of the same class are purchased and sold by the grantor based on the same formula (i.e., the formula price is used because of the difficulty associated with estimating the fair value of the grantor’s shares as discussed in section 5.2.9). Further, as discussed in Condition 2 below, those risks and rewards must be born for a minimum period.

2. The risks and rewards of share ownership are not retained for a reasonable period of time²³ from the date the requisite service is rendered and the share is issued.

ASC 718-10-25-9 specifies that a reasonable period of time is six months or more. The six-month period begins on “the date the requisite service is rendered and the share is issued.” Therefore, the six-month period starts when (1) a share is vested or (2) an option is exercised and not subject to forfeiture through a repurchase feature that is in substance a forfeiture provision (see section 5.2.3.5).

In some cases, the grantee has the right to put shares back to the grantor for fair value within six months of the option exercise or share vesting, but may choose not to do so. During the six months, these shares would be liability-classified because this condition is not met. However, at the end of the six-month period, the grantee has been subject to the risks and rewards of share ownership for a reasonable period of time. If the award is still being accounted for under ASC 718, the shares must be reclassified to equity at fair value on the date of reclassification. Changes in fair value previously recognized while the instrument was classified as a liability are not reversed. Despite this guidance, public entities must classify the redemption amount in temporary equity, as discussed in section 5.3. If the award is no longer being accounted for under ASC 718 (e.g., because the award has been modified after a grantee vests in the award and is no longer providing goods or services, or is no longer an employee), entities would follow the guidance in section 5.5.1.

ASC 718 includes the following illustrative guidance for puttable shares:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-85

An entity may, for example, grant shares under a share-based compensation arrangement that the grantee can put (sell) to the grantor (the entity) shortly after the vesting date for cash equal to the fair value of the shares on the date of repurchase. That award of puttable shares would be classified as a liability because the repurchase feature permits the grantee to avoid bearing the risks and rewards normally associated with equity share ownership for a reasonable period of time from the date the share is issued (see paragraph 718-10-25-9(a)). Alternatively, an entity might grant its own shares under a share-based compensation arrangement that may be put to the grantor only after the grantee has held them for a reasonable period of time after vesting but at a fixed redemption amount. Those puttable shares also would be classified as liabilities under the requirements of this Topic because the repurchase price is based on a fixed amount rather than variations in the fair value of the grantor’s shares. The grantee cannot bear the risks and rewards normally associated with equity share ownership for a reasonable period of time because of that redemption feature. However, if a share with a repurchase feature gives the grantee the right to sell shares back to the entity for a fixed amount over the fair value of the shares at the date of repurchase, paragraph 718-20-35-7 requires that the fixed amount over the fair value be recognized and attributed as additional compensation cost over the employee’s requisite service period (with a corresponding liability being accrued). The fixed amount over the fair value of a nonemployee award should be recognized as additional compensation cost over the vesting period (with a corresponding liability being accrued) in accordance with paragraph 718-10-25-2C.

²³ While the FASB initially decided not to provide additional guidance on what was meant by the term “reasonable period of time” for fear of setting a bright-line, it ultimately decided to define a “reasonable period of time” as a period of six months, consistent with the guidance in Interpretation 44 and EITF 00-23 and with how practice has evolved.

5.2.3.2 Put right is contingent (added June 2019)

A grantor may grant a share with a put right that is exercisable by the grantee only upon a contingent event (e.g., employee separation, death, disability). If none of the contingent events occur, the put right is not exercisable.

It is general practice to follow the guidance in EITF 00-23 to determine the classification of shares with a put right (at fair value) that can only be exercised upon the occurrence of a contingent event. The assessment begins with determining who controls the occurrence of the contingent event.

	Who controls the contingent event?	
	Grantee	Other
Assess the probability of the event occurring?	No	Yes

Contingent event in the control of the grantee

If the contingent event that triggers the grantee's right to put the shares back to the grantor is within the control of the grantee (e.g., voluntary termination), the probability of the contingent event occurring is not considered.

- ▶ If the shares can be put within six months of share vesting or option exercise, the award is classified as a liability. At the end of the six-month period, the grantee has been subject to the risks and rewards of share ownership for a reasonable period. If the award is still being accounted for under ASC 718, the shares are reclassified to equity at fair value on the date of reclassification. Changes in fair value previously recognized while the instrument was classified as a liability are not reversed. However, public entities must reclassify the redemption amount from a liability to temporary equity, until the put feature expires or the award is settled, as discussed in section 5.3.
- ▶ If the shares cannot be put within six months of share vesting or option exercise, the award is classified as equity (assuming no other features of the award would result in liability classification).

Contingent event is not within control of the grantee

If the contingent event that triggers the grantee's right to put the shares back to the grantor is not within the control of the grantee (e.g., involuntary termination, liquidity event), the contingent event must be assessed to determine if it is probable of occurring. If the contingent event is not probable of occurring, the award is classified as equity (assuming the award includes no other features that require liability classification). If the contingent event is probable of occurring while the shares are immature (i.e., the grantee has not been subject to the risks and rewards of share ownership for at least six months), the award is classified as a liability.²⁴

The evaluation of contingent events should be made on an individual grantee-by-grantee basis²⁵ and reassessed at each reporting period throughout the contingency period. If the probability of the contingent event occurring changes, it would be accounted for in a manner similar to a modification that changes the classification of an award (see sections 8.6.1 and 8.6.2).

²⁴ As discussed in section 5.2.2.2, practice has developed such that when a liquidity event would permit cash redemption of an award, the reclassification to a liability does not occur until the event occurs.

²⁵ As discussed in section 5.2.2.2, while it may be probable that some portion of a large grantee group may pass away or become disabled, it would be infrequent that a grantor would identify specific grantees for which it is probable that either of those events would occur.

5.2.3.3 Grantor has the right to call shares

When the grantor has a call option on shares, ASC 718-10-25-9(b) requires liability classification if “it is *probable* that the grantor would prevent the grantee from bearing those risks and rewards for a reasonable period of time from the date the share is issued.” [Emphasis added.] The concepts of “bearing the risks and rewards” of share ownership and “reasonable period of time” are the same as described for grantee puts in section 5.2.3.1.

The grantee must be subject to the risks and rewards of ownership for six months or more after the options are exercised or the shares vest for the share to be classified as equity. However, unlike put options where the probability that the grantee will put the shares is not factored into the classification analysis, ASC 718-10-25-9(b) only requires liability classification if it is *probable* that the grantor will exercise a call right that precludes the grantee from bearing the risks and rewards of ownership for at least six months. The guidance in EITF 00-23 regarding when a call right is “expected” to be exercised provides useful guidance in determining when it is probable that the grantor’s call right will be exercised.

Issue 23(a) of EITF 00-23 states that the assessment of whether a grantor’s repurchase at fair value of immature shares (i.e., held for less than six months) is probable should be based on (1) the grantor’s stated representation that it has the positive intention not to call such shares and (2) all other facts and circumstances, including:

- ▶ The frequency with which the grantor has called immature shares in the past
- ▶ The circumstances under which the grantor has called immature shares in the past
- ▶ The existence of any legal, regulatory or contractual limitations on the grantor’s ability to repurchase shares
- ▶ Whether the entity is a closely held, private entity (e.g., an entity may have a policy that shares cannot be widely held, thus resulting in an expectation that immature shares will be repurchased)

If it is probable that the grantor will repurchase immature shares (using the guidance above), the share-based payment is classified as a liability during the period that the shares are immature. At the end of the six-month period if the grantor has not exercised its call right, the grantee has been subject to the risks and rewards of share ownership for a reasonable period. If the award is still being accounted for under ASC 718, the shares are reclassified as equity at fair value on the date of reclassification. That is, it is accounted for in a manner similar to a modification that changes the classification of an award from liability to equity, as discussed in section 8.6.2. If the award is no longer being accounted for under ASC 718 (e.g., because the award has been modified after a grantee vests in the award and is no longer providing goods or services, or is no longer an employee), entities would follow the guidance in section 5.5.1. Changes in fair value previously recognized while the instrument was classified as a liability are not reversed.

A grantor assesses whether the repurchase of immature shares with a call feature is probable at each reporting period on an individual grantee-by-grantee basis. If a share option or share award that was initially classified as equity becomes a liability due to a change in the probability, it is accounted for in a manner similar to a modification that changes the classification of an award from equity to liability, as discussed in sections 5.2.2.1 and 8.6.1.

A different analysis is required if the call option could be exercised at a price that is not fair value.

In Issue 23(d) of EITF 00-23, the EITF concluded that a call feature that results, or could potentially result, in a repurchase amount that is *less* than the fair value of the underlying shares would always result in an expectation that the repurchase feature will be exercised. Therefore, the award is classified as a liability.

Issue 23(d) of EITF 00-23 also stated that if the call option could be exercised at a price that is greater than fair value, the determination of whether the call right is expected to be exercised should be made in a manner similar to call rights exercisable at fair value discussed in Issue 23(a) (using the guidance above). If it is probable that the grantor will repurchase immature shares, the share-based payment must be classified as a liability. If the repurchase amount includes a fixed premium over fair value, the fixed amount over the fair value is recognized as compensation cost over the requisite service period (with a corresponding liability being accrued), as discussed in 5.2.3.1 above. If it is not probable, then the grantee would bear the risks and rewards of ownership (a change in the value of the shares results in a corresponding change in the repurchase price).

5.2.3.4

Grantor's call feature is contingent (updated December 2018)

As discussed in section 5.2.3, ASC 718-10-25-9 addresses the accounting when a share-based payment that contains a repurchase feature is awarded to a grantee. That guidance indicates that a call feature that permits a grantee to avoid bearing the risks and rewards normally associated with equity share ownership for a reasonable period of time from the date the requisite service is rendered and the share is issued should be classified as a liability.

However, an entity may grant a share-based payment that provides the grantor with a call feature that is exercisable only on the occurrence of specified future events (e.g., employee separation, death, disability). If none of the events occur, the call never becomes exercisable.

ASC 718-10-25-9 does not provide guidance on how to assess whether the grantee is "permitted" to avoid bearing the risks and rewards of equity share ownership. Because the accounting for contingent call features is not comprehensively addressed in ASC 718, the concepts in the prior accounting literature (EITF 00-23) are applied in practice because FAS 123(R) (the predecessor to ASC 718) was not meant to change practice when issued. Therefore, entities may follow the guidance in Issue 23(b) of EITF 00-23 to determine the classification of shares when a grantor has a call right that can only be exercised upon the occurrence of a contingent event. Under EITF 00-23, the entity must assess whether it is probable that:

- ▶ The contingent event will occur – Regardless of which party controls the occurrence of the contingent event, the grantor is required to assess the probability of the contingent event occurring before the shares mature. Therefore, when the occurrence of the events or actions that can result in a call feature being exercisable are not controlled by the grantor, the grantor should assess if the contingent event is probable of occurring. Similarly, when the events or actions that can result in a call feature being exercisable are in the control of the grantor, the grantor should evaluate if it is probable it will take the actions necessary to cause the call feature to become exercisable. The evaluation of the probable occurrence of contingent events should be made for each award on an individual grantee-by-grantee basis, as applicable. As discussed in section 5.2.2.2, while it may be probable that some portion of a large grantee group may pass away or become disabled while in service, it would be infrequent that a grantor would identify specific grantees for which it is probable that either of those events would occur.
- ▶ The grantor will exercise the call feature and prevent the grantee from bearing the risks and rewards for a reasonable period of time from the date the option is exercised or the share is issued – For purposes of this assessment, a "reasonable period of time" is a period of six months or more. In assessing whether the grantor will exercise a call, an entity should consider all facts and circumstances (see section 5.2.3.3).

If both conditions are probable, the award is classified as a liability until the shares mature. At the end of the six-month period, the grantee has been subject to the risks and rewards of share ownership for a reasonable period. If the award is still being accounted for under ASC 718 at that time, the shares are

reclassified to equity at fair value on the date of reclassification similar to the accounting for a modification that changes the classification of an award (see section 8.6.2). Gains or losses previously recognized while the instrument was classified as a liability are not reversed.

If it is not probable that the contingent event will occur, or if it is probable that the contingent event will occur but the grantor does not expect to call the shares while they are immature, the award is classified as equity as long as no other features require liability classification.

Both conditions should be reassessed each reporting period. If the probability changes, the contingency period lapses or the shares reach maturity (i.e., the grantee has been subject to the risks and rewards of share ownership for at least six months), classification should be reassessed, and if it changes, it would be accounted for in a manner similar to a modification that changes the classification of an award (see sections 8.6.1 and 8.6.2).

Illustration 5-1: Assessing classification of an award with contingent call features

Example 1

On 1 January 20X1, an entity grants 100,000 nonvested shares to an employee that vest after one year of service (31 December 20X1). The nonvested shares contain a call feature that allows the employer to repurchase the shares at fair value upon an IPO. First, the employer assesses the probability of the contingent event occurring. Because the IPO is improbable of occurring until it happens (see section 4.4.2.2.1), the entity concludes that equity classification is appropriate.

On 30 June 20X1, the IPO occurs and, therefore, the employer must assess the probability of exercising its call feature while the shares are immature; thus preventing the employee from bearing the risk and rewards of share ownership for a reasonable period of time. The entity believes it is probable it will call the shares before the employee holds the share for six months (i.e., before 30 June 20X2). Therefore, on 30 June 20X1, the entity reclassifies the award to a liability. The accounting is similar to a modification that changes an award's classification from equity to a liability (see section 8.6.1).

Example 2

On 1 January 20X1, an entity grants 100,000 nonvested shares to an employee that vest after one year of service (31 December 20X1). The nonvested shares contain a call feature that allows the employer to repurchase the shares at fair value if the employee terminates employment for any reason. Because the employee is eligible to retire on 1 January 20X2 and has expressed intention to do so on that date, the entity determines that it is probable that the contingent event will occur while the shares are immature. Therefore, the entity must also consider the probability of exercising its call feature before the shares mature on 30 June 20X2. The entity determines that it does not intend to repurchase the shares before 30 June 20X2 and it does not have a past history of calling immature shares. The entity concludes that it is not probable that it will exercise its call feature; therefore, equity classification is appropriate.

5.2.3.5

Repurchase feature equivalent to a forfeiture provision

We believe that the scope of the guidance in ASC 718 on repurchase features excludes "repurchase features" that essentially are forfeiture provisions in the form of an option that permits a grantor to reacquire shares at the option's original exercise price (or the lower of the original exercise price or fair value, in certain circumstances) if an employee terminates employment (or a nonemployee stops providing goods or services) within a specified period. For example, a grantee may purchase a share for \$20 (fair value) at the grant date. The grantor will repurchase the share for \$20 if the employee ceases to be employed (or nonemployee ceases to provide goods or services) within three years of the grant date.

The purpose of these repurchase features often is to permit the grantee's holding period for tax purposes to begin at the grant date rather than at some later date. The repurchase feature functions as a forfeiture (vesting) provision and, therefore, is excluded from the scope of the guidance discussed in section 5.2.3. Forfeiture provisions are discussed further in section 3.8.

5.2.4 Awards with conditions other than service, performance or market conditions

Service, performance and market conditions are defined in section 3.4. An award may include conditions that affect vesting, exercisability or other conditions relevant in measuring fair value that are not service, performance or market conditions (referred to as "other conditions").

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-13

An award may be indexed to a factor in addition to the entity's share price. If that additional factor is not a market, performance, or service condition, the award shall be classified as a liability for purposes of this Topic, and the additional factor shall be reflected in estimating the fair value of the award. Paragraph 718-10-55-65 provides examples of such awards.

Awards with other conditions are classified as liabilities because they expose the holder of the instrument to certain risks that are not related to share ownership, including the risk of changes in the price of the issuing entity's shares.²⁶ ASC 718-10-55-65 provides the following examples of awards that contain factors that are characterized as an "other condition" and would cause awards to be classified as liabilities:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-65

An award may be indexed to a factor in addition to the entity's share price. If that factor is not a market, performance, or service condition, that award shall be classified as a liability for purposes of this Topic (see paragraphs 718-10-25-13 through 25-14A). An example would be an award of options whose exercise price is indexed to the market price of a commodity, such as gold. Another example would be a share award that will vest based on the appreciation in the price of a commodity, such as gold; that award is indexed to both the value of that commodity and the issuing entity's shares. If an award is so indexed, the relevant factors shall be included in the fair value estimate of the award. Such an award would be classified as a liability even if the entity granting the share-based payment instrument is a producer of the commodity whose price changes are part or all of the conditions that affect an award's vesting conditions or fair value.

²⁶ Paragraph B127 of Statement 123(R)'s Basis for Conclusions stated "The Board concluded that the terms of such an award do not establish an ownership relationship because the extent to which (or whether) the employee benefits from the award depends on something other than changes in the entity's share price. That conclusion is consistent with the Board's conclusion in Statement 150 that a share-settled obligation is a liability if it does not expose the holder of the instrument to certain risks and rewards, including the risk of changes in the price of the issuing entity's equity shares, that are similar to those to which an owner is exposed."

5.2.4.1 Options that can be exercised in a foreign currency

The FASB provided a narrow exception to the guidance in ASC 718-10-55-65 for certain awards that can be exercised in a foreign currency.

Under this exception, an option would not be “dual-indexed” and therefore would not contain an “other condition” if it is granted to an employee or a nonemployee of an entity’s foreign operation and the exercise price is denominated in one of the following:

- ▶ The currency in which a substantial portion of the shares are traded (ASC 718-10-25-14A)
- ▶ The foreign operation’s functional currency (ASC 718-10-25-14)
- ▶ The employee’s payroll currency (ASC 718-10-25-14)

For example, assume a Chinese entity’s shares trade only in the US, and that entity issues options to its Chinese employees denominated in US dollars. The functional and payroll currency of the employer and the employees is the Chinese renminbi. However, because the option is denominated in the currency in which a substantial portion of the shares is traded, the option is not “dual-indexed.” Therefore, there is no “other condition.”

For an award that meets this exception, the option would be classified as equity if none of its other features require liability classification (e.g., put rights).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-14

For this purpose, an award of equity share options granted to a grantee of an entity’s foreign operation that provides for a fixed exercise price denominated either in the foreign operation’s functional currency or in the currency in which the foreign operation’s employee’s pay is denominated shall not be considered to contain a condition that is not a market, performance, or service condition. Therefore, such an award is not required to be classified as a liability if it otherwise qualifies as equity. For example, equity share options with an exercise price denominated in euros granted to employees or nonemployees of a U.S. entity’s foreign operation whose functional currency is the euro are not required to be classified as liabilities if those options otherwise qualify as equity. In addition, options granted to employees and nonemployees are not required to be classified as liabilities even if the functional currency of the foreign operation is the U.S. dollar, provided that the foreign operation’s employees are paid in euros.

718-10-25-14A

For purposes of applying paragraph 718-10-25-13, a share-based payment award with an exercise price denominated in the currency of a market in which a substantial portion of the entity’s equity securities trades shall not be considered to contain a condition that is not a market, performance, or service condition. Therefore, in accordance with that paragraph, such an award shall not be classified as a liability if it otherwise qualifies for equity classification. For example, a parent entity whose functional currency is the Canadian dollar grants equity share options with an exercise price denominated in U.S. dollars to grantees of a Canadian entity with the functional and payroll currency of the Canadian dollar. If a substantial portion of the parent entity’s equity securities trades on a U.S. dollar denominated exchange, the options are not precluded from equity classification.

5.2.5 Substantive terms may cause liability classification

As discussed in section 3.3.1.1.2, the accounting for a share-based payment must consider all the substantive terms of the award. The grantor's past practice may indicate the substantive terms override the written terms of an award.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-15

The accounting for an award of share-based payment shall reflect the substantive terms of the award and any related arrangement. Generally, the written terms provide the best evidence of the substantive terms of an award. However, an entity's past practice may indicate that the substantive terms of an award differ from its written terms. For example, an entity that grants a **tandem award** under which a grantee receives either a stock option or a cash-settled stock appreciation right is obligated to pay cash on demand if the choice is the grantee's, and the entity thus incurs a liability to the grantee. In contrast, if the choice is the entity's, it can avoid transferring its assets by choosing to settle in stock, and the award qualifies as an equity instrument. However, if an entity that nominally has the choice of settling awards by issuing stock predominantly settles in cash or if the entity usually settles in cash whenever a grantee asks for cash settlement, the entity is settling a substantive liability rather than repurchasing an equity instrument. In determining whether an entity that has the choice of settling an award by issuing equity shares has a substantive liability, the entity also shall consider whether:

- a. It has the ability to deliver the shares. (Requirements to deliver registered shares do not, by themselves, imply that an entity does not have the ability to deliver shares and thus do not require an award that otherwise qualifies as equity to be classified as a liability.)
- b. It is required to pay cash if a contingent event occurs (see paragraphs 718-10-25-11 through 25-12).

A practice of repurchasing shares for cash (e.g., when the grantor exercises a call option), or a practice of repurchasing shares for cash whenever requested by the grantee, before the grantee has been exposed to the risks and rewards of share ownership for a reasonable period of time, may suggest that some or all share or options are liabilities, even though cash settlement is not explicitly allowed or required by the plan.

An entity should evaluate the substantive terms of a share-based payment throughout the life of the award, based on facts and circumstances. The reclassification of a share-based payment from equity to liability (or vice versa) is accounted for similar to a modification (see sections 8.6.1 and 8.6.2).

5.2.5.1 Awards for which the grantor can choose cash or share settlement

When evaluating the substantive terms of an option, the grantor must consider its ability to exercise its rights. For example, if the grantor has the ability to settle an award in either cash or shares at its election, equity classification is appropriate unless the substantive terms of the award (e.g., past practices or current intention) suggest that the grantor will settle the award in cash.

However, liability classification of an award may be required even if the grantor does not have a practice or current intention of settling awards in cash. As discussed in ASC 715-10-25-15, if the choice of share settlement is the grantor's, but there are circumstances in which the grantor would be unable to deliver shares, liability classification is required.²⁷ Generally, we believe equity classification of the award is appropriate (if the award includes no other features that require liability classification), as long as both of the following criteria are met:

- ▶ The grantor has the ability to settle in shares at the reporting date
- ▶ The grantor reasonably expects to be able to deliver shares at the settlement date

Often a grantor can choose to net-share settle options (see further discussion in section 5.2.6.1). In a net-share settlement, the grantee does not tender the exercise price of the options. Rather, the grantor withholds the number of shares from the option exercise necessary to satisfy the option exercise price (i.e., the grantor delivers to the grantee the number of shares with a current fair value equal to the intrinsic value of the exercised options).

In an example we discussed with the FASB staff, a grantor did not have sufficient shares to satisfy option exercises on a gross physical basis, but because grantees are required (or expected) to net-share settle the options, fewer shares would be delivered than suggested by the gross number of shares underlying the options. We believe, and the FASB staff agreed, that it was appropriate to determine whether cash settlement was expected and liability classification was required for some or all of the grants based on the logic in ASC 718-10-25-15. That is, if it is not probable that the grantor will be required to settle some or all of the options in cash, equity classification is appropriate (assuming the other requirements for equity classification are met).

The assessment of equity or liability classification is required throughout the life of the award. If there are circumstances in which the grantor would be unable to deliver shares, liability classification is required when it becomes probable that circumstance will occur. For example, if an entity grants an award that allows for either cash or equity settlement at the option of the grantor and initially concludes that equity classification is appropriate, the grantor would reclassify the award from equity to liability if the grantor decides at a later date to cash settle the award. The reclassification from equity to liability (or vice versa) would be accounted for following the modification guidance in section 8.6. The following example illustrates the accounting for awards that considers the number of shares that are expected to be delivered.

Illustration 5-2: Assessing the probability of share delivery

An entity grants 1 million options with an exercise price of \$10 per share. The entity expects 950,000 options to vest. No other options are outstanding. Shares authorized, unissued and available to satisfy exercises of the options total 800,000. The entity believes that it is not probable that its share price will exceed \$50 during the life of the options. The entity, which has the choice to settle the awards in cash or shares, intends to settle the awards in shares, net of the portion necessary to cover the exercise price and tax withholdings. The number of shares to be issued based on various share prices on the exercise date is illustrated in the following table:

²⁷ A similar concept exists in ASC 815-40. However, based on ASC 718-10-25-15, we do not believe that it is necessary to meet all of the requirements of ASC 815-40 for equity classification of a share-based payment while it is accounted for under ASC 718 (see section 5.5.1 for a discussion of when an award is no longer accounted for under ASC 718).

Share price at settlement	Shares delivered at settlement, assuming no forfeitures	Shares delivered at settlement, assuming forfeitures
\$10	0	0
\$15	333,333	316,667
\$20	500,000	475,000
\$30	666,667	633,333
\$50	800,000	760,000
\$100	900,000	855,000
\$500	980,000	931,000
\$1,000	990,000	940,500

Based on the entity's forfeiture estimates and its conclusion that it is not probable that its share price would exceed \$50 during the life of the options, the entity concluded that it expected to have sufficient authorized but unissued shares to satisfy exercise of all options granted. Accordingly, equity classification was appropriate for the options.

However, the entity must continue to assess the probability that sufficient authorized but unissued shares will be available. If it is probable that there would not be sufficient authorized but unissued shares available to satisfy all option exercises, a portion of the outstanding options must be reclassified as a liability consistent with the guidance discussed in section 5.2.2.2. Accordingly, if it becomes probable that the share price will reach \$100, the options on 55,000 shares would be reclassified as a liability from equity (see section 8.6.1).

5.2.6 Broker-assisted cashless exercises and statutory withholding requirements

ASC 718 provides guidance on broker-assisted cashless exercises and statutory withholding requirements, which are two areas where questions about classification frequently arise.

5.2.6.1 Broker-assisted cashless exercises

A broker-assisted cashless exercise provides grantees the opportunity to exercise options without any cash investment and without the grantor cash settling or net-share settling²⁸ the option. A broker-assisted cashless exercise can provide an employee the ability to fund tax withholdings in excess of the statutory maximum tax withholding without causing liability classification of the award (see section 5.2.6.2).

To conduct a broker-assisted cashless exercise, the entity arranges for a brokerage firm to "loan" the grantee the exercise price. Upon exercise, the brokerage firm immediately sells some or all of the shares that were acquired, and retains the portion of the proceeds to repay the "loan" (the loan and the repayment generally occur on the same day). The remaining proceeds or shares (net of any commissions, tax withholdings and other transaction costs) are remitted to the grantee. The typical structure for this method of exercise is:

1. The grantee authorizes the exercise of an option and the immediate sale of the option shares.
2. On the same day, the entity notifies the broker of the sale order.
3. The broker executes the sale and notifies the entity of the sale price.

²⁸ Under a net-share settlement, no cash is exchanged, and the grantor simply delivers the shares with a fair value equal to the intrinsic value of the option to the grantee.

4. The entity determines the statutory tax-withholding requirements (if applicable), see section 5.2.6.2 for discussion.
5. The entity delivers the share certificates to the broker by the settlement day (generally three days later).
6. On the settlement day, the broker pays cash to the entity for the exercise price and the grantee's tax withholdings (if applicable) and remits the balance of the net sales proceeds to the grantee. For a qualifying broker-assisted cashless exercise, an employee may tender to the grantor cash in excess of the maximum tax withholding requirements because that cash is coming from the employee's sale of shares into the market, not from the entity.

ASC 718 provides criteria to determine when a broker-assisted cashless exercise does not result in liability classification for awards that otherwise would be classified as equity. When the award meets these criteria, it is viewed as the grantee's exercise of the option and sale of shares in the market, rather than a cash settlement of some or all of the award by the grantor.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

718-10-25-16

A provision that permits grantees to effect a **broker-assisted cashless exercise** of part or all of an award of share options through a broker does not result in liability classification for instruments that otherwise would be classified as equity if both of the following criteria are satisfied:

- a. The cashless exercise requires a valid exercise of the share options.
- b. The grantee is the legal owner of the shares subject to the option (even though the grantee has not paid the exercise price before the sale of the shares subject to the option).

718-10-25-17

A broker that is a **related party** of the entity must sell the shares in the open market within a normal settlement period, which generally is three days, for the award to qualify as equity.

ASC 718 does not address what is meant by the grantee being the "legal owner of the shares." However, since this guidance is based on similar guidance in Issue 48 of EITF 00-23, it is general practice to follow the guidance in EITF 00-23 to determine whether the grantee is the legal owner of the shares.

The EITF stated that, to be considered the legal owner of the shares, the grantee must assume market risk from the moment of exercise until the broker effects the sale in the open market. This period cannot be shorter than the time that might lapse if the grantee paid cash for the full exercise price and immediately sold the shares through an independent broker. However, compensation cost must be recognized if the grantor acquires the shares from the broker before the broker has been exposed to the risk of price fluctuations for at least a normal settlement period (i.e., the transaction is accounted for as if the grantor used cash to settle the award).

In applying the guidance in ASC 718-10-25-17 on the use of related-party brokers, it is also general practice to follow the guidance in Issue 48 of EITF 00-23, which stated that there are no accounting consequences for the cashless exercise through a related-party broker, if all the following conditions are met:

- ▶ The grantee has made a valid exercise of the options and is the legal owner (as discussed above) of all of the shares (even though the grantee did not pay the exercise price to the grantor before the sale of the shares). If the grantee was never the legal owner of the shares, the share option would be

in substance a cash settled SAR for which liability classification is required (see section 5.2.2.1). For example, it may be illegal for individuals in certain countries to own shares in foreign corporations or for entities in certain countries to allow share ownership by foreign nationals. In those circumstances, the award will be classified as a liability as the grantee will never be treated as the legal owner of the shares under a cashless exercise arrangement and will, in essence, receive only a cash settlement on exercise.

- ▶ The broker sells the shares on the open market. The sale of the option shares in the open market provides evidence that the marketplace, not the employer through its affiliate, acquired the option shares. If the related-party broker acquires the shares for its own account rather than selling the shares in the open market, in substance, the grantor paid cash to a grantee to settle an award and liability accounting generally would be required.
- ▶ The process for a cashless exercise using a related-party broker must be the same as a cashless exercise using an independent broker, except for the requirement that the shares be sold in the open market (as described in the bullet above).
- ▶ The broker is a substantive entity with separate operations from those of the employer, except when the broker itself is the grantor.

5.2.6.2 Tendering shares to satisfy statutory withholding requirements (updated June 2019)

In the US, an employee's exercise of a nonqualified stock option generates taxable income equal to the intrinsic value of the option on the exercise date. The IRS requires employers to withhold and remit tax on this income. Some plans allow employees to use shares received from the exercise of the option to satisfy their tax withholding requirement. The entity repurchases a portion of the shares at fair value and uses the cash to satisfy the tax withholding requirements on behalf of the employee. Similarly, a plan may permit the employee to use vested shares to satisfy a tax withholding obligation.

ASC 718-10-25-18 provides guidance on the effect of such tax withholding on the classification of an award and allows an employer with a statutory income tax withholding obligation to withhold shares with a fair value up to the maximum statutory tax rate in the employee's applicable jurisdiction(s) and classify the award as equity (assuming no other conditions exist that would require it to be classified as a liability). The guidance allows an entity to determine only one maximum rate for all employees in each jurisdiction, rather than a rate for each employee in the jurisdiction. Therefore, the rate used to determine the amount that may be withheld could be higher than the employee's statutory tax rate. However, if the amount that is withheld, or may be withheld at the employee's discretion, is in excess of the maximum statutory tax rates in the employees' applicable jurisdictions, the entire award shall be classified and accounted for as a liability.

Some jurisdictions do not require the employer to withhold income taxes. Therefore, any amounts withheld are considered excess withholding and liability classification would be required for the entire award.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Recognition

Determining Whether to Classify a Financial Instrument as a Liability or as Equity

718-10-25-18

Similarly, a provision for either direct or indirect (through a net-settlement feature) repurchase of shares issued upon exercise of options (or the vesting of **nonvested** shares), with any payment due employees withheld to meet the employer's statutory withholding requirements resulting from the

exercise, does not, by itself, result in liability classification of instruments that otherwise would be classified as equity. However, if the amount that is withheld, or may be withheld at the employee's discretion, is in excess of the maximum statutory tax rates in the employees' applicable jurisdictions, the entire award shall be classified and accounted for as a liability. That is, to qualify for equity classification, the employer must have a statutory obligation to withhold taxes on the employee's behalf, and the amount withheld cannot exceed the maximum statutory tax rates in the employees' applicable jurisdictions. The maximum statutory tax rates are based on the applicable rates of the relevant tax authorities (for example, federal, state, and local), including the employee's share of payroll or similar taxes, as provided in tax law, regulations, or the authority's administrative practices, not to exceed the highest statutory rate in that jurisdiction, even if that rate exceeds the highest rate that may be applicable to the specific award grantee.

The withholding of a fractional number of shares is often required to meet the maximum statutory withholding amount. We do not believe that rounding to a whole number of shares results in an amount withheld in excess of the maximum statutory withholding amount and therefore would not require liability classification.

In some countries, no withholding is required at the time of exercise. Countries may tax options upon issuance or exercise or upon filing a personal income tax return. The guidance states that the maximum statutory tax rates are based on the applicable rates of the relevant tax authorities (i.e., federal, state and local), including the employee's share of payroll or similar taxes, as provided in tax law, regulations or the authority's administrative practices.

Some factors to consider in determining the maximum statutory withholding requirements include:

- ▶ **Mobile employees** – Many employees work in multiple states or foreign locations. In determining maximum withholding requirements for mobile employees, an employer needs to be familiar with the withholding requirements in the various jurisdictions where an employee works and earns share-based payment awards.
- ▶ **Expatriates** – Employees from the US who work in foreign locations may be subject to withholding requirements different from those in the US. For example, some jurisdictions may not require the employer to withhold any taxes for share-based payment awards. In this situation, any share withholding by the employer would be considered excess withholding under ASC 718 and would result in liability accounting for the entire award (see section 5.2.6.3).
- ▶ **Directors** – While a director may be considered an employee under ASC 718, he or she is not considered an employee under the IRS statutory withholding requirements. As a result, the maximum tax withholding rules would not apply to an award issued to a director. In this situation, any share withholding by the grantor would be considered excess withholding under ASC 718 and result in liability accounting for the entire award (see section 5.2.6.3).
- ▶ **Nonemployee goods and service providers** – Independent contractors and goods and service providers are nonemployees under the IRS statutory withholding requirements. As a result, the tax withholding requirements would not apply to an award issued to nonemployees. In this situation, any share withholding by the grantor would be considered excess withholding under ASC 718 and result in liability accounting for the entire award (see section 5.2.6.3).
- ▶ **Third-party service providers** – Many entities engage third-party service providers to help administer their share plans. Such providers must be knowledgeable of the applicable tax withholding requirements and the accounting consequences of excess withholding. Employers may need to provide their service providers with employee data, withholding rates or other information to appropriately calculate maximum tax withholding requirements.

When a grantor does not have an obligation to withhold income taxes (e.g., for directors, nonemployees), but allows a grantee to elect to withhold, the entire award is accounted for as a liability beginning on the grant date (even if such election is not taken). When a grantor does not have an obligation to withhold income taxes and the plan does not allow for tax withholding, but the grantor determines to withhold based on the grantee's request, then the award is reclassified from equity to a liability on the date that the grantor agrees to withhold income taxes. That is, the reclassification is accounted for as a modification that changes the classification from equity to a liability (see section 8.6.1). If a grantor establishes a practice of withholding taxes based on grantees' requests (despite the terms of the plan), the entity would need to assess whether some or all options within the plan are liabilities as discussed in section 5.2.5. An entity should evaluate the substantive terms of a share-based payment throughout the life of the award. Facts and circumstances may indicate equity classification is initially appropriate but that liability classification is subsequently required (or vice versa).

Employers dealing with these complexities, including granting awards to employees in jurisdictions with marginal withholding rates, may wish to use the highest marginal rate or average rate for withholding in some jurisdictions to reduce the employer's administrative burden. Under ASC 718, this practice would not result in liability classification of share-based payment awards, as long as the withholding rate does not exceed the maximum statutory rate in an employee's jurisdiction.

In response to a technical inquiry, the FASB staff said it believes that a change in the net-share settlement terms of a share-based payment plan or outstanding award to increase the withholding of shares up to the maximum statutory tax rate would not be accounted for as a modification under ASC 718. Entities cannot analogize other fact patterns to this technical inquiry response. This conclusion was further clarified in the Basis for Conclusions of ASU 2017-09, which says that changes to an award's net settlement provisions related to tax withholdings that do not affect the classification of an award would generally not require modification accounting.²⁹ However, entities must be mindful that if changes in the net settlement provisions change the classification of the award, modification accounting would be required.

Presentation in the statement of cash flows

ASC 230-10-45-15 (a) requires a grantor to classify as a financing activity in its statement of cash flows the cash paid to a tax authority when shares are withheld to satisfy the employer's statutory income tax withholding obligation. This classification is consistent with how other repurchases of an entity's equity instruments are classified. Refer to our FRD, ***Statement of cash flows***, for additional discussion.

5.2.6.3

Hypothetical statutory withholding for expatriate employees

Certain tax strategies relating to expatriate employees involve the hypothetical withholding of taxes on all forms of an employee's income, including share-based payment compensation, as if the employee was subject only to US tax laws. A question arises whether "hypothetical" withholding arrangements would cause liability accounting for share-based payments.

Under "hypothetical" withholding arrangements, employers withhold from compensation based on the expatriate employee's statutory tax rate that would have applied if the employee had remained in the US. This withholding occurs regardless of the statutory withholding rate (if any) in the foreign country. If the hypothetical withholding rate is greater than the statutory withholding rate of the foreign country, the excess is used to fund any deficiency in countries where the hypothetical withholding rate is less than the statutory withholding rate. Hypothetical withholding results in the employer withholding a number of shares equal to the intrinsic value of the options on the exercise date multiplied by the employee's US statutory tax rate.

²⁹ Paragraph BC11 of ASU 2017-09.

Consistent with the guidance in ASC 718-10-25-18, liability classification is required if shares are withheld in excess of the maximum statutory tax rate in the employee's applicable jurisdiction(s). In addition, the employer is only able to avoid liability classification for net-share settlements where it has a statutory withholding tax obligation. Therefore, "hypothetical" tax withholding will result in liability classification for the award, if amounts withheld are in excess of the thresholds in the relevant tax jurisdiction.

5.2.7 Awards that may be settled partially in cash

5.2.7.1 Guarantees of the value of shares underlying an option grant

Some entities link loans or bonuses to the grant of an option within the option grant or in a separate agreement. Generally, these types of arrangements will result in the grantor guaranteeing a minimum level of compensation to the grantee if the share price does not increase to a specified price (e.g., \$50 per share) by the end of the vesting period. A maximum cash bonus is reduced as the intrinsic value of the option increases. Therefore, if the value of the grantor's shares sufficiently appreciates, the grantee will not receive a cash bonus. However, if the share price does not appreciate to the guaranteed level, the grantee will receive a cash bonus equal to the difference between the guaranteed level and actual share price. In these arrangements, the grantee benefits from an increase in the intrinsic value of the share option, a cash bonus if the share does not appreciate, or some combination of the two. Other arrangements include a loan to a grantee that is forgiven if the share price does not appreciate to the guaranteed level.

The FASB staff addressed these arrangements informally and concluded that because the cash payment is made before and regardless of whether the option is ever exercised (i.e., payment of the cash bonus is not contingent on exercise of the option and the bonus does not affect the terms of the option), the award is accounted for as a combination plan consisting of a net-cash-settled written put option and an equity-settled written call option (i.e., a traditional option). The net-cash-settled put option would be accounted for as a liability and remeasured at fair value each reporting period until expiration, when the fair value would be paid to the grantee. The equity-settled written call option would be accounted for as an equity instrument.

5.2.7.2 Awards settled partially in cash and partially in shares

Some awards are settled in a combination of cash and shares. For example, assume an entity grants 1,000 restricted shares to a grantee and commits to making a cash payment equal to the taxes due when the shares vest. The grantor estimates the grantee's marginal income tax rate to be 33%. Accordingly, the award can be viewed as an award of 1,000 restricted shares and an award of 330 cash-settled "phantom shares." We confirmed with the FASB staff that despite the linkage between the two awards, it would be appropriate to account for each component separately. Accordingly, the award of restricted shares would be classified as equity (assuming no other features cause liability classification) based on the fair value measured on the grant date. The phantom shares award would be classified as a liability and remeasured at fair value until settlement.

We also understand that the FASB staff believes similar accounting is appropriate for a grant of an option and a tax bonus that is triggered upon option exercise. That is, the option would be accounted for as an equity award (assuming no other features would cause liability accounting) and the tax bonus feature would be accounted for as a cash-settled SAR (a liability).

5.2.8 Awards of profits interests and similar interests (updated October 2017)

As discussed in section 2.2.4, profits interests are frequently issued by pass-through entities, such as a partnership, a limited liability partnership (LLP) and a limited liability company (LLC). For example, a profits interest may entitle the interest holder to a portion of any distributions made once senior interest holders obtain a specified return. Depending on the terms of the arrangement, that interest may be

similar to the grant of an equity interest (restricted shares that are subordinate to existing equity), an option (the right to purchase an interest at a future date at a specified exercise price), a SAR (the right to receive, in cash, an amount equal to the appreciation in the fair value of an underlying profits interest) or a profit-sharing arrangement.

Questions sometimes arise whether an interest in a limited liability entity is a form of compensation to an employee or a distribution to a partner in their capacity as an owner. Some factors to consider in determining whether the arrangement is a partner distribution or employee compensation include:

- ▶ **Form of ownership** – If the individual has made a contribution and signed a partnership agreement that will provide for sharing in the profits and losses and distributions, and the individual receives a Schedule K-1 for tax purposes, the arrangement may be more akin to a partner arrangement. Alternatively, employee compensation classification may be appropriate if the individual's amount of ownership is conditioned upon providing a service or meeting a performance condition where the failure to meet the requirements will result in the partnership interest ceasing to exist.
- ▶ **Governance of the partnership** – If the individual is part of a visible group that is known to have ultimate authority over the entity's direction, this is an indicator of a partner arrangement.
- ▶ **Funding participation** – A partner generally is required to make a contribution based upon his or her percentage of ownership when capital is needed. Therefore, the arrangement may cover distribution of the results of the entity's operations to the partners in their capacity as owners.

It can be difficult to determine whether profit interests should be accounted for under ASC 718 or as a performance bonus or profit-sharing arrangement under ASC 710. If payment under the arrangement is required to be settled in or based, at least in part, on the price of the entity's shares or other equity instruments, the arrangement is in the scope of ASC 718. The accounting for such arrangements was addressed by an SEC staff member³⁰ at the 2006 AICPA National Conference on Current SEC and PCAOB Developments. The following is an excerpt from his speech:

Non-authoritative guidance

Several accounting issues arise when a special class of stock is granted to employees. First and foremost, one must look through the legal form of the instrument to determine whether the instrument is in fact a substantive class of equity for accounting purposes, or is instead similar to a performance bonus or profit sharing arrangement. When making this determination, all relevant features of the special class must be considered. There are no bright lines or litmus tests. When few if any assets underlie the special class, or the holder's claim to those assets is heavily subordinated, the arrangement often has characteristics of a performance bonus or profit-sharing arrangement. Instruments that provide the holder with substantive voting rights and pari passu dividend rights are at times indicative of an equity interest. Consideration should also be given to any investment required, and any put and call rights that may limit the employee's downside risk or provide for cash settlement. [...]

When the substance of the instrument is that of a performance bonus or profit sharing arrangement, it should be accounted for as such. In those circumstances, any returns to the employee should be reflected as compensation expense, not as equity distributions or minority interest expense. Further, if the employee remitted consideration at the outset of the arrangement in exchange for the instrument, such consideration should generally be reflected in the balance sheet as a deposit liability.

³⁰ The excerpt is from a speech given by Joseph Ucuzoglu, Professional Accounting Fellow, Office of the Chief Accountant, SEC on 11 December 2006.

We believe a profits interest award should be accounted for based on its substance, which requires judgment. In determining whether an award should be liability- or equity-classified in accordance with ASC 718, we believe pass-through entities should consider the key factors underlying the award, including:

- ▶ The legal form of the instrument (to be classified as equity it must be considered legal equity of the partnership or LLC)
- ▶ Participation features such as voting rights, distribution rights and liquidation rights (i.e., to be classified as equity the instrument must participate in the residual returns of the entity's net assets in a manner consistent with equity ownership)
- ▶ Transferability of the instrument
- ▶ Retention of vested interests upon termination of employment or when a nonemployee ceases to provide goods or services (liability classification is likely when vested interests are not retained upon termination)
- ▶ The settlement and repurchase features

Questions frequently arise about the valuation of profits interests that are subject to ASC 718. Some entities believe that a profits interest has no value because (1) if the entity were liquidated immediately, the profits interest holder would normally not be entitled to a distribution and (2) a basis of zero is frequently assigned to the profits interest for tax purposes. While the valuation of profits interests is beyond the scope of this publication, we believe assertions of zero value for such awards are not consistent with the concepts of fair value, and such valuation would suggest that there is no retention benefit in granting the profits interests to the grantees.

We believe it is inappropriate to assume immediate liquidation when estimating the fair value of a profits interest, in part because that assumption would be inconsistent with the financial statement presumption that the entity is a going concern. The SEC staff rejected the use of valuation methodologies that focus predominately on the amount that would be realized by the holder in a current liquidation. Rather, we believe that the valuation of a profits interest should consider reasonably possible cash flow scenarios, many of which presumably would result in distributions to the profits interests' holders. The valuation is similar to the valuation of common shares when the liquidation preference of preferred shares would absorb all distributions by the entity if it were liquidated.

In addition, even when profits interests and other special classes of shares are considered to be substantive classes of equity, the terms of these instruments may result in classifying the instruments in temporary equity in accordance with ASC 480-10 (as discussed in section 5.3) and presenting EPS using the two-class method in accordance with ASC 260-10 (see our FRD, *Earnings per share*).

5.2.9

Application of classification guidance to book (formula) value share purchase plan

In some instances, the purchase price of shares of a nonpublic entity is a formula price based on book value of the shares. The accounting for the shares will depend on whether the formula price is deemed to be a proxy for the fair value of the shares.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

Book Value Plans for Employees

718-10-55-131

A nonpublic entity that is not a Securities and Exchange Commission (SEC) registrant has two classes of stock. Class A is voting and held only by the members of the founding family, and Class B (book value shares) is nonvoting and held only by employees. The purchase price of Class B shares is a formula price based on book value. Class B shares require that the employee, six months after retirement or separation from the entity, sell the shares back to the entity for cash at a price determined by using the same formula used to establish the purchase price. Class B shares may not be required to be accounted for as liabilities pursuant to Topic 480 because the entity is a nonpublic entity that is not an SEC registrant. Nevertheless, Class B shares may be classified as liabilities if they are granted as part of a share-based payment transaction and those shares contain certain repurchase features meeting criteria in paragraph 718-10-25-9; this Example assumes that Class B shares do not meet those criteria. Because book value shares of public entities generally are not indexed to their stock prices, such shares would be classified as liabilities pursuant to this Topic.

718-10-55-132

Determining whether a transaction involving Class B shares is compensatory will depend on the terms of the arrangement. For instance, if an employee acquires 100 shares of Class B stock in exchange for cash equal to the formula price of those shares, the transaction is not compensatory because the employee has acquired those shares on the same terms available to all other Class B shareholders and at the current formula price based on the current book value. Subsequent changes in the formula price of those shares held by the employee are not deemed compensation for services.

718-10-55-133

However, if an employee acquires 100 shares of Class B stock in exchange for cash equal to 50 percent of the formula price of those shares, the transaction is compensatory because the employee is not paying the current formula price. Therefore, the value of the 50 percent discount should be attributed over the requisite service period. However, subsequent changes in the formula price of those shares held by the employee are not compensatory.

In this example (in ASC 718-10-55-133), changes in the formula price are not compensatory only because the repurchase feature does not require liability accounting based on the guidance discussed in section 5.2.3. If the shares were liability-classified, the liability generally would be recognized at the formula price each period with changes in the formula price recognized as compensation cost. Options on such shares generally would be recognized at fair value (or intrinsic value for nonpublic entities) with an underlying “share price” equal to the current formula value.

Based on our discussions with the FASB staff we understand that a key aspect of this example is that all purchasers and sellers of the Class B shares transact in the shares at the formula price; therefore, the formula price is a proxy for the fair value for those shares. However, if the formula price only applied to employees, and other shareholders bought and sold shares at fair value that differed from the formula price, the Class B shares would be liabilities as the plan provides for a repurchase of shares at amount other than fair value as discussed in section 5.2.3.

Another key aspect of this example is that the use of the formula price is intended to reward the employees as shareholders, and liquidity is provided at a formula price because of the difficulty in estimating the fair value of the employer's shares. If frequent transactions in the employer's shares establish the fair value of the shares, we believe that the shares would be required to be classified as a liability. We believe this would apply even if the transactions were in a different class of shares as long as the rights of the other class of shares were not substantively different from the class held by the employees. Additionally, upon a liquidity event (e.g., change in control or liquidation), if the employees receive the formula price while other shareholders receive the residual, the repurchase would not be consistent with treating the employees as shareholders, and liability classification would be required.

The above discussion assumes that the employee will bear the risks and rewards of being a shareholder for a reasonable period (i.e., six months or more). If based on the above guidance the repurchase price provides the employee with a return consistent with that provided to other shareholders, equity classification is appropriate only if the employee is expected to be subject to those risks and rewards for at least six months after the shares are purchased or vest (see section 5.2.3). Accordingly, because the repurchase of shares generally is required at termination (which is within the control of the employee), we believe that the shares would only qualify for equity classification if repurchase is permitted six months or more after the vesting or purchase. Additionally, the repurchase price must be determined at the time of the repurchase.

5.3 **Temporary equity classification (application of ASR 268) for SEC registrants (updated June 2019)**

A repurchase or cash settlement feature may not result in liability classification of an award after consideration of the guidance discussed in sections 5.2. However, SEC registrants must still consider the requirements of ASR 268 (included in the Codification for reference at ASC 480-10-S99-1); SAB Topic 3.C, *Redeemable Preferred Stock*; and the SEC staff announcement in EITF Topic No. D-98, "Classification and Measurement of Redeemable Securities" (included in the Codification for reference at ASC 480-10-S99-3A) (collectively, the SEC's guidance on redeemable securities). The following are examples of awards that would be classified in temporary equity (if other features do not cause liability classification):

- ▶ An employee share option may provide the employee with the right to require the employer to repurchase the shares acquired on exercise of the option for fair value beginning six months after option exercise.
- ▶ A share option may provide for cash settlement on an event (e.g., death, disability or a change in control occurring while the individual is an employee) that is not probable.
- ▶ An award of nonvested shares may provide the employee the right to require the employer to repurchase the shares either (1) six months after the shares vest or (2) upon the occurrence of an event (e.g., death, disability, a change in control while providing service) that is not probable.

SAB Topic 14 states that the SEC's guidance on redeemable securities applies to share-based payments subject to repurchase features upon the initial grant of the equity instruments.

Excerpt from SAB Topic 14.E

Facts: Under a share-based payment arrangement, Company F grants to an employee shares (or share options) that all vest at the end of four years (cliff vest). The shares (or shares underlying the share options) are redeemable for cash at fair value at the holder's option, but only after six months from the date of share issuance (as defined in FASB ASC Topic 718). Company F has determined that the shares (or share options) would be classified as equity instruments under the guidance of FASB ASC Topic 718. However, under ASR 268 and related guidance, the instruments would be considered to be redeemable for cash or other assets upon the occurrence of events (e.g., redemption at the option of the holder) that are outside the control of the issuer.

Question 1: While the instruments are subject to FASB ASC Topic 718,⁸³ is ASR 268 and related guidance applicable to instruments issued under share-based payment arrangements that are classified as equity instruments under FASB ASC Topic 718?

Interpretive response: Yes. The staff believes that registrants must evaluate whether the terms of instruments granted in conjunction with share-based payment arrangements with employees that are not classified as liabilities under FASB ASC Topic 718 result in the need to present certain amounts outside of permanent equity (also referred to as being presented in “temporary equity”) in accordance with ASR 268 and related guidance.⁸⁴

When an instrument ceases to be subject to FASB ASC Topic 718 and becomes subject to the recognition and measurement requirements of other applicable GAAP, the staff believes that the company should reassess the classification of the instrument as a liability or equity at that time and consequently may need to reconsider the applicability of ASR 268.

Question 2: How should Company F apply ASR 268 and related guidance to the shares (or share options) granted under the share-based payment arrangements with employees that may be unvested at the date of grant?

Interpretive response: Under FASB ASC Topic 718, when compensation cost is recognized for instruments classified as equity instruments, additional paid-in-capital⁸⁵ is increased. If the award is not fully vested at the grant date, compensation cost is recognized and additional paid-in-capital is increased over time as services are rendered over the requisite service period. A similar pattern of recognition should be used to reflect the amount presented as temporary equity for share-based payment awards that have redemption features that are outside the issuer’s control but are classified as equity instruments under FASB ASC Topic 718. The staff believes Company F should present as temporary equity at each balance sheet date an amount that is based on the redemption amount of the instrument, but takes into account the proportion of consideration received in the form of employee services. Thus, for example, if a nonvested share that qualifies for equity classification under FASB ASC Topic 718 is redeemable at fair value more than six months after vesting, and that nonvested share is 75% vested at the balance sheet date, an amount equal to 75% of the fair value of the share should be presented as temporary equity at that date. Similarly, if an option on a share of redeemable stock that qualifies for equity classification under FASB ASC Topic 718 is 75% vested at the balance sheet date, an amount equal to 75% of the intrinsic⁸⁶ value of the option should be presented as temporary equity at that date.

⁸³ FASB ASC Topic 718, paragraph A231, states that an instrument ceases to be subject to FASB ASC Topic 718 when “the rights conveyed by the instrument to the holder are no longer dependent on the holder being an employee of the entity (that is, no longer dependent on providing service).”

⁸⁴ Instruments granted in conjunction with share-based payment arrangements with employees that do not by their terms require redemption for cash or other assets (at a fixed or determinable price on a fixed or determinable date, at the option of the holder, or upon the occurrence of an event that is not solely within the control of the issuer) would not be assumed by the staff to require net cash settlement for purposes of applying ASR 268 in circumstances in which FASB ASC Section 815-40-25, Derivatives and Hedging – Contracts in Entity’s Own Equity – Recognition, would otherwise require the assumption of net cash settlement. See FASB ASC paragraph 815-40-25-11, which states, in part: “... the events or actions necessary to deliver registered shares are not controlled by an entity and, therefore, except under the circumstances described in FASB ASC paragraph 815-40-25-16, if the contract permits the entity to net share or physically settle the contract only by delivering registered shares, it is assumed that the entity will be required to net cash settle the contract.” See also FASB ASC subparagraph 718-10-25-15(a).

⁸⁵ Depending on the fact pattern, this may be recorded as common stock and additional paid in capital.

⁸⁶ The potential redemption amount of the share option in this illustration is its intrinsic value because the holder would pay the exercise price upon exercise of the option and then, upon redemption of the underlying shares, the company would pay the holder the fair value of those shares. Thus, the net cash outflow from the arrangement would be equal to the intrinsic value of the share option. In situations where there would be no cash inflows from the share option holder, the cash required to be paid to redeem the underlying shares upon the exercise of the put option would be the redemption value.

This guidance requires an SEC registrant to classify share-based payments that are not liabilities but that could require the grantor to redeem the equity instruments for cash or other assets outside permanent equity (between liabilities and equity, generally characterized as “temporary” or “mezzanine” equity). While SEC Staff Accounting Bulletins do not apply to nonpublic entities, we believe this guidance is a preferable accounting alternative for nonpublic entities.

The guidance clarifies that the amount recognized in temporary equity is based on the redemption amount of the vested portion of the award, less the exercise price of the vested portion. However, the initial and subsequent measurement depends on whether:

- ▶ The award is vested or nonvested (see section 5.3.1)
- ▶ The award consists of redeemable options or redeemable shares (see section 5.3.2)
- ▶ Redemption is contingent on an event that is not probable of occurrence (see section 5.3.3)

Further, the effect of changes in the amount classified as temporary equity differs depending on whether the redemption amount is at the fair value of the shares (or intrinsic value of an option).

5.3.1 Vested versus nonvested awards (updated June 2019)

The SEC staff’s response to Question 2 of the SAB clarifies that although an award is subject to vesting (and, in most cases, the employer could terminate the employee before the award vests and not incur a redemption obligation), the SEC staff’s guidance on redeemable securities still applies to the award.

As discussed in SAB Topic 14, the redemption amount in temporary equity is based on the relative proportion of the award that is vested. Accordingly, the initial redemption amount for a nonvested share would be zero, but the redemption amount would be accreted in accordance with the vesting schedule. When the award is fully vested, the full redemption amount would be classified in temporary equity.

5.3.2 Redeemable options or redeemable shares

The requirement in ASC 480-10-S99-3A(12) that states that the “initial carrying amount of redeemable preferred stock should be its fair value at date of issue” led to some confusion in practice because it is not clear whether this requirement was intended to apply to employee options that are redeemable at intrinsic value, rather than fair value. For example, assume an employee option is granted at the money and is subject to redemption at intrinsic value only upon an event that is not probable of occurrence (e.g., a change in control). Initially, the redemption amount of the option is zero (because it is granted at the money). Accordingly, presenting the *fair value* of the instrument in temporary equity is inconsistent with the intent of the SEC staff’s guidance on redeemable securities to highlight the redemption obligation that is measured at *intrinsic value*. Similar issues arise in the grant of an employee option that permits the employee to put the underlying shares to the employer at fair value six months after option exercise.

In the examples described above, consistent with the requirements of footnote 86 of SAB Topic 14³¹ and ASC 480-10-S99-3A, the redemption amount that would be classified in temporary equity is based on the intrinsic value of the option. However, if an option or share is redeemable at fair value, we believe that the amount classified in temporary equity would be measured based on the fair value of the option or share, not the intrinsic value of the option.

³¹ Footnote 86 of SAB Topic 14 states “The potential redemption amount of the share option in this illustration is its intrinsic value because the holder would pay the exercise price upon exercise of the option and then, upon redemption of the underlying shares, the company would pay the holder the fair value of those shares. Thus, the net cash outflow from the arrangement would be equal to the intrinsic value of the share option. In situations where there would be no cash inflows from the share option holder, the cash required to be paid to redeem the underlying shares upon the exercise of the put option would be the redemption value.”

In summary, the amount that is classified in temporary equity is as follows:

Type of instrument	Amount classified in temporary equity calculated based on the vested percentage of
Option redeemable at intrinsic value	Intrinsic value
Option redeemable at fair value	Fair value
Option for which underlying <i>share</i> is redeemable at fair value	Intrinsic value of option or, after exercise, fair value of share
Share redeemable at fair value	Fair value

For options redeemable at intrinsic value, the amount recognized in temporary equity (intrinsic value) will differ from the amount recognized in equity as compensation cost because the latter amount will be based on the fair value of the option on the grant date.

Refer to section 5.3.5 for examples.

5.3.3 Contingent redemption (updated October 2017)

In some cases, the employee's ability to require the employer to redeem an equity instrument is contingent upon an event outside the employer's control (e.g., an award with a contingent put that is not classified as a liability in accordance with the guidance in section 5.2.3.2). For example, an award may provide the employee (or the employee's estate) an option to redeem an equity instrument only upon the employee's death (while they are employed) or disability or upon a change in control. If the contingent redemption right is not considered freestanding (i.e., it is an embedded redemption feature in the related equity instrument) and does not cause the equity instrument to be a mandatorily redeemable financial instrument accounted for as a liability under ASC 480, the SEC staff's guidance on redeemable securities is considered to determine whether the equity instrument is classified as temporary equity and, if so, how it should be measured. That guidance requires an assessment of whether the contingent event is probable in determining the appropriate measurement method. If the event that permits redemption is not probable,³² ASC 480-10-S99-3A(15) states that subsequent adjustment of temporary equity is unnecessary (i.e., not permitted).

Based on the guidance in ASC 480-10-S99-3A, a share-based payment that is redeemable by an employee only upon a contingent event outside the employer's control would not be adjusted from its initial redemption value until the contingent event is probable. Therefore, the initial redemption amount is zero for options granted at the money and contingently redeemable at intrinsic value, and no adjustment to that amount is required until the contingent event is probable. When the contingent event is probable:

- ▶ If the employee's put option is on an immature share or an option, liability classification would be required (see further discussion in sections 5.2.2 and 5.2.3). As discussed in section 8.6.1, any excess of the fair value of the liability at reclassification over the amount recognized in equity for the award would be recognized as compensation cost. Compensation cost for an award that was reclassified from equity to a liability cannot be less than the grant-date fair value of the equity award. Accordingly, if the fair value of the liability is less than the grant-date fair value of the equity award, that deficiency does not affect the amount of compensation cost recognized.
- ▶ If the employee's put option is on a mature share (or a share that is expected to be mature when the put becomes exercisable), the adjustment to the redemption amount is recognized as discussed in section 5.3.4.

³² While not specifically addressed in ASC 718, paragraph 85 of EITF 00-23 applies, which stated that "an employer should assess whether the contingent event is expected to occur (that is, whether occurrence is probable) on an *individual grantee-by-grantee basis*." [Emphasis added.] Accordingly, while it may be probable that some portion of a large grantee group may pass away or become disabled, it would be infrequent that a grantor would identify specific grantees for which it is probable that either of those events would occur.

5.3.4 Accounting for changes in amounts classified as temporary equity

SAB Topic 14 does not explicitly address which corresponding accounts should be adjusted when the redemption value of a share-based payment is reclassified to temporary equity. For redeemable preferred shares, ASC 480-10-S99-3A states that the change in redemption amount is recognized in retained earnings and increases or decreases in earnings available to common shareholders and, as a result, EPS. However, the SEC staff believes that while adjustments to the redemption amount must be recognized in retained earnings (similar to a dividend) or, in the absence of retained earnings, by charges against additional paid-in capital, the effect of that adjustment on the calculation of EPS differs depending on how the redemption amount is calculated. ASC 480-10-S99-3A(21) states the following regarding when a share is redeemable at fair value or when an option is redeemable at intrinsic value:

Excerpt from Accounting Standards Codification

Distinguishing Liabilities from Equity – Overall

SEC Materials

480-10-S99-3A(21)

However, increases or decreases in the carrying amount of a redeemable common stock should not affect income available to common stockholders. Rather, the SEC staff believes that to the extent that a common shareholder has a contractual right to receive at share redemption (in other than a liquidation event that meets the exception in paragraph 3(f)) an amount that is other than the fair value of the issuer's common shares, then that common shareholder has, in substance, received a distribution different from other common shareholders. Under Paragraph 260-10-45-59A, entities with capital structures that include a class of common stock with different dividend rates from those of another class of common stock but without prior or senior rights, should apply the two-class method of calculating earnings per share. Therefore, when a class of common stock is redeemable at other than fair value, increases or decreases in the carrying amount of the redeemable instrument should be reflected in earnings per share using the two-class method.¹⁷ For common stock redeemable at fair value¹⁸, the SEC staff would not expect the use of the two-class method, as a redemption at fair value does not amount to a distribution different from other common shareholders.¹⁹

¹⁷ The two-class method of computing earnings per share is addressed in Section 260-10-45. The SEC staff believes that there are two acceptable approaches for allocating earnings under the two-class method when a common stock instrument is redeemable at other than fair value. The registrant may elect to: (a) treat the entire periodic adjustment to the instrument's carrying amount (from the application of paragraphs 14-16) as being akin to a dividend or (b) treat only the portion of the periodic adjustment to the instrument's carrying amount (from the application of paragraphs 14-16) that reflects a redemption in excess of fair value as being akin to a dividend. Under either approach, decreases in the instrument's carrying amount should be reflected in the application of the two-class method only to the extent they represent recoveries of amounts previously reflected in the application of the two-class method.

¹⁸ Common stock that is redeemable based on a specified formula is considered to be redeemable at fair value if the formula is designed to equal or reasonably approximate fair value. The SEC staff believes that a formula based solely on a fixed multiple of earnings (or other similar measure) is not considered to be designed to equal or reasonably approximate fair value.

¹⁹ Similarly, the two-class method is not required when share-based payment awards granted to employees are redeemable at fair value (provided those awards are in the form of common shares or options on common shares). However, those share-based payment awards may still be subject to the two-class method pursuant to Section 260-10-45.

Accordingly, for common shares redeemable at fair value or for options redeemable at intrinsic value, changes in the redemption amount would not affect the calculation of EPS. However, if the redemption amount of the shares is for other than fair value, the change in redemption amount is treated as a distribution (dividend) to the holders of redeemable shares and an adjustment to earnings available to common shareholders.

For options redeemable at fair value, we believe that because the option holder is receiving a redemption amount that is higher than the fair value of the underlying shares and the intrinsic value of the option (assuming exercise and immediate redemption of the shares), changes in the redemption amount (measured at the fair value of the options) would be recognized as an adjustment to earnings available to common shareholders.

The EPS effect of the various instruments and redemption features described above is summarized as follows:

Type of instrument / redemption feature	Is the change in redemption value an adjustment to earnings available to common shareholders?
Option redeemable at intrinsic value	No
Option redeemable at fair value	Yes
Option for which underlying <i>share</i> is redeemable at fair value	No
Share redeemable at fair value	No
Option or share redeemable based on a price that is other than intrinsic value or fair value	Yes

5.3.5 Examples (updated June 2019)

The following examples illustrate the accounting for awards issued with a put redemption feature that are subject to the guidance in ASR 268.

Illustration 5-3: Option redeemable at fair value only upon a change in control

On 1 January 20X7, an entity grants 1,000 at-the-money options that permit the grantee to put the options back to the entity for cash (at fair value) upon a change in control. The fair value of the options is \$10,000 and the options are subject to cliff vesting on 31 December 20X8. The entity's statutory tax rate is 25%. The options are granted to a small group of senior executives and the entity's tax deduction is not limited by section 162(m) (forfeitures are ignored in this example).

Initially, the entity concluded that a change in control is not probable. Since the put is at fair value and cannot be exercised within six months of option exercise, the award qualifies for equity classification. As a result, compensation is measured on the grant date.

The entity records the following entry to recognize compensation cost during each of the two years in the requisite service period:

Dr. Compensation cost	\$ 5,000	
Dr. Deferred income tax asset	1,250	
Cr. Deferred income tax benefit		\$ 1,250
Cr. Additional paid-in capital		5,000

Entry to recognize compensation cost for each of the years ended 31 December 20X7 and 31 December 20X8.

Because the options were granted at the money, the redemption amount on the grant date is zero. Since a change in control is not considered probable on 1 January 20X7, that redemption amount is not adjusted. Accordingly, no amount is reclassified to temporary equity as noted in section 5.3.3.

On 1 January 20X9, a change in control occurs, and the grantees therefore have an active put right.³³ The fair value of the options is \$15,000. Therefore, the options must be reclassified from equity to a liability. The difference between the grant-date fair value of \$10,000 and the liability of \$15,000 is recognized as compensation cost, with a corresponding deferred tax benefit.

³³ As discussed in Section 4.4.2.2.1, historically compensation cost related to performance options that only vest on consummation of a business combination was recognized when the business combination was consummated. Recognition was deferred until consummation of the transaction, even when it became likely that the business combination would be consummated. This position is based on the principle in ASC 805-20-55-51. We believe a similar approach should be applied under ASC 718 and also should be applied to other types of liquidity events, including IPOs. Similarly, practice has developed such that when such an event would permit cash redemption of an award, the reclassification to a liability does not occur until the event occurs.

Dr. Additional paid-in capital	\$	10,000	
Dr. Compensation cost		5,000	
Dr. Deferred income tax asset		1,250	
Cr. Deferred income tax benefit			\$ 1,250
Cr. Share-based payment liability			15,000

Entry to reclassify the options from equity to a liability on 1 January 20X9.

Further, because the change in the redemption value of the shares underlying the options is at fair value, there is no adjustment to earnings available to common shareholders.

Illustration 5-4: Redemption feature is not contingent – Option on shares redeemable at fair value beginning six months after option exercise

On 1 January 20X7, an entity grants 1,000 at-the-money options. The exercise price per share is \$40. The award provides the grantee the right to put the underlying shares to the entity for cash equal to the fair value of the shares on the put date. The put cannot be exercised until six months after option exercise. The fair value of the options is \$10,000, and the options are subject to cliff vesting on 31 December 20X8. The entity's statutory tax rate is 25%. The options are granted to a small group of senior executives and the entity's tax deduction is not limited by section 162(m) (forfeitures are ignored for this example).

The options are exercised on 1 January 20X9, and the shares are redeemed on 1 July 20X9. The intrinsic value of the options/fair value of the shares is as follows:

Date	Intrinsic value of options	Fair value of shares
1 January 20X7	\$ 0	\$ 40,000
31 December 20X7	2,000	42,000
31 December 20X8	5,000	45,000
1 January 20X9	5,000	45,000
1 July 20X9	N/A	44,000

Since the exercise price for the put on the underlying shares is the fair value of the shares on the put date, and the put cannot be exercised within six months of option exercise, the award qualifies for equity classification. As a result, compensation is measured on the grant date. The entity records the following entry to recognize compensation cost during each of the two years in the requisite service period:

Dr. Compensation cost	\$	5,000	
Dr. Deferred income tax asset		1,250	
Cr. Deferred income tax benefit			\$ 1,250
Cr. Additional paid-in capital			5,000

Entry to recognize compensation cost for each of the years ended 31 December 20X7 and 31 December 20X8.

While the award is classified as equity under ASC 718, the award provides the grantee the right to require the grantor to redeem the underlying shares for cash. Accordingly, the redemption value of the award is considered temporary equity under ASC 480-10-S99. Because the options were granted at the money, the redemption amount on the grant date is zero. Since the redemption right is within the control of the grantee, the entity records the following entry to reclassify the redemption amount to temporary equity in proportion to the requisite service period that has elapsed as of 31 December 20X7. Because the underlying shares are redeemable at fair value, we do not believe that the adjustments to retained earnings in the following entries would affect the calculation of earnings available to common shareholders (the numerator of the EPS calculation).

Dr. Retained earnings	\$	1,000	
Cr. Temporary equity			\$ 1,000

Entry to reclassify the 31 December 20X7 redemption amount to temporary equity based on 50% vesting and redemption value of \$2,000 (\$42,000 fair value – \$40,000 exercise price).

Temporary equity must be adjusted to the current redemption amount each reporting period. This example illustrates a single entry at the end of the fiscal year, but an SEC registrant would record an entry each quarter.

Dr. Retained earnings	\$	4,000	
Cr. Temporary equity			\$ 4,000

Entry to reclassify the 31 December 20X8 redemption amount to temporary equity based on 100% vesting, a redemption value of \$5,000 (\$45,000 fair value – \$40,000 exercise price), less \$1,000 previously classified in temporary equity).

The following entry is recorded when the options are exercised:

Dr. Cash	\$	40,000	
Dr. Deferred income tax expense		2,500	
Dr. Current income taxes payable		1,250	
Cr. Current income tax expense			\$ 1,250
Cr. Deferred income tax asset			2,500
Cr. Temporary equity			40,000

To recognize exercise of options on 1 January 20X9 and related tax effects.

Although the options were exercised, the shares issued are redeemable and, therefore, the temporary equity balance must be adjusted to the redemption value of the shares. While those entries would be recorded each quarter by an SEC registrant, we illustrated a single adjustment when the shares are repurchased and the entry to record the redemption of the shares:

Dr. Temporary equity	\$	1,000	
Cr. Retained earnings			\$ 1,000

Entry to reduce redemption amount as of 1 July 20X9 based on decline in value of shares from \$45,000 to \$44,000.

Dr. Temporary equity	\$	44,000	
Cr. Cash			\$ 44,000

Entry to recognize the redemption of the shares on 1 July 20X9.

5.3.6 Exceptions to the requirements of distinguishing liabilities from equity

ASC 480-10-S99-3A(3)(d) identifies two circumstances in which share-based payment awards normally would require temporary equity classification. In both circumstances, the SEC staff provided exceptions such that the conditions described would not cause a share-based payment to be classified in temporary equity if the award otherwise would be classified as permanent equity.

Excerpt from Accounting Standards Codification

Distinguishing Liabilities from Equity – Overall

SEC Materials

480-10-S99-3A(3)(d)

Share-based payment awards. Equity-classified share-based payment arrangements with employees are not subject to ASR 268 due solely to either of the following:

- ▶ Net cash settlement would be assumed pursuant to Paragraphs 815-40-25-11 through 25-16 solely because of an obligation to deliver registered shares.⁷
- ▶ A provision in an instrument for the direct or indirect repurchase of shares issued to an employee exists solely to satisfy the employer's minimum statutory tax withholding requirements (as discussed in Paragraphs 718-10-25-18 through 25-19).^[34]

⁷ See footnote 84 of Section 718-10-S99.

5.3.7 Application of ASR 268 to nonemployee awards

The SEC staff's guidance on redeemable securities and SAB Topic 14 also applies to awards to nonemployees that are subject to redemption outside the issuer's control:

Excerpt from SAB Topic 14.E

Question 3: Would the methodology described for employee awards in the Interpretive Response to Question 2 above apply to nonemployee awards to be issued in exchange for goods or services with similar terms to those described above?

Interpretive Response: See Topic 14.A for a discussion of the application of the principles in FASB ASC Topic 718 to nonemployee awards. The staff believes it would generally be appropriate to apply the methodology described in the Interpretive Response to Question 2 above to nonemployee awards.

However, the exceptions to the requirements described in section 5.3.6 would not apply to awards to nonemployees.

³⁴ Although the SEC's guidance refers to "minimum" statutory withholding, based on discussions with the SEC staff, they noted this guidance was not updated in accordance with ASU 2016-09, which allows for the maximum statutory withholding. Entities should refer to the ASC 718 references in this paragraph for the appropriate guidance.

5.4 Measurement objective and measurement date for liabilities

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

Initial Measurement

718-30-30-1

At the **grant date**, the measurement objective for liabilities incurred under **share-based compensation** arrangements is the same as the measurement objective for equity instruments awarded to grantees as described in paragraph 718-10-30-6. However, the **measurement date** for liability instruments is the date of **settlement**.

Subsequent Measurement

718-30-35-1

The **fair value** of liabilities incurred in **share-based payment transactions** shall be remeasured at the end of each reporting period through **settlement**.

718-30-35-2

[...] Changes in the fair value (or intrinsic value) of a liability that occur after the end of the employee's requisite service period or the nonemployee's vesting period are compensation cost of the period in which the changes occur. Any difference between the amount for which a liability **award** is settled and its fair value at the settlement date as estimated in accordance with the provisions of this Subtopic is an adjustment of compensation cost in the period of settlement. Example 1 (see paragraph 718-30-55-1) provides an illustration of accounting for a liability award from the **grant date** through its settlement.

The measurement objective for liability-classified awards is the same as for equity-classified awards. However, liability-classified awards must be remeasured at each reporting period until settlement. Ultimately, the compensation cost recognized for a liability-classified award equals the amount for which the award is settled (e.g., the cash paid to settle an award or the value of the instruments transferred to the grantee to settle the award). This differs from equity-classified awards, which are generally measured on the grant date.

For public entities, liability-classified awards must be measured at fair value (see section 5.4.1). Nonpublic entities have the choice of measuring liability awards at fair value (or calculated value if expected volatility is not reasonably estimable) or intrinsic value (see section 5.4.2). For simplicity, references below to fair value include fair value and calculated value.

5.4.1 Public entities – measurement and recognition of liability-classified awards

ASC 718 requires that public entities measure share-based payment awards classified as liabilities at fair value at each reporting date:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

718-30-35-3

A **public entity** shall measure a liability award under a **share-based payment arrangement** based on the award's fair value remeasured at each reporting date until the date of settlement. Compensation cost for each period until settlement shall be based on the change (or a portion of the change, depending on the percentage of the requisite service that has been rendered for an employee award or the percentage that would have been recognized had the grantor paid cash for the goods or services instead of paying with a nonemployee award at the reporting date) in the fair value of the instrument for each reporting period. Example 1 (see paragraph 718-30-55-1) provides an illustration of accounting for an instrument classified as a liability using the fair-value-based method.

For example, a cash-settled SAR (i.e., a commitment by the grantor to pay the grantee an amount by which the grantor's share price on a specified future date exceeds a stated exercise price) is effectively a net-cash settled written call option. As a result, the same option-pricing approach is used to estimate the value of that cash-settled SAR as is used for an economically equivalent option. Over time, the time value of the SAR will decay (i.e., at settlement, the grantee will receive only intrinsic value).

Under ASC 718, the time value of a liability initially will be recognized as compensation cost but then will be reversed as the settlement date approaches (i.e., at settlement, the grantee will receive only intrinsic value). At settlement, total compensation cost will not differ from that which would result under the intrinsic value method, although the timing of that recognition will differ.

ASC 718 provides little guidance on the attribution of compensation cost for liability-classified awards. Generally, we believe that the guidance on the recognition of compensation cost for equity-classified awards also applies to liability awards. For example, liability-classified awards subject to graded service vesting would be subject to the same accounting (accelerated versus straight-line attribution) as equity awards (see further discussion in section 4.4.1.4 and examples in section 4.4.1.6).

5.4.1.1

Comprehensive example of accounting for a share-based liability

ASC 718 provides the following example of the accounting for a liability award. Although the illustration is for a public entity, it also applies to nonpublic entities that account for liability-classified awards at fair value.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

Implementation Guidance and Illustrations

Example 1: Cash-Settled Stock Appreciation Right

718-30-55-2

Entity T, a **public entity**, grants share appreciation rights with the same terms and conditions as those described in Example 1 (see paragraph 718-20-55-4). As in Example 1, Case A, Entity T makes an accounting policy election in accordance with paragraph 718-10-35-3 to estimate the number of forfeitures expected to occur and includes that estimate in its initial accrual of compensation costs. Each stock appreciation right entitles the holder to receive an amount in cash equal to the increase in value of 1 share of Entity T stock over \$30. Entity T determines the grant-date **fair value** of each stock appreciation right in the same manner as a **share option** and uses the same assumptions and option-pricing model used to estimate the fair value of the share options in that Example; consequently, the grant-date fair value of each stock appreciation right is \$14.69 (see paragraphs 718-20-55-7 through 55-9). The awards cliff-**vest** at the end of three years of service (an explicit and requisite service period of three years). The number of stock appreciation rights for which the requisite service is expected to be rendered is estimated at the **grant date** to be 821,406 ($900,000 \times .973$). Thus, the fair value of the **award** as of January 1, 20X5, is \$12,066,454 ($821,406 \times \14.69). For simplicity, this Example assumes that estimated forfeitures equal actual forfeitures.

718-30-55-3

Paragraph 718-30-35-4 permits a **nonpublic entity** to measure share-based payment liabilities at either fair value (or, in some cases, **calculated value**) or **intrinsic value**. If a nonpublic entity elects to measure those liabilities at fair value, the accounting demonstrated in this Example would be applicable. Paragraph 718-30-35-3 requires that share-based compensation liabilities be recognized at fair value or a portion thereof (depending on the percentage of requisite service rendered at the reporting date) and be remeasured at each reporting date through the date of **settlement**; consequently, compensation cost recognized during each year of the three-year vesting period (as well

as during each year thereafter through the date of settlement) will vary based on changes in the award's fair value. As of December 31, 20X5, the assumed fair value is \$10 per stock appreciation right; hence, the fair value of the award is \$8,214,060 ($821,406 \times \10). The share-based compensation liability as of December 31, 20X5, is \$2,738,020 ($\$8,214,060 \div 3$) to account for the portion of the award related to the service rendered in 20X5 (1 year of the 3-year requisite service period). For convenience, this Example assumes that journal entries to account for the award are performed at year-end. The journal entries for 20X5 are as follows.

Compensation cost	\$ 2,738,020	
Share-based compensation liability		\$ 2,738,020
To recognize compensation cost.		

Deferred tax asset	\$ 958,307	
Deferred tax benefit		\$ 958,307

To recognize the deferred tax asset for the temporary difference related to compensation cost ($\$2,738,020 \times .35 = \$958,307$).

718-30-55-4

As of December 31, 20X6, the fair value is assumed to be \$25 per stock appreciation right; hence, the award's fair value is \$20,535,150 ($821,406 \times \25), and the corresponding liability at that date is \$13,690,100 ($\$20,535,150 \times 2/3$) because service has been provided for 2 years of the 3-year requisite service period. Compensation cost recognized for the award in 20X6 is \$10,952,080 ($\$13,690,100 - \$2,738,020$). Entity T recognizes the following journal entries for 20X6.

Compensation cost	\$10,952,080	
Share-based compensation liability		\$10,952,080
To recognize a share-based compensation liability of \$13,690,100 and associated compensation cost.		

Deferred tax asset	\$ 3,833,228	
Deferred tax benefit		\$ 3,833,228

To recognize the deferred tax asset for additional compensation cost ($\$10,952,080 \times .35 = \$3,833,228$).

718-30-55-5

As of December 31, 20X7, the fair value is assumed to be \$20 per stock appreciation right; hence, the award's fair value is \$16,428,120 ($821,406 \times \20), and the corresponding liability at that date is \$16,428,120 ($\$16,428,120 \times 1$) because the award is fully vested. Compensation cost recognized for the liability award in 20X7 is \$2,738,020 ($\$16,428,120 - \$13,690,100$). Entity T recognizes the following journal entries for 20X7.

Compensation cost	\$ 2,738,020	
Share-based compensation liability		\$ 2,738,020
To recognize a share-based compensation liability of \$16,428,120 and associated compensation cost.		

Deferred tax asset	\$ 958,307	
Deferred tax benefit		\$ 958,307

To recognize the deferred tax asset for additional compensation cost ($\$2,738,020 \times .35 = \$958,307$).

718-30-55-6

The share-based liability award is as follows:

Year	Total Value of Award at Year-End	Pretax Cost for Year	Cumulative Pretax Cost
20X5	\$8,214,060 (821,406 × \$10)	\$2,738,020 (\$8,214,060 ÷ 3)	\$ 2,738,020
20X6	\$20,535,150 (821,406 × \$25)	\$10,952,080 [(\$20,535,150 × ⅓) – \$2,738,020]	\$ 13,690,100
20X7	\$16,428,120 (821,406 × \$20)	\$2,738,020 (\$16,428,120 – \$13,690,100)	\$ 16,428,120

718-30-55-7

For simplicity, this Example assumes that all of the stock appreciation rights are exercised on the same day, that the liability award's fair value is \$20 per stock appreciation right, and that Entity T has already recognized its income tax expense for the year without regard to the effects of the exercise of the **employee** stock appreciation rights. In other words, current tax expense and current taxes payable were recognized based on taxable income and deductions before consideration of additional deductions from exercise of the stock appreciation rights. The amount credited to cash for the exercise of the stock appreciation rights is equal to the share-based compensation liability of \$16,428,120.

718-30-55-8

At exercise the journal entry is as follows.

Share-based compensation liability	\$16,428,120	
Cash (821,406 × \$20)		\$16,428,120

To recognize the cash payment to employees from stock appreciation right exercise.

718-30-55-9

The cash paid to the employees on the date of exercise is deductible for tax purposes. The tax benefit is \$5,749,842 (\$16,428,120 × .35).

718-30-55-10

At exercise the journal entry is as follows.

Deferred tax expense	\$ 5,749,842	
Deferred tax asset		\$ 5,749,842

To write off the deferred tax asset related to the stock appreciation rights.

Current taxes payable	\$ 5,749,842	
Current tax expense		\$ 5,749,842

To adjust current tax expense and current taxes payable to recognize the current tax benefit from deductible compensation cost.

718-30-55-11

If the stock appreciation rights had expired worthless, the share-based compensation liability account and deferred tax asset account would have been adjusted to zero through the income statement as the award's fair value decreased.

Although the above example illustrates the accounting for an employee award, ASC 718-30-55-1A and 55-1B state that the guidance also applies to a nonemployee award with the same features. However, the timing of cost attribution may differ as compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

5.4.2 Nonpublic entities – measurement and recognition of liability-classified awards

While the ultimate measurement date for all share-based payment liabilities is the same (the settlement date), the measurement method for liabilities of nonpublic entities may differ from public entities:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

Initial Measurement

718-30-30-2

A **nonpublic entity** shall make a policy decision of whether to measure all of its liabilities incurred under share-based payment arrangements (for employee and nonemployee awards) at **fair value** or to measure all such liabilities at **intrinsic value**.

Subsequent Measurement

718-30-35-4

Regardless of the measurement method initially selected under paragraph 718-10-30-20, a nonpublic entity shall remeasure its liabilities under share-based payment arrangements at each reporting date until the date of settlement. The fair-value-based method is preferable for purposes of justifying a change in accounting principle under Topic 250. Example 1 (see paragraph 718-30-55-1) provides an illustration of accounting for an instrument classified as a liability using the fair-value-based method. Example 2 (see paragraph 718-30-55-12) provides an illustration of accounting for an instrument classified as a liability using the intrinsic value method.

Nonpublic entities may elect to account for liability-classified awards using (1) the fair value method (or the calculated value method described in section 7.4.2, using an appropriate industry sector index to estimate volatility, if the grantor cannot reasonably estimate its own volatility) or (2) the intrinsic value method. Regardless of the measurement method used, the liability-classified award must be remeasured at each reporting date until the award is settled. The choice of measurement method is an accounting policy and must be applied consistently to all awards accounted for as liabilities (including awards to both employees and nonemployees).

The comprehensive example of accounting for a share-based liability included in section 5.4.1.1 also applies to nonpublic entities if they measure liability-classified awards using fair value. See 5.4.2.1 for a comprehensive example for a liability award when a nonpublic entity uses intrinsic value.

ASU 2016-09 provided a practical expedient that allows nonpublic entities to elect a one-time change in accounting principle to measure liability-classified awards issued to employees at intrinsic value, if they previously measured them at fair value. An evaluation of whether intrinsic value is preferable to fair value was not required. Upon adoption of ASU 2018-07, nonpublic entities that measure their liability-classified employee awards using intrinsic value must also measure liability-classified nonemployee awards using intrinsic value. Nonpublic entities that have not previously granted liability-classified employee awards and, therefore, have not made a policy election can make a one-time policy election upon the adoption of ASU 2018-07 to measure liability-classified employee and nonemployee awards at intrinsic value.

As stated in ASC 718-30-35-4, the fair value method is preferable to the intrinsic value method. As a result, a nonpublic entity may voluntarily change from the intrinsic value method to the fair value method of accounting for liabilities. However, a change from the fair value method to the intrinsic value method is not permitted, except for the one-time change allowed upon adoption of ASU 2016-09 (for employee awards) and ASU 2018-07 (for nonemployee awards).

5.4.2.1 Comprehensive example of accounting for a share-based liability at intrinsic value (added June 2019)

ASC 718 provides the following example of the accounting for a liability award measured at intrinsic value.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Liabilities

Implementation Guidance and Illustrations

Example 2: Award Granted by a Nonpublic Entity That Elects the Intrinsic Value Method

718-30-55-13

On January 1, 20X6, Entity W, a nonpublic entity that has chosen the accounting policy of using the intrinsic value method of accounting for share-based payments that are classified as liabilities in accordance with paragraphs 718-30-30-2 and 718-30-35-4, grants 100 cash-settled stock appreciation rights with a 5-year life to each of its 100 employees. Each stock appreciation right entitles the holder to receive an amount in cash equal to the increase in value of 1 share of Entity W's stock over \$7. The awards cliff-vest at the end of three years of service (an explicit and requisite service period of three years). For simplicity, the Example assumes that no forfeitures occur during the vesting period and does not reflect the accounting for income tax consequences of the awards.

718-30-55-14

Because of Entity W's accounting policy decision to use intrinsic value, all of its share-based payments that are classified as liabilities are recognized at intrinsic value (or a portion thereof, depending on the percentage of requisite service that has been rendered) at each reporting date through the date of settlement; consequently, the compensation cost recognized in each year of the three-year requisite service period will vary based on changes in the liability award's intrinsic value. As of December 31, 20X6, Entity W stock is valued at \$10 per share; hence, the intrinsic value is \$3 per stock appreciation right (\$10 - \$7), and the intrinsic value of the award is \$30,000 (10,000 × \$3). The compensation cost to be recognized for 20X6 is \$10,000 (\$30,000 ÷ 3), which corresponds to the service provided in 20X6 (1 year of the 3-year service period). For convenience, this Example assumes that journal entries to account for the award are performed at year-end. The journal entry for 20X6 is as follows.

Compensation cost	\$	10,000	
Share-based compensation liability			\$ 10,000
To recognize compensation cost.			

718-30-55-15

As of December 31, 20X7, Entity W stock is valued at \$8 per share; hence, the intrinsic value is \$1 per stock appreciation right (\$8 - \$7), and the intrinsic value of the award is \$10,000 (10,000 × \$1). The decrease in the intrinsic value of the award is \$20,000 (\$10,000 - \$30,000). Because services for 2 years of the 3-year service period have been rendered, Entity W must recognize cumulative compensation cost for two-thirds of the intrinsic value of the award, or \$6,667 (\$10,000 × 2/3); however, Entity W recognized compensation cost of \$10,000 in 20X6. Thus, Entity W must recognize an entry in 20X7 to reduce cumulative compensation cost to \$6,667.

Share-based compensation liability	\$	3,333	
Compensation cost			\$ 3,333
To adjust cumulative compensation cost (\$6,667 - \$10,000).			

718-30-55-16

As of December 31, 20X8, Entity W stock is valued at \$15 per share; hence, the intrinsic value is \$8 per stock appreciation right (\$15 - \$7), and the intrinsic value of the award is \$80,000 (10,000 × \$8). The cumulative compensation cost recognized as of December 31, 20X8, is \$80,000 because the award is fully vested. The journal entry for 20X8 is as follows.

Compensation cost	\$ 73,333	
Share-based compensation liability		\$ 73,333

To recognize compensation cost (\$80,000 - \$6,667).

718-30-55-17

The share-based liability award at intrinsic value is as follows:

Year	Total Value of Award at Year-End	Pretax Cost for Year	Cumulative Pretax Cost
20X5	\$30,000 (10,000 × \$3)	\$10,000 (\$30,000 ÷ 3)	\$ 10,000
20X6	\$10,000 (10,000 × \$1)	\$(3,333) [(\$10,000 × 2/3) - \$10,000]	\$ 6,670
20X7	\$80,000 (10,000 × \$8)	\$73,333 (\$80,000 - \$6,667)	\$ 80,000

718-30-55-18

For simplicity, this Example assumes that all of the stock appreciation rights are settled on the day that they vest, December 31, 20X8, when the share price is \$15 and the intrinsic value is \$8 per share. The cash paid to settle the stock appreciation rights is equal to the share-based compensation liability of \$80,000.

718-30-55-19

At exercise the journal entry is as follows.

Share-based compensation liability	\$ 80,000	
Cash (10,000 × \$8)		\$ 80,000

To recognize the cash payment to employees from stock appreciation right exercise.

718-30-55-20

If the stock appreciation rights had not been settled, Entity W would continue to remeasure those remaining awards at intrinsic value at each reporting date through the date they are exercised or otherwise settled.

Although the above example illustrates the accounting for an employee award, ASC 718-30-55-12A and 55-12B state that the guidance also applies to a similar liability-classified nonemployee award. However, the timing of cost attribution may differ as compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

5.5 Subsequent accounting for certain freestanding financial instruments

5.5.1 Determining when an award becomes subject to other US GAAP

ASC 718-10-35-10 states that a freestanding financial instrument that is subject to ASC 718 continues to be subject to that guidance for its life, unless its terms are modified after a grantee vests in the award and is no longer providing goods or services, or is no longer an employee, whichever is applicable.

ASC 718-10-35-9 and 35-10 provide the following guidance on exchanges of instruments in a business combination or equity restructuring (e.g., share split) transaction:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-9

Paragraphs 718-10-35-10 through 35-14 are intended to apply to those instruments issued in **share-based payment transactions** with employees and nonemployees accounted for under this Topic, and to instruments exchanged in a business combination for share-based payment awards of the acquired business that were originally granted to grantees of the acquired business and are outstanding as of the date of the business combination.

718-10-35-9A

A convertible instrument award granted to a nonemployee in exchange for goods or services to be used or consumed in a grantor's own operations is subject to recognition and measurement guidance in this Topic until the award is fully vested. Once vested, a convertible instrument award that is equity in form, or debt in form, that can be converted into equity instruments of the grantor, shall follow recognition and measurement through reference to other applicable generally accepted accounting principles (GAAP), including Subtopic 470-20 on debt with conversion and other options.

718-10-35-10

A **freestanding financial instrument** issued to a grantee in exchange for goods or services received (or to be received) that is subject to initial recognition and measurement guidance within this Topic shall continue to be subject to the recognition and measurement provisions of this Topic throughout the life of the instrument, unless its terms are modified after a nonemployee vests in the award and is no longer providing goods or services, or a grantee is no longer an employee. Only for purposes of this paragraph, a **modification** does not include a change to the terms of an award if that change is made solely to reflect an **equity restructuring** provided that both of the following conditions are met:

- a. There is no increase in fair value of the award (or the ratio of **intrinsic value** to the exercise price of the award is preserved, that is, the holder is made whole) or the antidilution provision is not added to the terms of the award in contemplation of an equity restructuring.
- b. All holders of the same class of equity instruments (for example, stock options) are treated in the same manner.

If a share-based payment previously issued under ASC 718 is modified in a business combination or an equity restructuring (e.g., share splits) after a grantee vests in the award and is no longer providing goods or services, or is no longer an employee, whichever is applicable, the award would continue to be accounted for under ASC 718. However, the change pursuant to the business combination is considered a modification under ASC 718 (see sections 8.7 and 8.10.3).

5.5.2

Measurement of awards subject to other US GAAP

As discussed in section 3.2.2, the measurement of share-based payments under ASC 718 is "fair-value-based" and therefore excludes the effects of certain features, such as reload features and clawbacks.

If an award becomes subject to other US GAAP (e.g., because of a modification after a grantee vests in the award and is no longer providing goods or services or is no longer an employee) that requires fair value measurement, the exceptions that apply to share-based payments under ASC 718 generally would no longer apply. Accordingly, the fair value of an option subject to ASC 480-10, ASC 815 and ASC 815-40 may differ from the fair-value-based measurement under ASC 718 and result in a gain or loss on remeasurement.

5.5.3 Accounting for modifications of share-based payments that become subject to other US GAAP

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Subsequent Measurement

718-10-35-11

Other modifications of that instrument that take place after a nonemployee vests in the award and is no longer providing goods or services, or a grantee is no longer an employee should be subject to the modification guidance in paragraph 718-10-35-14. Following modification, recognition and measurement of the instrument shall be determined through reference to other applicable GAAP.

718-10-35-12

Once the classification of an instrument is determined, the recognition and measurement provisions of this Topic shall be applied until the instrument ceases to be subject to the requirements discussed in paragraph 718-10-35-10. Topic 480 or other applicable GAAP, such as Topic 815, applies to a freestanding financial instrument that was issued under a share-based payment arrangement but that is no longer subject to this Topic. This guidance is not intended to suggest that all freestanding financial instruments shall be accounted for as liabilities pursuant to Topic 480, but rather that freestanding financial instruments issued in share-based payment transactions may become subject to that Topic or other applicable GAAP depending on their substantive characteristics and when certain criteria are met.

718-10-35-14

An entity may modify (including cancel and replace) or **settle** a fully vested, freestanding financial instrument after it becomes subject to Topic 480 or other applicable GAAP. Such a modification or settlement shall be accounted for under the provisions of this Topic unless it applies equally to all financial instruments of the same class regardless of the holder of the financial instrument. Following the modification, the instrument continues to be accounted for under that Topic or other applicable GAAP. A modification or settlement of a class of financial instrument that is designed exclusively for and held only by grantees (or their beneficiaries) may stem from the employment or vendor relationship depending on the terms of the modification or settlement. Thus, such a modification or settlement may be subject to the requirements of this Topic. See paragraph 718-10-35-10 for a discussion of changes to awards made solely to reflect an equity restructuring.

We believe that, in most cases, if a modification or settlement of an equity instrument that is no longer in the scope of ASC 718 (as discussed in section 5.5.1) is offered to *all* holders of a class of equity securities, any incremental fair value associated with the modification would be recognized as a distribution to equity holders. The measurement of incremental fair value would be based on an analogy to ASC 718. For modifications or exchanges of preferred share instruments, see section 3.6.2 of our FRD, *Issuer's accounting for debt and equity financings*.

However, if such a modification or settlement is not offered to all equity holders of that class, any incremental fair value is recognized as compensation cost, regardless of whether the equity holder remains an employee (or continues to provide goods or services as a nonemployee) on the modification date.

6 Estimating fair-value-based measurements

6.1 Definition of fair value

An entity is required under ASC 718 to estimate a fair-value-based measurement³⁵ on the measurement date³⁶ of the instruments that it is obligated to issue when grantees have delivered the good or rendered the service and satisfied any other conditions necessary to earn the right to benefit from the instruments (e.g., to exercise share options). ASC 718 defines fair value as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Fair Value

The amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale.

Although this definition refers to assets and liabilities, it also applies to share-based payments.

As discussed in section 3.2.2, ASC 718 requires a fair-value-based measurement method that excludes the effect of certain conditions, restrictions and other features that would be considered in a true fair-value measurement.

6.2 Fair-value hierarchy

ASC 718-10-55-10 states that observable market prices of similar or identical instruments should be used to estimate the fair value of share-based payments, if they are available.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-10

[...] Observable market prices of identical or similar equity or liability instruments in active markets are the best evidence of fair value and, if available, shall be used as the basis for the measurement of equity and liability instruments awarded in a share-based payment transaction. Determining whether an equity or liability instrument is similar is a matter of judgment, based on an analysis of the terms of the instrument and other relevant facts and circumstances. For example, awards to grantees of a **public entity** of shares of its common stock, subject only to a service or **performance condition** for vesting (nonvested shares), shall be measured based on the market price of otherwise identical (that is, identical except for the vesting condition) common stock at the grant date.

³⁵ The guidance in ASC 820 does not apply to share-based payment transactions.

³⁶ As discussed in section 3, the measurement date for share-based payments generally is the grant date for equity-classified awards and the settlement date for liability-classified awards. Liability-classified awards must be remeasured at fair value (or, for nonpublic entities in certain circumstances, calculated value or intrinsic value) until settlement.

Observable market prices of identical or similar equity or liability instruments in active markets are available only for shares of public entities or shares of nonpublic entities for which transactions recently have occurred. When observable market prices are not available, ASC 718 states the following:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation- Overall

Implementation Guidance and Illustrations

718-10-55-11

If observable market prices of identical or similar equity or liability instruments of the entity are not available, the fair value of equity and liability instruments awarded to grantees shall be estimated by using a valuation technique that meets all of the following criteria:

- a. It is applied in a manner consistent with the fair value measurement objective and the other requirements of this Topic.
- b. It is based on established principles of financial economic theory and generally applied in that field (see paragraph 718-10-55-16). Established principles of financial economic theory represent fundamental propositions that form the basis of modern corporate finance (for example, the **time value** of money and risk-neutral valuation).
- c. It reflects all substantive characteristics of the instrument (except for those explicitly excluded by this Topic, such as vesting conditions and reload features).

That is, the fair values of equity and liability instruments granted in a share-based payment transaction shall be estimated by applying a valuation technique that would be used in determining an amount at which instruments with the same characteristics (except for those explicitly excluded by this Topic) would be exchanged.

Appropriate valuation techniques must be used when observable market prices are not available. Examples of awards for which observable market prices typically will not be available include:

- ▶ Options issued to employees and certain nonemployees, due to their unique characteristics (e.g., nontransferability, long contractual term, term truncation on an employee's termination), even when the options on the grantor's shares trade on an open market or exchange
- ▶ Shares with terms that differ materially from shares for which market prices are available (e.g., shares for which resale is prohibited for a period after vesting provisions lapse)
- ▶ Shares of nonpublic entities for which there have been no recent market transactions

6.3 How various terms are incorporated into the valuation

All substantive characteristics of the instrument must be incorporated into the valuation of a share-based payment, except for those that ASC 718 explicitly excludes as discussed in section 3.2.2 (ASC 718-10-55-11). However, ASC 718-10-30-10 states that "restrictions and conditions inherent in equity instruments awarded are treated differently depending on whether they continue in effect after the requisite service period."

The use of option-pricing models to value options is discussed in section 7.

6.3.1 Nontransferability and nonhedgeability during the vesting period

As discussed in section 3.2.2, ASC 718 requires a fair-value-based measurement approach. Accordingly, restrictions on transferability and hedging during the vesting period are not considered in estimating the fair value of a share-based payment.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall***Initial Measurement***718-10-30-11**

A restriction that stems from the forfeitability of instruments to which grantees have not yet earned the right, such as the inability either to exercise a nonvested equity share option or to sell nonvested shares, is not reflected in estimating the fair value of the related instruments at the grant date. Instead, those restrictions are taken into account by recognizing compensation cost only for awards for which grantees deliver the good or render the service.

6.3.2**Nontransferability or nonhedgeability after the vesting period**

Unlike pre-vesting restrictions on a grantee's ability to transfer or hedge a share-based payment, post-vesting restrictions affect the value of share-based payments.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall***Initial Measurement***718-10-30-10**

[...] A restriction that continues in effect after an entity has issued instruments to employees, such as the inability to transfer vested equity share options to third parties or the inability to sell vested shares for a period of time, is considered in estimating the fair value of the instruments at the grant date. [...]

ASC 718 defines a restriction as follows:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall***Glossary***718-10-20***Restriction*

A contractual or governmental provision that *prohibits* sale (or substantive sale by using derivatives or other means to effectively terminate the risk of future changes in the share price) of an equity instrument for a specified period of time. [Emphasis added]

The FASB defines a restriction as a *prohibition* on resale, rather than a *limitation* on resale. Securities are often mistakenly considered to be "restricted" if their resale to third parties is limited but not prohibited, under federal securities laws because the securities have not been registered with the SEC. For example, securities laws may limit the sale of a security to transactions involving qualified institutional buyers (e.g., Section 144A offerings) or other exempt transactions. Such a limitation would not represent a prohibition, and we understand the FASB believes that such a limitation should not affect the estimated fair value of a share-based payment.³⁷ However, because transfers of securities to grantees typically are not eligible for an exemption from registration, we do not believe this issue would arise frequently.

³⁷ Based on the discussions at the 26 May 2005 Resource Group meeting.

6.3.2.1 Effect of nontransferability or nonhedgeability of shares

Market prices for shares subject to transfer prohibitions usually are not available. If a market price for such a share is not available, the fair value should be estimated using valuation techniques.

Non-authoritative literature

Basis for Conclusions of Statement 123(R)

BC74. Certain post-vesting restrictions, such as a contractual prohibition on selling shares for a specified period of time after vesting, are essentially the same as restrictions that may be present in equity instruments exchanged in the marketplace. For those restrictions, either a market price of a similar traded instrument or, if one is not available, the same valuation techniques used to estimate the fair value of a traded instrument are to be used to estimate the fair value of a similar instrument awarded to employees as compensation.

The SEC staff has noted that the assumptions incorporated into the valuation of a share-based payment arrangement should be attributes that a market participant would consider (i.e., an attribute of the security) rather than attributes of a specific holder of the security. Additionally, any discount for lack of transferability should be specific to the security and not derived based on general rules of thumb (e.g., a percentage discount for a one-year restriction).³⁸

Absent cash transactions in the same or similar instruments, an appraisal of the fair value of the shares by an independent expert generally provides the best evidence of fair value. However, the SEC staff typically examines the determination of the fair value of shares carefully. In particular, the SEC staff has aggressively challenged significant discounts from the market price of freely transferable shares when an entity values shares with restrictions. If there is no objective and verifiable evidence that supports the fair value of the restricted securities, the SEC staff generally presumes that the best available evidence of fair value is the quoted market price of traded securities with similar but not identical characteristics (generally, a similar share that is unrestricted). In other words, if there is no objective evidence, the SEC staff believes that an entity should not value restricted shares at a discount. The FASB also commented on the valuation of restricted securities in ASC 718-10-55-5, in which it indicated that if unrestricted “shares are traded in an active market, post-vesting restrictions may have little, if any, effect on the amount at which the shares being valued would be exchanged.”

Objective evidence supporting the valuation of restricted shares should consider the effects of all relevant terms of shares with similar (not necessarily identical) characteristics to the shares traded in a public market. For example, entities should consider the nature and term of the restriction, the nature of the issuer, the nature of the market (or expected market) for the share (e.g., the number of potential buyers), the volatility of the shares, and other market factors. The SEC staff may object to valuations based solely on studies of market price discounts used in other circumstances (e.g., a study of market price discount in Section 144A transactions).

³⁸ Sandie E. Kim, an SEC professional accounting fellow, addressed this at the AICPA National Conference on Current SEC and PCAOB Developments in December 2007, and the SEC staff reiterated these comments at the AICPA National Conference on Current SEC and PCAOB Developments in December 2015.

6.3.2.2 Effect of nontransferability or nonhedgeability of options

ASC 718-10-30-10 indicates that for “equity share options and similar instruments, the effect of nontransferability (and nonhedgeability, which has a similar effect) is taken into account by reflecting the effects of grantees’ expected exercise and post-vesting employment termination behavior in estimating fair value (referred to as an option’s expected term).” That is, the fair value of the option is effectively reduced for the restriction by using an expected life reflecting early-exercise behavior (see section 7.3.1 for further discussion), rather than a contractual life. An additional discount should not be applied to the estimate derived from the option-pricing model.

6.3.2.3 Effect of nontransferability or nonhedgeability of shares underlying options

Entities sometimes grant options on restricted shares (i.e., the sale of the share received on exercise of the option is contractually prohibited for some time after exercise). To estimate the fair value of such an option, an entity should use the value of the underlying restricted share as an input into the option-pricing model, rather than apply a discount to the output of the option-pricing model. This guidance assumes that the restrictions on the share remain in place after the option is exercised (e.g., sale of the underlying share is prohibited for one year after exercise). In the event that the restrictions on the share expire before the exercise of the option, no discount should be applied to the value of the share used in the option-pricing model. In addition, consistent with the discussion in section 6.3.2.1, the entity should have objective and verifiable evidence to support any valuation of restricted shares that differs from the quoted market price of the entity’s unrestricted, publicly traded shares.

6.3.3 Market conditions

A share-based payment contains a market condition if the exercisability or other terms of the award are dependent on achieving a specified share price or a specified return on the share. See section 3.4.4 for further discussion and examples of awards with market conditions.

As discussed in section 3.4.4, market conditions are treated differently than performance and service vesting conditions. That is, ASC 718-10-30-14 requires market conditions to be directly incorporated into the grant-date valuation of an award, but performance and service vesting conditions are not directly incorporated into the grant date fair-value-based measurement (although they do affect whether or not the cost of the award is recognized):

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation- Overall

Implementation Guidance and Illustrations

718-10-30-14

Some awards contain a **market condition**. The effect of a market condition is reflected in the grant-date fair value of an award. (Valuation techniques have been developed to value path-dependent options as well as other options with complex terms. Awards with market conditions, as defined in this Topic, are path-dependent options.) Compensation cost thus is recognized for an award with a market condition provided that the good is delivered or the service is rendered, regardless of when, if ever, the market condition is satisfied.

While the FASB used the term “path-dependent *options*” when discussing awards with market conditions, this concept applies whether the award is an option or share that vests based on the achievement of a specified share price or share return.

To value awards with market conditions, entities must use models such as a lattice model or a Monte Carlo simulation model because different share price paths or share price realizations result in different values for the award. Lattice and Monte Carlo simulation models are discussed in sections 7.2.2 and 7.2.3.

An entity can use a lattice model to perform a discounted cash flow analysis of the probability-weighted payoffs of a share-based payment assuming many possible share price paths (which are modeled based on inputs such as volatility and the risk-free interest rate). A present value payout is calculated for each share price path, which is then probability-weighted (each discrete path is weighted with an equal probability of occurrence) to derive the fair value. The Monte Carlo simulation is based on a similar discounted cash flow concept. See Appendix E for a detailed description of a lattice model.

Unlike Monte Carlo simulation models, lattice models may have recombining paths.³⁹ That is, an increase in the share price followed by a decrease gets to the same price as if the share price experienced a decrease then an increase. Thus, a lattice model produces a tree of possible prices, but it is not possible to distinguish the path taken to arrive at any of the possible prices. Monte Carlo simulations generate paths that are independent of one another rather than a lattice or tree of possible prices. Therefore, to value awards that have a path-dependent market condition (e.g., share price greater than a certain dollar amount for 20 out of 30 consecutive trading days) rather than a hurdle (e.g., share price must exceed a certain amount after three years), entities generally have to use a Monte Carlo simulation.

Illustration 6-1: Valuation of an award with a market condition

Assume that an entity issues a share to a grantee that will vest only if the share price at the end of the first year after the grant date has appreciated by at least 20%. The grant-date fair value of a share is \$100, and there are only two possible share price paths during the year (in reality, there would be many potential share price paths during a year) in which the share price at the end of the year will be either \$85 or \$125. The fair value of the award would be calculated as follows:

A	B	C	D	E = C x D
Expected price in one year	Value of award in one year	Present value of award	Probability of share price path	Probability-weighted present value
\$ 85	\$ 0	\$ 0	50%	\$ 0
125	125	119.05	50%	<u>59.52</u>
			Fair Value of Award	<u>\$ 59.52</u>

To avoid the need for a lattice model or simulation, some entities have proposed measuring the value of the award noted in the illustration above as the grant date fair value multiplied by the probability of vesting (i.e., as 50% x \$100, or \$50, in this example). However, treating the probability of vesting as though it is independent of the share price results in an estimate of fair value that is substantially lower than the fair value derived from the lattice model approach shown above.

However, it is not appropriate to multiply the probability that the market condition will be achieved by the fair value of the share on the grant date because the share price on the grant date reflects the expected value across all possible price paths, including both where the target share price will be achieved and where the share price is not achieved. The value of the award instead must consider the expected value of the share contingent on meeting the target share price, including only the paths where the target share price is achieved. Because the share price is higher in the paths where the target share price is achieved, the contingent expected value of the share is higher than the overall fair value of the share on the grant date.

³⁹ A lattice model may have non-recombining paths if term structures of volatility or interest rates are used. At a basic level, though, lattice models recombine.

Effectively, multiplying the share price by the probability that the target share price will be achieved negates some of the discount from the current grant date share price associated with share price paths in which the target is not achieved. Therefore, the fair value of an award with a market condition should be derived from within the lattice model or simulation, and not calculated outside the model.

6.3.4 Reload features

ASC 718 defines a reload feature as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Reload Feature and Reload Option

A reload feature provides for automatic grants of additional options whenever a grantee exercises previously granted options using the entity's shares, rather than cash, to satisfy the exercise price. At the time of exercise using shares, the grantee is automatically granted a new option, called a reload option, for the shares used to exercise the previous option.

ASC 718 provides the following guidance on accounting for options with reload features:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-23

The fair value of each award of equity instruments, including an award of options with a reload feature (reload options), shall be measured separately based on its terms and the share price and other pertinent factors at the grant date. The effect of a reload feature in the terms of an award shall not be included in estimating the grant-date fair value of the award. Rather, a subsequent grant of reload options pursuant to that provision shall be accounted for as a separate award when the reload options are granted.

While reload features should not be incorporated into the fair value of an award, those features can indirectly affect the fair value of an option by influencing grantee-exercise behavior. Options granted upon the triggering of the reload feature are measured at fair value on the date the reload options are granted (i.e., on the date the number of shares and the exercise price of the reload options are determined) and recognized over the requisite service period of the reload grant. See section 7.4.3 for a discussion of reload features.

6.3.5 Certain contingent features (e.g., clawbacks)

Certain contingent features that provide for the return of shares or options in specific circumstances also are excluded from the valuation of a share-based payment.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-24

A contingent feature of an award that might cause a grantee to return to the entity either equity instruments earned or realized gains from the sale of equity instruments earned for consideration that is less than fair value on the date of transfer (including no consideration), such as a clawback feature (see paragraph 718-10-55-8), shall not be reflected in estimating the grant-date fair value of an equity instrument.

Compensation – Stock Compensation – Awards Classified as Equity***Subsequent Measurement*****718-20-35-2**

A contingent feature of an **award** that might cause a grantee to return to the entity either equity instruments earned or realized gains from the sale of equity instruments earned for consideration that is less than fair value on the date of transfer (including no consideration), such as a clawback feature (see paragraph 718-10-55-8), shall be accounted for if and when the contingent event occurs. [...]

Compensation – Stock Compensation – Overall***Implementation Guidance and Illustrations*****718-10-55-8**

[...] A clawback feature can take various forms but often functions as a noncompete mechanism. For example, an employee that terminates the employment relationship and begins to work for a competitor is required to transfer to the issuing entity (former employer) equity shares granted and earned in a share-based payment transaction.

The accounting for clawback and similar features is discussed in section 3.5.2.

6.4 Valuing nonvested shares**6.4.1 Definition of nonvested shares**

ASC 718 defines nonvested shares as follows:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall*****Glossary*****718-10-20*****Nonvested Shares***

Shares that an entity has not yet issued because the agreed-upon consideration, such as the delivery of specified goods or services and any other conditions necessary to earn the right to benefit from the instruments, has not yet been satisfied. Nonvested shares cannot be sold. The restriction on sale of nonvested shares is due to the forfeitability of the shares if specified events occur (or do not occur).

In practice, nonvested shares are typically referred to as “restricted shares,” but ASC 718-10-30-18 defines “restricted shares” as shares whose sale is contractually or governmentally prohibited after the shares are vested and fully outstanding (see section 6.4.3).

6.4.2 Share awards with vesting conditions

ASC 718-10-30-17 states that a “nonvested equity share or nonvested equity share unit shall be measured at its fair value as if it were vested and issued on the grant date.” That is, the fact that the share is not earned until vested and is not transferable during the vesting period does not affect the valuation of nonvested shares, as discussed in section 6.3.1.

6.4.3 Share awards with post-vesting restrictions

ASC 718-10-30-19 clarifies that a “restricted share awarded to a grantee, that is, a share that will be restricted after the grantee has a vested right to it, shall be measured at its fair value, which is the same amount for which a similarly restricted share would be issued to third parties.” As discussed in section 6.4.1, ASC 718-10-20 defines a restricted share as “a share for which sale is contractually or governmentally *prohibited* for a specified period of time.” [Emphasis added.] The valuation of such shares is discussed in section 6.3.2.1.

6.4.4 Share awards that do not pay dividends during the vesting period

Grantees may receive grants of nonvested shares on which they do not receive dividends during the vesting period. As discussed in paragraph B93 of the Basis for Conclusions of Statement 123(R), because the value of a share includes the value of expected dividends on the share, the value of a share that does not participate in dividends during the vesting period is less than that of a share that fully participates in dividends. Therefore, if a grantee does not receive dividends declared on shares until the shares vest, the grant-date fair value of the award is measured by reducing the share price at that date by the present value of the dividends expected to be paid on the shares during vesting period, discounted at the appropriate risk-free interest rate.⁴⁰

6.4.5 Valuing awards – nonpublic entities

One of the key accounting and auditing issues in many IPO transactions is the valuation of share-based payments (including options) issued as compensation while the entity was nonpublic (often referred to as “cheap stock” because the value of the underlying share at the grant date is less than the IPO price). The SEC staff generally presumes that the IPO price is the best evidence of fair value at the time of the offering. We expect the SEC staff to be skeptical of valuations occurring during the 12 months before the offering that conclude that the fair value of securities was significantly less than the anticipated IPO price.

The SEC staff has urged entities to make their share-based payment disclosures more concise and focused on the judgments made by management in determining fair value. Notwithstanding this view, the SEC staff asks registrants to support their valuations of underlying awards, especially when the fair value of an entity’s pre-IPO common shares is significantly lower than the expected IPO price.

The AICPA Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, (the Guide) includes a framework for valuation specialists, preparers of financial statements and independent auditors for estimating and auditing the fair value of share-based payments issued by nonpublic entities. While the Guide is non-authoritative, it includes best practices in the views of the AICPA staff and the AICPA’s Equity Securities Task Force. The Guide includes an overview of the valuation process for the share-based payments of a nonpublic entity, including the factors to be considered and various approaches for determining fair value. It further recommends that entities make extensive disclosures in IPO registration statements regarding their determination of the fair value of share-based payments. Those disclosures are specified in chapter 14 of the Guide and pertain to both the financial statements and management’s discussion and analysis (MD&A). The Guide also provides examples of disclosures.

⁴⁰ Paragraph B93 of the Basis for Conclusions of Statement 123(R) states “the fair value of a share of stock in concept equals the present value of the expected future cash flows to the stockholder, which includes dividends. Therefore, additional compensation does not arise from dividends on nonvested shares that eventually vest. Because the measure of compensation cost for those shares is their fair value at the grant date, recognizing dividends on nonvested shares as additional compensation would effectively double-count those dividends. For the same reason, if employees do not receive dividends declared on the class of shares granted to them until the shares vest, the grant-date fair value of the award is measured by reducing the share price at that date by the present value of the dividends expected to be paid on the shares before vesting, discounted at the appropriate risk-free interest rate.”

We recommend that nonpublic entities contemplating an IPO consider the Guide when valuing share-based payments. Further, we urge any entity filing an IPO registration statement to make the disclosures recommended by the Guide. Compliance with the Guide will not insulate an entity from SEC staff questions regarding the valuation of pre-IPO share-based payments. The SEC staff will likely challenge both the appropriateness of the valuation methodology in the circumstances and the underlying assumptions used to value pre-IPO share-based payments. However, the Guide includes a framework that, when appropriately interpreted and applied, should yield a credible valuation to which the SEC staff ultimately will not object.

The SEC staff states in its Financial Reporting Manual that entities should disclose the following information about share-based payments in an IPO filing:

- ▶ The methods used to determine the fair value of the entity's shares and the nature of material assumptions used in determining the fair value
- ▶ The extent to which such estimates are highly complex and subjective, and the fact that estimates won't be necessary for new awards once the shares begin trading

Based on this guidance, entities should focus on describing the methodology and judgments they use and the extent to which the estimates are complex and subjective. That is, they do not need to quantify each assumption or explain how the assumptions changed over time, though this information should be maintained in an entity's internal documentation.

The Financial Reporting Manual also states that while the SEC staff may issue comments to understand unusual valuations, the staff will not expect expanded MD&A disclosures on underlying events and business developments that affected such valuations.

Observable market prices for shares of nonpublic entities may be available. For example, entities may sell their shares around the same time that they grant share-based payments. Grantees may also sell shares to investors directly or through secondary markets. When these transactions occur, an entity should carefully evaluate whether the sales prices represent the fair value of the shares.

However, in most cases, observable market prices for shares of nonpublic entities are not available. As a result, the fair value of shares must be determined by reference to the fair value of the underlying business determined using a market approach (e.g., a market-multiple analysis) or an income approach (e.g., a discounted-cash-flow analysis). We would expect the fair value measurement of the entity's equity value to be consistent with the principles of ASC 820.

The Guide recommends that nonpublic entities obtain contemporaneous valuations from independent valuation specialists to determine the fair value of securities issued as compensation. The Guide asserts that a contemporaneous valuation by an independent party is more objective and provides more persuasive evidence of fair value than a retrospective valuation or one that is performed by a related party (e.g., a director, officer, investor, employee, the investment firm underwriting an IPO). The Guide also includes a framework for evaluating observed transactions in a nonpublic entity's shares (including secondary market transactions). In the absence of an independent contemporaneous valuation, the Guide recommends that the entity provide more extensive disclosures in its IPO registration statement about the milestones that occurred between the date the securities were issued and the date on which their fair value was determined.

The Guide also discusses the IPO process and its effects on enterprise value, specifically how the IPO often significantly reduces the entity's cost of capital. An entity's cost of capital inversely affects enterprise value (i.e., a reduced cost of capital increases the fair value of the enterprise and the fair value of its shares). Accordingly, the fair value of a newly public entity may be significantly higher than its value immediately before the IPO. Other factors that affect valuation include the entity's stage of development, whether significant milestones have been reached, the presence of other classes of equity and the likelihood of the IPO occurring.

All relevant evidence should be considered in estimating the fair value of a nonpublic entity and its shares, and the methodology for the valuation and the nature of the underlying assumptions should be clearly documented. Ultimately, the entity, not the valuation specialist, is responsible for the reasonableness of the estimate of fair value used to record the cost of share-based payments in its financial statements. The valuation should not be biased in favor of a particular amount or result. Rather, all evidence, both positive and negative, should be considered. A contemporaneous valuation is less likely than a retrospective valuation to be biased by hindsight knowledge of events and results that would have had to be predicted in determining fair value as of the grant date.

6.5 Options and share appreciation rights

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-7

The fair value of an equity **share option** or similar instrument shall be measured based on the observable market price of an option with the same or similar terms and conditions, if one is available (see paragraph 718-10-55-10).

718-10-30-8

Such market prices for equity share options and similar instruments granted in share-based payment transactions are frequently not available; however, they may become so in the future.

718-10-30-9

As such, the fair value of an equity share option or similar instrument shall be estimated using a valuation technique such as an option-pricing model. For this purpose, a similar instrument is one whose fair value differs from its intrinsic value, that is, an instrument that has **time value**. For example, a share appreciation right that requires net settlement in equity shares has time value; an equity share does not. Paragraphs 718-10-55-4 through 55-47 provide additional guidance on estimating the fair value of equity instruments, including the factors to be taken into account in estimating the fair value of equity share options or similar instruments as described in paragraphs 718-10-55-21 through 55-22.

Under ASC 718, entities are required to use option-pricing models to estimate the fair value of options and SARs in the absence of market prices for similar or identical instruments. Section 7 discusses in detail the use of option-pricing models.

6.6 Change in valuation methodology

ASC 718 provides the following guidance on changes in valuation methods and assumptions:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-27

Assumptions used to estimate the fair value of equity and liability instruments granted in share-based payment transactions shall be determined in a consistent manner from period to period. For example, an entity might use the closing share price or the share price at another specified time as the current share price on the grant date in estimating fair value, but whichever method is selected, it shall be used consistently. The valuation technique an entity selects to estimate fair value for a particular type of instrument also shall be used consistently and shall not be changed unless a different valuation technique is expected to produce a better estimate of fair value. A change in either the valuation technique or the method of determining appropriate assumptions used in a valuation technique is a change in accounting estimate for purposes of applying Topic 250, and shall be applied prospectively to new awards.

We expect that changes in estimates and methodologies for the valuation of share-based payments will be infrequent. However, such changes may occur for options and similar instruments. See section 7.2.3.2 for discussion on changing option-pricing models and input assumptions.

7 Valuations using option-pricing models (updated June 2019)

7.1 Valuation of options

The fair value of an option comprises two basic components: intrinsic value and time value. Intrinsic value is the difference between the exercise price of the option and the market value of the underlying shares. Time value reflects the potential for future gain if the share price rises during the period the option is outstanding.

When valuing options in accordance with ASC 718, entities must consider the unique characteristics of options that are issued as share-based payments. These characteristics (e.g., post-vesting transferability features, nonhedgeability features), which are not often present in options that are traded in the marketplace, must be incorporated into the valuation of options that are issued as share-based payments. Accordingly, references to “ASC 718 options” throughout this chapter reflect the requirement that all substantive characteristics of the instrument be considered when valuing options in accordance with ASC 718.

As discussed in section 6.1, the objective in estimating the fair value of a share-based payment is to estimate the amount at which the award could be bought or sold in a current transaction between willing parties. Like other fair value guidance in US GAAP, ASC 718-10-55-10 states, “Observable market prices of identical or similar equity or liability instruments in active markets are the best evidence of fair value and, if available, should be used as the basis for the measurement of equity and liability instruments awarded in a share-based payment transaction.” While fair value may be readily determinable for awards of shares, the FASB acknowledged that market quotes are not available for long-term, nontransferable options, generally issued in exchange for employee services and that may also be issued to goods and service providers, because these instruments generally are not traded. Absent the availability of such market quotes, the FASB believes that the fair value of an option issued under ASC 718 must be estimated using an option-pricing model.

When the FASB originally deliberated Statement 123(R), market prices of ASC 718 options or similar instruments were generally not available. However, the FASB recognized that they could become available in the future. We are aware of certain entities and investment banks that have explored creating markets for ASC 718 options. However, due in part to the challenges involved in creating instruments similar to ASC 718 options that (1) exclude the risk of forfeiture during the requisite service period from their valuation, (2) incorporate the risk of term truncation due to post-vesting termination and early exercise and (3) cannot be transferred, at this time, we are not aware of any such markets⁴¹ that have developed.

⁴¹ In 2006, Zions Bancorporation created a new type of security, Employee Stock Option Appreciation Rights Securities (ESOARS), designed to help companies establish the market value of their ASC 718 options. Given the challenges in creating a robust market for such securities, however, this approach did not gain traction.

7.2 Use of option-pricing models

ASC 718 does not prescribe the use of a specific option-pricing model. Instead, the following guidance regarding the selection of a valuation technique for share-based payments is provided:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-11

If observable market prices of identical or similar equity or liability instruments of the entity are not available, the fair value of equity and liability instruments awarded to grantees shall be estimated by using a valuation technique that meets all of the following criteria:

- a. It is applied in a manner consistent with the fair value measurement objective and the other requirements of this Topic.
- b. It is based on established principles of financial economic theory and generally applied in that field (see paragraph 718-10-55-16). Established principles of financial economic theory represent fundamental propositions that form the basis of modern corporate finance (for example, the **time value** of money and risk-neutral valuation).
- c. It reflects all substantive characteristics of the instrument (except for those explicitly excluded by this Topic, such as vesting conditions and reload features).

That is, the fair values of equity and liability instruments granted in a share-based payment transaction shall be estimated by applying a valuation technique that would be used in determining an amount at which instruments with the same characteristics (except for those explicitly excluded by this Topic) would be exchanged.

Additionally, ASC 718 requires that an option-pricing model take into account the following six inputs, at a minimum:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-21

If an observable market price is not available for a share option or similar instrument with the same or similar terms and conditions, an entity shall estimate the fair value of that instrument using a valuation technique or model that meets the requirements in paragraph 718-10-55-11 and takes into account, at a minimum, all of the following:

- a. The exercise price of the option.
- b. The expected term of the option. This should take into account both the contractual term of the option and the effects of grantees' expected exercise and postvesting termination behavior. In a closed-form model, the expected term is an assumption used in (or input to) the model, while in a lattice model, the expected term is an output of the model (see paragraphs 718-10-55-29 through 55-34, which provide further explanation of the expected term in the context of a lattice model).
- c. The current price of the underlying share.

- d. The expected volatility of the price of the underlying share for the expected term of the option.
- e. The expected dividends on the underlying share for the expected term of the option (except as provided in paragraphs 718-10-55-44 through 55-45).
- f. The risk-free interest rate(s) for the expected term of the option.

718-10-55-22

The term expected in (b); (d); (e); and (f) in paragraph 718-10-55-21 relates to expectations at the **measurement date** about the future evolution of the factor that is used as an assumption in a valuation model. The term is not necessarily used in the same sense as in the term *expected future cash flows* that appears elsewhere in the Codification. The phrase *expected term of the option* in (d); (e); and (f) in paragraph 718-10-55-21 applies to both closed-form models and lattice models (as well as all other valuation techniques). However, if an entity uses a lattice model (or other similar valuation technique, for instance, a Monte Carlo simulation technique) that has been modified to take into account an option's contractual term and grantees' expected exercise and postvesting termination behavior, then (d); (e); and (f) in paragraph 718-10-55-21 apply to the contractual term of the option.

See section 7.3 for a discussion of each of these inputs. The directional effect of changes in each of these inputs is described in the following table:

An increase in the ...	Results in a fair value estimate that is ...
1. Price of the underlying share	Higher
2. Exercise price of the option	Lower
3. Expected volatility of the shares	Higher
4. Expected dividends on the shares	Lower
5. Risk-free interest rate	Higher
6. Expected term of the option	Higher

The characteristics described in ASC 718-10-55-11 are the minimum characteristics that must be considered in selecting a valuation technique to be used for ASC 718 options. ASC 718-10-55-14 clarifies that "a share-based payment award could contain other characteristics, such as a market condition, that should be included in a fair value estimate. Judgment is required to identify an award's substantive characteristics and, as described in paragraphs 718-10-55-15 through 55-20, to select a valuation technique that incorporates those characteristics."

Based on the above guidance, the FASB indicated that several valuation techniques, when appropriately applied, will meet the requirements of ASC 718, including the Black-Scholes-Merton formula, lattice models (including binomial and trinomial models) and Monte Carlo simulations, which are used by finance professionals to value various types of options and can be tailored to address the substantive terms of most ASC 718 options. The FASB also indicated that other models could meet these requirements. However, much of the guidance in ASC 718 is focused on the use of lattice models and the Black-Scholes-Merton formula:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-16

A **lattice model** (for example, a binomial model) and a **closed-form model** (for example, the Black-Scholes-Merton formula) are among the valuation techniques that meet the criteria required by this Topic for estimating the fair values of share options and similar instruments granted in share-based

payment transactions. A Monte Carlo simulation technique is another type of valuation technique that satisfies the requirements in paragraph 718-10-55-11. Other valuation techniques not mentioned in this Topic also may satisfy the requirements in that paragraph. Those valuation techniques or models, sometimes referred to as option-pricing models, are based on established principles of financial economic theory. Those techniques are used by valuation professionals, dealers of derivative instruments, and others to estimate the fair values of options and similar instruments related to equity securities, currencies, interest rates, and commodities. Those techniques are used to establish trade prices for derivative instruments and to establish values in adjudications. As discussed in paragraphs 718-10-55-21 through 55-50, both lattice models and closed-form models can be adjusted to account for the substantive characteristics of share options and similar instruments granted in share-based payment transactions.

The following sections discuss the two most common models used to value ASC 718 options, the Black-Scholes-Merton formula and a lattice model. ASC 718 does not state a preference for any particular option-pricing model. However, the FASB indicates that in many circumstances a lattice model (or Monte Carlo simulations based on a lattice approach) will provide a better estimate of the fair value of many ASC 718 options because of the flexibility of the approach. The flexibility of the lattice model is discussed in greater detail in the following sections and is illustrated in Appendix E.

While the use of option-pricing models that involve complex calculations might suggest that the resulting fair value estimates are precise, the estimates depend on the assumptions utilized, and the use of different, reasonable assumptions will produce different estimates of fair value. In addition, fair value estimates reflect the conditions that exist on the measurement date, but the actual future payoff for the options will almost certainly differ from this estimate.

Preparers have raised concerns that their fair value estimates could be challenged by regulators or plaintiffs if actual results differ materially from their estimates. In SAB Topic 14, the SEC staff provides additional guidance on the valuation of ASC 718 options, noting that there is a range of reasonable conduct in estimating fair value:

Excerpt from SAB Topic 14

The staff recognizes that there is a range of conduct that a reasonable issuer might use to make estimates and valuations and otherwise implement FASB ASC Topic 718, and the interpretive guidance provided by this SAB, particularly during the period of the Statement's initial implementation. Thus, throughout this SAB the use of the terms "reasonable" and "reasonably" is not meant to imply a single conclusion or methodology, but to encompass the full range of potential conduct, conclusions or methodologies upon which an issuer may reasonably base its valuation decisions. Different conduct, conclusions or methodologies by different issuers in a given situation does not of itself raise an inference that any of those issuers is acting unreasonably. **While the zone of reasonable conduct is not unlimited, the staff expects that it will be rare when there is only one acceptable choice in estimating the fair value of share-based payment arrangements under the provisions of FASB ASC Topic 718 and the interpretive guidance provided by this SAB in any given situation.** In addition, as discussed in the Interpretive Response to Question 1 of Section C, Valuation Methods, estimates of fair value are not intended to predict actual future events, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made under FASB ASC Topic 718. Over time, as issuers and accountants gain more experience in applying FASB ASC Topic 718 and the guidance provided in this SAB, the staff anticipates that particular approaches may begin to emerge as best practices and that the range of reasonable conduct, conclusions and methodologies will likely narrow. [Emphasis added.]

We still expect the SEC staff to challenge any valuation assumptions that result in an outcome that does not appear to fall within a reasonable range. However, because preparers and auditors have more experience with option-pricing models, more data has become available, and best practices have emerged, that reasonable range has likely narrowed.

SAB Topic 14 also provides the following guidance to clarify that variations between the grant-date estimate of the fair value of an option and the intrinsic value on exercise of that option are not indicators that the grant-date valuation contained an error:

Excerpt from SAB Topic 14.C

Question 1: If a valuation technique or model is used to estimate fair value, to what extent will the staff consider a company's estimates of fair value to be materially misleading because the estimates of fair value do not correspond to the value ultimately realized by the employees who received the share options?

Interpretive Response: The staff understands that estimates of fair value of employee share options, while derived from expected value calculations, cannot predict actual future events.²⁴ The estimate of fair value represents the measurement of the cost of the employee services to the company. The estimate of fair value should reflect the assumptions marketplace participants would use in determining how much to pay for an instrument on the date of the measurement (generally the grant date for equity awards). For example, valuation techniques used in estimating the fair value of employee share options may consider information about a large number of possible share price paths, while, of course, only one share price path will ultimately emerge. If a company makes a good faith fair value estimate in accordance with the provisions of FASB ASC Topic 718 in a way that is designed to take into account the assumptions that underlie the instrument's value that marketplace participants would reasonably make, then subsequent future events that affect the instrument's value do not provide meaningful information about the quality of the original fair value estimate. As long as the share options were originally so measured, changes in an employee share option's value, no matter how significant, subsequent to its grant date do not call into question the reasonableness of the grant date fair value estimate. [Footnote 24 omitted]

SAB Topic 14 also provides guidance regarding the level of expertise required of the individuals involved in estimating the fair value of an option. As discussed in the following sections, while using a Black-Scholes-Merton formula to estimate the value of an ASC 718 option is computationally easier than using a lattice or simulation approach, determining the appropriate input assumptions to be used in any option-pricing model requires a sufficient understanding of option-pricing theory and the requirements of ASC 718.

Excerpt from SAB Topic 14.C

Question 4: Must every company that issues share options or similar instruments hire an outside third party to assist in determining the fair value of the share options?

Interpretive response: No. However, the valuation of a company's share options or similar instruments should be performed by a person with the requisite expertise.

We believe that the level of requisite expertise will vary based on the complexity of the awards and the type of option-pricing models used. We do not believe that it would be necessary in all circumstances for the individuals involved in the valuation of ASC 718 options to have specific professional certifications or academic credentials. However, they must have a sufficient understanding of option-pricing theory and the requirements of ASC 718 and SAB Topic 14 to be able to appropriately select and apply option-pricing models. As the options or models used increase in complexity, the likelihood that the individuals involved would be required to have specific academic backgrounds or professional certifications will increase.

7.2.1 Overview of the Black-Scholes-Merton formula

ASC 718-10-20 describes a closed-form model as a “valuation model that uses an equation to produce an estimated fair value.” The Black-Scholes-Merton formula is an example of a closed-form model. The formula is as follows:

$$c = S e^{-qT} N(d_1) - K e^{-rT} N(d_2)$$

where

$$d_1 = \frac{\ln(S/K) + (r - q + \sigma^2/2)T}{\sigma\sqrt{T}}$$

$$d_2 = d_1 - \sigma\sqrt{T}$$

c =	price of a written call
S =	price of the underlying share
N =	the cumulative probability distribution function for a standardized normal distribution
q =	dividend yield
K =	call option exercise price
ln =	natural logarithm
r =	the continuously compounded risk-free rate
σ =	annualized volatility of the underlying share
T =	time to expiration (in years)
e =	a mathematical constant, the base of the natural logarithm (2.718282...), and “ln” is the natural logarithm of the indicated value

While the Black-Scholes-Merton formula is complex, the application of the formula in practice is relatively straightforward. The formula can be programmed into a spreadsheet, and numerous programs and calculators exist that calculate the fair value of an option using the Black-Scholes-Merton formula.

As a result, the formula is used widely by finance professionals to value a large variety of options. However, the characteristics of certain of the required assumptions makes the Black-Scholes-Merton formula better suited to valuing short-term, exchange-traded options than options granted under ASC 718. Some of the factors to consider when using the Black-Scholes-Merton to value ASC 718 options are:

- ▶ **Long term to expiration** – ASC 718 options often have a 10-year contractual term, which is far longer than the term for most traded options. The longest term traded options (long-term equity anticipation securities (LEAPS)) typically have lives of up to two years.
- ▶ **Nontransferable** – ASC 718 options generally are not transferable, and, therefore, the grantee may exercise the option early in order to monetize their award. For an option where the underlying shares do not pay dividends, early exercise is suboptimal, forgoing the time value corresponding to the remaining contractual term in favor of receiving the intrinsic value at the exercise date. ASC 718 requires the use of an “expected term” in place of the contractual term to reflect the possibility of early exercise. For options issued to nonemployees, which may be nontransferable, ASC 718 permits the use of the expected term or the contractual term on an award-by-award basis (see section 7.3.2).
- ▶ **Subject to vesting provisions** – ASC 718 options often cannot be exercised prior to the satisfaction of service or performance conditions. Vesting provisions, therefore, affect the valuation of ASC 718 options because they affect the expected term of the options by, among other things, establishing a minimum expected term.

- ▶ **Subject to term truncation** – The term of an employee option often is truncated on termination of employment (e.g., a vested option may be exercisable for only 90 days after termination). Provisions regarding term truncation, therefore, will affect estimates of the expected term of the option. The term of nonemployee options may also be truncated upon termination of services or other events. For options issued to nonemployees, ASC 718 allows the use of the expected term or the contractual term on an award-by-award basis (see section 7.3.2).
- ▶ **Subject to blackout periods** – In some cases, certain grantees may be prohibited from selling shares, including shares obtained from option exercise, during a specified period around the release of earnings information. These provisions would eliminate the possibility of option exercise during a blackout period. Blackout periods are not readily incorporated into a valuation using the Black-Scholes-Merton formula but, as discussed below, can be incorporated into a lattice valuation. While the application of the Black-Scholes-Merton formula is relatively straightforward, many of the complicating factors associated with the valuation of ASC 718 options cannot be incorporated into it and, therefore, must be derived outside of the formula. The development of appropriate assumptions for use in the Black-Scholes-Merton formula is discussed in section 7.3.

7.2.2

Overview of lattice models

ASC 718 provides the following definition of a lattice model:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Lattice Model

A model that produces an estimated fair value based on the assumed changes in prices of a financial instrument over successive periods of time. The binomial model is an example of a lattice model. In each time period, the model assumes that at least two price movements are possible. The lattice represents the evolution of the value of either a financial instrument or a market variable for the purpose of valuing a financial instrument. In this context, a lattice model is based on risk-neutral valuation and a contingent claims framework. See Closed-Form Model for an explanation of the terms risk-neutral valuation and contingent claims framework.

A lattice model is a framework for calculating the fair value of an option using a “lattice” describing the distribution of possible future share prices, capturing the payoff of the option upon exercise and calculating the probability-weighted present value of that payoff. A lattice model is a flexible framework for valuation that can more explicitly capture the effect of early exercise behavior on the valuation of ASC 718 options.

Valuing ASC 718 options using closed-form option pricing models, such as the Black-Scholes Merton formula, requires modifying the assumptions to capture the ways that these options differ from transferrable options (e.g., specifying an expected term for the option rather than the contractual term to address the expected early exercise behavior across the pool of option holders). Because of the limitations of closed-form models, ASC 718 indicates that the use of a more complex lattice model (e.g., a binomial model) that takes into account grantee exercise patterns based on changes in an entity’s share price and other relevant variables and allows for other dynamic input assumptions often may result in a better estimate of fair value.

To create a lattice model, a tree, whose branches represent alternative future share price paths, is created based on expected volatilities and yields (interest rates and dividends) over the contractual term of the option. Those share price paths are then used to calculate the fair value of the option, essentially calculating the present value of the probability weighted future intrinsic values in a risk-neutral framework. This present value calculation is complicated by assumptions regarding early exercise behavior, which results in the truncation of a specific share price path, using the intrinsic value at that date (rather than contractual maturity) to calculate the present value at the grant date. Essentially, the lattice model is a probability-weighted discounted cash flow analysis with a very large number of possible outcomes. Appendix E includes a more detailed discussion of lattice models and includes examples of how a simple lattice model can be built.

The concepts that underpin lattice models and the Black-Scholes-Merton formula are the same,⁴² but the key difference between a lattice model and a closed-form model is the flexibility of the former. For example, as illustrated in Appendix E, a lattice model can explicitly use dynamic assumptions regarding the term structure of volatility, dividend yields and interest rates. Further, a lattice model can incorporate assumptions about how the likelihood of early exercise of an option may increase as the intrinsic value of that option increases or how grantees may have a high propensity to exercise ASC 718 options with significant intrinsic value shortly after vesting.

In addition, a lattice model can incorporate market conditions that may be part of an ASC 718 option's design, such as a provision that an option is exercisable only if the underlying share price achieves a certain level (see section 3.4.4 for a discussion on market conditions).

7.2.2.1 Implementing lattice models

The FASB has concluded that lattice models are based on established principles of financial economic theory and provide a reasonable estimate of the value of an ASC 718 option. However, the effort involved in performing the calculations can be significant.

Entities likely will have to collect and analyze significant amounts of grantee exercise data to attempt to identify factors that explain early exercise behavior. Additionally, the use of varying interest rates, volatilities and dividends over the term of the option adds considerable complexity. As a practical matter, we believe many entities will not have the ability to develop the assumptions and perform the complex calculations required by the lattice model without the assistance of valuation experts or the use of appropriate software solutions.

7.2.3 Selecting an option-pricing model

As previously indicated, ASC 718 does not prescribe the use of a specific option-pricing model to value options.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-17

This Topic does not specify a preference for a particular valuation technique or model in estimating the fair values of share options and similar instruments granted in share-based payment transactions. Rather, this Topic requires the use of a valuation technique or model that meets the measurement objective in paragraph 718-10-30-6 and the requirements in paragraph 718-10-55-11. The selection of an appropriate valuation technique or model will depend on the substantive characteristics of the

⁴² The valuations obtained using the Black-Scholes-Merton formula and a lattice model will be approximately the same if the same assumptions (e.g., constant volatility, constant dividend yields, constant risk-free rate, the same expected term) are used.

instrument being valued. Because an entity may grant different types of instruments, each with its own unique set of substantive characteristics, an entity may use a different valuation technique for each different type of instrument. The appropriate valuation technique or model selected to estimate the fair value of an instrument with a market condition must take into account the effect of that market condition. The designs of some techniques and models better reflect the substantive characteristics of a particular share option or similar instrument granted in share-based payment transactions. Paragraphs 718-10-55-18 through 55-20 discuss certain factors that an entity should consider in selecting a valuation technique or model for its share options or similar instruments.

718-10-55-18

The Black-Scholes-Merton formula assumes that option exercises occur at the end of an option's contractual term, and that expected volatility, expected dividends, and risk-free interest rates are constant over the option's term. If used to estimate the fair value of instruments in the scope of this Topic, the Black-Scholes-Merton formula must be adjusted to take account of certain characteristics of share options and similar instruments that are not consistent with the model's assumptions (for example, exercising before the end of the option's contractual term when estimating expected term). Because of the nature of the formula, those adjustments take the form of weighted-average assumptions about those characteristics. In contrast, a lattice model can be designed to accommodate dynamic assumptions of expected volatility and dividends over the option's contractual term, and estimates of expected option exercise patterns during the option's contractual term, including the effect of **blackout periods**. Therefore, the design of a lattice model more fully reflects the substantive characteristics of particular share options or similar instruments. Nevertheless, both a lattice model and the Black-Scholes-Merton formula, as well as other valuation techniques that meet the requirements in paragraph 718-10-55-11, can provide a fair value estimate that is consistent with the measurement objective and fair-value-based method of this Topic.

718-10-55-19

Regardless of the valuation technique or model selected, an entity shall develop reasonable and supportable estimates for each assumption used in the model, including the share option or similar instrument's expected term, taking into account both the contractual term of the option and the effects of grantees' expected exercise and postvesting termination behavior. The term supportable is used in its general sense: capable of being maintained, confirmed, or made good; defensible. An application is supportable if it is based on reasonable arguments that consider the substantive characteristics of the instruments being valued and other relevant facts and circumstances.

For many instruments, closed-form models, lattice models and Monte Carlo simulations will produce similar values as long as the assumptions are appropriately developed and the models are applied correctly. The choice of model will be driven by the terms and conditions of the award (e.g., market conditions).

Some of the factors to consider in determining which option-pricing model to use to value ASC 718 options are described below.⁴³ In many cases, no single factor will provide compelling evidence that the use of a particular option-pricing model is more appropriate in the circumstances. Rather, all factors that are relevant to the valuation, including those described below, should be considered.

- ▶ **Contractual term of the option** – The shorter the contractual term of the option, the less likely the estimate will benefit from a lattice or simulation model's ability to model dynamic exercise behavior.

⁴³ While the following discussion focuses on the use of the Black-Scholes-Merton formula vs. a lattice model, it generally applies equally to the use of any closed-form, option-pricing model vs. the use of any dynamic approach like a lattice or Monte Carlo simulation.

- ▶ **Exercise provisions** – Some awards – e.g., share appreciation rights – may specify that the award can be exercised or settled only on a specified date (i.e., the option is a European option). In that case, using a lattice model to dynamically model exercise behavior is of no benefit. On the other hand, if the option can be exercised over a long period (i.e., can be exercised any time between vesting and expiration and that period is long), using a lattice or simulation model may allow for a better measurement of early exercise behavior.
- ▶ **Past changes in share prices** – In determining an expected term for use in a Black-Scholes-Merton formula, many entities consider the average time to exercise/cancellation for previously granted ASC 718 options. However, if the entity's share price has been in a prolonged period of increase or decline, those periods may not be indicative of future exercise behavior. Because the prior trend in share price may or may not continue into the future, it may be necessary to use an approach that permits more dynamic modeling of expected exercise behavior, such as a lattice or simulation model.
- ▶ **Other factors that affect exercise behavior** – In some circumstances, grantee exercise behavior may be highly correlated to the amount of intrinsic value of the ASC 718 option (moneyness). In that case, a lattice or simulation model's ability to incorporate exercise behavior based on the moneyness of an option is an advantage. Alternatively, if grantee exercise behavior is primarily correlated to time (e.g., executives tend to hold options to maturity while less senior employees tend to exercise options shortly after vesting), using a lattice or simulation model may be of limited benefit.
- ▶ **Market conditions** – In many cases, it will not be practicable to modify the Black-Scholes-Merton formula to accommodate the effect of a market condition. For example, as discussed in Question 2 of SAB Topic 14.C (see excerpt below), the Black-Scholes-Merton formula cannot easily be modified to value an option that becomes exercisable only when the share price exceeds a specified premium over the exercise price. Accordingly, in most cases a lattice or simulation model must be used to value an award with market conditions.
- ▶ **Slope of interest rates and volatilities** – If short-term and long-term interest rate and volatility curves are flat, the ability to incorporate varying interest rates and volatilities into a lattice model may be of limited benefit. Conversely, if the slope of these curves is steep, the benefits of a lattice model may be significant.
- ▶ **Dividend policy** – For entities that pay dividends, especially if the dividend yield is high, if the share price appreciates so that an option is in-the-money, it may be optimal for the holder of the option to exercise early in order to participate in the dividends. Because the Black-Scholes-Merton formula assumes that the option will be exercised at a single point in time, it does not capture this. In addition, since the Black-Scholes-Merton formula requires the use of a single dividend yield over the expected term of the option, it is more difficult to appropriately capture anticipated changes in dividend policies in the Black-Scholes-Merton formula than in a lattice or simulation model.
- ▶ **Availability of information** – In some cases, the information to develop dynamic assumptions used in a lattice model may not be available. For example, if few of its grantees have exercised options, an entity may not have the information it needs to identify robust relationships between exercise behavior and other factors, such as intrinsic value and time. If the information an entity needs to develop a detailed model of early exercise behavior is not available, it may be more appropriate for an entity to use a Black-Scholes-Merton formula. In that circumstance, it may be appropriate to consider external data or use the SEC staff's "simplified" method to estimate expected term (see section 7.3.2.2.1). Additionally, nonpublic entities may use a practical expedient to estimate the expected term for certain share-based payment awards (see section 7.3.2.2.2).

- ▶ **Classification of the award** – Equity-classified awards generally are measured on the grant date and are not remeasured. However, liability-classified awards must be remeasured until settlement. Thus, for liability-classified awards, the compensation cost ultimately recognized is the same regardless of the valuation approach (i.e., the final compensation cost recognized will be the intrinsic value that the grantee realizes from exercising the option on the settlement date). Therefore, any potential measurement error in estimating time value at interim periods will have no effect on the compensation cost ultimately recognized. As a result, an entity may conclude that the complexity of using a lattice or simulation model would outweigh any potential financial reporting benefits for liability-classified awards.
- ▶ **Materiality** – In some circumstances, the aggregate estimated value of options granted is relatively small, such that any likely difference in the estimate due to the choice of the valuation method would not be material to the financial statements for any periods affected. In those circumstances, an entity may conclude that the incremental costs of using a lattice model outweigh any potential financial reporting benefits.

The SEC staff has also provided the following interpretive guidance with respect to the selection of option-pricing models. While the SEC staff indicated that in some circumstances use of a lattice or simulation model might be required (consistent with the discussion above), the SEC staff makes clear that the use of a Black-Scholes-Merton formula is acceptable as long as the formula can be appropriately adapted to the terms of the option. In most cases, for typical employee options with a fixed exercise price and fixed service-based vesting, we would expect that the use of a Black-Scholes-Merton formula, *with appropriately derived assumptions* (see section 7.3), would meet the requirements of ASC 718 and SAB Topic 14.

Excerpt from SAB Topic 14.C

Question 2: In order to meet the fair value measurement objective in FASB ASC Topic 718, are certain valuation techniques preferred over others?

Interpretive response: FASB ASC paragraph 718-10-55-17 clarifies that the Topic does not specify a preference for a particular valuation technique or model. As stated in FASB ASC paragraph 718-10-55-17, in order to meet the fair value measurement objective, a company should select a valuation technique or model that (a) is applied in a manner consistent with the fair value measurement objective and other requirements of FASB ASC Topic 718, (b) is based on established principles of financial economic theory and generally applied in that field and (c) reflects all substantive characteristics of the instrument.

The chosen valuation technique or model must meet all three of the requirements stated above. In valuing a particular instrument, certain techniques or models may meet the first and second criteria but may not meet the third criterion because the techniques or models are not designed to reflect certain characteristics contained in the instrument. For example, for a share option in which the exercisability is conditional on a specified increase in the price of the underlying shares, the Black-Scholes-Merton closed-form model would not generally be an appropriate valuation model because, while it meets both the first and second criteria, it is not designed to take into account that type of market condition.²⁵

Further, the staff understands that a company may consider multiple techniques or models that meet the fair value measurement objective before making its selection as to the appropriate technique or model. The staff would not object to a company's choice of a technique or model as long as the technique or model meets the fair value measurement objective. For example, a company is not required to use a lattice model simply because that model was the most complex of the models the company considered. [Footnote 25 omitted]

7.2.3.1 Use of different option-pricing models for ASC 718 options with substantively different terms

An entity may conclude that a particular option-pricing model is appropriate for some ASC 718 options (or similar awards) but not others.

For example, an entity may grant two types of share-based payments: (1) cash-settled SARs that vest after three years of service and must be settled at the end of the third year and (2) options that vest ratably over four years and expire in 10 years. The entity may conclude that a lattice model will provide a better estimate of fair value for the 10-year options because of the long period between vesting and expiration, differences between short-term and long-term volatilities and interest rates, and because it believes its grantee's exercise behavior is highly correlated with the intrinsic value of the options.

On the other hand, because the SARs have a shorter term and grantees are unable to exercise early, the entity may reasonably conclude that the Black-Scholes-Merton formula is a reasonable methodology for valuing the cash-settled SARs. Accordingly, the entity may decide to value its 10-year options using a lattice model and its cash-settled SARs using a Black-Scholes-Merton formula. We believe that such an approach is consistent with the requirements of ASC 718.

7.2.3.2 Changing option-pricing models or input assumptions

ASC 718 provides the following guidance on changing option-pricing models:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-20

An entity shall change the valuation technique it uses to estimate fair value if it concludes that a different technique is likely to result in a better estimate of fair value (see paragraph 718-10-55-27). For example, an entity that uses a closed-form model might conclude, when information becomes available, that a lattice model or another valuation technique would provide a fair value estimate that better achieves the fair value measurement objective and, therefore, change the valuation technique it uses.

718-10-55-27

Assumptions used to estimate the fair value of equity and liability instruments granted in share-based payment transactions shall be determined in a consistent manner from period to period. For example, an entity might use the closing share price or the share price at another specified time as the current share price on the grant date in estimating fair value, but whichever method is selected, it shall be used consistently. The valuation technique an entity selects to estimate fair value for a particular type of instrument also shall be used consistently and shall not be changed unless a different valuation technique is expected to produce a better estimate of fair value. A change in either the valuation technique or the method of determining appropriate assumptions used in a valuation technique is a change in accounting estimate for purposes of applying Topic 250, and shall be applied prospectively to new awards.

ASC 718 specifies that the valuation technique an entity uses to estimate fair value for a particular type of award should be used consistently and should not be changed unless a different valuation technique is expected to produce a better estimate of fair value. Accordingly, we believe that a change in option-valuation technique from a Black-Scholes-Merton formula to a lattice model generally would provide a better estimate and be an acceptable change, but it would be highly unlikely that a change from a lattice model to a Black-Scholes-Merton formula would result in a better estimate.

The guidance on changes in valuation techniques also applies to the method of determining option-pricing model input assumptions. For example, if an entity changes its approach to estimating expected volatility from one that relies on a calculation primarily based on historical share-price movements to one that incorporates the implied volatilities of exchange-traded options, we believe it must be expected that the change will produce a better estimate.

ASC 718 states that a change in either the valuation technique or the method of determining the appropriate assumptions for a valuation technique is a change in accounting estimate for purposes of applying ASC 250, and should be applied prospectively to new awards (unless, of course, the previous valuations were materially in error, in which case the requirements in ASC 250 for correcting errors must be applied). If the effect of the change in estimate is material, an entity must provide the disclosures required by ASC 250, including the nature of the change and, if practicable, the effect of the change on income from continuing operations, net income and related per-share amounts of the current period as required by ASC 250-10-50-4 (e.g., by disclosing what the difference in the estimate of fair value would have been if the entity had used the prior methodology as well as the amounts by which current-year expense would have differed). If a change in estimate does not have a material effect in the period of change but is reasonably certain to have a material effect in later periods, a description of that change in estimate is disclosed when the financial statements in the period of change are presented.

The SEC staff also has provided the following guidance regarding changes in valuation techniques:

Excerpt from SAB Topic 14.C

Question 3: In subsequent periods, may a company change the valuation technique or model chosen to value instruments with similar characteristics?²⁶

Interpretive response: As long as the new technique or model meets the fair value measurement objective in FASB ASC Topic 718 as described in Question 2 above, the staff would not object to a company changing its valuation technique or model.²⁷ A change in the valuation technique or model used to meet the fair value measurement objective would not be considered a change in accounting principle. As such, a company would not be required to file a preferability letter from its independent accountants as described in Rule 10-01(b)(6) of Regulation S-X when it changes valuation techniques or models.²⁸ However, the staff would not expect that a company would frequently switch between valuation techniques or models, particularly in circumstances where there was no significant variation in the form of share-based payments being valued. Disclosure in the footnotes of the basis for any change in technique or model would be appropriate.²⁹ [Footnotes 26, 28 and 29 omitted]

²⁷ The staff believes that a company should take into account the reason for the change in technique or model in determining whether the new technique or model meets the fair value measurement objective. For example, changing a technique or model from period to period for the sole purpose of lowering the fair value estimate of a share option would not meet the fair value measurement objective of the Topic.

We believe judgment must be used to determine whether a change in valuation techniques or model represents a true change in an entity's methodology for determining the assumption (e.g., changing from estimates based on historical realized volatility to one based on implied volatilities) or a refinement to the methodology that might not require disclosure as a change in accounting estimate (e.g., if the entity begins to add the implied volatilities of longer-term options that recently began to trade to the implied volatilities of shorter-term options used previously). However, in all cases, we believe that a change in methodology is appropriate only when the entity believes that the change will produce a better estimate of fair value.

In addition to the disclosures required by ASC 250 for changes in estimates, public entities should consider whether additional disclosure is required in the MD&A to the extent that the change in estimate has a material effect on the entity's results of operations (see section 13.5).

7.3 Selecting option-pricing model input assumptions

As discussed in section 7.2, option-pricing models must consider at least six inputs. The exercise price of the option is objectively determinable. Generally, the underlying share price for public entities also is objectively determinable. However, for public entities there are different approaches to determine the share price on the valuation date. For example, an entity may choose to use the opening share price, the closing share price or the average share price during the day. We believe that any of these approaches are acceptable if they are applied consistently in estimating the fair value of all share-based payments (see section 7.3.3). Nonpublic entities may have to estimate the fair value of their shares on the valuation date using the Guide.

The remaining assumptions are subjective and generally require significant analysis to develop.

ASC 718 provides the following guidance regarding the selection of valuation assumptions:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-13

In applying a valuation technique, the assumptions used shall be consistent with the fair value measurement objective. That is, assumptions shall reflect information that is (or would be) available to form the basis for an amount at which the instruments being valued would be exchanged. In estimating fair value, the assumptions used shall not represent the biases of a particular party. Some of those assumptions will be based on or determined from external data. Other assumptions, such as the employees' expected exercise behavior, may be derived from the entity's own historical experience with share-based payment arrangements.

7.3.1 Considerations for selecting input assumptions

7.3.1.1 Fair value should incorporate all substantive characteristics

In addition to the minimum set of input assumptions that must be incorporated into an option-pricing model, ASC 718 requires other substantive characteristics to be incorporated into the valuation:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-14

The fair value of any equity or liability instrument depends on its substantive characteristics. Paragraphs 718-10-55-21 through 55-22 list the minimum set of substantive characteristics of instruments with option (or option-like) features that shall be considered in estimating those instruments' fair value. However, a share-based payment award could contain other characteristics, such as a **market condition**, that should be included in a fair value estimate. Judgment is required to identify an award's substantive characteristics and, as described in paragraphs 718-10-55-15 through 55-20, to select a valuation technique that incorporates those characteristics.

However, certain characteristics of share-based payments are specifically required to be excluded from the valuation of an ASC 718 option:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-8

Reload features and contingent features that require a grantee to transfer equity shares earned, or realized gains from the sale of equity instruments earned, to the issuing entity for consideration that is less than fair value on the date of transfer (including no consideration), such as a clawback feature, shall not be reflected in the grant-date fair value of an equity award. Those features are accounted for if and when a reload grant or contingent event occurs. [...]

The accounting for reloads and clawbacks is discussed in section 3.5. However, it is important to note that while those features are not directly incorporated into the valuation of a share-based payment, they can affect the valuation of an ASC 718 option based on their effect on grantee exercise behavior.

For example, a reload feature typically requires an entity to grant additional at-the-money options equal to the number of “mature” shares tendered to satisfy the exercise price of an option. If an option contains a reload feature, the grantee can exercise an option and still benefit from future share price increases on a portion of the shares previously subject to the option (equal to the number of shares tendered to satisfy the exercise price). Accordingly, if all other relevant factors are the same, options with reload features tend to be exercised earlier than options without reload features. The tendency toward earlier exercise should be factored into the expected term of an option that contains reloads, which may result in a shorter expected term and a lower grant-date fair value of the option.

We believe that the FASB’s prohibition on incorporating reload features into the value of an ASC 718 option is not intended to preclude an entity from considering the effect of potential reloads on grantee exercise behavior assumptions any more than it would preclude an entity from considering the effect on grantee exercise behavior of other factors that are not a feature of the award (e.g., a grantee’s need for liquidity or desire to diversify).

7.3.1.2

Using historical information to develop option-pricing assumptions

ASC 718 provides the following guidance on how historical experience should be incorporated into the development of the assumptions used in an option-pricing model:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-24

Historical experience is generally the starting point for developing expectations about the future. Expectations based on historical experience shall be modified to reflect ways in which currently available information indicates that the future is reasonably expected to differ from the past. The appropriate weight to place on historical experience is a matter of judgment, based on relevant facts and circumstances. For example, an entity with two distinctly different lines of business of approximately equal size may dispose of the one that was significantly less volatile and generated more cash than the other. In that situation, the entity might place relatively little weight on volatility, dividends, and perhaps grantees’ exercise and postvesting termination behavior from the predisposition (or disposition) period in developing reasonable expectations about the future. In contrast, an entity that has not undergone such a restructuring might place heavier weight on historical experience. That entity might conclude, based on

its analysis of information available at the time of measurement, that its historical experience provides a reasonable estimate of expected volatility, dividends, and grantees' exercise and postvesting termination behavior. This guidance is not intended to suggest either that historical volatility is the only indicator of expected volatility or that an entity must identify a specific event in order to place less weight on historical experience. Expected volatility is an expectation of volatility over the expected term of an option or similar instrument; that expectation shall consider all relevant factors in paragraph 718-10-55-37, including possible mean reversion. Paragraphs 718-10-55-35 through 55-41 provide further guidance on estimating expected volatility.

718-10-55-25

In certain circumstances, historical information may not be available. For example, an entity whose common stock has only recently become publicly traded may have little, if any, historical information on the volatility of its own shares. That entity might base expectations about future volatility on the average volatilities of similar entities for an appropriate period following their going public. A **nonpublic entity** will need to exercise judgment in selecting a method to estimate expected volatility and might do so by basing its expected volatility on the average volatilities of otherwise similar public entities. For purposes of identifying otherwise similar entities, an entity would likely consider characteristics such as industry, stage of life cycle, size, and financial leverage. Because of the effects of diversification that are present in an industry sector index, the volatility of an index should not be substituted for the average of volatilities of otherwise similar entities in a fair value measurement.

We believe entities should carefully evaluate their historical experience when estimating the fair value of options under ASC 718. We do not believe that the FASB's discussion of using historical information as a starting point to develop option-pricing assumptions is meant to preclude an entity from using current, market-based information. For example, if an entity has actively traded options from which it can derive a measure of implied volatility, it may appropriately conclude that this implied volatility measure represents a market participant's expectations of its future share volatility and, therefore, is more useful in estimating expected volatility than its historical realized volatility. The consideration of implied volatility data is discussed in greater detail in section 7.3.3.2.

7.3.1.3

Consistency of assumptions from period to period

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-27

Assumptions used to estimate the fair value of equity and liability instruments granted in share-based payment transactions shall be determined in a consistent manner from period to period. For example, an entity might use the closing share price or the share price at another specified time as the current share price on the grant date in estimating fair value, but whichever method is selected, it shall be used consistently. The valuation technique an entity selects to estimate fair value for a particular type of instrument also shall be used consistently and shall not be changed unless a different valuation technique is expected to produce a better estimate of fair value. A change in either the valuation technique or the method of determining appropriate assumptions used in a valuation technique is a change in accounting estimate for purposes of applying Topic 250, and shall be applied prospectively to new awards.

ASC 718-10-55-27 does not preclude an entity from changing assumptions from period to period when circumstances have changed or a refinement of the methodology used to develop assumptions is warranted, if the changes are believed to provide a better estimate of fair value. Changes in estimates due to changes in option-pricing models and input assumptions are discussed further in section 7.2.3.2.

7.3.1.4 Range of reasonable assumptions

ASC 718 provides the following guidance to help entities determine an input assumption when there is a range of reasonable estimates and no amount in the range is more or less likely to be a better estimate than any other amount:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-23

There is likely to be a range of reasonable estimates for expected volatility, dividends, and term of the option. If no amount within the range is more or less likely than any other amount, an average of the amounts in the range (the expected value) shall be used. In a lattice model, the assumptions used are to be determined for a particular node (or multiple nodes during a particular time period) of the lattice and not over multiple periods, unless such application is supportable.

7.3.2 Term of the option

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-10

To satisfy the measurement objective in paragraph 718-10-30-6, the restrictions and conditions inherent in equity instruments awarded are treated differently depending on whether they continue in effect after the **requisite service period** or the nonemployee's vesting period. A **restriction** that continues in effect after an entity has issued awards, such as the inability to transfer vested equity share options to third parties or the inability to sell vested shares for a period of time, is considered in estimating the fair value of the instruments at the grant date. For equity share options and similar instruments, the effect of nontransferability (and nonhedgeability, which has a similar effect) is taken into account by reflecting the effects of grantees' expected exercise and postvesting termination behavior in estimating fair value (referred to as an option's expected term).

718-10-30-10A

On an award-by-award basis, an entity may elect to use the contractual term as the expected term when estimating the fair value of a nonemployee award to satisfy the measurement objective in paragraph 718-10-30-6. Otherwise, an entity shall apply the guidance in this Topic in estimating the expected term of a nonemployee award, which may result in a term less than the contractual term of the award.

Although ASC 718 requires an entity to value awards issued to employees using an estimate of the expected term, an entity may value awards issued to nonemployees using the expected term or the contractual term.⁴⁴ The entity can make this choice on an award-by-award basis. That is, it can choose to measure one nonemployee award with the contractual term and another nonemployee award using an expected term. However, if an entity does not have a reasonable basis on which to base an estimate of the expected term for a nonemployee award and has not elected the nonpublic entity practical expedient described in section 7.3.2.2, we believe the entity should use the contractual term.

⁴⁴ Note that the full contractual term of an option should be used in an option-pricing model if the option is freely transferable because, as described in ASC 718-10-55-29, it is rarely economically advantageous to exercise such an option before the end of its contractual term.

The expected term has a significant effect on the value of the ASC 718 option. The longer the term, the more time the grantee has to allow the share price to increase, making the ASC 718 option more valuable. Further, lengthier option terms provide more opportunity for grantees to exploit market highs. Nevertheless, empirical data shows that grantees, for a variety of reasons (e.g., diversification, liquidity needs), typically do not wait until the end of the contractual term of a nontransferable option to exercise.

ASC 718 provides the following guidance and factors to consider in developing estimates of the expected term of options:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-29

The fair value of a traded (or transferable) share option is based on its contractual term because rarely is it economically advantageous to exercise, rather than sell, a transferable share option before the end of its contractual term. Employee share options generally differ from transferable share options in that employees cannot sell (or hedge) their share options – they can only exercise them; because of this, employees generally exercise their options before the end of the options' contractual term. Thus, the inability to sell or hedge an employee share option effectively reduces the option's value because exercise prior to the option's expiration terminates its remaining life and thus its remaining time value. In addition, some employee share options contain prohibitions on exercise during blackout periods. To reflect the effect of those restrictions (which may lead to exercise before the end of the option's contractual term) on employee options relative to transferable options, this Topic requires that the fair value of an employee share option or similar instrument be based on its expected term, rather than its contractual term (see paragraphs 718-10-55-5 and 718-10-55-21).

718-10-55-29A

Paragraph 718-10-30-10A states that, on an award-by-award basis, an entity may elect to use the contractual term as the expected term when estimating the fair value of a nonemployee award to satisfy the measurement objective in paragraph 718-10-30-6. Otherwise, an entity shall apply the guidance in this Topic in estimating the expected term of a nonemployee award, which may result in a term less than the contractual term of the award. If an entity does not elect to use the contractual term as the expected term, similar considerations discussed in paragraph 718-10-55-29, such as the inability to sell or hedge a nonemployee award, apply when estimating its expected term.

718-10-55-30

The expected term of an employee share option or similar instrument is the period of time for which the instrument is expected to be outstanding (that is, the period of time from the service inception date to the date of expected exercise or other expected settlement). The expected term is an assumption in a closed-form model. However, if an entity uses a lattice model that has been modified to take into account an option's contractual term and employees' expected exercise and post-vesting employment termination behavior, the expected term is estimated based on the resulting output of the lattice. For example, an entity's experience might indicate that option holders tend to exercise their options when the share price reaches 200 percent of the exercise price. If so, that entity might use a lattice model that assumes exercise of the option at each node along each share price path in a lattice at which the early exercise expectation is met, provided that the option is vested and exercisable at that point. Moreover, such a model would assume exercise at the end of the contractual term on price paths along which the exercise expectation is not met but the options are in-the-money at the end of the contractual term. The terms *at-the-money*, *in-the-money*, and *out-of-the-money* are used to describe share options whose exercise price is equal to, less than, or greater than the market price of

the underlying share, respectively. The valuation approach described recognizes that employees' exercise behavior is correlated with the price of the underlying share. Employees' expected post-vesting employment termination behavior also would be factored in. Expected term, which is a required disclosure (see paragraphs 718-10-50-2 through 50-2A), then could be estimated based on the output of the resulting lattice. An example of an acceptable method for purposes of financial statement disclosures of estimating the expected term based on the results of a lattice model is to use the lattice model's estimated fair value of a share option as an input to a closed-form model, and then to solve the closed-form model for the expected term. Other methods also are available to estimate expected term.

ASC 718-10-55-31 provides the following factors to consider when estimating the expected term of an option.

The vesting period of the award

An ASC 718 option's expected term must at least include the vesting period (or the average vesting period, for awards subject to graded vesting that are valued as a single award with a single average expected term). Because the options cannot be exercised during the vesting period, no early exercise would be assumed during the vesting period. Forfeitures during this period are recognized by reducing the number of options included in the recognition of compensation cost. Additionally, the length of time grantees hold options after they vest may vary inversely with the length of the vesting period. That is, the longer the vesting period, the more likely it is that the grantee may exercise shortly after vesting.

Grantees' historical exercise and post-vesting termination behavior for similar grants

Another factor to consider when assessing the expected term is the exercise pattern associated with prior similar ASC 718 option grants. In determining whether past grants are similar to the current grant, entities should consider all of the significant terms of the ASC 718 options (e.g., the contractual term, vesting conditions, exercise price compared to grant-date market price of the underlying shares, reload features). Usually, it will be most appropriate to analyze exercises and settlements resulting from post-vesting employment terminations separately from other early exercises.

Generally, past exercise behavior for similar awards should serve as the starting point for determining either expected exercise behavior in a lattice model or the expected life in a closed-form model. For a lattice or simulation model, that behavior should be analyzed, correlated to various factors that are believed to drive exercise behavior (e.g., the intrinsic value or moneyness of the option, the share return since the grant date, the time from vesting and time to expiration) and used in conjunction with assumptions about post-vesting forfeitures and cancellations to estimate the timing and amount of expected exercises.

For a closed-form model, past exercise behavior represents a starting point for estimating the expected life, but care should be taken to make sure that the analysis of historical exercise behavior considers all activity from the grant date to the date that all awards have been or will be settled, including options that are still outstanding or that expired out of the money at the end of the contractual term.

For example, assume ASC 718 options with a 10-year contractual term were granted five years ago and a substantial portion of those options remain outstanding on the date of the analysis. The disposition of those options that remain outstanding must be considered in assessing historical exercise behavior; however, certain software packages produce reports for purposes of expected term estimates that exclude unexercised options. Ignoring those outstanding options would result in an estimated expected term of less than five years, which would not be appropriate because that estimate excludes the remaining contractual term of the option.

The issue of outstanding options can be addressed in the analysis of exercise behavior by either (1) restricting the analysis to include only options that have reached the end of their contractual term or (2) extrapolating exercise behavior to the outstanding options. We have seen exercise behavior extrapolated to future periods using several approaches, including the following:

- ▶ Outstanding options are assumed to be exercised in equal quantities each period from the date of the analysis to contractual maturity.
- ▶ Outstanding options are assumed to be exercised at marginal rates based on exercise data available for options that have reached contractual maturity.
- ▶ Outstanding options are assumed to be exercised at contractual maturity, which generally would result in an overly conservative estimate of expected term.

For both lattice or simulation models and closed-form models, post-vesting termination patterns also affect the expected term. For example, an option may have a 10-year term, but if a grantee's employment is terminated, the grantee typically has only 90 days (or some other truncated term) to exercise the option (even if the contractual expiration of the option would be years away absent the termination). Accordingly, an entity should look at its prior termination patterns, adjust those patterns for future expectations, and incorporate those expected terminations into its estimate of expected term (in a closed-form model) or its expected exercise behavior (in a lattice model). Turnover patterns are not necessarily linear and may be a non-linear function of a variety of factors, such as:

- ▶ Grantee demographics (e.g., age, gender, tenure, position)
- ▶ Path of the share price (e.g., if options are deeply out-of-the-money, they may have little retention value and the termination rate may be higher than if the options were at- or in-the-money)
- ▶ Economic conditions and the trend of the entity's share price relative to the market

Significant changes in the underlying share price, dividend yields, terms of option plans, tax laws, volatility, termination patterns or other factors may indicate that past exercise behavior is not indicative of expected exercise behavior. Additionally, if the amount of past exercise data is limited, that data may not represent a sufficiently large sample on which to base a robust conclusion on expected exercise behavior. In that circumstance, it may be appropriate to consider external data or use the SEC staff's "simplified" method to expected term (see section 7.3.2.2.1). Additionally, nonpublic entities may use a practical expedient to estimate the expected term for certain share-based payment awards (see section 7.3.2.2.2).

The expected volatility of the shares

Generally, grantees tend to exercise ASC 718 options on higher volatility shares earlier, in part because of the greater risk that a gain in the option will be lost in the future. Because of this inverse relationship between expected term and expected volatility, the effect of a change in one assumption will be mitigated by the change in the other assumption. That is, all other things being equal, we would anticipate the expected term of an ASC 718 option to increase as expected volatility decreases, and we would anticipate that the expected term would decrease as expected volatility increases. Additionally, the evolution of the share price affects a grantee's exercise behavior (e.g., a grantee may be more likely to exercise an option shortly after it becomes in-the-money if the option had been out-of-the-money for a long period of time). Exercise behavior based on the evolution of the share price can be incorporated into a lattice or simulation model, but it is generally impracticable to do so in a closed-form model.

Blackout periods and other coexisting arrangements

Blackout periods and other coexisting arrangements that allow for exercise to automatically occur during blackout periods if certain conditions are satisfied generally cannot be incorporated into a closed-form option-pricing model, but can be incorporated into a lattice or simulation model by precluding early exercise behavior during blackout periods. However, in most cases we do not believe that incorporating blackout periods into the valuation of an ASC 718 option will have a significant effect on the valuation.

External data

ASC 718-10-55-32 suggests that in some cases it may be appropriate to use external data rather than internal grantee exercise data to estimate the expected term. We agree that this may be appropriate in some circumstances, particularly for entities that may not have sufficient historical information to develop reasonable expectations about future exercise patterns. For instance, an entity for which all outstanding grants have been out-of-the-money for a long period may simply not be able to observe any exercise behavior. Similarly, younger entities may not possess enough history to perform a reasonable analysis of past exercise behavior. In these cases, entities may have to look to the exercise history of grantees of similar entities that grant awards with similar terms (e.g., similar vesting provisions, contractual term, relationship of exercise price to grant date fair value of the underlying share) to develop expectations of exercise behavior. However, such data must be used with care because a specific entity's grantees may differ in important ways from the grantees included in external data. Accordingly, we generally believe the appropriate peer group data should be used only if (1) sufficient internal data is not available, (2) there is reason to believe that the exercise behavior of the similar entity's grantees is not unique to that entity and their grantees do not exhibit unique demographic characteristics, or (3) the use of broader external data would not be expected to materially affect the financial statements (e.g., because the period between vesting and expiration is relatively short or if reasonably possible variations in the value would not materially affect the financial statements).

While there currently is limited publicly available data about grantee exercise patterns, valuation professionals and human resource consultants may have access to relevant data. It should be noted that the use of another entity's disclosed expected term is not an appropriate substitute for an analysis of the underlying exercise data.

Aggregation by relatively homogeneous grantee groups

ASC 718-10-55-34 states that "an entity shall aggregate individual awards into relatively homogeneous groups with respect to exercise and postvesting employment termination behaviors regardless of the valuation technique or model used to estimate the fair value." Grantees' ages, lengths of service and home jurisdictions (i.e., domestic or foreign) may be factors that will be captured in historical early exercise behavior by segmenting exercise data into homogeneous groups. However, a significant change in circumstances from those that existed when previous options were granted may indicate that historical exercise behavior must be adjusted to take into account these changes.

Although ASC 718-10-55-34 requires an entity to stratify option grants among relatively homogeneous groups for valuation purposes, it does not require stratification by specific demographic groups (e.g., by pay levels), unless those demographic groups are expected to display significantly different exercise behavior. However, we often see significant differences between exercise behaviors of various demographic groups and, therefore, in most cases would expect to see such stratification.

The number of grantee groups that an entity should identify for purposes of ASC 718 option valuation is a matter of judgment based on the degree of similarity of the behavior of various groups of grantees. To the extent that exercise behavior varies significantly, an entity would generally be required to segment grantees into separate groups if the stratification would be expected to result in a materially different ASC 718 option valuation.

The SEC staff provided the following interpretive guidance that suggests that one or two groupings of employees usually would be sufficient to make a reasonable estimate of the fair value of ASC 718 options:

Excerpt from SAB Topic 14.D.2

Question 4: FASB ASC paragraph 718-10-55-34 indicates that an entity shall aggregate individual awards into relatively homogenous groups with respect to exercise and post-vesting employment termination behaviors for the purpose of determining expected term, regardless of the valuation technique or model used to estimate the fair value. How many groupings are typically considered sufficient?

Interpretive response: As it relates to employee groupings, the staff believes that an entity may generally make a reasonable fair value estimate with as few as one or two groupings.⁶⁹

⁶⁹ The staff believes the focus should be on groups of employees with significantly different expected exercise behavior. Academic research suggests two such groups might be executives and non-executives. A study by S. Huddart found executives and other senior managers to be significantly more patient in their exercise behavior than more junior employees. (Employee rank was proxied for by the number of options issued to that employee.) See S. Huddart, "Patterns of stock option exercise in the United States," in: J. Carpenter and D. Yermack, eds., *Executive Compensation and Shareholder Value: Theory and Evidence* (Kluwer, Boston, MA, 1999), pp. 115-142. See also S. Huddart and M. Lang, "Employee stock option exercises: An empirical analysis," *Journal of Accounting and Economics*, 1996, pp. 5-43.

Generally, we believe that awards to employees and nonemployees will be modeled in separate relatively homogeneous groups. However, if the terms of the awards are similar and the exercise and post-vesting behavior of the grantees are expected to be similar, it may be appropriate to include nonemployees in the same group as employees with the same characteristics (e.g., when a nonemployee performs "employee-like services").

7.3.2.1

Exercise behavior under lattice models

As discussed in section 7.3.2, a lattice model provides significant versatility in the consideration of exercise behavior. Appendix E provides illustrations of how exercise behavior can be modeled using a lattice approach. The factors to consider when modeling exercise behavior are described in section 7.3.2. Generally, past exercise behavior should serve as the starting point for determining expected exercise behavior. Past behavior should be analyzed to estimate the effect of the various factors that are believed to drive exercise behavior (e.g., the intrinsic value or moneyness of the option, the share return since the grant date, the time from vesting, the time to expiration) and used in conjunction with assumptions about post-vesting forfeitures and cancellations to estimate the timing and amount of expected exercises. However, significant changes in circumstances may indicate that past exercise behavior is not indicative of expected exercise behavior and, in those circumstances, previous exercise behavior should be adjusted to take into account the changes.

Typically, we would expect that exercises and cancellations resulting from termination would be modeled separately from voluntary early exercise behavior. The grantor would estimate expected post-vesting termination rates (as previously discussed, pre-vesting forfeitures are incorporated into compensation cost by reducing the number of awards that are recognized and do not affect the value of the award) based on historical rates, considering how those rates may be expected to change in the future, and assume early exercise, cancellation or expiration of options held by terminated employees or nonemployees who no longer provide goods or services. When analyzing past exercise behavior to determine how various factors are correlated to non-termination option exercise behavior, options exercised after or shortly before termination should be excluded from the data.

ASC 718 provides examples of the use of a lattice model in which exercise behavior is based on only two factors, terminations and the moneyness (comparison of the price of the share and the strike price) of the option, as reflected by the use of a single suboptimal exercise factor (a factor representing the value of the underlying share as a multiple of the exercise price of the option which, if achieved, results in exercise of the option). This model, typically referred to as the Hull-White model, is a widely used method due to its simplicity and the ease of estimating the suboptimal exercise factor from historical exercise data.

More complex models may capture partial exercises each period and model the effect of time. For example, lower-level employees may tend to exercise their options shortly after vesting if there is even a modest amount of intrinsic value in the options, while senior executives tend to exercise options at or near expiration. In addition, the effect of an option's moneyness on exercise behavior may change over time, such that a greater amount of moneyness is required to induce grantees to exercise early in the option's term (and forego significant time value), while less moneyness is required to induce exercise later in the term as time value is smaller (this behavior can be modeled by, for example, using suboptimal exercise factors that decline over time).

Relationships between exercise behavior and various factors can vary from entity to entity based on an entity's culture and policies for share-based payments, the age and relative wealth of grantees, and other factors. Accordingly, we believe that when developing assumptions for early exercise behavior under a lattice model, an entity should carefully consider the factors that are most highly correlated to grantee exercise behavior.

7.3.2.2

Expected term under the Black-Scholes-Merton formula

An estimate of expected term based on the types of inputs described in section 7.3.2 can also be used in a Black-Scholes-Merton formula. However, the formula requires that only a single expected term be used.

As discussed in section 7.3.2, the number of grantee groups that should be segmented for purposes of option valuation is a matter of judgment based on the degree of similarity of the behavior of the groups. To the extent that the exercise behavior is not similar, segmentation generally would be appropriate if it would be expected to result in a materially different option valuation. However, as previously discussed, the SEC staff believes that in many cases it would be unnecessary to segment employees into more than two groups.

Determining a single expected term can be challenging, particularly for entities that are looking to base their estimate on the periods their previous option grants were outstanding, which were highly dependent on the circumstances that existed during those periods.

For example, if an entity's price increased significantly during the period (e.g., as would be the case for options granted at certain entities at the beginning of a bull market), grantees would have likely exercised options very soon after vesting. Alternatively, if options were granted at the end of a bull market and the share price declined significantly after the grant date, the options would likely be exercised much later (if ever). These relationships would exist because, as discussed previously, the moneyness of an option can have a significant effect on exercise behavior. Accordingly, deriving a single expected term in these situations involves considerable judgment.

The SEC staff provided the following interpretive guidance regarding the estimate of the expected term for use in a Black-Scholes-Merton formula.

Excerpt from SAB Topic 14.D.2

Question 5: What approaches could a company use to estimate the expected term of its employee share options?

Interpretive response: A company should use an approach that is reasonable and supportable under FASB ASC Topic 718's fair value measurement objective, which establishes that assumptions and measurement techniques should be consistent with those that marketplace participants would be likely to use in determining an exchange price for the share options.⁷⁰ If, in developing its estimate of expected term, a company determines that its historical share option exercise experience is the best estimate of future exercise patterns, the staff will not object to the use of the historical share option exercise experience to estimate expected term.⁷¹

A company may also conclude that its historical share option exercise experience does not provide a reasonable basis upon which to estimate expected term. This may be the case for a variety of reasons, including, but not limited to, the life of the company and its relative stage of development, past or expected structural changes in the business, differences in terms of past equity-based share option grants,⁷² or a lack of variety of price paths that the company may have experienced.⁷³

FASB ASC Topic 718 describes other alternative sources of information that might be used in those cases when a company determines that its historical share option exercise experience does not provide a reasonable basis upon which to estimate expected term. For example, a lattice model (which by definition incorporates multiple price paths) can be used to estimate expected term as an input into a Black-Scholes-Merton closed-form model.⁷⁴ In addition, FASB ASC paragraph 718-10-55-32 states "...expected term might be estimated in some other manner, taking into account whatever relevant and supportable information is available, including industry averages and other pertinent evidence such as published academic research." For example, data about exercise patterns of employees in similar industries and/or situations as the company's might be used. While such comparative information may not be widely available at present, the staff understands that various parties, including actuaries, valuation professionals and others are gathering such data. [Footnotes 70 and 74 omitted]

⁷¹ Historical share option exercise experience encompasses data related to share option exercise, postvesting termination, and share option contractual term expiration.

⁷² For example, if a company had historically granted share options that were always in-the-money, and will grant at-the-money options prospectively, the exercise behavior related to the in-the-money options may not be sufficient as the sole basis to form the estimate of expected term for the at-the-money grants.

⁷³ For example, if a company had a history of previous equity-based share option grants and exercises only in periods in which the company's share price was rising, the exercise behavior related to those options may not be sufficient as the sole basis to form the estimate of expected term for current option grants.

Some approaches that could be used to estimate the expected term include:

Modeling or simulating exercise behavior based on a variety of share price paths

This approach is similar to the approach described above for incorporating exercise and termination behavior into a lattice model. However, the result of the modeling is used to estimate a single expected term that is then input into a closed-form model.

If this approach is used, it will differ from the approach used in a lattice model for purposes of valuing an ASC 718 option. Specifically, a lattice valuation is based on a risk-neutral framework in which all assets are assumed to return the risk-free rate, and the share price varies from that assumed upward drift based on the assumed expected volatility. This approach is appropriate for purposes of ASC 718 option valuation because the upward drift associated with the share price paths in the lattice model is equal to the discount rate used to calculate the present value of the terminal value of each price path. That is, any change from a risk-free rate for purposes of modeling share price changes would be offset by using the same rate to discount the terminal value to its present value on the measurement date.

For purposes of modeling grantee exercise behavior, a risk-neutral framework is not an appropriate assumption because when grantees decide whether to exercise an ASC 718 option they would not assume a risk-free return on a risky asset. Accordingly, when modeling exercise behavior for purposes of estimating the expected term to be used in a Black-Scholes-Merton formula, an entity can use a risk-adjusted lattice framework to project share prices and estimate expected term. Alternatively, an entity could use other risk-adjusted approaches to model share price paths (e.g., Monte Carlo simulation).

Estimating expected term based on the period that previous options were outstanding

This approach may be appropriate when an entity has significant historical data that includes a variety of different share price paths or when an entity concludes that exercise behavior is correlated primarily to time rather than share price path. However, the analysis should consider the fact that recently granted options remain outstanding and unexercised. That is, if the entity bases its expected term assumption on the average period options historically have been outstanding, it would have to demonstrate that the average is adjusted to account for the options that have only been outstanding for a short period of time and remain outstanding (i.e., their life cycle is incomplete). If no adjustment is made, those outstanding options will inappropriately reduce the average period used to estimate expected term.

One method to adjust the average historical term for recently granted options is to assume that those recently granted options will be exercised ratably from the date of the analysis (or the vesting date, if later) to the contractual term (an approach similar to the SEC staff's "simplified" method of estimating expected term is described in section 7.3.2.2.1). The entity would then include the resulting estimated terms for the outstanding options in the calculation of the average expected time to exercise. However, if based on historical patterns, this approach clearly misrepresents exercise behavior, it may be more appropriate for an entity to analyze historical exercise patterns and apply those patterns to options that remain outstanding to adjust the average. Partial life cycles are discussed in section 7.3.2.

Another approach is to apply the ratable exercise method just described to the outstanding options after applying the post-vesting forfeiture rate to the outstanding balance as of the measurement date and after applying a probability of the options expiring out-of-the-money. Under this method, details about expected forfeitures, departures and current moneyness may make the estimate of expected life more meaningful.

Estimating the expected terms based on ASC 718 options granted by other, similar companies with similarly structured awards

As discussed above, this alternative likely will be available only in limited circumstances.

Estimating expected term using the SEC staff's 'simplified' method

See section 7.3.2.2.1 for details.

Estimating expected term using the nonpublic entity practical expedient

See section 7.3.2.2.2 for details.

7.3.2.2.1

SEC staff's 'simplified' method for estimating expected term

In SAB Topic 14 Question 6, the SEC staff describes a "simplified" method to develop the estimate of the expected term of a "plain vanilla" employee share option. Under the simplified method, the expected term would be presumed to be the midpoint between the vesting date and the end of the contractual term. SAB Topic 14 states that this approach, with appropriate disclosure, can be used to develop an estimate of the expected term of a plain vanilla⁴⁵ employee option for which the value is estimated using a Black-Scholes-Merton formula.

⁴⁵ The assessment of whether an award is plain vanilla must be made at the modification date for an award that is modified. Accordingly, if the option is not at-the-money on the modification date, the SEC staff's simplified method cannot be used to estimate the fair value immediately before and after modification.

The SEC staff also noted that an entity may not be able to rely on its historical data and that alternative information, such as exercise data for employees of other entities, may not be easily obtainable. Therefore, the SEC staff accepts the use of the simplified method for estimating the expected term of plain vanilla options in certain circumstances:

Excerpt from SAB Topic 14.D.2

Facts: Company E grants equity share options to its employees that have the following basic characteristics:⁷⁵

- ▶ The share options are granted at-the-money;
- ▶ Exercisability is conditional only on performing service through the vesting date;⁷⁶
- ▶ If an employee terminates service prior to vesting, the employee would forfeit the share options;
- ▶ If an employee terminates service after vesting, the employee would have a limited time to exercise the share options (typically 30-90 days); and
- ▶ The share options are nontransferable and nonhedgeable.

Company E utilizes the Black-Scholes-Merton closed-form model for valuing its employee share options.

Question 6: As share options with these “plain-vanilla” characteristics have been granted in significant quantities by many companies in the past, is the staff aware of any “simple” methodologies that can be used to estimate expected term?

Interpretive Response: As noted above, the staff understands that an entity that is unable to rely on its historical exercise data may find that certain alternative information, such as exercise data relating to employees of other companies, is not easily obtainable. As such, some companies may encounter difficulties in making a refined estimate of expected term. Accordingly, if a company concludes that its historical share option exercise experience does not provide a reasonable basis upon which to estimate expected term, the staff will accept the following “simplified” method for “plain vanilla” options consistent with those in the fact set above: $\text{expected term} = ((\text{vesting term} + \text{original contractual term}) / 2)$.

Assuming a ten year original contractual term and graded vesting over four years (25% of the options in each grant vest annually) for the share options in the fact set described above, the resultant expected term would be 6.25 years.⁷⁷ Academic research on the exercise of options issued to executives provides some general support for outcomes that would be produced by the application of this method.⁷⁸

Examples of situations in which the staff believes that it may be appropriate to use this simplified method include the following:

- ▶ A company does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate expected term due to the limited period of time its equity shares have been publicly traded.
- ▶ A company significantly changes the terms of its share option grants or the types of employees that receive share option grants such that its historical exercise data may no longer provide a reasonable basis upon which to estimate expected term.
- ▶ A company has or expects to have significant structural changes in its business such that its historical exercise data may no longer provide a reasonable basis upon which to estimate expected term.

The staff understands that a company may have sufficient historical exercise data for some of its share option grants but not for others. In such cases, the staff will accept the use of the simplified method for only some but not all share option grants. The staff also does not believe that it is necessary for a company to consider using a lattice model before it decides that it is eligible to use this simplified method. Further, the staff will not object to the use of this simplified method in periods prior to the time a company's equity shares are traded in a public market.

If a company uses this simplified method, the company should disclose in the notes to its financial statements the use of the method, the reason why the method was used, the types of share option grants for which the method was used if the method was not used for all share option grants, and the periods for which the method was used if the method was not used in all periods. Companies that have sufficient historical share option exercise experience upon which to estimate expected term may not apply this simplified method. In addition, this simplified method is not intended to be applied as a benchmark in evaluating the appropriateness of more refined estimates of expected term.

Also, as noted above in Question 5, the staff believes that more detailed external information about exercise behavior will, over time, become readily available to companies. **As such, the staff does not expect that such a simplified method would be used for share option grants when more relevant detailed information becomes widely available.** [Emphasis added.]

⁷⁵ Employee share options with these features are sometimes referred to as "plain-vanilla" options.

⁷⁶ In this fact pattern the requisite service period equals the vesting period.

⁷⁷ Calculated as $\frac{[1 \text{ year vesting term (for the first 25\% vested)} + 2 \text{ year vesting term (for the second 25\% vested)} + 3 \text{ year vesting term (for the third 25\% vested)} + 4 \text{ year vesting term (for the last 25\% vested)}] \div 4 \text{ total years of vesting} + 10 \text{ year contractual life}}{2}$; that is, $\frac{((1+2+3+4)/4) + 10}{2} = 6.25$ years.

⁷⁸ J.N. Carpenter, "The exercise and valuation of executive stock options," *Journal of Financial Economics*, 1998, pp.127-158 studies a sample of 40 NYSE and AMEX firms over the period 1979-1994 with share option terms reasonably consistent to the terms presented in the fact set and example. The mean time to exercise after grant was 5.83 years and the median was 6.08 years. The "mean time to exercise" is shorter than expected term since the study's sample included only exercised options. Other research on executive options includes (but is not limited to) J. Carr Bettis; John M. Bizjak; and Michael L. Lemmon, "Exercise behavior, valuation, and the incentive effects of employee stock options," forthcoming in the *Journal of Financial Economics*. One of the few studies on nonexecutive employee options the staff is aware of is S. Huddart, "Patterns of stock option exercise in the United States," in: J. Carpenter and D. Yermack, eds., *Executive Compensation and Shareholder Value: Theory and Evidence* (Kluwer, Boston, MA, 1999), pp. 115-142.

7.3.2.2.2

Nonpublic entity practical expedient for estimating expected term

ASC 718 includes the following practical expedient nonpublic entities may use to estimate the expected term for certain share-based payment awards:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Initial Measurement

718-10-30-20A

For an award that meets the conditions in paragraph 718-10-30-20B, a nonpublic entity may make an entity-wide accounting policy election to estimate the expected term using the following practical expedient:

- a. If vesting is only dependent upon a service condition, a nonpublic entity shall estimate the expected term as the midpoint between the employee's requisite service period or the nonemployee's vesting period and the contractual term of the award.

- b. If vesting is dependent upon satisfying a performance condition, a nonpublic entity first would determine whether the performance condition is **probable** of being achieved.
 - 1. If the nonpublic entity concludes that the performance condition is probable of being achieved, the nonpublic entity shall estimate the expected term as the midpoint between the employee's requisite service period (a nonpublic entity shall consider the guidance in paragraphs 718-10-55-69 through 55-79 when determining the requisite service period of the award) or the nonemployee's vesting period and the contractual term.
 - 2. If the nonpublic entity concludes that the performance condition is not probable of being achieved, the nonpublic entity shall estimate the expected term as either:
 - i. The contractual term if the service period is implied (that is, the requisite service period or the nonemployee's vesting period is not explicitly stated but inferred based on the achievement of the performance condition at some undetermined point in the future)
 - ii. The midpoint between the employee's requisite service period or the nonemployee's vesting period and the contractual term if the requisite service period is stated explicitly.

Paragraph 718-10-55-50A provides implementation guidance on the practical expedient.

718-10-30-20B

A nonpublic entity that elects to apply the practical expedient in paragraph 718-10-30-20A shall apply the practical expedient to a share option or similar award that has all of the following characteristics:

- a. The share option or similar award is granted at the money.
- b. The grantee has only a limited time to exercise the award (typically 30-90 days) if the grantee no longer provides goods or terminates service after vesting.
- c. The grantee can only exercise the award. The grantee cannot sell or hedge the award.
- d. The award does not include a market condition.

A nonpublic entity that elects to apply the practical expedient in paragraph 718-10-30-20A may always elect to use the contractual term as the expected term when estimating the fair value of a nonemployee award as described in paragraph 718-10-30-10A. However, a nonpublic entity must apply the practical expedient in paragraph 718-10-30-20A for all nonemployee awards that have all the characteristics listed in this paragraph if that nonpublic entity does not elect to use the contractual term as the expected term and that nonpublic entity elects the accounting policy election to apply the practical expedient in paragraph 718-10-30-20A.

Implementation Guidance

718-10-55-50A

In accordance with paragraph 718-10-30-20A, a nonpublic entity may elect a practical expedient to estimate the expected term. For liability-classified awards, an entity would update the estimate of the expected term each reporting period until settlement. The updated estimate should reflect the loss of time value associated with the award and any change in the assessment of whether a performance condition is probable of being achieved.

ASC 718-10-30-20B lists the required criteria for an entity to use the practical expedient.⁴⁶ The expedient is not available for awards that include a market condition because such awards generally cannot be valued by an option-pricing model that uses a single-point estimate for the expected term. The expedient is based on the assumption that exercise occurs evenly over the period from vesting until an award's expiration.

When an entity elects to use the practical expedient for an award where vesting is dependent only on a service condition, an entity estimates the expected term as the midpoint between the vesting date and the contractual term. If an award includes a performance condition, an entity will assess at the grant date whether it is probable that the performance condition will be met. If it is probable that the performance condition will be met, the entity estimates the expected term as the midpoint between the requisite service period (the longer of the service or performance periods) and the contractual term. If it is not probable that the performance condition will be met and the requisite service period is an implied service period (i.e., a service period that is inferred based on when a performance condition is expected to be achieved), the entity is required to estimate the expected term as the contractual term. However, if it is not probable that the performance condition will be met and the service period is stated in the award, the entity estimates the expected term as the midpoint between the requisite service period and the contractual term.

The practical expedient in ASC 718-10-30-20A is an entity-wide policy election and applies to both employee and nonemployee awards that meet the criteria in ASC 718-10-30-20B. However, even if a nonpublic entity has elected the practical expedient, it may choose to value nonemployee options using the contractual term on an award-by-award basis (see 7.3.2).

A nonpublic entity that elects the practical expedient will also use it to determine the expected term for a liability-classified share-based payment award throughout the life of the award, if the award met the characteristics specified in ASC 718-10-30-20B when it was granted (including that it was granted at-the-money).

7.3.2.3

Expected term of awards with graded vesting

An ASC 718 option may specify multiple vesting dates, commonly referred to as graded vesting, in which specified tranches of the option vest on different dates. For example, an option grant may be subject to graded vesting over four years, in which 25% of the award vests at the end of each of the next four years. In such a circumstance, because each of the four tranches becomes exercisable on a different date, each tranche could have a different expected term. Case B of ASC 718 (paragraphs ASC 718-20-55-25 through 55-34, included in section 4.4.1.6) illustrates two methods that can be used to value an ASC 718 option subject to graded vesting:

As separate awards corresponding to each vesting tranche – ASC 718-20-55-29 illustrates the valuation of an award subject to graded vesting using a lattice model in which the exercise behavior was modeled separately for each vesting tranche, resulting in a different estimated fair value for each tranche.

As a single award with a single average expected term – ASC 718-20-55-32 states that in the example in ASC 718-20-55-29, the grantor “also could use a single weighted-average expected life to value the entire award and arrive at a different amount of total compensation cost.” While this approach may result in a less accurate estimate of value, the difference may not be significant for grantee groups that tend to hold options well beyond the vesting date. Further, it simplifies the tracking of recognized compensation cost for purposes of adjusting deferred tax assets to the actual tax benefit realized for the award.

⁴⁶ The assessment of whether an award meets the criteria in ASC 718-10-30-20B must be made at the modification date for an award that is modified. Accordingly, if the option is not at-the-money on the modification date, the practical expedient cannot be used to estimate the fair value immediately before and after modification.

7.3.3 Expected share volatility

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Volatility

A measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. The higher the volatility, the more the returns on the shares can be expected to vary – up or down. Volatility is typically expressed in annualized terms.

Much of the value of an option is derived from its potential for appreciation. The more volatile the share price, the more valuable the option because of the greater possibility of significant positive changes in share price.

Volatility is not the same as a share's "beta." Beta measures a share's price fluctuation relative to the average market fluctuation and is not the measure used in an option-pricing model. Volatility is a measure of a share price's variability over time.

Volatility is measured by the standard deviation of a statistical (or probability) distribution. The larger the standard deviation in relation to the average price level, the more variable the price. In simpler terms, an annualized volatility of 30% means that the probability that the year-end share price will be within 30% of the share price at the beginning of the year is approximately two-thirds (statistically, one standard deviation). Conversely, there is a probability of approximately one-third that the year-end share price will fall outside that range.

ASC 718 does not prescribe a method to estimate expected volatility, but ASC 718-10-55-37 describes certain factors to consider in estimating expected volatility. Entities should consider the relevant available data when estimating expected volatility, including the historical realized volatility for the entity's shares over time, or the implied volatility from the entity's traded options, or both, considering the factors described below.

7.3.3.1 Historical realized volatility

Historical realized volatility is a calculation of volatility based on historical share prices during a period of time. Historical realized volatility often is the starting point in estimating expected volatility. ASC 718 provides the following factors for entities to consider in estimating expected volatility:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-37(a)

Volatility of the share price, including changes in that volatility and possible mean reversion of that volatility. Mean reversion refers to the tendency of a financial variable, such as volatility, to revert to some long-run average level. Statistical models have been developed that take into account the mean-reverting tendency of volatility. In computing historical volatility, for example, an entity might

disregard an identifiable period of time in which its share price was extraordinarily volatile because of a failed takeover bid if a similar event is not expected to recur during the expected or contractual term. If an entity's share price was extremely volatile for an identifiable period of time, due to a general market decline, that entity might place less weight on its volatility during that period of time because of possible mean reversion. Volatility over the most recent period is generally commensurate with either of the following:

1. The contractual term of the option if a lattice model is being used to estimate fair value
2. The expected term of the option if a closed-form model is being used. An entity might evaluate changes in volatility and mean reversion over that period by dividing the contractual or expected term into regular intervals and evaluating evolution of volatility through those intervals.

7.3.3.1.1

Length of measurement period

ASC 718 indicates that historical realized volatility should be measured over a lookback period commensurate with the expected (if a closed-form model is used) or contractual (if a lattice model is used) term of an option.

As discussed below, the SEC staff believes that registrants may calculate historical realized volatility over a longer term than the expected or contractual term if the use of a longer term is expected to result in a better estimate of expected volatility. For example, it may be appropriate to use data over a longer term if volatility was unusually high for the historical period equal to the expected term and the registrant believes the high-volatility period to be an anomaly but does not have a basis to exclude that period from the calculation (see section 7.3.3.1.2). However, a period of time equal in length to the expected or contractual term generally should serve as the starting point for the estimate.

Excerpt from SAB Topic 14.D.1

2. Amount of Historical Data -

FASB ASC subparagraph 718-10-55-37(a) indicates entities should consider historical volatility over a period generally commensurate with the expected or contractual term, as applicable, of the share option. The staff believes Company B could utilize a period of historical data longer than the expected or contractual term, as applicable, if it reasonably believes the additional historical information will improve the estimate. For example, assume Company B decided to utilize a Black-Scholes-Merton closed-form model to estimate the value of the share options granted on January 2, 20X6 and determined that the expected term was six years. Company B would not be precluded from using historical data longer than six years if it concludes that data would be relevant.

7.3.3.1.2

Excluding periods from measurement of historical realized volatility

ASC 718-10-55-37(a) states that "in computing historical volatility, an entity might disregard an identifiable period of time in which its share price was extraordinarily volatile because of a failed takeover bid if a similar event is not expected to recur during the expected or contractual term." It may be reasonable to exclude the volatility from a period if both of the following conditions are met:

- ▶ The volatility resulted from an event or transaction that is specific to the entity (it often will be difficult to ascertain whether the volatility resulted from a specific event or transaction).
- ▶ The event or transaction is not reasonably expected to occur again during the contractual term (if a lattice model is used) or estimated term (if a Black-Scholes-Merton formula is used) of the option.

ASC 718-10-55-37(a) also states that “if an entity’s share price was extremely volatile for an identifiable period of time, due to a general market decline, that entity might place less weight on its volatility during that period of time because of possible mean reversion.” We believe that reducing (or, in rare circumstances, eliminating) the weighting of volatility during a specified period (e.g., the 2008 financial crisis) generally is appropriate only if it is possible to objectively determine through other volatility data that the market expects volatility in the future to revert to a mean that will differ materially from the volatility during the specified period.

For example, this might be the case if the entity has sufficient implied volatility data of its shares as described in section 7.3.3.2 (or, potentially, of guideline companies, as discussed in section 7.3.3.5) that demonstrates the market’s view of expected volatility differs significantly from the specified period of historical realized volatility. Therefore, the entity may conclude that it should rely primarily on implied volatilities in estimating expected volatility. Additionally, an entity may be able to support mean reversion by dividing the contractual or expected term into regular intervals and evaluating evolution of volatility through those intervals (as described in ASC 718-10-55-37(a)(2)) or through other econometric means.

The SEC staff provided the following guidance regarding excluding historical periods from the calculation of historical realized volatility:

Excerpt from SAB Topic 14.D.1

5. Exclusion of periods of Historical Data -

In some instances, **due to a company’s particular business situations**, a period of historical volatility data may not be relevant in evaluating expected volatility.⁴⁵ In these instances, that period should be disregarded. The staff believes that if Company B disregards a period of historical volatility, it should be prepared to support its conclusion that its historical share price during that previous period is not relevant to estimating expected volatility due to one or more discrete and specific historical events and that similar events are not expected to occur during the expected term of the share option. **The staff believes these situations would be rare.** [Footnote 45 omitted, emphasis added.]

For example, an entity that had a large merger or spin-off that fundamentally changed its risk profile might justify excluding periods of historical realized volatility because the event was related specifically to the entity and no similar events are expected to occur over the term of the options. However, the volatility of the overall stock market, for example, during the financial crisis in the late 2000s, would not be considered an entity-specific event that would justify excluding such a period from the calculation of historical realized volatility. In addition, it would not be appropriate to exclude a period of volatility relating to an entity-specific event (such as the announcement of positive or negative results from a clinical trial, the announcement of a reduction in force or loss of a major customer) if similar events might reasonably be expected to occur over the term of the options.

If an entity believes that historical realized volatility is not indicative of expected volatility, but it cannot justify excluding periods of historical realized volatility because there were not significant one-time entity-specific events that justify excluding those periods, it may place greater weight on implied volatility (and perhaps rely exclusively on implied volatility) if there is sufficient trading volume in its options and certain other criteria are met (section 7.3.3.2 discusses considerations for determining the extent to which implied volatility data can serve as the basis for the estimate of expected volatility, and section 7.3.3.7 discusses weighting the various considerations (e.g., historical realized volatility and implied volatility)).

SAB Topic 14 also clarifies that historical realized volatility may not be an appropriate indicator of expected volatility if market participants anticipate future significant changes in the entity's business:

Excerpt from SAB Topic 14.D.1

4. Consideration of Future Events -

The objective in estimating expected volatility is to ascertain the assumptions that marketplace participants would likely use in determining an exchange price for an option.⁴⁴ Accordingly, the staff believes that Company B should consider those future events that it reasonably concludes a marketplace participant would also consider in making the estimation. For example, if Company B has recently announced a merger with a company that would change its business risk in the future, then it should consider the effect of the merger in estimating the expected volatility if it reasonably believes a marketplace participant would also consider this event. [Footnote 44 omitted]

The SEC staff provided the following interpretive guidance on calculating historical realized volatility, which clarified that methods of calculating historical realized volatility that place significantly greater reliance on more recent periods than earlier periods are not appropriate:

Excerpt from SAB Topic 14.D.1

1. Method of Computing Historical Volatility -

The staff believes the method selected by Company B to compute its historical volatility should produce an estimate that is representative of Company B's expectations about its future volatility over the expected (if using a Black-Scholes-Merton closed-form model) or contractual (if using a lattice model) term³⁹ of its employee share options. **Certain methods may not be appropriate for longer term employee share options if they weight the most recent periods of Company B's historical volatility much more heavily than earlier periods.**⁴⁰ For example, a method that applies a factor to certain historical price intervals to reflect a decay or loss of relevance of that historical information emphasizes the most recent historical periods and thus would likely bias the estimate to this recent history.⁴¹ [Footnote 39 omitted, Emphasis added.]

⁴⁰ FASB ASC subparagraph 718-10-55-37(a) states that entities should consider historical volatility over a period generally commensurate with the expected or contractual term, as applicable, of the share option. Accordingly, the staff believes methods that place extreme emphasis on the most recent periods may be inconsistent with this guidance.

⁴¹ Generalized Autoregressive Conditional Heteroskedasticity (GARCH) is an example of a method that demonstrates this characteristic.

7.3.3.2

Implied volatilities

Excerpt from Accounting Standards Codification

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The implied volatility of the share price determined from the market prices of traded options or other traded financial instruments such as outstanding convertible debt, if any.

Implied volatilities generally are calculated using a Black-Scholes-Merton formula by including the trading price (i.e., the fair value of the exchange traded option) and other assumptions in the formula and solving for volatility.

When estimating expected volatility of an option, the SEC staff believes that entities may use implied volatilities to the extent that the options have terms of at least one year and have sufficient trading activity. However, if there are no traded options with over-year terms, the SEC staff believes that entities may use implied volatilities and consider other relevant information if the term of the options is at least six months. Terms of traded options typically range from as little as a month to a year or two, and in rare circumstances, up to four years.

Entities that can observe reliable trading of options on their shares should consider whether it is appropriate to place greater weight on implied volatilities than on historical realized volatilities when developing an estimate of the expected volatility. Implied volatilities of options with appropriate terms likely are better indicators of market participants' expectations about future volatility.

The SEC staff provided the following interpretive guidance to assist registrants in determining the degree of reliance to place on implied volatilities when estimating expected volatility:

Excerpt from SAB Topic 14.D.1

Question 3: What should Company B consider when evaluating the extent of its reliance on the implied volatility derived from its traded options?

Interpretive response: To achieve the objective of estimating expected volatility as stated in FASB ASC paragraphs 718-10-55-35 through 718-10-55-41, the staff believes Company B generally should consider the following in its evaluation...

1. Volume of Market Activity -

The staff believes Company B should consider the volume of trading in its underlying shares as well as the traded options. For example, prices for instruments in actively traded markets are more likely to reflect a marketplace participant's expectations regarding expected volatility.

2. Synchronization of the Variables -

Company B should synchronize the variables used to derive implied volatility. For example, to the extent reasonably practicable, Company B should use market prices (either traded prices or the average of bid and asked quotes) of the traded options and its shares measured at the same point in time. This measurement should also be synchronized with the grant of the employee share options; however, when this is not reasonably practicable, the staff believes Company B should derive implied volatility as of a point in time as close to the grant of the employee share options as reasonably practicable.

3. Similarity of the Exercise Prices -

The staff believes that when valuing an at-the-money employee share option, the implied volatility derived from at- or near-the-money traded options generally would be most relevant.⁴⁷ If, however, it is not possible to find at- or near-the- money traded options, Company B should select multiple traded options with an average exercise price close to the exercise price of the employee share option.⁴⁸

4. Similarity of Length of Terms -

The staff believes that when valuing an employee share option with a given expected or contractual term, as applicable, the implied volatility derived from a traded option with a similar term would be the most relevant. However, if there are no traded options with maturities that are similar to the share option's contractual or expected term, as applicable, then the staff believes Company B could consider traded options with a remaining maturity of six months or greater.⁴⁹ However, when using traded options with a term of less than one year,⁵⁰ the staff would expect the company to also consider other relevant information in estimating expected volatility. In general, the staff believes more reliance on the implied volatility derived from a traded option would be expected the closer the remaining term of the traded option is to the expected or contractual term, as applicable, of the employee share option.

The staff believes Company B's evaluation of the factors above should assist in determining whether the implied volatility appropriately reflects the market's expectations of future volatility and thus the extent of reliance that Company B reasonably places on the implied volatility.

⁴⁷ Implied volatilities of options differ systematically over the "moneyness" of the option. This pattern of implied volatilities across exercise prices is known as the "volatility smile" or "volatility skew." Studies such as "Implied Volatility" by Stewart Mayhew, *Financial Analysts Journal*, July-August 1995, have found that implied volatilities based on near-the-money options do as well as sophisticated weighted implied volatilities in estimating expected volatility. In addition, the staff believes that because near-the-money options are generally more actively traded, they may provide a better basis for deriving implied volatility.

⁴⁸ The staff believes a company could use a weighted-average implied volatility based on traded options that are either in-the-money or out-of-the-money. For example, if the employee share option has an exercise price of \$52, but the only traded options available have exercise prices of \$50 and \$55, then the staff believes that it is appropriate to use a weighted average based on the implied volatilities from the two traded options; for this example, a 40% weight on the implied volatility calculated from the option with an exercise price of \$55 and a 60% weight on the option with an exercise price of \$50.

⁴⁹ The staff believes it may also be appropriate to consider the entire term structure of volatility provided by traded options with a variety of remaining maturities. If a company considers the entire term structure in deriving implied volatility, the staff would expect a company to include some options in the term structure with a remaining maturity of six months or greater.

⁵⁰ The staff believes the implied volatility derived from a traded option with a term of one year or greater would typically not be significantly different from the implied volatility that would be derived from a traded option with a significantly longer term.

Some valuation professionals also consider historical implied volatilities (i.e., implied volatilities of exchange-traded options based on quoted prices over an extended period of time) in estimating expected volatility. The rationale for this approach is that current spot-implied volatilities are derived from options with a significantly shorter term than the typical ASC 718 option, and those spot-implied volatilities may not appropriately capture the tendency of implied volatility to revert to a long-term mean.

Consideration of historical implied volatilities may more appropriately capture the long-term mean-volatility, which spot implied volatility for an option with a long term to expiration might be expected to approach if such an option were observable. We understand from discussions with the SEC staff that the requirements discussed under the above heading "2. Synchronization of the Variables," were not intended to preclude such an approach to estimating expected volatility.

ASC 718 indicates that the implied volatility of convertible debt may be considered in estimating expected volatility. However, we think this approach often would not be appropriate. Our view is based on the fact that convertible debt instruments include multiple types of risk (e.g., interest rate, credit, equity) and, therefore, the volatility of the trading price of convertible debt includes volatilities associated with all of these risks. Further, because of the complex features typically found in convertible debt instruments (e.g., put options, call options, contingent interest, contingent conversion, various adjustments to the conversion price), it is difficult to bifurcate and value the embedded written call on the entity's shares for purposes of calculating the implied share price volatility as described earlier for traded options. This view appears to be consistent with the view expressed by the SEC staff, as described in footnote 37 of SAB Topic 14:

Excerpt from SAB Topic 14.D.1

The staff believes implied volatility derived from embedded options can be utilized in determining expected volatility if, in deriving the implied volatility, the company considers all relevant features of the instruments (e.g., value of the host instrument, value of the option, etc.). The staff believes the derivation of implied volatility from other than simple instruments (e.g., a simple convertible bond) can, in some cases, be impracticable due to the complexity of multiple features. [Footnote 37]

7.3.3.3 Changes in corporate structure and capital structure

Excerpt from Accounting Standards Codification

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An entity's corporate structure may affect expected volatility (see paragraph 718-10-55-24). An entity's capital structure also may affect expected volatility; for example, highly leveraged entities tend to have higher volatilities.

If the corporate or capital structure of an entity has changed significantly, historical realized volatilities prior to the change may not be representative of expected volatility, requiring a greater weighting on post-change data (see sections 7.3.3.4 and 7.3.3.7) or adjustments to the historical data to reflect the change in leverage.

7.3.3.4 Limitations on availability of historical data

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-37(c)

For a public entity, the length of time its shares have been publicly traded. If that period is shorter than the expected or contractual term of the option, the term structure of volatility for the longest period for which trading activity is available shall be more relevant.

If the length of time the entity's shares have been publicly traded is shorter than the expected or contractual term of the option, the volatility for the longest period for which trading activity is available generally should be used. However, if the period for which data is available is very short (e.g., less than two years, as discussed in SAB Topic 14.D, see section 7.3.3.5), it may not be appropriate to use the entity's historical data in estimating expected volatility and the use of historical or current data for guideline companies may be appropriate (see section 7.3.3.5).

7.3.3.5 Guideline companies

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

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718-10-55-37(c)

A newly public entity also might consider the expected volatility of similar entities. In evaluating similarity, an entity would likely consider factors such as industry, stage of life cycle, size, and financial leverage. A nonpublic entity might base its expected volatility on the expected volatilities of entities that are similar except for having publicly traded securities.

It may be appropriate for a newly public entity or nonpublic entity to use historical realized volatilities or implied volatilities of similar entities (guideline companies), if those entities are comparable in most significant respects, including industry, stage of life cycle, size and financial leverage.

For a newly public entity with at least a few months but less than two years of trading history, it is also appropriate to consider the entity's own volatility over the observable period, as an indication of how the entity's volatility compares with the selected guideline companies. For example, if the entity's volatility is 20% higher than the median volatility of the guideline companies over the lookback period matching the entity's available data (time since listing), then it might be appropriate to select a volatility that is 20% higher than the median volatility of the guideline companies over a lookback period matching the expected or contractual term of the awards.

We generally believe (as does the SEC staff, as described in the portion of SAB Topic 14 below) that in looking to guideline companies, it is more appropriate for an entity to base the estimate of expected volatility on the volatility data of individual entities rather than the volatility of an index, even if a relatively narrow industry index. Using the volatility of an index would typically not be appropriate since there is an element of diversification in any index that will reduce the volatility of that index as compared to its constituent components.

For example, if an index consisted of only two entities and an upward movement of one entity's shares is matched by an equal downward movement in the other entity's shares, the volatility for the index would be zero, even though the relative changes in the share prices of the two entities may have been significant. Accordingly, it is more appropriate to calculate the individual volatilities of the two entity's shares and weigh their respective volatilities (e.g., by averaging their volatilities or taking the median, adjusted for differences in size and leverage).

We believe that the vast majority of nonpublic entities will be able to identify appropriate guideline companies to estimate their expected volatility. Therefore, it will not be necessary or appropriate for nonpublic entities to use the "calculated value" method, which uses the historical volatility of an industry sector index (see section 7.4.2).

The SEC staff provided the following additional interpretive guidance on the use of expected volatilities of guideline companies:

Excerpt from SAB Topic 14.D.1

Facts: Company C is a newly public entity with limited historical data on the price of its publicly traded shares and no other traded financial instruments. Company C believes that it does not have sufficient company specific information regarding the volatility of its share price on which to base an estimate of expected volatility.

Question 6: What other sources of information should Company C consider in order to estimate the expected volatility of its share price?

Interpretive Response: FASB ASC Topic 718 provides guidance on estimating expected volatility for newly public and nonpublic entities that do not have company specific historical or implied volatility information available.⁵⁹ Company C may base its estimate of expected volatility on the historical, expected or implied volatility of similar entities whose share or option prices are publicly available. In making its determination as to similarity, Company C would likely consider the industry, stage of life cycle, size and financial leverage of such other entities.⁶⁰

The staff would not object to Company C looking to an industry sector index (e.g., NASDAQ Computer Index) that is representative of Company C's industry, and possibly its size, to identify one or more similar entities.⁶¹ Once Company C has identified similar entities, it would substitute a measure of the individual volatilities of the similar entities for the expected volatility of its share price as an assumption in its valuation model.⁶² Because of the effects of diversification that are present in an industry sector index, Company C should not substitute the volatility of an index for the expected volatility of its share price as an assumption in its valuation model.⁶³

After similar entities have been identified, Company C should continue to consider the volatilities of those entities unless circumstances change such that the identified entities are no longer similar to Company C. Until Company C has sufficient information available, the staff would not object to Company C basing its estimate of expected volatility on the volatility of similar entities for those periods for which it does not have sufficient information available.⁶⁴ Until Company C has either a sufficient amount of historical information regarding the volatility of its share price or other traded financial instruments are available to derive an implied volatility to support an estimate of expected volatility, it should consistently apply a process as described above to estimate expected volatility based on the volatilities of similar entities.⁶⁵ [Footnotes 59, 60, 62, 63 and 65 omitted]

⁶¹ If a company operates in a number of different industries, it could look to several industry indices. However, when considering the volatilities of multiple companies, each operating only in a single industry, the staff believes a company should take into account its own leverage, the leverages of each of the entities, and the correlation of the entities' stock returns.

⁶⁴ FASB ASC paragraph 718-10-55-37. The staff believes that at least two years of daily or weekly historical data could provide a reasonable basis on which to base an estimate of expected volatility if a company has no reason to believe that its future volatility will differ materially during the expected or contractual term, as applicable, from the volatility calculated from this past information. If the expected or contractual term, as applicable, of a share option is shorter than two years, the staff believes a company should use daily or weekly historical data for at least the length of that applicable term.

7.3.3.6

Historical data intervals

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-37(d)

If an entity considers historical volatility in estimating expected volatility, it shall use intervals that are appropriate based on the facts and circumstances and that provide the basis for a reasonable fair value estimate. For example, a publicly traded entity would likely use daily price observations, while a nonpublic entity with shares that occasionally change hands at negotiated prices might use monthly price observations.

SAB Topic 14 also provides guidance regarding the intervals to be used. The guidance in SAB Topic 14 suggests that the example discussed in ASC 718-10-55-37(d) of public entities using daily price observations may not be absolutely necessary if the entity measured historical realized volatility over a sufficient period such that a sufficient number of data points are considered.

Excerpt from SAB Topic 14.D.1

3. Frequency of Price Observations -

FASB ASC subparagraph 718-10-55-37(d) indicates an entity should use appropriate and regular intervals for price observations based on facts and circumstances that provide the basis for a reasonable fair value estimate. Accordingly, the staff believes Company B should consider the frequency of the trading of its shares and the length of its trading history in determining the appropriate frequency of price observations. The staff believes using daily, weekly or monthly price observations may provide a sufficient basis to estimate expected volatility if the history provides enough data points on which to base the estimate.⁴² Company B should select a consistent point in time within each interval when selecting data points.⁴³

⁴² Further, if shares of a company are thinly traded the staff believes the use of weekly or monthly price observations would generally be more appropriate than the use of daily price observations. The volatility calculation using daily observations for such shares could be artificially inflated due to a larger spread between the bid and asked quotes and lack of consistent trading in the market.

⁴³ FASB ASC paragraph 718-10-55-40 states that a company should establish a process for estimating expected volatility and apply that process consistently from period to period. In addition, FASB ASC paragraph 718-10-55-27 indicates that assumptions used to estimate the fair value of instruments granted to employees should be determined in a consistent manner from period to period.

Additional guidance on the appropriate intervals to measure historical realized volatility is provided in footnote 56 of SAB Topic 14 (see section 7.3.3.7.2) in which the SEC staff says that if less than three years of historical share price movements are used as the basis for the estimate of expected volatility, monthly observations would not provide a sufficient amount of data and, therefore, daily or weekly observations should be used. Further, for large capitalization entities that are actively traded, we believe it would generally be inappropriate to use any intervals other than daily price intervals to calculate historical realized volatility.

7.3.3.6.1 **Method of measuring historical realized volatility**

Most entities calculate realized historical or implied volatility based on closing share or option prices on the day of measurement, which may be done daily, weekly or monthly. If entities wish to deviate from the typical practice of measuring volatility based on closing share or option prices, they should carefully consider remarks made by an SEC staff member⁴⁷ at the 2005 AICPA National Conference on Current SEC and PCAOB Developments:

SEC staff speech excerpt

However, I do want to mention that we are aware that there are many methods available out there for companies to utilize in computing historical volatility.

When evaluating the alternative methods, we would encourage companies to keep in mind the objective as stated in Statement 123R [Topic 718] – to ascertain the assumption about expected volatility that marketplace participants would likely use in determining an exchange price for an option.³ The staff expects companies to make good faith efforts to determine an appropriate estimate of expected volatility as one of the key assumptions used in determining a reasonable fair value estimate.

We have become aware of two methods for computing historical volatility that we believe will not meet this expectation. The first method is one that weighs the most recent periods of historical volatility much more heavily than earlier periods. The second method relies solely on using the average value of the daily high and low share prices to compute volatility. While we understand that we may not be aware of all of the methods that currently exist today and that others may be developed in the future, we would like to remind companies to keep in mind the objective in Statement 123R when choosing the appropriate method. [Footnote 3 omitted]

7.3.3.7 **Weighting of items for consideration**

All of the above factors should be considered and, to the extent possible, reconciled in estimating expected volatility. However, in some cases, it may be reasonable to exclude certain factors from the analysis of expected volatility. For example, if an entity has limited trading in options and, therefore, limited implied volatility data, it may conclude that implied volatility data should not be included in the analysis to estimate expected volatility and rely primarily on historical realized volatility data. Conversely, if an entity has extensive implied volatility data, it may conclude that this data provides the best indication of the views of market participants and exclude historical realized volatility data from its analysis. However, the entity should consider all of the above factors and eliminate a factor only after careful consideration of all of the facts and circumstances.

⁴⁷ Remarks made by Alison T. Spivey, Associate Chief Accountant, Office of the Chief Accountant of the SEC staff.

The SEC staff also has provided the following interpretive guidance on how to consider the above factors in estimating expected volatility:

Excerpt from SAB Topic 14.D.1

Facts: Company B is a public entity whose common shares have been publicly traded for over twenty years. Company B also has multiple options on its shares outstanding that are traded on an exchange (“traded options”). Company B grants share options on January 2, 20X6.

Question 1: What should Company B consider when estimating expected volatility for purposes of measuring the fair value of its share options?

Interpretive response: FASB ASC Topic 718 does not specify a particular method of estimating expected volatility. However, the Statement does clarify that the objective in estimating expected volatility is to ascertain the assumption about expected volatility that marketplace participants would likely use in determining an exchange price for an option.³² FASB ASC Topic 718 provides a list of factors entities should consider in estimating expected volatility.³³ Company B may begin its process of estimating expected volatility by considering its historical volatility.³⁴ However, Company B should also then consider, based on available information, how the expected volatility of its share price may differ from historical volatility.³⁵ Implied volatility³⁶ can be useful in estimating expected volatility because it is generally reflective of both historical volatility and expectations of how future volatility will differ from historical volatility.

The staff believes that companies should make good faith efforts to identify and use sufficient information in determining whether taking historical volatility, implied volatility or a combination of both into account will result in the best estimate of expected volatility. The staff believes companies that have appropriate traded financial instruments from which they can derive an implied volatility should generally consider this measure. The extent of the ultimate reliance on implied volatility will depend on a company’s facts and circumstances; however, the staff believes that a company with actively traded options or other financial instruments with embedded options³⁷ generally could place greater (or even exclusive) reliance on implied volatility. (See the Interpretive Responses to Questions 3 and 4 below.)

The process used to gather and review available information to estimate expected volatility should be applied consistently from period to period. When circumstances indicate the availability of new or different information that would be useful in estimating expected volatility, a company should incorporate that information. [Footnotes 32, 33, 34, 35, 36 and 37 omitted.]

7.3.3.7.1

Exclusive reliance on implied volatility

The SEC staff provided the following guidance on when it would not object to exclusive reliance on implied volatilities in estimating expected volatility:

Excerpt from SAB Topic 14.D.1

Question 4: Are there situations in which it is acceptable for Company B to rely exclusively on either implied volatility or historical volatility in its estimate of expected volatility?

Interpretive response: As stated above, FASB ASC Topic 718 does not specify a method of estimating expected volatility; rather, it provides a list of factors that should be considered and requires that an entity’s estimate of expected volatility be reasonable and supportable.⁵¹ Many of the factors listed in FASB ASC Topic 718 are discussed in Questions 2 and 3 above. The objective of estimating volatility, as stated in FASB ASC Topic 718, is to ascertain the assumption about expected volatility that marketplace participants would likely use in determining a price for an option.⁵² The staff believes that a company, after considering the factors listed in FASB ASC Topic 718, could, in certain situations, reasonably conclude that exclusive reliance on either historical or implied volatility would provide an estimate of expected volatility that meets this stated objective.

The staff would not object to Company B placing exclusive reliance on implied volatility when the following factors are present, as long as the methodology is consistently applied:

- ▶ Company B utilizes a valuation model that is based upon a constant volatility assumption to value its employee share options;⁵³
- ▶ The implied volatility is derived from options that are actively traded;
- ▶ The market prices (trades or quotes) of both the traded options and underlying shares are measured at a similar point in time to each other and on a date reasonably close to the grant date of the employee share options; [As discussed at the beginning of this section, we understand that the requirement to synchronize variables was not intended by the SEC staff to preclude the use of historical realized volatilities in estimating expected volatility.]
- ▶ The traded options have exercise prices that are both (a) near-the-money and (b) close to the exercise price of the employee share options;⁵⁴ and
- ▶ The remaining maturities of the traded options on which the estimate is based are at least one year. [Footnotes 51 and 52 omitted]

⁵³ FASB ASC paragraphs 718-10-55-18 and 718-10-55-39 discuss the incorporation of a range of expected volatilities into option pricing models. The staff believes that a company that utilizes an option pricing model that incorporates a range of expected volatilities over the option's contractual term should consider the factors listed in FASB ASC Topic 718, and those discussed in the Interpretive Responses to Questions 2 and 3 above, to determine the extent of its reliance (including exclusive reliance) on the derived implied volatility.

⁵⁴ When near-the-money options are not available, the staff believes the use of a weighted-average approach, as noted in a previous footnote, may be appropriate.

The SEC staff has said it would not object to the exclusive reliance on implied volatilities to estimate expected volatility if the above criteria are met. However, we believe that there may be other circumstances in which the exclusive reliance on implied volatilities may be reasonable, and we do not believe the SEC staff intended to require that all of these conditions be met whenever expected volatility is estimated based exclusively on implied volatility (although the SEC staff may comment on the exclusive reliance on implied volatility in other circumstances and expect thorough support for the entity's conclusion).

7.3.3.7.2

Exclusive reliance on historical realized volatility

The SEC staff provided the following guidance on when it would not object to exclusive reliance on historical realized volatility in estimating expected volatility:

Excerpt from SAB Topic 14.D.1

The staff would not object to Company B placing exclusive reliance on historical volatility when the following factors are present, so long as the methodology is consistently applied:

- ▶ Company B has no reason to believe that its future volatility over the expected or contractual term, as applicable, is likely to differ from its past;⁵⁵
- ▶ The computation of historical volatility uses a simple average calculation method;
- ▶ A sequential period of historical data at least equal to the expected or contractual term of the share option, as applicable, is used; and
- ▶ A reasonably sufficient number of price observations are used, measured at a consistent point throughout the applicable historical period.⁵⁶

⁵⁵ See FASB ASC paragraph 718-10-55-38. A change in a company's business model that results in a material alteration to the company's risk profile is an example of a circumstance in which the company's future volatility would be expected to differ from its past volatility. Other examples may include, but are not limited to, the introduction of a new product that is central to a company's business model or the receipt of U.S. Food and Drug Administration approval for the sale of a new prescription drug.

⁵⁶ If the expected or contractual term, as applicable, of the employee share option is less than three years, the staff believes monthly price observations would not provide a sufficient amount of data.

Regarding the first bullet above, we believe that an entity must make a reasonable effort to identify information that would lead to a conclusion that expected volatility is likely to differ from historical realized volatility. For example, if the entity had implied volatility data that met the conditions described previously and that data suggested that expectations of future volatility differ materially from historical realized volatility, that data should not be ignored.

We also believe that there may be other circumstances in which exclusive reliance on historical realized volatility may be appropriate. For example, it may be appropriate to use historical realized volatility if the period of observation is reasonably long and better information on volatility is unavailable (e.g., there are no traded options or appropriately comparable guideline companies), even if the entity does not have historical realized volatility data for a period corresponding to the expected or contractual term of the option.

After consideration of all of the factors in section 7.3.3, an entity may conclude it should rely exclusively on historical realized volatility, even if its facts are not completely consistent with those described in the SEC's example. The fact that the SEC staff would not object to exclusive reliance on historical realized volatility in the circumstances described above does not imply that the SEC staff would object to such reliance in other circumstances, although the SEC staff would expect the entity to thoroughly support its conclusion.

7.3.3.8

Disclosures relating to estimates of expected volatility

The entity's methodology for estimating volatility must be objectively supportable. As discussed in section 7.3.3.7, any adjustments to historical observations of historical realized or implied volatility should be based on objective data that supports such an adjustment.

As discussed in section 14.2, entities must disclose the methodology used to estimate expected volatility. Additionally, entities should also consider providing a sensitivity analysis in their critical accounting policies that describes the potential effect of changes in option-pricing model inputs (e.g., expected volatility and expected term) on the measurement of compensation cost.

Excerpt from SAB Topic 14.D.1

Question 5: What disclosures would the staff expect Company B to include in its financial statements and MD&A regarding its assumption of expected volatility?

Interpretive Response: FASB ASC paragraph 718-10-50-2 prescribes the minimum information needed to achieve the Topic's disclosure objectives.⁵⁷ Under that guidance, Company B is required to disclose the expected volatility and the method used to estimate it.⁵⁸ Accordingly, the staff expects that at a minimum Company B would disclose in a footnote to its financial statements how it determined the expected volatility assumption for purposes of determining the fair value of its share options in accordance with FASB ASC Topic 718. For example, at a minimum, the staff would expect Company B to disclose whether it used only implied volatility, historical volatility, or a combination of both.

In addition, Company B should consider the applicability of SEC Release No. FR 60 and Section V, "Critical Accounting Estimates," in SEC Release No. FR-72 regarding critical accounting policies and estimates in MD&A. The staff would expect such disclosures to include an explanation of the method used to estimate the expected volatility of its share price. This explanation generally should include a discussion of the basis for the company's conclusions regarding the extent to which it used historical volatility, implied volatility or a combination of both. A company could consider summarizing its evaluation of the factors listed in Questions 2 and 3 of this section as part of these disclosures in MD&A. [Footnotes 57 and 58 omitted]

7.3.3.9 Expected volatility under lattice and simulation models

Lattice and simulation models can accommodate dynamic assumptions regarding the term structure of volatility if sufficient data is available.

Examples of dynamic assumptions regarding the term structure that affect volatility include the assumption that the implied volatility of an option depends on its term to expiration.

While a Black-Scholes-Merton formula requires the use of a single expected volatility, volatility in a lattice model is expressed as an algorithm. Essentially, a starting point must be selected based on the guidance in section 7.3.3, then changes in volatility are expressed in the algorithm. Those changes often are based on the estimated term structure of volatility or are expressed as a regression to a long-term mean volatility.

For example, an entity may have implied volatility data for options with terms ranging from one month to two years. The entity would be able to plot those implied volatility data points onto a volatility curve and derive an algorithm to fit the points on the curve (statistical tools are available for such a process). The algorithm could then be used to populate the remainder of the curve (i.e., the remaining term), and that volatility curve would be incorporated into the lattice model as discussed in Appendix E.

7.3.3.10 Expected volatility under the Black-Scholes-Merton formula

In calculating the fair value of an ASC 718 option using the Black-Scholes-Merton formula, a single expected volatility assumption must be used. That assumption should be based on the volatility expected over the expected term of the option (or contractual term if an entity elects to use it for a nonemployee award).

If expected volatility is based on historical realized volatility, the calculation of historical realized volatility should be consistent with the guidance in section 7.3.3.

While implied volatilities of traded options can be incorporated into the estimate of expected volatility, it is rare that traded options would have terms as long as the expected terms of typical ASC 718 options (or the contractual term, if an entity elects to use it for a nonemployee award). Accordingly, the SEC staff has suggested that it is appropriate to rely on implied volatilities of the entity's traded options with the longest available remaining time to maturity, with a minimum term of six months or greater.

Generally, such an estimate will be more difficult to make if the range between the high and low point of the volatility curve is great, which might suggest that it would be more appropriate to estimate the fair value of the ASC 718 option using a lattice model. Alternatively, if the entity has sufficient trading volume for options with terms of at least one year, it may be reasonable to use the implied volatilities of those options in estimating a single expected volatility for use in a closed-form model (see section 7.3.3.7.1).

7.3.4 Expected dividends

Dividends paid on the underlying shares will affect the ASC 718 option value. The higher the expected dividend yield, the lower the ASC 718 option value. Option holders generally do not have dividend rights until they exercise the option and become shareholders (although, as discussed in section 3.6, some options have "dividend protection"). All other things being equal, an option to purchase a high-dividend-yielding share is less valuable than an option to purchase a low-dividend-yielding share.

Estimating expected dividends over the expected term (or the contractual term, if an entity elects to use it for a nonemployee award) of the option requires judgment. ASC 718 provides the following guidance on estimating expected dividends:

Excerpt from Accounting Standards Codification

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Option-pricing models generally call for expected dividend yield as an assumption. However, the models may be modified to use an expected dividend amount rather than a yield. An entity may use either its expected yield or its expected payments. Additionally, an entity's historical pattern of dividend increases (or decreases) shall be considered. For example, if an entity has historically increased dividends by approximately 3 percent per year, its estimated share option value shall not be based on a fixed dividend amount throughout the share option's expected term. As with other assumptions in an option-pricing model, an entity shall use the expected dividends that would likely be reflected in an amount at which the option would be exchanged (see paragraph 718-10-55-13).

Generally, the expected dividend assumption should be based on external market participants' current expectations about an entity's anticipated dividend policy. For example, an entity that has demonstrated a stable dividend yield in past years and indicates it has no foreseeable plans to change its dividend policy may simply use its historical dividend yield to estimate the fair value of its ASC 718 options. If an entity has never paid a dividend, but has announced that it will begin paying a dividend yielding 2% of the current share price, then an expected dividend yield of 2% would likely be assumed in estimating the fair value of its ASC 718 options.

Depending on the industry, an emerging entity that never has paid dividends may reasonably be expected to begin paying dividends during the expected term of an option (or contractual term of an option if an entity elects to use it for a nonemployee award). Such an entity might consider the dividend payments of a comparable peer group in developing its expected dividend assumption, weighted to reflect the period during which dividends are expected to be paid.

However, entities should consider the implications of disclosing an expected dividend yield that differs significantly from the current dividend yield. Investors are likely to view such a change as forward-looking information about the entity's dividend plans and, accordingly, disclosure of significant changes in expected dividend yields should be discussed with the entity's counsel specializing in securities law. Further, because the expected dividend yield should reflect market participants' expectations, we do not believe the expected dividend yield should incorporate changes in dividends anticipated by management unless those changes have been communicated to or otherwise are anticipated by market participants.

7.3.4.1

Expected dividends under lattice or simulation models

Lattice or simulation models can be adapted to use an expected dividend payment rather than a yield and, therefore, also can take into account the effect of anticipated changes in dividend payments given the evolution of the underlying share price. Such approaches might better reflect expected future dividends, as dividends do not always move in lock-step with changes in the entity's share price. Expected dividend estimates in a lattice or simulation model should be determined based on the guidance in section 7.3.4.

The ability to use actual dividend payments in the valuation model rather than a dividend yield assumption is particularly useful in periods of general economic turmoil. As market prices fall, an entity's dividend payment may remain the same, because entities generally do not manage their dividend policy to a yield, but rather to a payment amount. If an ASC 718 option is valued during a time when the dividend yield is significantly higher than normalized levels, it may be more appropriate to use a model that does not require a yield assumption, but rather permits the explicit estimate of future dividend payments.

7.3.4.2 Expected dividends under the Black-Scholes-Merton formula

Closed-form option-pricing models generally call for a single expected dividend yield as an input. That input should be determined based on the guidance described in section 7.3.4. However, if significant changes in dividend policy are expected in the future, it may be more appropriate to explicitly subtract the present value of the expected dividends from the input share price used in the formula or to use a normalized dividend yield in the formula. Generally, we believe that adjusting for expected normalized dividends is appropriate when circumstances exist that suggest that current dividend yields are inappropriate or unsustainable.

If an entity uses a closed-form option-pricing model, the expected dividend yield likely is calculated as an annual yield. To calculate an ASC 718 option's value, the Black-Scholes-Merton formula uses a continuous expected dividend yield, which is the expected dividend yield that, when continuously compounded, equates to the annual effective dividend yield. As a result, the expected dividend yield must be adjusted to the continuously compounded expected dividend yield (although some option-pricing applications will make this adjustment for the user). See section 7.3.5.2 for a discussion on continuously compounded yields.

7.3.5 Risk-free interest rate

Excerpt from Accounting Standards Codification

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Option-pricing models call for the risk-free interest rate as an assumption to take into account, among other things, the time value of money. A U.S. entity issuing an option on its own shares must use as the risk-free interest rates the implied yields currently available from the U.S. Treasury zero-coupon yield curve over the contractual term of the option if the entity is using a lattice model incorporating the option's contractual term. If the entity is using a closed-form model, the risk-free interest rate is the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equal to the expected term used as the assumption in the model. For entities based in jurisdictions outside the United States, the risk-free interest rate is the implied yield currently available on zero-coupon government issues denominated in the currency of the market in which the share (or underlying share), which is the basis for the instrument awarded, primarily trades. It may be necessary to use an appropriate substitute if no such government issues exist or if circumstances indicate that the implied yield on zero-coupon government issues is not representative of a risk-free interest rate.

Determining the appropriate risk-free interest rate or rates to use in an option-pricing model generally is a straightforward process. However, certain issues can arise that require further analysis. For example, if the expected term (or contractual term if an entity elects to use it for a nonemployee award) of an ASC 718 option (or the period between nodes if a lattice model is used) does not correspond to the terms for which interest rates are quoted, it may be necessary to interpolate a rate from the available maturities. While there are more complex approaches to interpolating a rate, if the differences between the rates of the two closest maturities are not great, straight-line interpolation generally would be sufficient.

A US entity issuing an option on its own shares must use implied yields from the US Treasury zero-coupon yield curve or US Constant Maturity (CMT) curve over the expected term of the option (or contractual term for lattice or simulation models or if an entity elects to use it for a nonemployee award). To exactly match the term of the options, ASC 718 indicates that it is appropriate to use US Treasury STRIPS (zero-coupon bonds). For example, the annual interest yield is quoted daily in *The Wall Street Journal* and other relevant online sources. *The Wall Street Journal* lists that yield as the rate applicable

to a “U.S. zero-coupon STRIP.” However, we have noted that US Treasury STRIPs are traded less frequently and thus may include a spread for the relative illiquidity of these instruments. The US CMT curve is reported on the Federal Reserve website and other relevant online sources, and reflects the most robust traded activity in the US market. Since these bonds pay semi-annual coupons, however, these yields reflect a blended duration, including the interim coupon payments. In practice, the difference between the two approaches is typically small, and either approach is acceptable.

As another example, shares underlying options may trade in a country (Country A) that does not have a debt instrument that represents a risk-free asset. In those countries, it may be possible to develop a risk-free rate by adjusting the risk-free rate of another country (Country B) for the differential between the spot and forward exchange rates (i.e., the forward rate for a currency contract maturing at the end of the expected term of the option) to exchange the currency of Country B for the currency of Country A, using the following formula:

$$1 + \text{Country B risk-free rate} = (\text{forward rate/spot rate})(1 + \text{Country A risk-free rate})$$

7.3.5.1 Risk-free interest rate under lattice or simulation models

In a lattice or simulation model, the risk-free interest rate should be measured using the yield curve over the option’s contractual term. That is, at each node in the lattice model or step of the simulation, the entity would use the forward rate starting on the date of the node or time step, with a term equal to the period until the next node or time step.

For example, if a term structure of interest rates were incorporated into the lattice model shown in Exhibit E.2 in Appendix E, the interest rate used to calculate the present value at node S3,0 of the option values at nodes S4,1 and S4,0 would be the six-month forward rate starting 18 months after the option grant date. Spot treasury interest rate data can be obtained from the [US Treasury website](#) and used to calculate forward interest rates.

7.3.5.2 Risk-free interest rate under the Black-Scholes-Merton formula

If a US entity is using a closed-form model, the risk-free interest rate is the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equal to the expected term used (or the contractual term if an entity elects to use it for a nonemployee award) as the input to the model. If the term falls between two periods, the yield should be interpolated between the available yields (e.g., for a six-year expected term, the yield would be interpolated between the available five-year and seven-year yields).

To calculate an ASC 718 option’s value, the Black-Scholes-Merton formula uses a continuous interest rate that is not readily quoted and available. The continuous rate is the interest rate that, when continuously compounded, equates to the annual effective yield. For example, a 2.80% annual effective yield (which is the rate quoted in *The Wall Street Journal*) results in a continuously compounded interest rate (which would be used in an option-pricing model) of 2.76%. That is, the quoted yield must be adjusted to the continuously compounded interest rate (although some option-pricing applications will make this adjustment for the user) based on the following formula:

$$\text{Continuously compounded rate} = \ln(1 + \text{annual effective yield})$$

7.3.6 Lattice or simulation models – number of time steps and simulation paths

A lattice or simulation model requires the practitioner to select a number of time steps (i.e., how much time passes between nodes of the lattice or steps of the simulation) in implementing the model. In addition, a simulation model requires the practitioner to select the number of simulation paths. The number of time steps determines the points at which events, such as meeting a market condition threshold or early exercise, may be deemed to occur. In addition, in a lattice model, the number of time steps determines the number of ending nodes, while in a simulation model, the number of simulation

paths is chosen explicitly. Generally, the greater the number of time steps or simulation paths, the more accurate the ending value. However, as more time steps are added, the incremental increase in accuracy declines. The number of time steps or simulation paths takes on more importance when modeling events with low probabilities, for example, when options are significantly out-of-the-money.

7.3.7

Dilution

Excerpt from Accounting Standards Codification

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Traded options ordinarily are written by parties other than the entity that issues the underlying shares, and when exercised result in an exchange of already outstanding shares between those parties. In contrast, exercise of share options as part of a share-based payment transaction results in the issuance of new shares by the entity that wrote the option (the grantor), which increases the number of shares outstanding. That dilution might reduce the fair value of the underlying shares, which in turn might reduce the benefit realized from option exercise.

718-10-55-49

If the market for an entity's shares is reasonably efficient, the effect of potential dilution from the exercise of share options that are part of a share-based payment transaction will be reflected in the market price of the underlying shares, and no adjustment for potential dilution usually is needed in estimating the fair value of the grantee share options. For a public entity, an exception might be a large grant of options that the market is not expecting, and also does not believe will result in commensurate benefit to the entity. For a nonpublic entity, on the other hand, potential dilution may not be fully reflected in the share price if sufficient information about the frequency and size of the entity's grants of equity share options is not available for third parties who may exchange the entity's shares to anticipate the dilutive effect.

718-10-55-50

An entity shall consider whether the potential dilutive effect of an award of share options needs to be reflected in estimating the fair value of its options at the grant date. For public entities, the expectation is that situations in which such a separate adjustment is needed will be rare.

While ASC 718 requires adjustments for the potential dilutive effect of an award, ASC 718-10-55-49 states that the share price of public entities generally incorporates the dilutive effect of expected issuances of options. Therefore, it would be rare that any adjustment would have to be made to the fair value of an ASC 718 option for dilution.

We believe it is very unlikely that a public entity would be able to justify such an adjustment unless it makes a very large, unanticipated grant of options for which the market does not anticipate a commensurate benefit to the entity. In that circumstance, where the potential dilution is material and is not incorporated into the share price, we would expect that the announcement of the grant would cause the entity's share price to decline by a material amount. Nonpublic entities should consider whether the dilutive effect of a very large option grant is already incorporated into the estimated share price used in their option-pricing model. If that is not the case, some adjustment to the fair value may be appropriate.

7.3.8 Credit risk

Excerpt from Accounting Standards Codification

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An entity may need to consider the effect of its credit risk on the estimated fair value of liability awards that contain cash settlement features because potential cash payoffs from the awards are not independent of the entity's risk of default. Any credit-risk adjustment to the estimated fair value of awards with cash payoffs that increase with increases in the price of the underlying share is expected to be de minimis because increases in an entity's share price generally are positively associated with its ability to liquidate its liabilities. However, a credit-risk adjustment to the estimated fair value of awards with cash payoffs that increase with decreases in the price of the entity's shares may be necessary because decreases in an entity's share price generally are negatively associated with an entity's ability to liquidate its liabilities.

For typical share-based payments (including ASC 718 options, SARs or shares) the value of the award to the grantee increases as the share price increases. The FASB believes that for these instruments, the estimate of fair value generally would not need to incorporate credit risk because credit risk normally would be expected to be de minimis as the share price increases.

However, certain instruments increase in value as the grantor's share price declines (e.g., freestanding written put options and forward purchase options in which the issuer must buy back its own shares) and expose the counterparty to credit risk because they are required to or may be settled in cash. These instruments are required to be classified as liabilities under ASC 480 and ASC 718. Further, because of the nature of the payoff on these instruments, it would be appropriate to use a credit-adjusted, risk-free rate based on the issuer's credit standing, as described in Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and in ASC 410.

7.3.9 Frequency of valuation

Many entities grant options throughout the year. While they may make a single large grant once a year, entities frequently grant options at other times of the year to newly hired or promoted employees or for other purposes. The question arises whether a new estimate of fair value must be made for each separate option grant, particularly for those entities that use more complex lattice or simulation approaches to value ASC 718 options.

We generally believe that it would be appropriate to perform a valuation at the time of the largest annual grant. For other grants, it may be reasonable to use a previous valuation (expressed as a percentage of the grant date share price) to the extent that the terms of the option are the same (except that the exercise price would be similarly tied to, usually equal to, the grant date share price) and that the other inputs to the option-pricing model (e.g., expected volatility, expected term or contractual term, exercise behavior, risk-free interest rates, dividends) have not changed materially.

We typically would not expect to see significant changes in expected volatility or exercise behavior from one quarter to the next. However, if significant changes or events have occurred at the entity, or if the share price has changed significantly since the last valuation date, those expectations may have changed materially, and it will be necessary to derive a new estimate of the fair value of the ASC 718 options. Similarly, if the terms of a new grant differ materially from a previous grant, a new estimate of fair value will be required.

7.4 Valuing certain options

The following sections discuss the valuation of certain more complex awards as well as the provisions in ASC 718 regarding awards for which a reasonable estimate of fair value cannot be made.

7.4.1 Inability to estimate fair value

ASC 718-10-30-21 indicates that in certain rare circumstances an entity may be unable to reasonably estimate the fair value of a share-based payment. In the unusual circumstance that the fair value of an award cannot be reasonably estimated on the grant date, compensation cost must be measured at the instrument's intrinsic value and remeasured at each reporting date until the instrument is settled. This approach initially could result in less compensation cost than the fair value method under ASC 718, as many options and similar awards are issued with no intrinsic value, but could result in more cost over the life of the award if the share price increases significantly.

7.4.2 Use of 'calculated value' for options granted by nonpublic entities

7.4.2.1 When calculated value should be used

As discussed in section 3.2.4.1, ASC 718 allows a nonpublic entity that cannot reasonably estimate expected volatility to substitute the historical volatility of an appropriate industry sector index for the expected volatility of its shares. A nonpublic entity is required to use all other inputs required by ASC 718 in estimating the value of its options. This calculated value is described in ASC 718 as follows:

Excerpt from Accounting Standards Codification

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This Topic requires all entities to use the fair-value-based method to account for share-based payment arrangements that are classified as equity instruments. However, if it is not practicable for a nonpublic entity to estimate the expected volatility of its share price, paragraphs 718-10-30-19A through 30-20 require it to use the **calculated value** method. Alternatively, it may not be possible for a nonpublic entity to reasonably estimate the fair value of its equity share options and similar instruments at the date they are granted because the complexity of the award's terms prevents it from doing so. In that case, paragraphs 718-10-30-21 through 30-22 require that the nonpublic entity account for its equity instruments at their **intrinsic value**, remeasured at each reporting date through the date of exercise or other settlement.

718-10-55-55

For purposes of this Topic, it is not practicable for a nonpublic entity to estimate the expected volatility of its share price if it is unable to obtain sufficient historical information about past volatility, or other information such as that noted in paragraph 718-10-55-51, on which to base a reasonable and supportable estimate of expected volatility at the grant date of the award without undue cost and effort. In that situation, this Topic requires a nonpublic entity to estimate a value for its equity share options and similar instruments by substituting the historical volatility of an appropriate industry sector index for the expected volatility of its share price as an assumption in its valuation model. All other inputs to a nonpublic entity's valuation model shall be determined in accordance with the guidance in paragraphs 718-10-55-4 through 55-47.

We believe that if a nonpublic entity can identify an appropriate index of public entities from which it can derive a volatility for purposes of computing calculated value, it should generally be able to identify specific entities in the index to form the basis for an estimate of the expected volatility of its own shares. That is, we would generally expect nonpublic entities to estimate fair value rather than use a calculated value. We believe our view is consistent with the guidance in ASC 718-10-55-51:

Excerpt from Accounting Standards Codification

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718-10-55-51

Nonpublic entities may have sufficient information available on which to base a reasonable and supportable estimate of the expected volatility of their share prices. For example, a nonpublic entity that has an internal market for its shares, has private transactions in its shares, or issues new equity or convertible debt instruments may be able to consider the historical volatility, or implied volatility, of its share price in estimating expected volatility. Alternatively, a nonpublic entity that can identify similar public entities for which share or option price information is available may be able to consider the historical, expected, or implied volatility of those entities' share prices in estimating expected volatility. Similarly this information may be used to estimate the fair value of its shares or to benchmark various aspects of its performance (see paragraph 718-10-55-25).

7.4.2.2

How to determine an appropriate industry sector index

ASC 718 provides the following guidance with respect to determining an appropriate industry sector index:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-56

There are many different indexes available to consider in selecting an appropriate industry sector index. For example, Dow Jones Indexes maintain a global series of stock market indexes with industry sector splits available for many countries, including the United States. The historical values of those indexes are easily obtainable from its website. An appropriate industry sector index is one that is representative of the industry sector in which the nonpublic entity operates and that also reflects, if possible, the size of the entity. If a nonpublic entity operates in a variety of different industry sectors, then it might select a number of different industry sector indexes and weight them according to the nature of its operations; alternatively, it might select an index for the industry sector that is most representative of its operations. If a nonpublic entity operates in an industry sector in which no public entities operate, then it shall select an index for the industry sector that is most closely related to the nature of its operations. However, in no circumstances shall a nonpublic entity use a broad-based market index like the S&P 500, Russell 3000, or Dow Jones Wilshire 5000 because those indexes are sufficiently diversified as to be not representative of the industry sector, or sectors, in which the nonpublic entity operates.

7.4.2.3 Changing the industry sector index

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-57

A nonpublic entity shall use the selected index consistently, unless the nature of the entity's operations changes such that another industry sector index is more appropriate, in applying the calculated value method in both the following circumstances:

- a. For all of its equity share options or similar instruments
- b. In each accounting period.

The requirement described in ASC 718-10-55-57 regarding a change in the industry sector index used to apply the calculated value method is consistent with requirements regarding changes in methods for determining expected volatility and other assumptions (see section 7.2.3.2). Specifically, such changes are appropriate only to the extent that they provide a better estimate of fair (or calculated) value, and any change in methodology for developing the assumption should be applied prospectively and disclosed as a change in accounting estimate as required by ASC 250.

7.4.2.4 How to calculate volatility used in the calculated value

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-58

The calculation of the historical volatility of an appropriate industry sector index shall be made using the daily historical closing values of the index selected for the period of time prior to the grant date (or service inception date) of the equity share option or similar instrument that is equal in length to the expected term of the equity share option or similar instrument. If daily values are not readily available, then an entity shall use the most frequent observations available of the historical closing values of the selected index. If historical closing values of the index selected are not available for the entire expected term, then a nonpublic entity shall use the closing values for the longest period of time available. The method used shall be consistently applied (see paragraph 718-10-55-27). Example 9 (see paragraph 718-20-55-77) provides an illustration of accounting for an equity share option award granted by a nonpublic entity that uses the calculated value method.

When using the calculated value method to measure share-based payments, volatility must be calculated based on the historical volatility of an appropriate industry sector index.

This method will often result in a lower volatility than use of the average volatilities of the entities in the index. This is because the historical volatility of an index includes the effect of diversification (offsetting price movements by shares in the index). Because of these differences, the calculated value should not be described as "fair value."

7.4.2.5 Example of use of calculated value

ASC 718 provides the following example for when calculated value should be used by a nonpublic entity and how the appropriate industry sector index or indices should be determined:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-78

Entity W does not maintain an internal market for its shares, which are rarely traded privately. It has not issued any new equity or convertible debt instruments for several years and has been unable to identify any similar entities that are public. Entity W has determined that it is not practicable for it to estimate the expected volatility of its share price and, therefore, it is not possible for it to reasonably estimate the grant-date fair value of the share options. Accordingly, Entity W is required to apply the provisions of paragraph 718-10-30-20 in accounting for the share options under the **calculated value** method.

718-20-55-79

Entity W operates exclusively in the medical equipment industry. It visits the Dow Jones Indexes website and, using the Industry Classification Benchmark, reviews the various industry sector components of the Dow Jones U.S. Total Market Index. It identifies the medical equipment subsector, within the health care equipment and services sector, as the most appropriate industry sector in relation to its operations. It reviews the current components of the medical equipment index and notes that, based on the most recent assessment of its share price and its issued share capital, in terms of size it would rank among entities in the index with a small market capitalization (or small-cap entities). Entity W selects the small-cap version of the medical equipment index as an appropriate industry sector index because it considers that index to be representative of its size and the industry sector in which it operates. Entity W obtains the historical daily closing total return values of the selected index for the five years immediately before January 1, 20X6, from the Dow Jones Indexes website. It calculates the annualized historical volatility of those values to be 24 percent, based on 252 trading days per year.

7.4.3 Valuation of awards that contain reload features

Some ASC 718 options contain a reload feature. Reloads commonly are a new grant of at-the-money options in an amount equal to the number of shares tendered to satisfy the exercise price of the exercised option. ASC 718-10-30-23 requires an entity to exclude the value of a reload feature from the estimate of an award's grant date fair value. As a result, subsequent grants of options under the reload feature would be accounted for as new awards and measured on their respective grant dates (i.e., on the date the number of shares and the exercise price of the reload options are determined). See section 3.5.1 for further discussion of awards with reload features.

7.4.4 Options on restricted shares

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-5

A **restriction** that continues in effect after the entity has issued instruments to grantees, such as the inability to transfer vested equity share options to third parties or the inability to sell vested shares for a period of time, is considered in estimating the fair value of the instruments at the grant date. For instance, if shares are traded in an active market, postvesting restrictions may have little, if any, effect on the amount at which the shares being valued would be exchanged. For share options and similar instruments, the effect of nontransferability (and nonhedgeability, which has a similar effect) is taken into account by reflecting the effects of grantees' expected exercise and postvesting termination behavior in estimating fair value (referred to as an option's expected term).

718-10-55-6

In contrast, a restriction that stems from the forfeitability of instruments to which grantees have not yet earned the right, such as the inability either to exercise a nonvested equity **share option** or to sell **nonvested shares**, is not reflected in the fair value of the instruments at the grant date. Instead, those restrictions are taken into account by recognizing compensation cost only for awards for which grantees deliver the goods or render the service.

718-10-55-7

Note that performance and service conditions are vesting conditions for purposes of this Topic. Market conditions are not vesting conditions for purposes of this Topic but market conditions may affect exercisability of an **award**. Market conditions are included in the estimate of the grant-date fair value of awards (see paragraphs 718-10-55-64 through 55-66).

While not explicitly addressed in the FASB guidance above, entities sometimes grant options on restricted shares (i.e., the sale of the shares received on exercise of the option is contractually *prohibited* after exercise – see section 6.3.2.1). In order to estimate the fair value of such an ASC 718 option, an entity should use the value of the underlying restricted share as an input into the option-pricing model rather than apply a discount to the output of the option-pricing model. This guidance assumes that the restrictions on the share exceed the expected term (or contractual term, if an entity elects to use it for a nonemployee award) of the option. If the restrictions on the share expire before the expected exercise of the option (e.g., option vests in year three, restrictions expire in year five and expected option exercise is in year six), no discount should be applied to the value of the share used in the option-pricing model. In addition, consistent with the guidance on nonvested shares in section 6.3.2.1, the entity should have objective and verifiable evidence to support any valuation of restricted shares that differs from the quoted market price of the entity's publicly traded shares.

7.4.5 Options with indexed exercise prices

Some option awards include adjustments to the exercise price in certain circumstances. Several types of options that base the changes in exercise price on defined factors (i.e., indices) are loosely described as "indexed options."

For an indexed option, the exercise price may vary by a predetermined amount each year (e.g., increase by 5% annually) or may vary depending on an external factor, such as the performance of a peer-group index. The valuation of indexed options, which is described briefly in ASC 718, can be complex. In most cases, we believe the fair value of most types of indexed options, such as those described below, will be reasonably estimable. In the rare circumstance in which the fair value of the ASC 718 option is not reasonably estimable, the guidance in sections 3.2.3 and 7.4.1 applies.

- ▶ **Predetermined increases in exercise price** – When the indexed exercise price changes are predetermined, the changes in exercise price can be incorporated into a lattice or simulation model by incorporating the changes into the calculation of the exercise price in effect at each node. Also, when the exercise price increases annually by a predetermined percentage, it is also possible to use a closed-form model by deducting the percentage increase from the risk-free interest rate used in the option-pricing model (as illustrated in ASC 718-20-55-70). This approach is equivalent to the treatment of dividends in the Black-Scholes-Merton formula.
- ▶ **Exercise price reduced by dividends** – ASC 718 options normally do not participate in dividends before they are exercised. However, an option may provide that the exercise price is reduced by the amount of any dividends declared on the underlying shares. In that case, the fair value of the option can be determined using an option-pricing model with an assumed dividend yield of zero because any reduction in the exercise price will offset any dividends declared before the option is exercised. Dividend-protected options are discussed further in section 7.4.8.
- ▶ **Exercise price indexed to other share prices** – The valuation of other indexed options may be more complex. For example, an entity may grant an option with an exercise price that is indexed to a basket of peer-group entities' share prices, as described in Example 5 of ASC 718:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-52

Entity T grants share options whose exercise price varies with an index of the share prices of a group of entities in the same industry, that is, a **market condition**. Assume that on January 1, 20X5, Entity T grants 100 share options on its common stock with an initial exercise price of \$30 to each of 1,000 employees. The share options have a maximum term of 10 years. The exercise price of the share options increases or decreases on December 31 of each year by the same percentage that the index has increased or decreased during the year. For example, if the peer group index increases by 10 percent in 20X5, the exercise price of the share options during 20X6 increases to \$33 ($\30×1.10). On January 1, 20X5, the peer group index is assumed to be 400. The dividend yield on the index is assumed to be 1.25 percent.

718-20-55-53

Each indexed share option may be analyzed as a share option to exchange 0.0750 ($30 \div 400$) shares of the peer group index for a share of Entity T stock – that is, to exchange one noncash asset for another noncash asset. A share option to purchase stock for cash also can be thought of as a share option to exchange one asset (cash in the amount of the exercise price) for another (the share of stock). The intrinsic value of a cash share option equals the difference between the price of the stock upon exercise and the amount – the price – of the cash exchanged for the stock. The intrinsic value of a share option to exchange 0.0750 shares of the peer group index for a share of Entity T stock also equals the difference between the prices of the two assets exchanged.

718-20-55-54

To illustrate the equivalence of an indexed share option and the share option above, assume that an employee exercises the indexed share option when Entity T's share price has increased 100 percent to \$60 and the peer group index has increased 75 percent, from 400 to 700. The exercise price of the indexed share option thus is \$52.50 ($\30×1.75).

Price of Entity T share	\$ 60.00
Less: Exercise price of share option	<u>52.50</u>
Intrinsic value of indexed share option	<u>\$ 7.50</u>

718-20-55-55

That is the same as the intrinsic value of a share option to exchange 0.0750 shares of the index for 1 share of Entity T stock.

Price of Entity T share	\$ 60.00
Less: Price of a share of the peer group index ($.0750 \times \$700$)	<u>52.50</u>
Intrinsic value at exchange	<u>\$ 7.50</u>

718-20-55-56

Option-pricing models can be extended to value a share option to exchange one asset for another. The principal extension is that the volatility of a share option to exchange two noncash assets is based on the relationship between the volatilities of the prices of the assets to be exchanged – their **cross-volatility**. In a share option with an exercise price payable in cash, the amount of cash to be paid has zero volatility, so only the volatility of the stock needs to be considered in estimating that option's fair value. In contrast, the fair value of a share option to exchange two noncash assets depends on possible movements in the prices of both assets – in this Example, fair value depends on the cross-volatility of a share of the peer group index and a share of Entity T stock. Historical cross-volatility can be computed directly based on measures of Entity T's share price in shares of the peer group index. For example, Entity T's share price was 0.0750 shares at the grant date and 0.0857 ($60 \div 700$) shares at the exercise date. Those share amounts then are used to compute cross-volatility. Cross-volatility also can be computed indirectly based on the respective volatilities of Entity T stock and the peer group index and the correlation between them. The expected cross-volatility between Entity T stock and the peer group index is assumed to be 30 percent.

718-20-55-57

In a share option with an exercise price payable in cash, the assumed risk-free interest rate (discount rate) represents the return on the cash that will not be paid until exercise. In this Example, an equivalent share of the index, rather than cash, is what will not be paid until exercise. Therefore, the dividend yield on the peer group index of 1.25 percent is used in place of the risk-free interest rate as an input to the option-pricing model.

718-20-55-58

The initial exercise price for the indexed share option is the value of an equivalent share of the peer group index, which is \$30 ($0.0750 \times \400). The fair value of each share option granted is \$7.55 based on the following inputs.

Share price	\$30
Exercise price	\$30
Dividend yield	1.00%
Discount rate	1.25%
Volatility	30%
Contractual term	10 years
Suboptimal exercise factor	1.10

718-20-55-59

In this Example, the suboptimal exercise factor is 1.1. In Example 1 (see paragraph 718-20-55-4), the suboptimal exercise factor is 2.0. See paragraph 718-20-55-8 for an explanation of the meaning of a suboptimal exercise factor of 2.0.

718-20-55-60

The indexed share options have a three-year explicit service period. The market condition affects the grant-date fair value of the award and its exercisability; however, vesting is based solely on the explicit service period of three years. The at-the-money nature of the award makes the **derived service period** irrelevant in determining the requisite service period in this Example; therefore, the requisite service period of the award is three years based on the explicit service period. The accrual of compensation cost would be based on the number of options for which the requisite service is rendered or is expected to be rendered depending on an entity's accounting policy in accordance with paragraph 718-10-35-3 (which is not addressed in this Example). That cost would be recognized over the requisite service period as shown in Example 1 (see paragraph 718-20-55-4).

Although the example illustrates the accounting for an employee award, ASC 718-20-55-51A and 55-51B state that the guidance should be applied to the modification of a nonemployee award. However, the timing of cost attribution may differ as compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

7.4.6**Tandem plans**

Tandem plans are share-based payments with two components, but exercise of one component cancels the other (i.e., the components are mutually exclusive). The measurement of compensation cost for tandem plans is based on an analysis of the components, which can be complex. The determination of whether an award should be classified as equity or a liability (or bifurcated into equity and liability components) is discussed in section 5.

For a relatively straightforward tandem plan in which grantees have a choice of either options or SARs payable in cash, grantors should classify the award as a liability because the grantees can demand payment in cash. The measurement of such an award would be the same as for a SAR payable in cash. The accounting for such a tandem plan is illustrated in Example 7 in ASC 718-10-55-116 through 55-130.

Other tandem plans may include components with values that differ depending on the movement in the price of the entity's shares. The valuation of these types of plans is more complex, as shown below:

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Overall****Implementation Guidance and Illustrations****718-10-55-120**

This Case illustrates a tandem award in which the components have different values after the grant date, depending on movements in the price of the entity's stock. The employee's choice of which component to exercise will depend on the relative values of the components when the award is exercised.

718-10-55-121

Entity T grants to its chief executive officer an immediately vested award consisting of the following two parts:

- a. 1,000 phantom share units (units) whose value is always equal to the value of 1,000 shares of Entity T's common stock

- b. Share options on 3,000 shares of Entity T's stock with an exercise price of \$30 per share.

718-10-55-122

At the grant date, Entity T's share price is \$30 per share. The chief executive officer may choose whether to exercise the share options or to cash in the units at any time during the next five years. Exercise of all of the share options cancels all of the units, and cashing in all of the units cancels all of the share options. The cash value of the units will be paid to the chief executive officer at the end of five years if the share option component of the tandem award is not exercised before then.

718-10-55-123

With a 3-to-1 ratio of share options to units, exercise of 3 share options will produce a higher gain than receipt of cash equal to the value of 1 share of stock if the share price appreciates from the grant date by more than 50 percent. Below that point, one unit is more valuable than the gain on three share options. To illustrate that relationship, the results if the share price increases 50 percent to \$45 are as follows.

	<u>Units</u>	<u>Exercise of options</u>
Market value	\$ 45,000 (\$45 × 1,000)	\$ 135,000 (\$45 × 3,000)
Purchase price	<u>0</u>	<u>90,000</u> (\$30 × 3,000)
Net cash value	<u>\$ 45,000</u>	<u>\$ 45,000</u>

718-10-55-124

If the price of Entity T's common stock increases to \$45 per share from its price of \$30 at the grant date, each part of the tandem grant will produce the same net cash payment (ignoring transaction costs) to the chief executive officer. If the price increases to \$44, the value of 1 share of stock exceeds the gain on exercising 3 share options, which would be \$42 [$3 \times (\$44 - \$30)$]. But if the price increases to \$46, the gain on exercising 3 share options, \$48 [$3 \times (\$46 - \$30)$], exceeds the value of 1 share of stock.

718-10-55-125

At the grant date, the chief executive officer could take \$30,000 cash for the units and forfeit the share options. Therefore, the total value of the award at the grant date must exceed \$30,000 because at share prices above \$45, the chief executive officer receives a higher amount than would the holder of 1 share of stock. To exercise the 3,000 options, the chief executive officer must forfeit the equivalent of 1,000 shares of stock, in addition to paying the total exercise price of \$90,000 ($3,000 \times \30). In effect, the chief executive officer receives only 2,000 shares of Entity T stock upon exercise. That is the same as if the share option component of the tandem award consisted of share options to purchase 2,000 shares of stock for \$45 per share.

718-10-55-126

The cash payment obligation associated with the units qualifies the award as a liability of Entity T. The maximum amount of that liability, which is indexed to the price of Entity T's common stock, is \$45,000 because at share prices above \$45, the chief executive officer will exercise the share options.

718-10-55-127

In measuring compensation cost, the award may be thought of as a combination – not tandem – grant of both of the following:

- a. 1,000 units with a value at grant of \$30,000
- b. 2,000 options with a strike price of \$45 per share.

718-10-55-128

Compensation cost is measured based on the combined value of the two parts.

718-10-55-129

The fair value per share option with an exercise price of \$45 is assumed to be \$10. Therefore, the total value of the award at the grant date is as follows.

Units (1,000 × \$30)	\$ 30,000
Share options (2,000 × \$10)	<u>20,000</u>
Value of award	<u>\$ 50,000</u>

718-10-55-130

Therefore, compensation cost recognized at the date of grant (the award is immediately vested) would be \$30,000 with a corresponding credit to a share-based compensation liability of \$30,000. However, because the share option component is the substantive equivalent of 2,000 deep out-of-the-money options, it contains a derived service period (assumed to be 2 years). Hence, compensation cost for the share option component of \$20,000 would be recognized over the requisite service period. The share option component would not be remeasured because it is not a liability. That total amount of both components (or \$50,000) is more than either of the components by itself, but less than the total amount if both components (1,000 units and 3,000 share options with an exercise price of \$30) were exercisable. Because granting the units creates a liability, changes in the liability that result from increases or decreases in the price of Entity T's share price would be recognized each period until exercise, except that the amount of the liability would not exceed \$45,000.

In the above example, if the option component is exercised, the liability balance would be reclassified to additional paid-in capital.

7.4.7 Employee stock purchase plans (including look-back options)

As discussed in section 2.6, look-back options often are included in ESPPs. These options establish the exercise price at a specified percentage of the lower of the underlying share's market price on two dates. Because the exercise prices and other terms of an ESPP can vary, the valuation of such awards can be complex, see section 12.2.

7.4.8 Dividend-protected awards

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-44

Expected dividends are taken into account in using an option-pricing model to estimate the fair value of a share option because dividends paid on the underlying shares reduce the fair value of those shares and option holders generally are not entitled to receive those dividends. However, an award of share options may be structured to protect option holders from that effect by providing them with some form of dividend rights. Such dividend protection may take a variety of forms and shall be appropriately reflected in estimating the fair value of a share option. For example, if a dividend paid on the underlying shares is applied to reduce the exercise price of the option, the effect of the dividend protection is appropriately reflected by using an expected dividend assumption of zero.

ASC 718 describes a method to value options that requires an entity to reduce the exercise price of an option by the amount of any dividends paid on the underlying common shares. However, the valuation of other dividend-protected options may be more complicated, including options that require the payment of cash dividends to the option holder if dividends are paid on the underlying shares.

We believe that an option that entitles the holder to receive dividends has greater value than an option where the exercise price adjusts based on dividend payments, because in the former case, the holder realizes the value of the dividend without being required to exercise the option (which could be out-of-the money even after adjustments for dividends). Accordingly, we believe an option that pays cash dividends to the holder should be valued as two separate awards with fair values equal to:

- ▶ The present value of the estimated dividend payments that will be received prior to exercise
- ▶ The value of the option estimated using an option-pricing model excluding the expected dividend payment from the input share price assumption (i.e., ignoring the dividend payments described in the bullet above)

Further, the terms of the dividend protection feature should be considered in determining whether the share-based payment award is a participating security that would require the computation of EPS pursuant to the two-class method. See our FRD, *Earnings per share*, for more information.

8 Modifications, exchanges and settlements

This chapter was reorganized from the previous edition. See Appendix G for a concordance.

8.1 Overview

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Modification

A change in the terms or conditions of a share-based payment award.

Entities may modify existing share-based payment awards for a variety of reasons. An entity may decide to extend the contractual term of an option, for example, from eight years to 10 years. Modifications also may be made at the time of a grantee's termination. For example, an employee's option agreement may provide that any nonvested options will be forfeited on the employee's termination. However, because of the employee's excellent service, the entity may decide to accelerate vesting for the nonvested option when the employee is terminated. Entities also may decide to reprice their options when their share price falls and the desired motivational effect of the options is lost. In other cases, an entity may increase the number of shares previously issued under an option or add a reload feature (see section 6.3.4). Some modifications may be made for administrative reasons, such as to allow the award holders to exercise their rights following a corporate restructuring.

The modification of share-based payments can result in significant tax consequences. For example, a modification of an option may cause it to be viewed as a newly granted option for tax purposes. If that's the case, and the option is in the money on the modification date, it may be viewed as deferred compensation in the United States under Section 409A of the Internal Revenue Code (which may result in significant negative tax implications for the grantee) or no longer qualify as an incentive stock option (see section 8.4.3). Additionally, if a share-based payment granted to a "covered employee" met the grandfather provision under the US Tax Cuts and Jobs Act (TCJA), upon modification it may no longer be considered a grandfathered exception under Section 162(m) of the Internal Revenue Code and, therefore, become subject to the post-TCJA limitations under Section 162(m). Accordingly, entities should consult with their tax advisers before modifying share-based payments. Refer to section 22 of our FRD, *Income taxes*, for further details.

8.2

Modifications

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-2A

An entity shall account for the effects of a **modification** as described in paragraphs 718-20-35-3 through 35-9, unless all the following are met:

- a. The fair value (or **calculated value** or **intrinsic value**, if such an alternative measurement method is used) of the modified **award** is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification.
- b. The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified.
- c. The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified.

The disclosure requirements in paragraphs 718-10-50-1 through 50-2A and 718-10-50-4 apply regardless of whether an entity is required to apply modification accounting.

According to ASC 718-20-35-2A, not all changes to the terms or conditions of an award will require an entity to apply modification accounting. An entity does not apply modification accounting to a share-based payment award if all of the following are the same immediately before and after the change:

- ▶ The award's fair value (or calculated value or intrinsic value, if those measurement methods are used)⁴⁸
- ▶ The award's vesting conditions
- ▶ The award's classification as an equity or liability instrument

As a practical expedient, an entity is not required to estimate the value of the award immediately before and after the change if the change does not affect any of the inputs to the model used to value the award. For example, if an entity modifies an award to add a net settlement provision related to tax withholdings, the provision would not affect any of the inputs to the valuation model of the award. Therefore, the entity would not be required to estimate the fair value of the award immediately before and after the modification to satisfy the criterion in ASC 718-20-35-2A(a).

When evaluating the fair value (or calculated value or intrinsic value, if those measurement methods are used) immediately before and after the modification, entities should use the same unit of account they use when applying other guidance in ASC 718. That is, the guidance in ASC 718-20-35-2A(a) applies to an award that is modified and not, for example, to an individual share in the award.⁴⁹

⁴⁸ If an option is not at-the-money on the modification date, then the expected term may not be calculated using the SEC's simplified method or the nonpublic entity practical expedient to use the midpoint in the range. See sections 7.3.2.2.1 and 7.3.2.2.2 for the criteria to use SEC staff's simplified method and the nonpublic entity practical expedient, respectively.

⁴⁹ Paragraphs BC19-20 of ASU 2017-09.

Examples of changes to awards that generally will not require modification accounting include⁵⁰:

- ▶ Changes that are administrative in nature, such as a change to the entity name, entity address or plan name
- ▶ Changes in an award's net settlement provisions related to tax withholdings that do not affect the classification of the award

Examples of changes to awards that generally will require modification accounting include:

- ▶ Repricing of options that changes the value of the options
- ▶ Changing service conditions, performance conditions or market conditions
- ▶ Changing terms that result in a reclassification of the award (equity to liability or vice versa)
- ▶ Adding a provision that an award will vest immediately if an event such as a change in control or an involuntary termination occurs

The following is an example of changes to an award that does not result in modification accounting:

Illustration 8-1: Modification accounting is not applied to changes to the terms of an award

An entity grants an award for 10,000 options on 1 January 20X7. The options cliff vest on 31 December 20X9. After the grant date, the options become significantly out-of-the-money. On 1 February 20X8, the entity modifies the award by reducing the exercise price and the number of options as follows:

	Immediately before the modification	Immediately after the modification
Number of options	10,000	5,000
Option fair value	\$ 8	\$ 16
Total fair value	\$ 8,000	\$ 8,000

Because the aggregate fair value of the 10,000 options immediately before the modification is the same as the aggregate fair value of the modified 5,000 options, the criterion in ASC 718-20-35-2A(a) is met.

Because no other terms or conditions of the award are changed (e.g., the modified options still cliff vest on 31 December 20X9 and are equity classified), the change to the award does not require modification accounting.

An entity that is not required to apply modification accounting still needs to consider changes it makes to an award when applying other guidance in ASC 718 or guidance in other topics. For example, an award issued in exchange for employee or nonemployee goods or services continues to be in the scope of ASC 718 throughout the life of the instrument. However, in accordance with ASC 718-10-35-10, if the terms of an award are changed when the grantee is no longer an employee (or when a nonemployee is no longer providing goods or services to the entity), the instrument is no longer in the scope of ASC 718, and accounting may be required under other US GAAP when the award is modified (even if all the criteria in ASC 718-20-35-2A are met). Additionally, even if modification accounting is not required, the entity would need to consider changes to awards when applying guidance on topics such as EPS or income taxes (e.g., the entity's income tax accounting may be affected if the award is no longer considered a grandfathered exception under section 162(m)), as well as the disclosure requirements in ASC 718.

⁵⁰ Paragraphs BC11-12 of ASU 2017-09.

8.3 Accounting for modifications of award terms other than market conditions (updated June 2019)

Applying modification accounting can be complex and depends on the nature of the modification, whether the award was likely to vest under the original terms, whether the modified award is expected to vest under any revised terms, the entity's forfeiture policy and whether the modification changes the classification of the award (equity to liability or vice versa). These factors are discussed in the remainder of this section.

When modification accounting is applied, the modification is treated as an exchange of the original award for a new award. This section describes the accounting for modifications of service and/or performance vesting conditions or other terms (e.g., exercise price) of an award. Refer to section 8.5 for details regarding the accounting for modifications of market conditions.

When applying modification accounting, there are two important concepts from ASC 718-20-35-3 that must be kept in mind:

- ▶ The effect of the modification on the number of instruments expected to vest must be reflected in the calculation of the incremental compensation cost.
- ▶ Total recognized compensation cost for an equity award must at least equal the fair value of the award at the grant date unless *at the date of the modification* the performance or service conditions of the original award are not expected to be satisfied.

The measured cost of a modified equity-classified award depends on whether the original vesting conditions were expected to be satisfied as of the date of the modification. The guidance in this section addresses the accounting and measurement for a modification of an equity-classified award.

The accounting for a modification of an award that changes the classification between equity and liability (or liability to equity) is discussed in section 8.6.

No special guidance is necessary to evaluate the effect on compensation cost when an award classified as a liability remains a liability after the modification. This is because liability-classified awards are remeasured at their fair value (or intrinsic value or calculated value for a nonpublic entity that uses those methods) at each reporting date. Therefore, when a liability-classified award is modified, any change in fair value (or intrinsic value or calculated value for a nonpublic entity that uses those methods) as a result of the modification will be reflected in compensation cost when the liability is remeasured at the reporting date.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-3

Except as described in paragraph 718-20-35-2A, a modification of the terms or conditions of an equity award shall be treated as an exchange of the original award for a new award. In substance, the entity repurchases the original instrument by issuing a new instrument of equal or greater value, incurring additional compensation cost for any incremental value. The effects of a modification shall be measured as follows:

- a. Incremental compensation cost shall be measured as the excess, if any, of the fair value of the modified award determined in accordance with the provisions of this Topic over the fair value of the original award immediately before its terms are modified, measured based on the share price

and other pertinent factors at that date. As indicated in paragraph 718-10-30-20, references to fair value throughout this Topic shall be read also to encompass calculated value. The effect of the modification on the number of instruments expected to vest also shall be reflected in determining incremental compensation cost. The estimate at the modification date of the portion of the award expected to vest shall be subsequently adjusted, if necessary, in accordance with paragraph 718-10-35-3 and other guidance in Examples 14 through 15 (see paragraphs 718-10-55-107 through 55-121).

- b. Total recognized compensation cost for an equity award shall at least equal the fair value of the award at the grant date unless at the date of the modification the performance or service conditions of the original award are not expected to be satisfied. Thus, the total compensation cost measured at the date of a modification shall be the sum of the following:
 1. The portion of the grant-date fair value of the original award for which the requisite service is expected to be rendered (or has already been rendered) at that date
 2. The incremental cost resulting from the modification.

Compensation cost shall be subsequently adjusted, if necessary, in accordance with paragraph 718-10-35-3 and other guidance in Examples 14 through 15 (see paragraph 718-10-55-107 through 55-121).
- c. A change in compensation cost for an equity award measured at intrinsic value in accordance with paragraph 718-20-35-1 shall be measured by comparing the intrinsic value of the modified award, if any, with the intrinsic value of the original award, if any, immediately before the modification.

718-20-35-3A

An entity that has an accounting policy to account for forfeitures when they occur in accordance with paragraph 718-10-35-1D or 718-10-35-3 shall assess at the date of the modification whether the performance or service conditions of the original award are expected to be satisfied when measuring the effects of the modification in accordance with paragraph 718-20-35-3. However, the entity shall apply its accounting policy to account for forfeitures when they occur when subsequently accounting for the modified award.

Implementation Guidance and Illustrations

718-20-55-107

Paragraphs 718-10-55-60 through 55-63 note that awards may vest based on service conditions, performance conditions, or a combination of the two. Modifications of market conditions that affect exercisability or the ability to retain the award are not addressed by this Example. A modification of vesting conditions is accounted for based on the principles in paragraph 718-20-35-3; that is, total recognized compensation cost for an equity award that is modified shall at least equal the fair value of the award at the grant date unless, at the date of the modification, the performance or service conditions of the original award are not expected to be satisfied. If awards are expected to vest under the original vesting conditions at the date of the modification, an entity shall recognize compensation cost if either of the following criteria is met:

- a. The awards ultimately vest under the modified vesting conditions
- b. The awards ultimately would have vested under the original vesting conditions.

When a share-based payment is modified, an entity first must determine on the modification date whether, based on *current* circumstances, the awards would vest under both the original vesting conditions and the new vesting conditions. This assessment is performed regardless of whether the entity's policy election is to estimate forfeitures or account for forfeitures when they occur (as discussed in section 4.4.1.3). The chart below outlines the different types of modifications based on whether the vesting conditions are expected to be satisfied immediately before and after the modification:

Expectations of vesting immediately before modification	Expectations of vesting immediately after modification	Type of modification	Section reference
Probable	Probable	Type I	Section 8.3.1
Probable	Improbable	Type II	Section 8.3.2
Improbable	Probable	Type III	Section 8.3.3
Improbable	Improbable	Type IV	Section 8.3.4

ASC 718-20-35-3(b) states that total recognized compensation cost for an equity award shall at least equal the fair value of the award at the grant date unless at the date of the modification the performance or service conditions of the original award are not expected to be satisfied. Therefore, if the original vesting conditions are expected to be satisfied on the modification date (i.e., Type I or Type II modifications), the compensation cost to be recognized cannot be less than the grant-date fair value of the original award. If the modification increases the fair value of the award when compared to its fair value immediately prior to the modification, the incremental fair value resulting from the modification is recognized only if the modified vesting conditions are achieved.

Under ASC 718, the calculation of the incremental value resulting from the modification is based on the excess of the fair value of the modified award over the fair value of the original award, both determined at the date of the modification. Therefore, the award is measured immediately before its terms are modified based on *current* circumstances (e.g., price of the underlying share, exercise price of an option, expected volatility) as if the modification date is the grant date. Because the award is measured based on current circumstances, the expected term is not limited to the remainder of the expected term estimated on the grant date. For example, if an entity is modifying an option that is out-of-the-money due to a recent market decline in the share price, the fair value of the award will consider only the assumptions relating to the options before and after the change. Therefore, the entity may conclude that there is a change in its expected term given that it may take longer than initially anticipated for the individual to exercise the option.

If the original vesting conditions are not expected to be satisfied on the modification date before considering the effects of the modification (i.e., Type III or Type IV modifications), the grant-date fair value of the original award is no longer relevant, and the fair value of the modified award *measured on the modification date* is recognized if the modified award ultimately vests, regardless of whether the fair value of the modified award is greater than or less than the grant-date fair value of the original award.

When an entity evaluates whether it is probable before and after a modification that an award will vest, it should consider the effect of forfeitures on its determination of whether awards are expected to vest, regardless of its accounting policy election for forfeitures (discussed in section 4.4.1.3). For example, assume an entity modifies awards subject to a service vesting condition to accelerate vesting so the awards will vest immediately. Before the modification, based on the original service condition and current facts and circumstances, the entity determines that vesting was probable for 95% of the awards and improbable for the other 5% of the awards (i.e., it was expected that 5% of the grantees would not meet

the original service condition). As a result, we believe the modification to accelerate vesting results in a probable-to-probable (Type I) modification for the awards that were considered probable of vesting (95% of the awards), and an improbable-to-probable (Type III) modification for the awards expected to be forfeited absent the modification (5% of the awards). Comprehensive examples that include multiple types of modifications are included in sections 8.3.5 and 8.3.6.

If an award is modified more than once, the effects of the latest modification are measured against the fair value estimated for the award based on its terms immediately preceding the current modification (see also section 8.4.4).

Section 2.6 discusses modifications to add a vesting requirement to previously issued shares.

8.3.1 Type I (probable-to-probable) modification (updated June 2019)

As discussed previously, regardless of an entity's policy election for forfeitures, when applying modification accounting an entity must assess at the modification date whether the original award was expected to vest under its original terms. When a vesting condition that is probable of achievement is modified and the new vesting condition also is probable of achievement, the compensation cost to be recognized if either the original vesting condition or the new vesting condition is achieved cannot be less than the grant-date fair value of the original award. That is, compensation cost is recognized if *either* the original *or* modified vesting condition is achieved. If the modification also increases the fair value of the award (e.g., if the exercise price of an option is reduced or the term is extended), the FASB staff has indicated that the incremental compensation cost associated with the modification is recognized only if the *modified* vesting condition is satisfied. Because the entity is recognizing compensation cost before the modification since it is probable that the award will vest, the accounting for a Type I modification is the same regardless of an entity's forfeiture policy.

The following example from ASC 718 illustrates these concepts.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-109

Cases A through D are all based on the same scenario: Entity T grants 1,000 share options to each of 10 employees in the sales department. The share options have the same terms and conditions as those described in Example 1 (see paragraph 718-20-55-4) [section 4.4.1.6], except that the share options specify that vesting is conditional upon selling 150,000 units of product A (the original sales target) over the 3-year explicit service period. The grant-date fair value of each option is \$14.69 (see paragraph 718-20-55-9) [section 4.4.1.6]. For simplicity, this Example assumes that no forfeitures will occur from employee termination; forfeitures will only occur if the sales target is not achieved. Example 15 (see paragraph 718-20-55-120) provides an additional illustration of a Type III modification.

718-20-55-110

Cases A through D assume that the options are out-of-the-money when modified; however, that fact is not determinative in the illustrations (that is, options could be in- or out-of-the-money).

Case A: Type I Probable to Probable Modification**718-20-55-111**

Based on historical sales patterns and expectations related to the future, management of Entity T believes at the grant date that it is probable that the sales target will be achieved. On January 1, 20X7, 102,000 units of Product A have been sold. During December 20X6, one of Entity T's competitors declared bankruptcy after a fire destroyed a factory and warehouse containing the competitor's inventory. To push the salespeople to take advantage of that situation, the award is modified on January 1, 20X7, to raise the sales target to 154,000 units of Product A (the modified sales target). Notwithstanding the nature of the modification's probability of occurrence, the objective of this Case is to demonstrate the accounting for a Type I modification. Additionally, as of January 1, 20X7, the options are out-of-the-money because of a general stock market decline. No other terms or conditions of the original award are modified, and management of Entity T continues to believe that it is probable that the modified sales target will be achieved. Immediately before the modification, total compensation cost expected to be recognized over the 3-year vesting period is \$146,900 or \$14.69 multiplied by the number of share options expected to vest (10,000). Because no other terms or conditions of the award were modified, the modification does not affect the per-share-option fair value (assumed to be \$8 in this Case at the date of the modification). Moreover, because the modification does not affect the number of share options expected to vest, no incremental compensation cost is associated with the modification.

718-20-55-112

This paragraph illustrates the cumulative compensation cost Entity T should recognize for the modified award based on three potential outcomes:

- a. Outcome 1 – achievement of the modified sales target. In Outcome 1, all 10,000 share options vest because the salespeople sold at least 154,000 units of Product A. In that outcome, Entity T would recognize cumulative compensation cost of \$146,900.
- b. Outcome 2 – achievement of the original sales target. In Outcome 2, no share options vest because the salespeople sold more than 150,000 units of Product A but less than 154,000 units (the modified sales target is not achieved). In that outcome, Entity T would recognize cumulative compensation cost of \$146,900 because the share options would have vested under the original terms and conditions of the award.
- c. Outcome 3 – failure to achieve either sales target. In Outcome 3, no share options vest because the modified sales target is not achieved; additionally, no share options would have vested under the original terms and conditions of the award. In that case, Entity T would recognize cumulative compensation cost of \$0.

Although the example illustrates the modification of an employee award, ASC 718-20-55-109A and 55-109B state that the guidance should be applied to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1). Additionally, valuation amounts could be different because an entity may elect to use the contractual term as the expected term of options and similar instruments when valuing nonemployee share-based payment transactions.

Note that in the above example the fair value of the award did not change because the only change was to increase the performance target. If the grantor in the example had modified other terms of the award that make its fair value greater than the fair value immediately prior to the modification (e.g., by extending the term of the options or reducing their exercise price), the incremental fair value as a result of the modification would be recognized only if the modified sales goal was met. That is, the incremental fair value is effectively treated as a separate award and recognized only if the modified vesting condition is satisfied. Additionally,

because the original performance target was probable of being achieved, if the modified performance target is not achieved but the original performance is achieved, the original grant-date fair value would still be recognized even though the award did not vest (Outcome 2).

The accounting would be the same if the sales target were reduced to 146,000 units (rather than increased to 154,000 units). If either the new sales target or the original sales target were achieved, the entity would recognize the grant-date fair value of \$14.69 per option (as well as any incremental compensation if the fair value increased as a result of the modification). This is because at the date of modification, the entity expected the original performance condition to be met. Note that, absent the modification, if 150,000 units were not sold, the original award would not have vested and no compensation cost would have been recognized.

Sections 8.3.5 and 8.3.6 include comprehensive examples that feature multiple types of modifications, including Type I.

Type I modification that increases the employee's requisite service period or nonemployee's vesting period

If a modification results in an employee's requisite service period that is longer than the original period and incremental compensation cost, there are two acceptable methods to attribute the remaining unrecognized compensation cost from the original award and the incremental compensation cost⁵¹:

- ▶ Alternative 1 – The unrecognized compensation cost remaining from the original grant-date valuation is recognized over the remainder of the employee's original requisite service period (because it would be recognized if the original service condition was met, even if the revised service condition was not met), while the incremental compensation cost would be recognized over the additional service period (beginning on the modification date). Essentially, the unrecognized compensation cost is bifurcated and recognized as if the two components were separate awards with separate vesting periods.
- ▶ Alternative 2 – The total compensation cost relating to the newly modified award (including both the unrecognized compensation cost remaining from the original grant-date valuation and the incremental compensation cost resulting from the modification) is recognized ratably over the employee's remaining requisite service period of the modified award.

Because most share-based payment accounting systems do not have the capability to bifurcate an award for recognition purposes while treating the award as a single instrument for disclosure and other purposes, either of the above approaches is likely to require the implementation of procedures to make sure that the appropriate amount of compensation cost is recognized in the appropriate periods for each award. Such amount could be (1) zero, if neither the original vesting condition nor the modified vesting condition is achieved; (2) the original grant-date fair value, if the original vesting condition is achieved but the modified vesting condition is not achieved; or (3) both the original grant-date fair value and the incremental compensation cost, if both the original and modified vesting conditions are achieved. Alternative 1 may be more difficult to apply within the constraints of existing accounting systems. However, alternative 1 avoids the possibility of recognizing incremental compensation cost upon forfeiture (if, for example, the application of alternative 2 results in the recognition as of the original vesting date of total compensation cost that is less than the original grant-date fair value).

⁵¹ The acceptable methods were concluded upon by the Resource Group at its 26 May 2005 meeting.

The following example illustrates the two methods of expense recognition:

Illustration 8-2: Modification increases the requisite service period

On 1 January 20X5, Entity T grants 10,000 options to an executive that will cliff vest on 31 December 20X7. For simplicity, this example assumes there are no forfeitures. The grant-date fair value of each option is \$14.69. The aggregate fair value of \$146,900 will be recognized over the three-year vesting period. During 20X6, Entity T's share price decreases significantly, and on 1 January 20X7, the entity modifies the options to lower the exercise price and extend the service period to 31 December 20X8. The fair value of each option is \$8.20 and \$10.50, immediately before and after the modification, respectively, totaling \$23,000 of incremental fair value as a result of the modification (\$2.30 incremental value per option x 10,000 options). Entity T could use either of the following methods to recognize the incremental compensation cost resulting from the modification:

Alternative 1

The remaining \$48,966 of unrecognized compensation cost from the original award (one-third of the original award's aggregate fair value of \$146,900) is recognized during 20X7, the remainder of the original requisite service period. The incremental compensation cost from the modification of \$23,000 is recognized over the additional requisite service period (\$11,500 of compensation cost for 20X7 and 20X8). Total compensation cost of \$60,466 and \$11,500 is recognized in 20X7 and 20X8, respectively.

Alternative 2

\$71,966 of compensation cost (i.e., \$48,966 of unrecognized compensation cost from the original award, plus \$23,000 of incremental compensation cost from the modification) is recognized over the new requisite service period. Total compensation cost of \$35,983 is recognized in 20X7 and 20X8.

Forfeiture of the award

On 31 December 20X7, the grantee terminates employment. Assume that the Company accounts for forfeitures when they occur. Even though the grantee will not vest in the award, because the employee would have vested in the original award, the original grant-date fair value must be recognized when the employee terminates. However, because the grantee will not vest in the modified award, the incremental compensation cost as a result of the modification will not be recognized.

Alternative 1

As of 31 December 20X7, the Company has appropriately recognized \$146,900 in compensation cost relating to the original award. However, the Company has also recognized \$11,500 in compensation cost for the incremental value from the modification, which must be reversed at termination.

Alternative 2

As of 31 December 20X7, the Company has recognized total compensation cost as follows:

20X5	\$ 48,966
20X6	48,966
20X7	35,983
Total compensation cost	\$ 133,915

However, as of the grantee's termination date, the Company must recognize the fair value of the original award, or \$146,900. Therefore, on 31 December 20X7, the Company must record \$12,985 of compensation cost (\$146,900 – \$133,915).

Although the above example illustrates the modification of an employee award, the same concepts apply to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Regardless of the method selected, the total amount of compensation cost recognized after the modification will not differ (although the timing of recognition will differ). The selection of either attribution approach is an accounting policy decision that must be applied consistently and, if material, must be disclosed in the notes to the financial statements.

8.3.1.1 Example – Type I modification of vested options

When modification accounting is applied to the modification of a vested award, it is a Type I modification. Case A below illustrates the accounting for a modification to reprice a vested option.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-93

The following Cases illustrate the accounting for **modifications** of the terms of an award (see paragraphs 718-20-35-3 through 35-4) and are based on Example 1, Case A (see paragraph 718-20-55-10) [section 4.4.1.6], in which Entity T granted its employees 900,000 share options with an exercise price of \$30 on January 1, 20X5:

- a. Modification of vested share options (Case A)
- b. Share settlement of vested share options (Case B)
- c. Modification of **nonvested share** options (Case C)
- d. Cash settlement of nonvested share options (Case D).

Case A: Modification of Vested Share Options

718-20-55-94

On January 1, 20X9, after the share options have vested, the market price of Entity T stock has declined to \$20 per share, and Entity T decides to reduce the exercise price of the outstanding share options to \$20. In effect, Entity T issues new share options with an exercise price of \$20 and a contractual term equal to the remaining contractual term of the original January 1, 20X5, share options, which is 6 years, in exchange for the original vested share options. Entity T incurs additional compensation cost for the excess of the fair value of the modified share options issued over the fair value of the original share options at the date of the exchange, measured as shown in the following paragraph. A nonpublic entity using the calculated value would compare the calculated value of the original award immediately before the modification with the calculated value of the modified award unless an entity has ceased to use the calculated value, in which case it would follow the guidance in paragraph 718-20-35-3(a) through (b) (calculating the effect of the modification based on the fair value). The modified share options are immediately vested, and the additional compensation cost is recognized in the period the modification occurs.

718-20-55-95

The January 1, 20X9, fair value of the modified award is \$7.14. To determine the amount of additional compensation cost arising from the modification, the fair value of the original vested share options assumed to be repurchased is computed immediately before the modification. The resulting fair value at January 1, 20X9, of the original share options is \$3.67 per share option, based on their

remaining contractual term of 6 years, suboptimal exercise factor of 2, \$20 current share price, \$30 exercise price, risk-free interest rates of 1.5 percent to 3.4 percent, expected volatility of 35 percent to 50 percent and a 1.0 percent expected dividend yield. The additional compensation cost stemming from the modification is \$3.47 per share option, determined as follows.

Fair value of modified share option at January 1, 20X9	\$ 7.14
Less: Fair value of original share option at January 1, 20X9	<u>3.67</u>
Additional compensation cost to be recognized	<u>\$ 3.47</u>

718-20-55-96

Compensation cost already recognized during the vesting period of the original award is \$10,981,157 for 747,526 vested share options [900,000 options × .94³] (see paragraphs 718-20-55-14 through 55-17) [section 4.4.1.6]. For simplicity, it is assumed that no share options were exercised before the modification. Previously recognized compensation cost is not adjusted. Additional compensation cost of \$2,593,915 (747,526 vested share options × \$3.47) is recognized on January 1, 20X9, because the modified share options are fully vested; any income tax effects from the additional compensation cost are recognized accordingly.

Although the example illustrates the modification of an employee award, ASC 718-20-55-93A and 55-93B state that the guidance also applies to a nonemployee award with the same features.

The FASB did not describe the assumptions used to value the post-modification options in Case A, but it should be noted that the assumptions used to value the pre-modification and post-modification options likely will differ in this example. While it may be appropriate to use the same “suboptimal exercise factor” in both calculations, the use of that factor will result in a longer expected term for the out-of-the-money option than for the new at-the-money option. This is because, on average, it will take longer for the option with the higher exercise price to achieve the suboptimal exercise factor (in which the share price is equal to twice the option’s exercise price). As a result of the different expected terms, the other assumptions will likely vary (e.g., because of the term structures of interest and volatility, those assumptions will differ for the modified option). Determining input assumptions for a lattice model is discussed in detail in section 7.

8.3.1.2

Example – Type I modification of nonvested options

Case C below illustrates the accounting for a modification to reprice an unvested option.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-93

The following Cases illustrate the accounting for **modifications** of the terms of an award (see paragraphs 718-20-35-3 through 35-4) and are based on Example 1, Case A (see paragraph 718-20-55-10) [section 4.4.1.6], in which Entity T granted its employees 900,000 share options with an exercise price of \$30 on January 1, 20X5:

- Modification of vested share options (Case A)
- Share settlement of vested share options (Case B) [refer to Section 8.9]
- Modification of **nonvested share** options (Case C)
- Cash settlement of nonvested share options (Case D) [refer to Section 8.9].

Case C: Modification of Nonvested Share Options**718-20-55-98**

On January 1, 20X6, 1 year into the 3-year vesting period, the market price of Entity T stock has declined to \$20 per share, and Entity T decides to reduce the exercise price of the share options to \$20. The three-year cliff-vesting requirement is not changed. In effect, in exchange for the original nonvested share options, Entity T grants new share options with an exercise price of \$20 and a contractual term equal to the 9-year remaining contractual term of the original share options granted on January 1, 20X5. Entity T incurs additional compensation cost for the excess of the fair value of the modified share options issued over the fair value of the original share options at the date of the exchange determined in the manner described in paragraphs 718-20-55-95 through 55-96 [section 8.3.1.1]. Entity T adds that additional compensation cost to the remaining unrecognized compensation cost for the original share options at the date of modification and recognizes the total amount ratably over the remaining two years of the three-year vesting period. Because the original vesting provision is not changed, the modification has an explicit service period of two years, which represents the requisite service period as well. Thus, incremental compensation cost resulting from the modification would be recognized ratably over the remaining two years rather than in some other pattern.

718-20-55-99

The January 1, 20X6, fair value of the modified award is \$8.59 per share option, based on its contractual term of 9 years, suboptimal exercise factor of 2, \$20 current share price, \$20 exercise price, risk-free interest rates of 1.5 percent to 4.0 percent, expected volatilities of 35 percent to 55 percent, and a 1.0 percent expected dividend yield. The fair value of the original award immediately before the modification is \$5.36 per share option, based on its remaining contractual term of 9 years, suboptimal exercise factor of 2, \$20 current share price, \$30 exercise price, risk-free interest rates of 1.5 percent to 4.0 percent, expected volatilities of 35 percent to 55 percent, and a 1.0 percent expected dividend yield. Thus, the additional compensation cost stemming from the modification is \$3.23 per share option, determined as follows.

Fair value of modified share option at January 1, 20X6	\$ 8.59
Less: Fair value of original share option at January 1, 20X6	<u>5.36</u>
Incremental value of modified share option at January 1, 20X6	<u>\$ 3.23</u>

718-20-55-100

On January 1, 20X6, the remaining balance of unrecognized compensation cost for the original share options is \$9.79 per share option. Using a value of \$14.69 for the original option as noted in paragraph 718-20-55-9 [section 4.4.1.6] results in recognition of \$4.90 ($\$14.69 \div 3$) per year. The unrecognized balance at January 1, 20X6, is \$9.79 ($\$14.69 - \4.90) per option. The total compensation cost for each modified share option that is expected to vest is \$13.02, determined as follows.

Incremental value of modified share option	\$ 3.23
Unrecognized compensation cost for original share option	<u>9.79</u>
Total compensation cost to be recognized	<u>\$ 13.02</u>

718-20-55-101

That amount is recognized during 20X6 and 20X7, the two remaining years of the requisite service period.

The example illustrates the modification of an employee award. ASC 718-20-55-93A and 55-93C state that although the recognition of compensation cost may be different for a nonemployee award, the guidance for calculating additional compensation cost to recognize upon modification also applies to a nonemployee award with the same features.

While Case C describes the assumptions (except for the exercise price) as being the same for both options, as discussed in section 8.3.1.1, the average expected term will be shorter for the repriced option because it will take longer for the option with the higher exercise price to achieve the suboptimal exercise factor (in which the share price is equal to twice the option's exercise price). As a result of the different expected terms, the other assumptions will likely vary (e.g., because of the term structures of interest and volatility, those assumptions will differ for the modified option), although the range of assumptions used in the lattice model will be the same. That is, for the repriced option more price paths will result in early exercise and a shorter term and, therefore, a different range of volatilities and interest rates will apply to that path. However, because at the extremes the lattices for both options will include exercises (or post-vesting forfeitures) shortly after vesting as well as at expiration, the disclosed ranges are the same (but weighted-average assumptions, if disclosed, would differ). Determining input assumptions for a lattice model is discussed in detail in section 7.

8.3.2

Type II (probable-to-improbable) modification

Modifications that cause a vesting condition to change from being probable of achievement to no longer being probable of achievement are rare. However, the FASB provided the example below of a Type II modification. Similar to a Type I (probable-to-probable) modification, regardless of whether the modified vesting terms are met, compensation cost must be recognized for the original grant-date fair value if the award would have vested based on its original terms (i.e., if the service or performance condition in the original award is satisfied).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-109

Cases A through D are all based on the same scenario: Entity T grants 1,000 share options to each of 10 employees in the sales department. The share options have the same terms and conditions as those described in Example 1 (see paragraph 718-20-55-4) [section 4.4.1.6], except that the share options specify that vesting is conditional upon selling 150,000 units of product A (the original sales target) over the 3-year explicit service period. The grant-date fair value of each option is \$14.69 (see paragraph 718-20-55-9) [section 4.4.1.6]. For simplicity, this Example assumes that no forfeitures will occur from employee termination; forfeitures will only occur if the sales target is not achieved. Example 15 (see paragraph 718-20-55-120) provides an additional illustration of a Type III modification.

Case B: Type II Probable to Improbable Modification

718-20-55-113

It is generally believed that Type II modifications will be rare; therefore, this illustration has been provided for the sake of completeness. Based on historical sales patterns and expectations related to the future, management of Entity T believes that at the grant date, it is probable that the sales target (150,000 units of product A) will be achieved. At January 1, 20X7, 102,000 units of product A have been sold and the options are out-of-the-money because of a general stock market decline. Entity T's management implements a cash bonus program based on achieving an annual sales target for 20X7. The options are neither cancelled nor settled as a result of the cash bonus program. The cash bonus program would be accounted for using the same accounting as for other cash bonus arrangements.

Concurrently, the sales target for the option awards is revised to 170,000 units of Product A. No other terms or conditions of the original award are modified. Management believes that the modified sales target is not probable of achievement; however, they continue to believe that the original sales target is probable of achievement. Immediately before the modification, total compensation cost expected to be recognized over the 3-year vesting period is \$146,900 or \$14.69 multiplied by the number of share options expected to vest (10,000). Because no other terms or conditions of the award were modified, the modification does not affect the per-share-option fair value (assumed in this Case to be \$8 at the modification date). Moreover, because the modification does not affect the number of share options expected to vest under the original vesting provisions, Entity T would determine incremental compensation cost in the following manner.

Fair value of modified share option	\$ 8
Share options expected to vest under original sales target	<u>10,000</u>
Fair value of modified award	<u>\$ 80,000</u>
Fair value of original share option	\$ 8
Share options expected to vest under original sales target	<u>10,000</u>
Fair value of original award	<u>\$ 80,000</u>
Incremental compensation cost of modification	<u><u>\$ 0</u></u>

718-20-55-114

In determining the fair value of the modified award for this type of modification, an entity shall use the greater of the options expected to vest under the modified vesting condition or the options that previously had been expected to vest under the original vesting condition.

718-20-55-115

This paragraph illustrates the cumulative compensation cost Entity T should recognize for the modified award based on three potential outcomes:

- a. Outcome 1 – achievement of the modified sales target. In Outcome 1, all 10,000 share options vest because the salespeople sold at least 170,000 units of Product A. In that outcome, Entity T would recognize cumulative compensation cost of \$146,900.
- b. Outcome 2 – achievement of the original sales target. In Outcome 2, no share options vest because the salespeople sold more than 150,000 units of Product A but less than 170,000 units (the modified sales target is not achieved). In that outcome, Entity T would recognize cumulative compensation cost of \$146,900 because the share options would have vested under the original terms and conditions of the award.
- c. Outcome 3 – failure to achieve either sales target. In Outcome 3, no share options vest because the modified sales target is not achieved; additionally, no share options would have vested under the original terms and conditions of the award. In that case, Entity T would recognize cumulative compensation cost of \$0.

Although the example illustrates the modification of an employee award, ASC 718-20-55-109A and 55-109B state that the guidance should be applied to the modification of a nonemployee award.

8.3.3 Type III (improbable-to-probable) modification (updated December 2018)

As discussed previously, regardless of an entity's policy election for forfeitures, when applying modification accounting an entity must assess at the modification date whether the original award was expected to vest under its original terms. The most common type of modification is a Type III modification, in which it previously was not probable that the vesting condition would be satisfied, and the modification causes it to become probable that the vesting condition will be satisfied. As discussed previously, because the original vesting condition is not probable of achievement on the modification date, the original grant-date fair value is no longer relevant and, therefore, is not used to measure compensation cost for the award under any circumstances. Unlike a Type I or Type II modification, the compensation cost recognized in these cases may be less than what would have been recognized based on the original grant-date fair value of the award. The amount of compensation cost recognized depends on whether the award contains a performance or service condition (see sections 8.3.3.1 and 8.3.3.2, respectively), as well as the entity's policy election for forfeitures.

Section 8.3.5 has comprehensive examples that include multiple types of modifications, including Type III modifications.

8.3.3.1 Type III modification of awards with performance conditions (updated December 2018)

As discussed in section 4.4.2.2, when an award has a performance condition, the entity must recognize compensation cost over the employee's requisite service period or nonemployee's vesting period if it is probable that the performance condition will be satisfied. If it is not probable that the performance condition will be satisfied, the entity records no compensation cost. Therefore, for a Type III modification of an award with a performance condition, the entity would not have recorded compensation cost before the modification because it was improbable at the modification date that the award would vest. The modified award is valued on the modification date, and since it is probable that the performance condition will be satisfied, the entity recognizes compensation cost beginning on the modification date over the employee's requisite service period or nonemployee's vesting period of the modified award. That is, the modified award is accounted for as the issuance of a new award.

The following example and outcomes illustrate the accounting for a Type III modification of performance awards.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-109

Cases A through D are all based on the same scenario: Entity T grants 1,000 share options to each of 10 employees in the sales department. The share options have the same terms and conditions as those described in Example 1 (see paragraph 718-20-55-4) [section 4.4.1.6], except that the share options specify that vesting is conditional upon selling 150,000 units of product A (the original sales target) over the 3-year explicit service period. The grant-date fair value of each option is \$14.69 (see paragraph 718-20-55-9) [section 4.4.1.6]. For simplicity, this Example assumes that no forfeitures will occur from employee termination; forfeitures will only occur if the sales target is not achieved. Example 15 (see paragraph 718-20-55-120) provides an additional illustration of a Type III modification.

Case C: Type III Improbable to Probable Modification**718-20-55-116**

Based on historical sales patterns and expectations related to the future, management of Entity T believes at the grant date that none of the options will vest because it is not probable that the sales target will be achieved. On January 1, 20X7, 80,000 units of Product A have been sold. To further motivate the salespeople, the sales target (150,000 units of Product A) is lowered to 120,000 units of Product A (the modified sales target). No other terms or conditions of the original award are modified. Management believes that the modified sales target is probable of achievement. Immediately before the modification, total compensation cost expected to be recognized over the 3-year vesting period is \$0 or \$14.69 multiplied by the number of share options expected to vest (zero). Because no other terms or conditions of the award were modified, the modification does not affect the per-share-option fair value (assumed in this Case to be \$8 at the modification date). Since the modification affects the number of share options expected to vest under the original vesting provisions, Entity T will determine incremental compensation cost in the following manner.

Fair value of modified share option	\$ 8
Share options expected to vest under modified sales target	<u>10,000</u>
Fair value of modified award	<u>\$ 80,000</u>
Fair value of original share option	\$ 8
Share options expected to vest under original sales target	<u>0</u>
Fair value of original award	<u>\$ 0</u>
Incremental compensation cost of modification	<u>\$ 80,000</u>

718-20-55-117

This paragraph illustrates the cumulative compensation cost Entity T should recognize for the modified award based on three potential outcomes:

- a. Outcome 1 – achievement of the modified sales target. In Outcome 1, all 10,000 share options vest because the salespeople sold at least 120,000 units of Product A. In that outcome, Entity T would recognize cumulative compensation cost of \$80,000.
- b. Outcome 2 – achievement of the original sales target and the modified sales target. In Outcome 2, Entity T would recognize cumulative compensation cost of \$80,000 because in a Type III modification the original vesting condition is generally not relevant (that is, the modified award generally vests at a lower threshold of service or performance).
- c. Outcome 3 – failure to achieve either sales target. In Outcome 3, no share options vest because the modified sales target is not achieved; in that case, Entity T would recognize cumulative compensation cost of \$0.

Although the example illustrates the modification of an employee award, ASC 718-20-55-109A and 55-109B state that the guidance should be applied to the modification of a nonemployee award.

8.3.3.2 Type III modification of awards with service conditions (updated December 2018)

An entity may elect to account for forfeitures as they occur (e.g., when an employee leaves the entity) or to estimate forfeitures at the service inception date and adjust the estimate when it is likely to change (as discussed in section 4.4.1.3). The accounting policy election for forfeitures only applies to the assessment of the achievement of service conditions. Because the policy election affects whether compensation cost is recognized for an award with a service condition, the recognition of compensation cost after a Type III modification of an award that was improbable because it was not expected to meet a service condition depends on the entity's policy election. That is, even though the total compensation cost recognized for the modified award will be the same, the timing will differ depending on the entity's policy election.

When an entity has elected to estimate forfeitures and adjusts the estimate when it is likely to change

When an entity elects to estimate forfeitures, it does not recognize compensation cost for awards that are improbable of vesting due to the expectation that a service condition will not be met. Therefore, for a Type III modification of such an award, the entity would not have recorded compensation cost before the modification for those awards not expected to vest. The modified award is valued on the modification date and, because after considering the modified terms, it is probable that the service condition will be met, the entity recognizes compensation cost beginning on the modification date over the employee's requisite service period or nonemployee's vesting period of the modified award. The compensation cost measured for these awards is the fair value of the awards on the modification date. The original grant-date fair value generally is not relevant, even if the award's original vesting conditions are met (as described in ASC 718-20-55-117(b) Outcome 2 above). That is, the modified award is accounted for as the issuance of a new award.

The accounting for this type of modification is similar to that in the example in section 8.3.3.1.

When an entity elects to account for forfeitures as they occur

When an entity elects to account for forfeitures as they occur, it ignores forfeiture expectations in its accounting and, therefore, recognizes compensation cost for all awards. The entity does not reverse the compensation cost until the forfeiture occurs. Therefore, for an award that was improbable of vesting because the service condition was not expected to be met, compensation cost would have been recorded before the modification because of the entity's forfeiture policy election. However, as discussed previously, ASC 718-20-35-3A requires the entity to consider the probability of vesting when determining the accounting for modifications to awards. That is, an entity that elects to account for forfeitures as they occur still will need to determine whether any awards are improbable of vesting on the modification date. In a Type III modification, because it is not probable on the modification date that the original service condition will be achieved, the original grant-date fair value is no longer relevant, and compensation cost must be recognized based on the fair value of the modified award. ASC 718 does not provide guidance on how the compensation cost related to the modified award should be recognized when an entity elects to account for forfeitures as they occur. We believe the amount of compensation cost to be recognized over the remaining service period is the fair value of the modified award less the compensation cost already recognized on the original award.

The following example illustrates the accounting:

Illustration 8-3: Modification of a service condition when an entity accounts for forfeitures as they occur

The entity grants an award of 100,000 options to an executive on 1 January 20X4 that cliff vests after five years of service. On the grant date, the award has a fair value of \$10 per option. Accordingly, the entity recognized annual compensation cost of \$200,000 (100,000 options × \$10 per option × 1/5 vesting per year). The awards do not contain a provision for acceleration of vesting upon retirement. The entity accounts for forfeitures as they occur.

In September 20X7, the entity is informed that the executive intends to retire on 31 December 20X7. In conjunction with the executive's termination agreement executed on 30 September 20X7, the entity modifies the awards to accelerate the vesting date to 31 December 20X7 to coincide with the executive's retirement. On the modification date, the award has a fair value of \$12 per option.

The entity determines this is a Type III modification because at the modification date, the original award was improbable of vesting (due to the executive's planned retirement), and the modified award is considered probable of vesting (the entity expects the executive to remain employed until the planned retirement date). The Type III modification results in a new measurement of compensation cost, and the original grant-date fair value of the award is no longer used to measure compensation cost for the award.

At the modification date, the entity has previously recognized \$750,000 (\$200,000 annual compensation cost x 3.75 years) of compensation cost. The fair value of the modified award is \$1,200,000 (100,000 options x \$12). Therefore, compensation cost of \$450,000 (fair value of the modified awards of \$1,200,000 - previously recognized compensation cost of \$750,000) must be recognized over the remaining service period (1 October 20X7 to 31 December 20X7).

Although the above example illustrates the modification of an employee award, the same concepts apply to the Type III modification of a nonemployee award for calculating the additional compensation cost. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

In the above illustration, the actual forfeiture of the original award does not occur until the executive retires on 31 December 20X7. We believe that because the executive remains in service to the entity, the execution of the termination agreement on 30 September 20X7 is not a forfeiture of the original award and, therefore, the entity should not reverse compensation cost at that time. However, because the award was improbable of vesting on the modification date, the entity knows on the modification date that the original award's fair value is no longer relevant. Therefore, the entity adjusts compensation cost to recognize the modified award's fair value over the remaining requisite service for an employee award or vesting period for a nonemployee award.

We believe the above example illustrates the appropriate accounting when there is an increase in the fair value between the grant date and the modification date based on the expense recognition framework provided in ASC 718. Illustration 8-8 below also demonstrates this accounting. However, ASC 718 does not provide a framework for recognizing compensation cost when there is a decrease in fair value between the grant date and the modification date when the award is improbable of vesting before modification and the entity accounts for forfeitures as they occur. In this case, we believe that one of the following methods of expense recognition may be appropriate:

- ▶ Alternative 1 – The difference between the fair value of the modified award less the compensation cost already recognized on the original award is recognized ratably over the remaining service period. That is, the entity accounts for the modification in a consistent manner as if the fair value had increased between the grant date and the modification date as described in Illustration 8-3 above. If the modification-date fair value of the award in Illustration 8-3 had been \$760,000, the difference of \$10,000 (\$760,000 less previously recognized cost of \$750,000) would be recognized over the remaining three-month service period.
- ▶ Alternative 2 – At the first reporting date after the modification, the entity determines the cumulative compensation cost that should be recognized at that date as if the fair value of the modified award had been recognized from the original grant date over the employee's requisite service period or nonemployee's vesting period. The entity takes this amount less the compensation

cost already recognized on the original award and recognizes it in the period of modification (i.e., a cumulative-effect adjustment). The remaining compensation cost is recognized over the remaining service period. If the modification-date fair value of the award in Illustration 8-3 had been \$760,000, the entity would determine that it should have recognized \$712,500 ($\$760,000 \times 3.75/4$ -year modified service period) at 30 September 20X7, resulting in a difference of \$37,500 to be reversed on the modification date. The remaining compensation cost of \$47,500 would be recognized over the remaining three-month service period. The expense recognition using this alternative in a Type IV modification is also shown in Illustration 8-9 in section 8.3.6.

Other methods for recognizing compensation cost may be appropriate when there is a decrease in fair value between the grant date and the modification date. An entity should be consistent in its approach to recognize compensation cost for modified awards.

8.3.3.3 Modification to accelerate vesting in connection with termination (updated December 2018)

It is a common practice for an entity to give ex gratia awards (awards granted voluntarily) to employees and other goods or service providers to show appreciation for their contributions. An example of an ex gratia award is a change to an existing award to accelerate service vesting in anticipation of, or concurrent with, the termination of an employee (or the termination of an arrangement with a nonemployee to provide goods or services). In that case, the modification is a Type III modification because the grantee is not expected to vest in the original award, and it is accounted for in the manner described either in section 8.3.3.1 or 8.3.3.2, depending on whether the award has a performance condition or service condition, respectively.

8.3.3.4 Modification in conjunction with a reduction in responsibilities (added June 2019)

In defining the grant date, ASC 718 states, "The grantor becomes contingently obligated on the grant date to issue equity instruments or transfer assets to a grantee who delivers the goods or renders the service." This implies that the grantor needs to identify the goods to be delivered or services to be rendered by the grantee for the award to vest. Those goods or services generally would be apparent for an award that is granted in connection with an employment agreement or a vendor supply or service agreement.

But, in certain cases, further analysis may be required to assess the level of service the grantee needs to provide for an award to vest and/or the effect of a change in that level of service on vesting. For example, if a senior executive's responsibilities are reduced (e.g., the executive is demoted, the executive makes a transition from full-time employment to a board role or a consulting role), the entity may allow a previously issued share-based payment award to vest on its original schedule. The entity would have to consider whether allowing the executive to continue to benefit from the award should be considered a modification of the award.

Significance of the reduction in level of service

Entities should evaluate the change in responsibilities by comparing the level of service that the grantee was expected to provide under the original award with the level of service expected in the new role. If the level of service is significantly reduced but the entity allows the award to vest on its original schedule, this would indicate that the original award may have been modified.

As stated in section 8.4, when a modification occurs, an entity will need to determine whether the original vesting conditions were expected to be satisfied. If the reduction is significant and the grantee is no longer providing a level of service commensurate with the expected service when the award was granted, the entity may consider the award improbable of vesting as of the modification date. If the modified award is probable of vesting, the modification would be accounted for as a Type III modification (improbable-to-probable modification) in accordance with the guidance described in either section 8.3.3.1 or 8.3.3.2, depending on whether the award has a performance condition or service condition, respectively.

If the reduction is not significant and the grantee continues to provide a level of service that is commensurate with the expected service when the award was granted, the entity should assess whether the reduction in responsibilities affected the fair value or vesting conditions or the classification of the award. If there were no changes to those items, modification accounting is not applied (see section 8.2). If any of them changed, the entity would apply modification accounting (see section 8.3).

Illustration 8-4: Evaluating the significance of a change in the level of service

Significant change in the level of service

On 1 January 20X1, Entity A grants options to its CEO that cliff vest after two years of service. On 1 January 20X2, Entity A demotes the CEO to Vice President (VP) of Finance, but allows the award to vest on its original schedule, despite the change in the executive's role. No other changes were made to the award.

Entity A compares the level of service required under the original award to the level of service the executive will provide after the demotion. In the role of CEO, the executive was responsible for developing long-term strategic growth plans for the entity and communicating on behalf of the entity with shareholders and the public. As VP of Finance, the executive will be uninvolved in developing the entity's strategy and will instead focus on the completeness and accuracy of the entity's financial statements. Therefore, Entity A concludes that the reduction in responsibilities is significant.

Entity A concludes that as of the modification date, the original award is improbable of vesting because the employee will not be continuing in the role of CEO and the new level of service is significantly less than what was required under the original award. Further, Entity A concludes that the modified award is probable of vesting. Because there has been a Type III modification, Entity A determines that the original grant-date fair value is no longer relevant and determines the fair value of the award on the modification date. See section 8.3.3.2 for details about the accounting for Type III modifications.

Commensurate level of service

On 1 January 20X1, Entity A grants options to its VP of Finance that vest after two years of service. On 1 January 20X2, the executive becomes the VP of Investor Relations, and the entity allows the award to vest on its original schedule, despite the change in the executive's role. No other changes were made to the award.

Entity A compares the level of service required under the original award to the level of service to be performed in the new role and concludes that the VP positions are similar and require similar levels of responsibility. The entity concludes that because the level of service is similar and the fair value, vesting conditions and classification of the award have not changed, modification accounting is not applied (see section 8.2). That is, the entity concludes that the change in the role is an administrative change because there is no substantive change to the level of service required for the award to vest.

Nonsubstantive service condition in the grantee's new role

If an entity concludes that a reduction in the level of service is significant, the entity must also consider whether the new service condition is substantive (see section 4.4.1.2). If the new service condition is not substantive, we believe the entity may have effectively modified the award to accelerate the vesting of an improbable award (see section 8.3.3.3). If the new service condition is not substantive but the award continues to be subject to forfeiture if the grantee does not fulfill the requirements of the new condition, the entity may have added a clawback feature to the award (see section 3.5.2).

Entities will have to carefully analyze the facts and circumstances and exercise judgment to determine the appropriate accounting.

Illustration 8-5: Evaluating whether a substantive service condition exists

On 1 January 20X1, Entity A grants options to its CEO that vest after two years of service. On 1 January 20X2, Entity A terminates the CEO, but allows the award to vest on its original schedule while the former executive provides consulting services at the company's discretion.

Company A concludes that the level of service was reduced significantly when the full-time CEO became an on-demand consultant. Company A, therefore, concludes that as of the modification date, the original award is improbable of vesting because the grantee will not be continuing in the role of CEO, and the new level of service the former executive will provide is significantly less than what was intended under the original award.

Given the significant reduction in the level of service, Entity A evaluates whether the on-demand consulting services are substantive. Entity A concludes that because the level of service depends on the entity's needs, there is no formal plan in place that specifies the time commitment and other requirements for the consulting service, and it is possible that the work may be limited. Therefore, Entity A concludes that the modified award does not contain a substantive service condition and that it has effectively modified the award to accelerate its vesting.

Entity A accounts for the modification as a Type III modification that accelerates vesting in accordance with the guidance described in section 8.3.3.3.

8.3.4 Type IV (improbable-to-improbable) modification (updated December 2018)

As discussed previously, regardless of an entity's policy election for forfeitures, when applying modification accounting an entity must assess at the modification date whether the original award was expected to vest under its original terms.

In a Type IV modification, an award is modified and the vesting condition is improbable of being achieved both before and after the modification. Such modifications are common. For example, the grantor may conclude that the original performance vesting conditions in an award are so unattainable that the performance award no longer has the desired motivational effect on grantees. As a result, the grantor may reduce the performance target such that the new goal is more likely to be achieved than the original performance target but remains not probable of being met. In another example, when a service award is modified, it may be expected (both before and after the modification) that some portion of the awards will be forfeited because some grantees will terminate before the completion of the service period or discontinue to provide goods or services to the entity, regardless of the entity's forfeiture policy.

As discussed previously, because the original vesting condition is not probable of being achieved on the modification date, the original grant-date fair value is no longer relevant and, therefore, it is not used to measure compensation cost for the award under any circumstances. As a result, if the modified award ultimately vests, the compensation cost recognized is the fair value of the modified award, and it may be less than what would have been recognized based on the original grant-date fair value of the award. The accounting for a Type IV modification will depend on whether the award contains a performance or service condition, as well as the entity's policy election for forfeitures.

Sections 8.3.5 and 8.3.6 have comprehensive examples that include multiple types of modifications, including Type IV.

8.3.4.1 Type IV modification of awards with performance conditions (updated June 2019)

The following example from ASC 718 illustrates the accounting for the Type IV modification of an award with a performance condition. As previously discussed, the original grant-date fair value is no longer used to measure the compensation cost of the award with a Type IV modification because the original vesting condition was not probable of being achieved at the modification date.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-109

Cases A through D are all based on the same scenario: Entity T grants 1,000 share options to each of 10 employees in the sales department. The share options have the same terms and conditions as those described in Example 1 (see paragraph 718-20-55-4) [section 4.4.1.6], except that the share options specify that vesting is conditional upon selling 150,000 units of product A (the original sales target) over the 3-year explicit service period. The grant-date fair value of each option is \$14.69 (see paragraph 718-20-55-9) [section 4.4.1.6]. For simplicity, this Example assumes that no forfeitures will occur from employee termination; forfeitures will only occur if the sales target is not achieved. Example 15 (see paragraph 718-20-55-120) provides an additional illustration of a Type III modification.

Case D: Type IV Improbable to Improbable Modification

718-20-55-118

Based on historical sales patterns and expectations related to the future, management of Entity T believes that at the grant date it is not probable that the sales target will be achieved. On January 1, 20X7, 80,000 units of Product A have been sold. To further motivate the salespeople, the sales target is lowered to 130,000 units of Product A (the modified sales target). No other terms or conditions of the original award are modified. Entity T lost a major customer for Product A in December 20X6; hence, management continues to believe that the modified sales target is not probable of achievement. Immediately before the modification, total compensation cost expected to be recognized over the 3-year vesting period is \$0 or \$14.69 multiplied by the number of share options expected to vest (zero). Because no other terms or conditions of the award were modified, the modification does not affect the per-share-option fair value (assumed in this Case to be \$8 at the modification date). Furthermore, the modification does not affect the number of share options expected to vest; hence, there is no incremental compensation cost associated with the modification.

718-20-55-119

This paragraph illustrates the cumulative compensation cost Entity T should recognize for the modified award based on three potential outcomes:

- a. Outcome 1 – achievement of the modified sales target. In Outcome 1, all 10,000 share options vest because the salespeople sold at least 130,000 units of Product A. In that outcome, Entity T would recognize cumulative compensation cost of \$80,000 (10,000 × \$8).
- b. Outcome 2 – achievement of the original sales target and the modified sales target. In Outcome 2, Entity T would recognize cumulative compensation cost of \$80,000 because in a Type IV modification the original vesting condition is generally not relevant (that is, the modified award generally vests at a lower threshold of service or performance).
- c. Outcome 3 – failure to achieve either sales target. In Outcome 3, no share options vest because the modified sales target is not achieved; in that case, Entity T would recognize cumulative compensation cost of \$0.

Although the example illustrates the modification of an employee award, ASC 718-20-55-109A and 55-109B state that the guidance should be applied to the modification of a nonemployee award.

The following example further illustrates the accounting for a Type IV modification:

Illustration 8-6: Type IV modification

The entity grants an award of 100,000 options to an executive on 1 January 20X4. The grant-date fair value of each option is \$10. The options have a three-year service condition and require the entity to complete an IPO in that three-year period. The entity accounts for forfeitures when they occur. When the award is granted, the entity deems the performance condition (occurrence of an IPO) to be improbable (see section 4.4.2.2.1). Accordingly, no compensation cost is recognized.

On 1 January 20X5, the entity modifies the award by extending the service period and time to complete the IPO to four years (i.e., 31 December 20X7). The entity determines this is a Type IV modification because at the modification date, both the original and modified awards are considered improbable of vesting. On the modification date, the fair value of each option is \$12. At the time of the modification, the entity deems the performance condition improbable of occurring and continues to recognize no compensation cost.

On 1 January 20X7, the entity completes an IPO and the performance condition is met. Because the award was modified when it was improbable of vesting, the original grant-date fair value is no longer relevant and the modified grant-date fair value is used to recognize compensation cost for the award. Therefore, the fair value of the modified award is \$1,200,000 (\$12 fair value x 100,000 options). On 1 January 20X7, the executive has completed two years of service since the award was modified on 1 January 20X5 and one more year of service is required to vest in the award. Therefore, on 1 January 20X7, the entity records \$800,000 of compensation cost (2/3 years of service x \$1,200,000) as a cumulative catch-up adjustment to retroactively apply the new determination of probability (as described in section 4.4.2.3). The entity will recognize the remaining compensation cost of \$400,000 over the period from 1 January 20X7 through 31 December 20X7.

Although the above example illustrates the modification of an employee award, the same concepts apply to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for nonemployee awards is recognized as if the entity had paid cash for the goods or services (see section 4.1).

8.3.4.2

Type IV modification of awards with service conditions (updated December 2018)

An entity may elect to account for forfeitures as they occur (e.g., when an employee leaves the entity) or to estimate forfeitures at the service inception date and adjust the estimate when it is likely to change (as discussed in section 4.4.1.3). The accounting policy election for forfeitures only applies to the assessment of achievement of service conditions. Because the policy election affects whether the entity recognizes compensation cost for an award with a service condition, the accounting for a Type IV modification of an award that was improbable because a service condition was not expected to be met depends on the entity's policy election.

When an entity has elected to estimate forfeitures and adjust the estimate when it is likely to change

When an entity elects to estimate forfeitures, it does not recognize compensation cost for awards that are improbable of vesting due to the expectation that a service condition would not be met. Therefore, for a Type IV modification of such an award, because the award was improbable of vesting at the modification date, no compensation cost would have been recorded prior to the modification. Further, because the award remains improbable of vesting after modification, no compensation cost is recognized over the remaining requisite service period of an employee award or vesting period of a nonemployee award. However, if the modified award becomes probable of vesting at any time after the modification, the entity must recognize compensation cost for the fair value of the modified award at the date of the modification.

When an entity elects to account for forfeitures as they occur

When an entity elects to account for forfeitures as they occur, it ignores forfeiture expectations in its accounting and, therefore, recognizes compensation cost for all service awards and does not reverse the compensation cost until the forfeiture occurs. Therefore, for an award that was improbable of vesting because the service condition was not expected to be met (i.e., the award is expected to be forfeited) and the entity accounts for forfeitures as they occur, compensation cost would have been recorded before the modification because of the entity's forfeiture policy election. Further, compensation cost will continue to be recognized after modification, even though the award remains improbable of vesting. However, as discussed previously, because the original service condition was not probable of being achieved on the modification date, the original grant-date fair value is no longer relevant to the accounting. Therefore, we believe that the amount of compensation cost to be recognized is the fair value of the modified award. Compensation cost will continue to be recognized until the award forfeits, at which time the related compensation cost is reversed.

Similar to the discussion in section 8.3.3.2, when the modification-date fair value exceeds the grant-date fair value, we believe the difference between the fair value of the modified award and the previously recognized compensation cost should be recognized over the remaining service period (see Illustration 8-8 below, which demonstrates this accounting in a Type IV modification). However, when the modification-date fair value is less than the grant-date fair value, we believe that one of the following methods of expense recognition may be appropriate:

- ▶ Alternative 1 – The amount of compensation cost to be recognized over the remaining requisite service period is the fair value of the modified award less the compensation cost already recognized on the original award. That is, the entity accounts for the modification in a consistent manner as if the fair value had increased between the grant date and the modification date.
- ▶ Alternative 2 – At the first reporting date after the modification, the entity determines the cumulative compensation cost that should be recognized at that date as if the fair value of the modified award had been recognized from the original grant date over the employee's requisite service period or nonemployee's vesting period. The entity takes this amount less the compensation cost already recognized on the original award and recognizes it in the period of modification (i.e., a cumulative-effect adjustment). The remaining compensation cost is recognized over the remaining requisite service period. The expense recognition using this alternative in a Type IV modification is included in Illustration 8-9 in section 8.3.6.

Other methods for recognizing compensation cost may be appropriate when there is a decrease in fair value in the period between the grant date and the modification date. An entity should be consistent in its approach to recognize compensation cost for modified awards.

Determining the compensation cost to be reversed upon a forfeiture when accounting for forfeitures as they occur

When a forfeiture occurs, the entity must determine the amount of compensation cost to be reversed. One acceptable way to do this is to first account for the forfeited awards as the awards that were deemed not probable of vesting at the modification date. However, other methods to determine the value of the forfeited awards may be acceptable. An entity should be consistent in its approach to reverse compensation cost for forfeited awards.

8.3.5 Example – modification to accelerate vesting with no change in fair value

As discussed in section 4.1.2.2, an entity must elect an accounting policy to either account for forfeitures as they occur (e.g., when an employee leaves the entity) or estimate forfeitures and adjust the estimate when it is likely to change. Regardless of an entity's policy election for forfeitures, when accounting for a modification, an entity must assess at the modification date whether the original award was expected to vest under its original terms based on the guidance in ASC 718-20-35-3A.

Illustration 8-7 depicts the accounting for a modification to accelerate vesting when an entity estimates forfeitures. Illustration 8-8 depicts the accounting for a modification to accelerate vesting when an entity accounts for forfeitures when they occur. Although these examples illustrate the modification of employee awards, the same concepts apply to the modification of nonemployee awards. However, the timing of cost attribution may differ since compensation cost for nonemployee awards is recognized as if the entity had paid cash for the goods or services (see section 4.1).

Illustration 8-7: Modification to accelerate vesting when an entity estimates forfeitures

As discussed in section 8.3, modifications to accelerate vesting may result in several different types of modifications of awards: Type I, Type III and Type IV modifications.

Background

On 1 January 20X5, Entity A grants:

- ▶ Award: 100,000 options
- ▶ Service condition: cliff vest at the end of five years
- ▶ Fair value: \$10
- ▶ Forfeiture policy: to estimate forfeitures
- ▶ Forfeiture estimate: 5% of the awards would be forfeited by the end of the five-year period

Entity A recognizes annual compensation cost of \$190,000 (100,000 options × \$10 per option × 95% expected to vest × 1/5 vesting per year).

On 1 January 20X7, Entity A modifies the awards so that they are fully vested after four years of service rather than five years of service as originally required. No other terms or conditions of the original award are modified.

- ▶ Fair value: \$12 (immediately before and after the modification)
- ▶ Forfeiture estimate immediately before the modification: 5% of the awards would be forfeited by the end of the five-year period
- ▶ Forfeiture estimate immediately after the modification: 2% of the awards would be forfeited by the end of the four-year period

Analysis

At the modification date, we believe the modification to accelerate vesting results in three types of modifications: (1) a probable-to-probable (Type I) modification of the awards for which vesting was considered probable under the original terms (95% of the award), (2) an improbable-to-probable (Type III) modification of the awards for which forfeiture was expected under the original terms (3% of the award) but is no longer expected as a result of the modification, and (3) an improbable-to-improbable (Type IV) modification for the 2% of the awards that were expected to be forfeited before and after the modification.

The Type I modification results in no change to the measurement of the awards originally expected to vest because there is no difference in the fair value of the modified award and the original award immediately before the terms are modified. However, the \$570,000 in remaining unrecognized compensation cost at the modification date must be recognized over two years under the new service requirement. Accordingly, \$285,000 of compensation cost must be recognized for those awards in each of the next two years.

The Type III modification results in a new measurement of compensation cost (as discussed in section 8.3.3.2, when the award is modified and vesting previously was not probable, the original grant-date fair value of the award is no longer used to measure compensation cost for the award) for 3% of the awards. Therefore, compensation cost of \$36,000 (100,000 options × \$12 per option × 3% expected to vest) must be recognized over the remaining two years (\$18,000 per year).

With respect to the Type IV modification, no compensation cost will be recognized as a result of the modification because the awards are not expected to vest despite the modification. However, if the entity's forfeiture estimate changes such that all or a portion of these awards are expected to vest, the entity will need to recognize compensation cost of \$12 per option for these awards (as discussed in section 8.3.4.2, when vesting is modified and vesting previously was not probable, the original grant-date fair value of the award is no longer relevant). The effect of a change in estimated forfeitures is recognized through a cumulative catch-up adjustment that is included in compensation cost in the period of the change in estimate. That is, cumulative compensation cost recognized to date is adjusted to the amount that would have been recognized if the new estimate of forfeitures had been used since the modification date.

Illustration 8-8: Modification to accelerate vesting when an entity accounts for forfeitures as they occur

As discussed in section 8.3, modifications to accelerate vesting may result in several different types of modifications of awards: Type I, Type III and Type IV modifications.

Background

On 1 January 20X5, Entity A grants:

- ▶ Award: 100,000 options
- ▶ Service condition: cliff vest at the end of five years
- ▶ Fair value: \$10
- ▶ Forfeiture policy: to account for forfeitures when they occur
- ▶ Forfeiture estimate: 5% of the awards would be forfeited by the end of the five-year period

Entity A recognizes annual compensation cost of \$200,000 (100,000 options × \$10 per option × 1/5 vesting per year).

On 1 January 20X7, Entity A modifies the awards so that they are fully vested after four years of service rather than five years of service as originally required. No other terms or conditions of the original award are modified.

- ▶ Fair value: \$12 (immediately before and after the modification)
- ▶ Forfeiture estimate immediately before the modification: 5% of the awards would be forfeited by the end of the five-year period
- ▶ Forfeiture estimate immediately after the modification: 2% of the awards would be forfeited by the end of the four-year period

Analysis

At the modification date, we believe the modification to accelerate vesting results in the following modifications: (1) a probable-to-probable (Type I) modification of the awards for which vesting was considered probable (95% of the award), (2) an improbable-to-probable (Type III) modification for which vesting was not considered probable before modification but was considered probable after (3% of the award), and (3) an improbable-to-improbable (Type IV) modification of the awards for which forfeiture was expected under the original terms (2% of the award).

The Type I modification results in no change to the measurement of the awards originally expected to vest. However, the \$570,000 ((100,000 options x \$10 per option x 95% of the award) - \$380,000 compensation cost already recognized on the portion expected to vest based on the original terms) in remaining unrecognized compensation cost at the modification date must be recognized over two years under the new service requirement. Accordingly, \$285,000 of compensation cost must be recognized for those awards in each of the next two years.

The Type III and Type IV modifications result in a new measurement of compensation cost as discussed in sections 8.3.3 and 8.3.4, when the awards are modified and vesting previously was not probable, the original grant-date fair value of the award is no longer used to measure compensation cost for the award for 5% of the awards. Therefore, both the awards that are considered Type III and Type IV modifications must be remeasured to fair value on the modification date. Because the entity accounts for forfeitures as they occur, the entity will recognize compensation during the remaining service period based on the modification-date fair value. Therefore, compensation cost of \$20,000 ((100,000 options × \$12 per option × 5% (3% Type III and 2% Type IV) of awards not probable of vesting immediately before the modification – \$20,000 previously recognized compensation cost) × ½ vesting per year) must be recognized in each of the remaining two years.

Compensation cost will be reversed at the time of forfeitures, if any.

8.3.6 Example – modification to accelerate vesting in the event of a change in control

When an entity modifies an award to provide for the acceleration of vesting in the event of a change in control, it may represent a Type I modification and/or a Type IV modification. Modifications to provide for the acceleration of vesting on a change in control typically do not result in Type III modifications (improbable-to-probable modifications) because a change in control is not considered probable until the change in control actually happens (see further discussion in section 4.4.2.2.1). If no other terms or conditions of the award are modified, the modification will result in a new measurement date for those awards that are expected to be forfeited (that is, a Type IV modification), but it will not affect the awards previously expected to vest (that is, a Type I modification). That is, the addition of only a change in control provision would not increase the fair value of the award on the modification date. Therefore, in this example, the Type I modification does not result in incremental compensation cost to recognize.

Illustration 8-9: Modification to accelerate vesting on a change in control

Background

On 1 January 20X6, Entity A grants:

- ▶ Award: 100,000 options
- ▶ Service condition: cliff vest at the end of four years
- ▶ Fair value: \$5

On 1 January 20X7, Entity A modifies the awards to provide for acceleration of vesting in the event of a change in control. No other terms or conditions of the original award are modified.

- ▶ Fair value: \$4 (immediately before and after the modification)

Analysis – estimates forfeitures

Entity A estimates forfeitures in the accrual of compensation cost and assumes that 10% of the awards will be forfeited, and continues to believe that 10% of the awards will be forfeited after the modification.

Prior to the modification, Entity A had recognized compensation cost of \$112,500 (100,000 options × \$5 per option × 90% expected to vest × ¼ vesting per year).

For the 90% of the options that are expected to vest, the modification represents a probable-to-probable (Type I) modification and, accordingly, does not change the measurement of compensation cost, as there was no incremental compensation cost resulting from the modification. Because the change in control is not considered probable, the requisite service period also remains unchanged. Accordingly, for these options, Entity A will continue to recognize \$112,500 a year in compensation cost (assuming actual forfeitures equal estimated forfeitures).

For the 10% of options not expected to vest, an improbable-to-improbable (Type IV) modification has occurred. If these awards never vest, no compensation cost will be recognized. However, if the entity's estimate changes such that all or a portion of these awards are expected to vest, the entity will need to recognize compensation cost of \$4 per option for these awards (as discussed in section 8.3.4, when vesting is modified and vesting previously was not probable, the original grant-date fair value of the award is no longer considered, even in situations when the fair value on the modification date is less the grant-date fair value).

Analysis – accounts for forfeitures as they occur

Assume the same facts as above, except that Entity A had an accounting policy to account for forfeitures as they occur. In this case, the modification would still result in a probable-to-probable (Type I) modification for 90% of the awards and an improbable-to-improbable (Type IV) modification for 10% of the awards. However, before the modification, Entity A would have recognized compensation cost of \$125,000 (100,000 options × \$5 per option × ¼ vesting per year), assuming no forfeitures had occurred.

Because the fair value of the awards decreased between the grant date and the modification date, the entity determines it is appropriate to calculate cumulative compensation cost at the time of the modification on 1 January 20X7 of \$122,500 [(100,000 options × \$5 per option × 90% Type I modification × 1/4 vesting period) + (100,000 options × \$4 per option × 10% Type IV modification × 1/4 vesting period)], assuming no forfeitures had occurred. Entity A would then recognize a cumulative catch adjustment to compensation cost of (\$2,500) on 1 January 20X7 (\$122,500 compensation cost to date – \$125,000 recognized in 20X6).

If the change in control does not occur and 10,000 awards were forfeited immediately before the last day of vesting, Entity A would reverse compensation cost of \$40,000 (10,000 options × \$4 per option). This is because Entity A estimated at the time of the modification that 10,000 awards would be forfeited and recognized \$4 per option of cumulative compensation cost related to those awards. Other methods of determining the amount of compensation cost to reverse may be acceptable, such as in instances where actual forfeitures differ from forfeitures estimated at the time of the modification.

Although the above example illustrates the modification of an employee award, the same concepts apply to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

8.4 Other modification considerations

8.4.1 Modifications to provide for transferability of employee options

Employee share options typically are not transferable. However, option plans occasionally allow the option holder to transfer the option to a limited group of related parties (e.g., to an immediate family member), and the grantor may modify employee options to make them transferable to unrelated third parties. For example, we are aware of entities that have allowed employee options to be transferred for a limited period of time to an investment bank.

A modification of an option to provide for transferability normally will affect the expected term of the option. As discussed in section 7.3.1, because most employee options are not transferable, employees often exercise the option before the end of the contractual term. However, if an option were freely transferable, the employee would be expected to sell the option and capture both the time value of money and the intrinsic value of that option, rather than exercise the option early and only capture the intrinsic value. Accordingly, if an employee option is modified to make it freely transferable, the modified option should be measured at fair value with an expected term equal to the contractual term (see ASC 718-20-55-50).

However, if the modified option provides for very limited transferability (e.g., only to family members or a family trust), this feature may have a minimal effect on the employee's exercise behavior (and the expected term of the option) because the expected exercise behavior of the employee's family members may be no different than the expected exercise behavior of the employee. In this instance, the modified option may be measured at fair value based on the expected term, consistent with the valuation of awards with no transferability provisions.

All facts and circumstances associated with the modification and the likelihood of transfer and exercise should be considered when measuring the fair value of an award that is not freely transferable.

If an option is modified to make it freely transferable and that modification changes the expected term of the option, which is an input in the fair value of the award, modification accounting would be required. However, if that modification does not change the term of the option and the vesting conditions and classification of the award are the same before and after the modification (ASC 718-20-35-2A), modification accounting would not be required (see section 8.2).

8.4.2 Modifications of deeply out-of-the-money options

When modification accounting is applied, the new requisite service period for an employee award or vesting period for a nonemployee award must be based on the modified terms of the award. However, if an award that was granted at-the-money and subsequently becomes deeply out-of-the-money is modified to accelerate vesting, compensation cost must continue to be recognized over the employee's requisite service period or nonemployee's vesting period of the original option when the modification to accelerate vesting is not substantive (immediate recognition of the remaining unrecognized compensation cost is not permitted if the grantee continues to provide goods or services), as described in ASC 718-10-55-67.

If the derived service period of the modified option represents a significant portion of or is longer than the remainder of the original requisite service period for an employee award or vesting period for a nonemployee award, such a modification would be considered nonsubstantive and would not be accounted for as a modification. Any unrecognized compensation cost at the date of the modification

should continue to be recognized over the option's remaining requisite service period of an employee award or vesting period of a nonemployee award as if the modification had never occurred. Further discussion on the accounting for deeply out-of-the-money options is provided in section 4.4.3.2.

8.4.3 Modifications of incentive stock options

The modification of an incentive stock option (ISO) may cause the disqualification of the award as an ISO. If ISO status is disallowed because of a disqualifying modification, the award should be treated as if it had been a non-qualified option since inception. As a result, a deferred tax benefit should be recorded for all compensation cost recognized for the award through the modification date. Refer to section 22 of our FRD, *Income taxes*, for a discussion of the accounting for ISOs.

8.4.4 Implications of frequent modifications

The FASB discussed whether a different model should apply to awards that are frequently modified. For example, in some cases frequent modifications may suggest that the terms of the award are not mutually understood at the initial agreement date and, therefore, a grant date and measurement date cannot be achieved.

Though not retained in the Codification, the Background Information and Basis for Conclusions in Statement 123(R) explained why the FASB ultimately decided not to provide any special guidance regarding frequent modifications:

Non-authoritative literature

Basis for Conclusions of Statement 123(R)

BC200. The Board considered whether multiple modifications of the same award might in some circumstances indicate that an employer and employees who benefit from the change(s) to their awards no longer have a mutual understanding of the award's key terms and conditions. The accounting result of a determination that such a mutual understanding does not exist would be to account for that award, and possibly similar awards, based on their estimated fair value at each reporting date until settlement. The Board considered several possible means of identifying awards to be accounted for as if a grant date has not yet occurred and concluded that each possible method could result in significant implementation problems. The Board also noted that most modifications of awards will result in recognition of incremental compensation cost. Accordingly, the Board decided not to establish special accounting requirements for multiple modifications of the same award.

We believe that repeated modifications of employee and nonemployee awards generally will not lead to a conclusion that there is not a mutual understanding of the terms of an award, and a grant date (and measurement date) has not yet occurred. However, if it is apparent from the facts and circumstances that the initial terms of the award were provided as placeholders to be modified in the future, we believe that a grant date would not occur until the modification date. We expect such circumstances to be rare.

As discussed in section 8.3, if an award is modified more than once, the effects of the current modification would be measured against the fair value estimated for the award based on its terms immediately preceding the current modification (i.e., the most recent prior modification).

Also note that repeated cash settlements have potential accounting implications (e.g., potential liability classification), which are discussed in section 5.2.5.

8.4.5 Modifications of awards held by former employees and nonemployees (updated June 2019)

ASC 718-10-35-10 states that an award that is subject to ASC 718 will continue to be subject to the recognition and measurement provisions of that standard throughout the life of the instrument, unless its terms are modified when the holder is no longer employed or providing goods and services to the entity. That is, upon modification, the recognition and measurement of the instrument becomes subject to other guidance. For further discussion on the accounting for instruments that are not subject to ASC 718, see our FRDs, *Issuer's accounting for debt and equity financings* and *Derivatives and hedging (before the adoption of ASU 2017-12)* or *Derivatives and hedging (after the adoption of ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities)*.

Unless the modification is made for all holders of a class of equity securities, ASC 718-10-35-14 requires that any incremental fair value resulting from the modification or settlement of the former employee or nonemployee award be recognized as compensation cost, similar to a Type I modification (see section 5.5.3). If the modification affects all holders of a class of equity securities, any incremental fair value associated with the modification would be recognized as a distribution to equity holders (special guidance applies to modifications of preferred stock as described in ASC 260-10-S99-2).

8.5 Modifications of market conditions

The modification accounting guidance in ASC 718-20-55-107 through 55-119 (discussed in section 8.3) applies only to modifications of vesting conditions (e.g., service and performance conditions). ASC 718-20-55-107 clarifies that the guidance relating to Type I, II, III and IV modifications does not apply to modifications of market conditions.

The most significant difference in the accounting for a modification of a market condition from the accounting for a modification of a service or performance condition arises as a result of the provisions of ASC 718-20-35-3, which requires that total recognized compensation cost for an equity award shall at least equal the fair value of the award at the grant date, unless at the date of the modification the performance or service conditions of the original award are not expected to be satisfied. Thus, the total compensation cost measured at the date of a modification shall be (1) the portion of the grant-date fair value of the original award for which the promised good is expected to be delivered (or has already been delivered) or service is expected to be rendered (or has already been rendered) at that date, plus (2) the incremental cost resulting from the modification.

Unlike a service or performance condition, when a market condition is modified, the probability of satisfying the original condition does not affect the total compensation cost that will be recognized. As a result, the total compensation cost recognized for a modified award with only a market condition will never be less than the grant-date fair value of the original award. Additionally, the effect of the modification on the number of instruments expected to vest must be considered when measuring incremental compensation cost. The example below illustrates these points.

Illustration 8-10: Modification accounting for an award with a market condition when an entity estimates forfeitures

Assume that Entity X granted 1,000 options on 1 January 20X5 with an exercise price of \$15 per option (the market value of the shares on the grant date). The options become exercisable if the employee is employed when Entity X's share price reaches \$22 (a market condition). The entity used a binomial model to determine that the fair value of each option on the grant date was \$4.50. The requisite service period for the award, derived from the binomial model, was four years. Entity X estimates forfeitures related to the service condition and estimated that 75% (or 750) of the options would vest. In 20X5, Entity X recognized \$844 of compensation cost, calculated as $\$4.50 \times (1,000 \times 75\%) \times (1/4 \text{ years})$.

On 1 January 20X6, when the entity's share price had dropped to \$12, the entity modified the market condition so the options would become exercisable when the share price reaches \$17. To determine the incremental compensation cost when accounting for the modification, the entity measured the fair value of the original award immediately before the modification and compared it to the fair value of the modified award, which were \$2.25 per option and \$3.50 per option, respectively. The requisite service period of the modified award, derived from the binomial model used to value the award, was two years. As a result of the shorter requisite service period, the entity estimated that 80% (or 800) of the options would vest. The additional 50 options that are expected to vest as a result of the modification must be included in the calculation of incremental compensation cost. Incremental compensation cost resulting from the modification is calculated as follows:

Fair value of modified options	\$	3.50
Options expected to vest (modified conditions)		<u>800</u>
Fair value of modified award	\$	<u>2,800</u>
Fair value of original options	\$	2.25
Options expected to vest (original conditions)		<u>750</u>
Fair value of original award	\$	<u>1,688</u>
Incremental compensation cost	\$	<u>1,112</u>

Total compensation cost relating to the modified award is calculated as the unrecognized compensation cost from the original award plus the incremental compensation cost resulting from the modification, $(\$3,375 - \$844) + \$1,112 = \$3,643$. The entity will recognize compensation cost of \$3,643 over the new two-year requisite service period.

In contrast, if the fair value of the award immediately after the modification was less than the fair value immediately before the modification, there would be no incremental compensation cost to recognize, and the entity would continue recognizing compensation cost based on the original award's grant-date fair value.

Accounting for forfeitures as they occur

An entity may elect to account for forfeitures as they occur (e.g., when an employee leaves the entity) or estimate them and adjust the estimate when it is likely to change (as discussed in section 4.4.1.3). In the above illustration, if Entity X has elected to account for forfeitures as they occur, it will recognize total compensation cost for all outstanding awards (before any forfeitures) equal to (1) the grant-date fair value of the award, plus (2) any incremental fair value as a result of the modification, or \$5,750 (1,000 options x (\$4.50 original grant-date fair value plus \$1.25 incremental fair value as a result of the modification)) less previously recognized compensation cost (\$1,125, or \$4.50 grant-date fair value x 1,000 options x ¼ vesting period), or \$4,625 over the new two-year requisite service period of the modified award. The entity will reverse compensation cost as awards are forfeited.

Although the above example illustrates the modification of an employee award, the same concepts apply to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

8.6 Modifications that change an award's classification

A modification may change the balance sheet classification of an award. For example, an option that previously was classified as equity might be modified to provide the grantee with the right to request cash settlement (see section 5 for a discussion of the criteria for liability classification). If an entity modifies an award in that manner, it uses the modification model described in ASC 718-20-35-3 and in section 8.3, with certain differences, as described below.

8.6.1 Modification that changes classification from equity to a liability (updated June 2019)

Conceptually, a modification that changes an award's classification from equity to a liability is similar to the cash settlement of an award. As discussed further in section 8.9, cash settlements generally are accounted for as treasury-stock transactions, with the recognition of any previously measured but unrecognized compensation cost, as well as incremental compensation cost for any excess of the cash payment over the fair value of the award at settlement. Although conceptually similar, ASC 718 does not treat modifications that change an award's classification from equity to a liability the same as a cash settlement.

When accounting for modifications that change the classification of an award from an equity instrument to a liability, an entity includes in its measurement of compensation cost any increase in the fair value of the award between the grant date and the modification date. This is because when accounting for liability-classified awards, entities must remeasure the award at each reporting period and reflect any changes in compensation cost. This differs from the accounting for a settlement of the award that only results in recognizing additional compensation when the cash settlement is in excess of the fair value of the award on the settlement date. Accordingly, if a grantor is considering converting an equity award that has increased in value since the grant date to a cash award, it may wish to consider settling the award. Settling the award for fair value avoids recognizing any increases in value of the award between the grant date and modification date, while a modification that requires reclassification of an equity instrument to a liability results in additional compensation cost for increases in fair value since the grant date. However, as discussed in section 5.2.5, a history of cash settling immature shares may suggest that some or all of an entity's share-based payment awards are liabilities, even though cash settlement is not explicitly provided for in the plan.

We understand from discussions with the FASB staff that there are two key factors that must be considered in determining whether a transaction represents a settlement or a modification: (1) whether the obligation continues to be indexed to the grantor's shares and (2) whether future service is required. If either of these conditions exists, the transaction should be accounted for as a modification. If neither condition exists, the transaction is accounted for as a settlement as described in section 8.9.

ASC 718-20-35-3 requires that total recognized compensation cost for an equity award be at least equal to the grant-date fair value of the award, unless, at the date of the modification, the service or performance conditions of the original award are not expected to be satisfied. We understand from discussions with the FASB staff that when a modification results in the reclassification of an equity award to a liability award, the entity will recognize cumulative compensation cost equal to the *greater* of:

- (1) The grant-date fair value of the original equity award (or the acquisition-date fair value for awards recorded at fair value in conjunction with a business combination occurring subsequent to the original grant date) plus any incremental compensation cost associated with the modification (i.e., fair value of the modified award over the fair value of the original award immediately before the modification, as described in section 8.3)
- (2) The fair value of the modified liability award when it is settled

However, when considering the amount to be recognized under (1) above, the incremental compensation cost resulting from the modification cannot exceed the ultimate amount that the award is settled for. That is, if the fair value of the award decreases after the modification date, the incremental compensation cost recognized as a result of the modification may need to be reduced. However, because the original award was equity classified, the compensation cost recognized cannot be less than the original grant-date fair value. This view is consistent with the principle in ASC 718 that the replacement award is a new award. The vested portion of the total compensation cost, if any, should be recognized at the date of the modification when the award is reclassified as a liability.

When an equity-classified award that is probable of vesting is modified to be a liability-classified award, the total compensation cost ultimately recognized will depend on whether the award's fair value increases or decreases. For example, if the award's fair value at settlement is less than the original grant-date fair value, the entity will recognize total compensation based on (1) above. However, if the award's fair value at settlement has increased significantly since the original award was issued, then the entity will likely recognize compensation cost based on (2) above. The following example illustrates these concepts.

Illustration 8-11: Modification that changes classification from equity to liability – vested award

The recognition of incremental compensation cost can occur at the date of the modification even if the fair value of the liability is less than or equal to the grant-date fair value of the original award. For example, assume a grantee of Entity Y has a fully vested out-of-the-money option at 31 December 20X7. The grant-date fair value of the award was \$1,000. The current fair value of the award is \$200 immediately before the modification. Further assume the entity agrees to modify the option to permit cash settlement and to reprice the option. The fair value of the modified award is \$500. Entity Y would make the following entries to reclassify the award from equity to liability at the date of the modification:

Dr. Compensation cost	\$	300	
Dr. Additional paid-in capital		200	
Cr. Liability			\$ 500

The liability must be recognized on the modification date as the amount of the current fair value of the modified award (\$500). Additional compensation cost of \$300 must be recognized as the incremental fair value as a result of the modification (\$500 modified fair value - \$200 current fair value). The difference is recorded as a reduction of additional paid-in capital.

The fair value of the modified award should be remeasured each reporting date through settlement. Adjustments to increase or decrease the liability are recorded either as compensation cost or as a charge to equity, as described further below. The cumulative measure of compensation cost can never be less than the sum of the grant-date fair value of the original award, plus the incremental compensation cost associated with the modification (unless the settlement value is less than the incremental compensation cost associated with the modification). The incremental compensation cost is remeasured, but only to the extent that the total fair value of the award is less than the modification date incremental compensation cost (\$300 in this example).

Scenario 1 – settlement amount is greater than the original grant-date fair value, plus incremental compensation cost resulting from the modification

If the liability in future periods increases by less than the amount remaining in equity from the grant-date fair value of the original award (\$800 in this example, or \$1,000 of compensation cost recorded based on the grant-date fair value less the \$200 reduction to additional paid-in capital upon modification), any adjustment necessary to maintain the liability at fair value is recognized in equity. If the fair value of the liability in future periods exceeds the sum of the credit recognized in equity for the original award, plus any incremental fair value resulting from the modification, any adjustment is recognized as compensation cost. For example, if the award in the above example were settled for \$1,500 in the reporting period following the modification, the entity would recognize \$1,500 of cumulative compensation cost (\$1,000 for the grant-date fair value, plus \$300 of incremental compensation cost at the modification date, plus \$200 for changes in the fair value of the liability after the modification date). That is, total compensation cost will equal the settlement amount.

Entity Y would make the following entries to remeasure the liability as of the settlement date:

Dr. Compensation cost	\$200	
Dr. Additional paid-in capital	800	
Cr. Liability		\$ 1,000

Because the previous liability recorded was \$500, an additional liability of \$1,000 must be recorded so that the liability equals the settlement amount of \$1,500. Because the entity had already recorded compensation cost of \$1,300 (i.e., the original grant-date fair value, plus the incremental compensation as a result of the modification), the entity must record additional compensation cost of \$200 so that total compensation cost equals \$1,500. The difference (\$800) is recorded to additional paid-in capital.

Scenario 2 – settlement amount is greater than the original grant-date fair value, but less than the original grant-date fair value, plus incremental compensation resulting from the modification

If the fair value of the liability at settlement is less than the sum of the grant-date fair value of the original award and the incremental compensation cost associated with the modification, but greater than the incremental compensation cost resulting from the modification, the adjustment to the liability is recognized in equity. In the above example, if the award were settled in the reporting period following the modification for \$1,100 (i.e., the award is settled for less than the sum of the grant-date fair value of the original award of \$1,000, plus the incremental compensation cost associated with the modification of \$300), the change in the liability would be recorded in equity. In that circumstance, total compensation cost is \$1,300.

Entity Y would make the following entries to remeasure the liability as of the settlement date:

Dr. Additional paid-in capital	\$600	
Cr. Liability		\$ 600

Because the previous liability recorded was \$500, an additional liability of \$600 must be recorded so that the liability equals the settlement amount of \$1,100. Because the entity had already recorded compensation cost of \$1,300 (i.e., the original grant-date fair value, plus the incremental compensation as a result of the modification), the debit to the entry is made to additional paid-in capital.

Scenario 3 – settlement amount is less than the incremental compensation resulting from the modification

If the award was settled in the reporting period following the modification at an amount that is less than the incremental fair value of the modification on the modification date, incremental compensation cost must be reduced. For example, if the fair value of the award at settlement is \$100, the incremental fair value is remeasured from \$300 to \$100, with the reduction recognized in compensation cost. The total compensation cost is equal to the remeasured incremental fair value (\$100), plus the original grant-date fair value of the award (\$1,000), or \$1,100.

Entity Y would make the following entries to remeasure the liability as of the settlement date:

Dr. Liability	\$	400	
Cr. Compensation cost			\$ 200
Cr. Additional paid-in capital			200

Because the previous liability recorded was \$500, the liability is reduced by \$400 to the settlement amount of \$100. Further, the previously recognized incremental compensation cost of \$300 must be reduced to \$100 (the settlement amount), so a credit of \$200 is recorded to compensation cost. The difference (\$200) is recorded to additional paid-in capital.

The following table illustrates the compensation cost that would be recognized in the above example under a variety of settlement value scenarios:

Grant-date fair value	Fair value before modification	Fair value after modification	Fair value at settlement	Incremental compensation cost recognized at modification date	Compensation cost recognized between modification date and settlement	Cumulative compensation cost
(A)	(B)	(C)	(D)	(C) – (B) = (E)	(F) ⁵²	(A) + (E) + (F) = (G)
\$ 1,000	\$ 200	\$ 500	\$ 0	\$ 300	\$ (300)	\$ 1,000
1,000	200	500	100	300	(200)	1,100 ⁵³
1,000	200	500	200	300	(100)	1,200
1,000	200	500	300	300	–	1,300
1,000	200	500	400	300	–	1,300
1,000	200	500	500	300	–	1,300 ⁵⁴
1,000	200	500	600	300	–	1,300
1,000	200	500	700	300	–	1,300
1,000	200	500	800	300	–	1,300
1,000	200	500	900	300	–	1,300
1,000	200	500	1,000	300	–	1,300
1,000	200	500	1,100	300	–	1,300
1,000	200	500	1,200	300	–	1,300
1,000	200	500	1,300	300	–	1,300
1,000	200	500	1,400	300	100	1,400
1,000	200	500	1,500	300	200	1,500 ⁵⁵
1,000	200	500	1,600	300	300	1,600
1,000	200	500	1,700	300	400	1,700
1,000	200	500	1,800	300	500	1,800
1,000	200	500	1,900	300	600	1,900
1,000	200	500	2,000	300	700	2,000

⁵² If (D) is less than or equal to (E), (F) = (D) – (E). If (D) is greater than (E) but less than or equal to (A) + (E), (F) = 0. If (D) is greater than (A) + (E), (F) = (D) – (A) – (E).

⁵³ As illustrated in scenario 3 above.

⁵⁴ As illustrated in scenario 2 above.

⁵⁵ As illustrated in scenario 1 above.

If a modification does not result in incremental compensation cost, then decreases in the liability award's fair value through its settlement do not affect the amount of compensation cost recognized in future periods (i.e., compensation cost continues to be recognized based on the grant-date fair value of the equity award originally granted, and any adjustments to reflect the reduction in the liability are recorded in equity). This is because the total compensation cost recorded cannot be less than the original grant-date fair value of the award under (1) above. However, increases in the liability award's fair value through its settlement in excess of amounts previously recognized based on the grant-date fair value of the original award are recorded as compensation cost. This is because the total compensation cost recorded cannot be less than the settlement amount of the award under (2) above.

Note that if the award is fully vested at the modification date, any incremental compensation cost arising as a result of the modification would be immediately recognized. Any subsequent compensation cost resulting from changes in the fair value of the liability award would be recognized in the period of the change in fair value.

Alternatively, if the award is not vested, the portion of incremental compensation cost that corresponds to the percentage of the employee's requisite service period or nonemployee's vesting period that has been rendered prior to the modification date would be recognized immediately, and the remainder of the incremental compensation cost would be recognized over the remaining requisite service period of an employee award or vesting period of a nonemployee award. The objective underlying this principle is that, at any given point in time, the recognized compensation cost would be equal to the remeasured compensation cost times the percentage of the goods or services that have been rendered.

Illustration 8-12: Modification that changes classification from equity to liability – unvested award

Assume the same background facts in Illustration 8-11, except that when the award is modified on 31 December 20X7, the grantee has provided only 25% of the required service. The grant-date fair value of the award was \$1,000. The current fair value of the award is \$200. Further assume the entity agrees to modify the option to permit cash settlement and to reprice the option. The fair value of the modified award is \$500.

As a result of the modification, an additional \$300 of compensation cost is to be recognized. Entity Y would recognize 25% of the incremental compensation cost at the modification date, or \$75 (the incremental compensation related to the vested options) and recognize a liability of \$125 (\$500 fair value on modification date x 25% vested). The remainder of the incremental compensation cost (\$225, or 75% x \$300) is recognized over the remaining service period of the award.

When the award vests, it is ultimately settled for \$2,000. As the award vests, Entity Y would recognize the remaining \$750 of compensation cost from the original grant-date fair value measurement, \$225 of incremental compensation cost arising from the modification and \$700 of compensation cost that arises as a result of subsequent remeasurement of the award (the fair value at the settlement date less the original and incremental compensation cost recognized ($\$2,000 - (\$1,000 + \$300)$)).

The examples below from ASC 718 further illustrate the accounting for modifications that change the classification of an award from an equity instrument to a liability when incremental compensation cost does not arise.

8.6.1.1

Example – modification that changes classification from equity to a liability that continues to be indexed to entity's shares

The illustration below highlights the accounting for a modification of a share-based payment award that changes the classification from equity to a liability that continues to be indexed to the entity's shares.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-123

Entity T grants the same share options described in Example 1, Case A (see paragraph 718-20-55-10) [See section 4.4.1.6]. As in Example 1, Case A, Entity T has an accounting policy to estimate the number of forfeitures expected to occur in accordance with paragraph 718-10-35-3. The number of options for which the requisite service is expected to be rendered is estimated at the grant date to be 821,406 ($900,000 \times .97^3$). For simplicity, this Case assumes that estimated forfeitures equal actual forfeitures. Thus, as shown in the table in paragraph 718-20-55-130, the fair value of the award at January 1, 20X5, is \$12,066,454 ($821,406 \times \14.69), and the compensation cost to be recognized during each year of the 3-year vesting period is \$4,022,151 ($\$12,066,454 \div 3$). The journal entries for 20X5 are the same as those in paragraph 718-20-55-12.

718-20-55-12

[...] The journal entries to recognize compensation cost and related deferred tax benefit at the enacted tax rate of 35 percent are as follows for 20X5.

Compensation cost	\$ 4,022,151	
Additional paid-in capital		\$ 4,022,151

To recognize compensation cost.

Deferred tax asset	\$ 1,407,753	
Deferred tax benefit		\$ 1,407,753

To recognize the deferred tax asset for the temporary difference related to compensation cost ($\$4,022,151 \times .35 = \$1,407,753$).

718-20-55-124

On January 1, 20X6, Entity T modifies the share options granted to allow the employee the choice of share settlement or net cash settlement; the options no longer qualify as equity because the holder can require Entity T to settle the options by delivering cash. Because the modification affects no other terms or conditions of the options, the fair value (assumed to be \$7 per share option) of the modified award equals the fair value of the original award immediately before its terms are modified on the date of modification; the modification also does not change the number of share options for which the requisite service is expected to be rendered. On the modification date, Entity T recognizes a liability equal to the portion of the award attributed to past service multiplied by the modified award's fair value. To the extent that the liability equals or is less than the amount recognized in equity for the original award, the offsetting debit is a charge to equity. To the extent that the liability exceeds the amount recognized in equity for the original award, the excess is recognized as compensation cost. In this Case, at the modification date, one-third of the award is attributed to past service (one year of service rendered/three-year requisite service period). The modified award's fair value is \$5,749,842 ($821,406 \times \7), and the liability to be recognized at the modification date is \$1,916,614 ($\$5,749,842 \div 3$). The related journal entry follows.

Additional paid-in capital	\$ 1,916,614	
Share-based compensation liability		\$ 1,916,614

To recognize the share-based compensation liability.

718-20-55-125

No entry would be made to the deferred tax accounts at the modification date. The amount of remaining additional paid-in capital attributable to compensation cost recognized in 20X5 is \$2,105,537 (\$4,022,151 – \$1,916,614).

718-20-55-126

Paragraph 718-20-35-3(b) specifies that total recognized compensation cost for an equity award shall at least equal the fair value of the award at the grant date unless at the date of the modification the service or performance conditions of the original award are not expected to be satisfied. In accordance with that principle, Entity T would ultimately recognize cumulative compensation cost equal to the greater of the following:

- a. The grant-date fair value of the original equity award
- b. The fair value of the modified liability award when it is settled.

718-20-55-127

To the extent that the recognized fair value of the modified liability award is less than the recognized compensation cost associated with the grant-date fair value of the original equity award, changes in that liability award's fair value through its settlement do not affect the amount of compensation cost recognized. To the extent that the fair value of the modified liability award exceeds the recognized compensation cost associated with the grant-date fair value of the original equity award, changes in the liability award's fair value are recognized as compensation cost.

718-20-55-128

At December 31, 20X6, the fair value of the modified award is assumed to be \$25 per share option; hence, the modified award's fair value is \$20,535,150 (821,406 × \$25), and the corresponding liability at that date is \$13,690,100 (\$20,535,150 × 2/3) because two-thirds of the requisite service period has been rendered. The increase in the fair value of the liability award is \$11,773,486 (\$13,690,100 – \$1,916,614). Before any adjustments for 20X6, the amount of remaining additional paid-in capital attributable to compensation cost recognized in 20X5 is \$2,105,537 (\$4,022,151 – \$1,916,614). The cumulative compensation cost at December 31, 20X6, associated with the grant-date fair value of the original equity award is \$8,044,302 (\$4,022,151 × 2). Entity T would record the following journal entries for 20X6.

Compensation cost	\$ 9,667,949	
Additional paid-in capital	\$ 2,105,537	
Share-based compensation liability		\$11,773,486

To increase the share-based compensation liability to \$13,690,100 and recognize compensation cost of \$9,667,949 (\$13,690,100 – \$4,022,151).

Deferred tax asset	\$ 3,383,782	
Deferred tax benefit		\$ 3,383,782

To recognize the deferred tax asset for additional compensation cost (\$9,667,949 × .35 = \$3,383,782).

718-20-55-129

At December 31, 20X7, the fair value is assumed to be \$10 per share option; hence, the modified award's fair value is \$8,214,060 ($821,406 \times \10), and the corresponding liability for the fully vested award at that date is \$8,214,060. The decrease in the fair value of the liability award is \$5,476,040 ($\$8,214,060 - \$13,690,100$). The cumulative compensation cost as of December 31, 20X7, associated with the grant-date fair value of the original equity award is \$12,066,454 (see paragraph 718-20-55-123). Entity T would record the following journal entries for 20X7.

Share-based compensation liability	\$ 5,476,040	
Compensation cost		\$ 1,623,646
Additional paid-in capital		\$ 3,852,394

To recognize a share-based compensation liability of \$8,214,060, a reduction of compensation cost of \$1,623,646 ($\$13,690,100 - \$12,066,454$), and additional paid-in capital of \$3,852,394 ($\$12,066,454 - \$8,214,060$).

Deferred tax expense	\$ 568,276	
Deferred tax asset		\$ 568,276

To reduce the deferred tax asset for the reduction in compensation cost ($\$1,623,646 \times .35 = \$568,276$).

718-20-55-130

The modified liability award is as follows.

<u>Year</u>	<u>Total value of award</u>	<u>Pretax cost for year</u>	<u>Cumulative pretax cost</u>
20X5	\$ 12,066,454 ($821,406 \times \$14.69$)	\$4,022,151 ($\$12,066,454 \div 3$)	\$ 4,022,151
20X6	\$ 20,535,150 ($821,406 \times \$25.00$)	\$9,667,949 [$(\$20,535,150 \times \frac{2}{3}) - \$4,022,151$]	\$ 13,690,100
20X7	\$ 12,066,454 ($821,406 \times \$14.69$)	\$ (1,623,646) ($\$12,066,454 - \$13,690,100$)	\$ 12,066,454

718-20-55-131

For simplicity, this Case assumes that all share option holders elected to be paid in cash on the same day, that the liability award's fair value is \$10 per option, and that Entity T has already recognized its income tax expense for the year without regard to the effects of the settlement of the award. In other words, current tax expense and current taxes payable were recognized based on income and deductions before consideration of additional deductions from settlement of the award.

718-20-55-132

The \$8,214,060 in cash paid to the employees on the date of settlement is deductible for tax purposes. In the period of settlement, tax return deductions that are less than compensation cost recognized result in a charge to income tax expense. The tax benefit is \$2,874,921 ($\$8,214,060 \times .35$). Because tax return deductions are less than compensation cost recognized, the entity must write off the deferred tax assets recognized in excess of the tax benefit from the exercise of employee stock options to income tax expense in the income statement. The journal entries to reflect settlement of the share options are as follows.

Share-based compensation liability	\$ 8,214,060	
Cash ($\$10 \times 821,406$)		\$ 8,214,060

To recognize the cash paid to settle share options.

Deferred tax expense	\$ 4,223,259	
Deferred tax asset		\$ 4,223,259
To write off deferred tax asset related to compensation cost ($\$12,066,454 \times .35 = \$4,223,259$).		
Current taxes payable	\$ 2,874,921	
Current tax expense		\$ 2,874,921
To adjust current tax expense and current taxes payable for the tax benefit from deductible compensation cost upon settlement of share options.		

718-20-55-133

If instead of requesting cash, employees had held their share options and those options had expired worthless, the share-based compensation liability account would have been eliminated over time with a corresponding increase to additional paid-in capital. Previously recognized compensation cost would not be reversed. Similar to the adjustment for the actual tax deduction described in paragraph 718-20-55-132, all of the deferred tax asset of \$4,223,259 would be charged to income tax expense when the share options expire.

Although the example illustrates the modification of an employee award, ASC 718-20-55-122A states that the guidance for determining the additional compensation cost to recognize upon modification and reclassifying the award from equity to a liability also apply to a nonemployee award with the same features.

8.6.1.2**Example – modification that changes classification from equity to a liability not indexed to the entity's shares**

The illustration below highlights the accounting for a modification of a share-based payment award that changes the classification from equity to a liability that is not indexed to the entity's shares. As described in ASC 718-20-55-10, in the illustration below Entity T's policy is to estimate forfeitures.

Excerpt from Accounting Standards Codification**Compensation – Stock Compensation – Awards Classified as Equity***Implementation Guidance and Illustrations***718-20-55-144**

Entity T grants the same share options described in Example 1, Case A (see paragraph 718-20-55-10) and records similar journal entries for 20X5 (see paragraphs 718-20-55-12 through 55-16). By January 1, 20X6, Entity T's share price has fallen, and the fair value per share option is assumed to be \$2 at that date. Entity T provides its employees with an election to convert each share option into an award of a fixed amount of cash equal to the fair value of each share option on the election date (\$2) accrued over the remaining requisite service period, payable upon vesting. The election does not affect vesting; that is, employees must satisfy the original service condition to vest in the award for a fixed amount of cash. Entity T considers the guidance in paragraph 718-20-35-2A. Because the change in the terms or conditions of the award changes the classification of the award from equity to liability, Entity T applies modification accounting. This transaction is considered a modification instead of a settlement because Entity T continues to have an obligation to its employees that is conditional upon the receipt of future employee services. There is no incremental compensation cost because the fair value of the modified award is the same as that of the original award. At the date of the modification, a liability of \$547,604 [$(821,406 \times \$2) \times (1 \text{ year of requisite service rendered} \div 3\text{-year requisite service period})$], which is equal to the portion of the award attributed to past service multiplied by the modified award's fair value, is recognized by reclassifying that amount from additional paid-in capital.

The total liability of \$1,642,812 ($821,406 \times \2) should be fully accrued by the end of the requisite service period. Because the possible tax deduction of the modified award is capped at \$1,642,812, Entity T also must adjust its deferred tax asset at the date of the modification to the amount that corresponds to the recognized liability of \$547,604. That amount is \$191,661 ($\$547,604 \times .35$), and the write-off of the deferred tax asset is \$1,216,092 ($\$1,407,753 - \$191,661$). That write-off would be recognized as income tax expense in the income statement. Compensation cost of \$4,022,151 would be recognized in each of 20X6 and 20X7 for a cumulative total of \$12,066,454 (as calculated in Case A); of this, \$547,604 would be recognized as an increase to the liability balance, with the remaining \$3,474,547 recognized as an increase in additional paid-in capital. A deferred tax benefit would be recognized in the income statement, and a corresponding increase to the deferred tax asset would be recognized for the tax effect of the increased liability of \$191,661 ($\$547,604 \times .35$). The compensation cost recognized in additional paid-in capital in this situation has no associated income tax effect (additional deferred tax assets are recognized based only on subsequent increases in the amount of the liability).

Although the example illustrates the modification of an employee award, ASC 718-20-55-122A states that the guidance for determining the additional compensation cost to recognize upon modification and reclassifying the award from equity to a liability also apply to a nonemployee award with the same features.

In this example, the fair value of the equity award declined in the period between the grant date and the modification date. Therefore, the compensation cost recognized must be the original grant-date fair value. As discussed in section 8.6.1, the FASB's model for modification accounting differs significantly from its model for cash settlements. That is, when accounting for a settlement of an award, additional compensation cost is only recognized when the cash settlement is in excess of the fair value of the award on the settlement date. However, when accounting for the modification of an equity-classified award to a liability-classified award, entities must also account for any increases in share price between the grant date and the modification or settlement date.

It should be noted that because the liability instrument in this example has a fixed payoff, any excess deferred tax assets (i.e., any deferred tax assets recognized based on the amount of recognized compensation in excess of the fixed pay-off amount) should be written off at the modification date based on the overall model for recognizing the tax benefit from share-based payments. In that case, no future tax benefits would be recognized in connection with the recognition of future compensation cost because the overall tax benefit is limited by the amount of the fixed-cash payment. This accounting is different from other share-based payments in which the ultimate tax deduction is based on the value of the grantor's shares.

8.6.2 Modification that changes classification from a liability to equity

The model for modifications that causes liability awards to become equity awards is much simpler than the model described in section 8.6.1 because it does not require consideration of the grant-date fair value of the liability. Rather, the modification is effectively accounted for as the grant of a new equity award in settlement of a liability, as illustrated in the following example.

8.6.2.1 Example – modification that changes classification from a liability to equity

As described in ASC 718-30-55-2, in the illustration below Entity T grants 900,000 SARs that cliff vest at the end of three years. The SARs do not qualify as ISOs for US tax purposes, and the enacted tax rate is 35%. Entity T has a policy to estimate forfeitures and, at the grant date, expects 821,406 ($900,000 \times .973$) SARs to vest. For simplicity, this illustration assumes that estimated forfeitures equal actual forfeitures.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-135

This Case is based on the facts given in Example 1 (see paragraph 718-30-55-1) [see section 5.4.1]. Entity T grants cash-settled stock appreciation rights to its employees. The fair value of the award on January 1, 20X5, is \$12,066,454 ($821,406 \times \14.69) (see paragraph 718-30-55-2).

718-20-55-136

On December 31, 20X5, the assumed fair value is \$10 per stock appreciation right; hence, the fair value of the award at that date is \$8,214,060 ($821,406 \times \10). The share-based compensation liability at December 31, 20X5, is \$2,738,020 ($\$8,214,060 \div 3$), which reflects the portion of the award related to the requisite service provided in 20X5 (1 year of the 3-year requisite service period). For convenience, this Case assumes that journal entries to account for the award are performed at year-end. The journal entries for 20X5 are as follows.

Compensation cost	\$ 2,738,020	
Share-based compensation liability		\$ 2,738,020

To recognize compensation cost.

Deferred tax asset	\$ 958,307	
Deferred tax benefit		\$ 958,307

To recognize the deferred tax asset for the temporary difference related to compensation cost ($\$2,738,020 \times .35 = \$958,307$).

718-20-55-137

On January 1, 20X6, Entity T modifies the stock appreciation rights by replacing the cash-settlement feature with a net share settlement feature, which converts the award from a liability award to an equity award because Entity T no longer has an obligation to transfer cash to settle the arrangement. Entity T would compare the fair value of the instrument immediately before the modification to the fair value of the modified award and recognize any incremental compensation cost. Because the modification affects no other terms or conditions, the fair value, assumed to be \$10 per stock appreciation right, is unchanged by the modification and, therefore, no incremental compensation cost is recognized. The modified award's total fair value is \$8,214,060. The modified award would be accounted for as an equity award from the date of modification with a fair value of \$10 per share. Therefore, at the modification date, the entity would reclassify the liability of \$2,738,020 recognized on December 31, 20X5, as additional paid-in capital. The related journal entry is as follows.

Share-based compensation liability	\$ 2,738,020	
Additional paid-in capital		\$ 2,738,020

To reclassify the award as equity.

718-20-55-138

Entity T will account for the modified awards as equity going forward following the pattern given in Example 1, Case A (see paragraph 718-20-55-1) [see section 4.4.1.6], recognizing \$2,738,020 of compensation cost in each of 20X6 and 20X7, for a cumulative total of \$8,214,060.

Although the example illustrates the modification of an employee award, ASC 718-20-55-122A states that the guidance for determining the additional compensation cost to recognize upon modification and reclassifying the award from a liability to equity also apply to a nonemployee award with the same features.

8.6.3 Exchange of share-based payments for a combination of cash and modified equity instruments

A grantor may wish to exchange an outstanding equity award for a combination of a new equity award and cash. Generally, if the cash amount is vested at the modification date, such an exchange should be accounted for as a combination of a modification and a cash settlement. Any incremental compensation cost must be recognized if the combination of the fair value of the new equity award and the cash exceeds the fair value of the award immediately before the modification. The fair value immediately before settlement is based on a new estimate of the expected term based on *current* circumstances (i.e., the originally estimated expected term is no longer relevant). Additionally, the cash settlement may result in an acceleration of previously measured but unrecognized compensation cost. If the cash payment is subject to vesting or is indexed to the grantor's share price, the cash payment will continue to be accounted for in accordance with ASC 718 as a modification that causes liability accounting for a portion of the award (rather than a cash settlement, which is accounted for similar to a treasury stock transaction).

8.6.3.1 Example – all options are vested before modification; options and cash are vested after modification

Illustration 8-13: Exchange of vested award for vested modified award and cash

Entity X grants 100,000 options with an exercise price of \$10 per share for past services rendered (i.e., the options are fully vested on the grant date). The fair value of the grantor's share on the date of grant is \$11 per share, and the fair value of each option is \$4. On the grant date, Entity X records the following entry:

Dr. Compensation cost	\$ 400,000	
Cr. Additional paid-in capital		\$ 400,000

The entity offers to exchange the original options for 100,000 new options with an exercise price of \$11 per share (the fair value of the shares on the original grant date) and a fair value of \$5.20 per option and \$1 per option in cash to be paid in three months. The grantees do not have to provide any goods or services during the three-month period to receive the cash payment. Immediately before the modification, the 100,000 options have a fair value of \$6 each.

Fair value immediately after modification	\$ 620,000	(100 options x (\$5.20 fair value + \$1 cash))
Fair value immediately before modification	<u>600,000</u>	(100 options x \$6 fair value)
Incremental fair value	\$ 20,000	

The total consideration that the grantees will receive for their original options is \$620,000. This value exceeds the fair value of the options immediately before the modification and, accordingly, the \$20,000 in incremental fair value must be recognized as compensation cost on the modification date. Additionally, Entity X must record the liability of \$100,000 for the amount to be settled in cash (100,000 options x \$1).

Dr. Compensation cost	\$ 20,000	
Dr. Additional paid-in-capital	80,000	
Cr. Liability		\$ 100,000

8.6.3.2 Example – options were nonvested before modification; cash consideration is vested

If options are not vested before modification, additional complexities arise because the payment of fully vested cash effectively accelerates vesting for a portion of the award (see ASC 718-20-35-7 and section 8.9). The grantor must determine what portion of the original award has been cash settled and how much unrecognized compensation cost must be recognized at the modification date for that portion of the award. While we believe that there may be several ways to perform this calculation, we believe one acceptable approach is to first allocate the cash consideration to the incremental compensation cost and then recognize the remainder as a settlement of a portion of the award. The following example illustrates this approach.

Illustration 8-14: Exchange of nonvested award for modified nonvested award and vested cash

Assume the same facts as in section 8.6.3.1. Also, assume that the options originally were subject to a five-year cliff-vesting period and had a remaining service period of two years that was expected to be rendered at the date of the modification (i.e., awards were probable of vesting immediately before the modification). After the modification, the options have a two-year remaining service period and were deemed probable of vesting. The cash payment is fully vested.

One approach is to first allocate the cash consideration of \$100,000 to the incremental compensation cost (\$20,000) that is recognized on the modification date and account for the remainder (\$80,000) as a settlement of a portion of the award equal to the value of the cash (\$80,000) divided by the fair value of the award immediately before the modification (\$600,000). This results in a conclusion that 13.33% of the award was settled. That fraction is then multiplied by the originally measured compensation cost of \$400,000, resulting in the settlement of \$53,333 of the award. Because on the date of the modification 60% of the requisite service period had elapsed, 40% of the compensation cost for this portion of the award was unrecognized. Accordingly, along with the \$20,000 in incremental compensation cost, \$21,333 ($\$53,333 \times 40\%$) in compensation cost would be recognized on the date of the modification/settlement for the partial acceleration of vesting.

The total compensation cost to be recognized for the award can be summarized as follows:

Compensation cost recognized before the modification	\$ 240,000	$(\$400,000 \times 60\%)$
Incremental compensation cost to be recognized on the modification date	20,000	$(\$620,000 - \$600,000)$
Acceleration of compensation cost to be recognized on the modification/settlement date	21,333	$(\$400,000 \times .1333 \times 40\%)$
Remaining compensation cost to be recognized over the remaining service period	<u>138,667</u>	$(\$400,000 \times (1 - .1333) \times 40\%)$
Total compensation cost	<u>\$ 420,000</u>	

Although the above example illustrates the modification and settlement of an employee award, the same concepts apply to the modification and settlement of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

8.6.3.3

Example – options were nonvested before modification; cash consideration is subject to vesting

As discussed in ASC 718-20-55-144 and section 8.6.1.2, the exchange of nonvested equity awards for a nonvested cash payment is considered a modification that changes the classification of the award (or, in this case, a portion of the award) from an equity award to a liability. Under ASC 718, the liability must be recorded at fair value (for nonvested awards, the fair value of the award multiplied by the proportion of the service period that has elapsed), and if the fair value of the modified portion of the award is greater than the fair value of that portion of the award on the grant date, additional compensation cost must be recognized. However, the compensation cost for the liability subsequently will not be remeasured because the amount of the cash payment is fixed.

Illustration 8-15: Exchange of nonvested award for modified nonvested award and nonvested cash

Assume the same facts as in the previous example, except that the cash payment is subject to vesting over the same period that the options are subject to vesting (two years from the modification date).

As in the previous example, \$20,000 (\$620,000 – \$600,000) of incremental compensation cost is measured. However, since that consideration is subject to vesting, it is recognized over the two-year service period.

Because a portion of the award when vested will be settled in cash, a portion of the original award must be allocated to the compensation liability. Using the fair value of the liability and the fair value of the total award prior to considering the effects of the modification, approximately 13.33% ($\$80,000 / \$600,000$) of the award changes classification from equity to liability. The original grant-date fair value of the portion of the award that was reclassified as a liability award was \$53,333 ($\$400,000 \times 13.33\%$), of which \$21,333 (40%) has not yet been recognized and \$32,000 (60%) has been recognized as of the modification date. However, because the portion of the award originally measured at \$53,333 will be settled for \$80,000, the entity also must recognize incremental fair value of \$26,667 over the remaining vesting period. However, based on the guidance in ASC 718-20-55-124, the compensation cost for the liability component must be trued up on the modification date based on the fair value of the award at that date and the portion of the service period that has elapsed. Accordingly, because 60% of the service period has passed, and the fair value of the liability component is \$80,000, a liability of \$48,000 must be recognized on the balance sheet on the modification date. Since only \$32,000 of compensation cost of the original grant-date fair value of the liability portion of the award has been recognized through the modification date, an additional \$16,000 ($\$26,667 \times 60\%$) in compensation cost must be recognized on the modification date.

The total compensation cost to be recognized for the award can be summarized as follows:

Compensation cost recognized before the modification	\$ 240,000	($\$400,000 \times 60\%$)
Compensation cost to be recognized on the modification date for vested portion of the modified liability component (mark to fair value)	16,000	($\$26,667 \times 60\%$)
Incremental compensation cost to be recognized over the remaining service period for the liability component	20,000	($\$620,000 - \$600,000$)
Compensation cost for the modified liability component to be recognized over the remaining service period	32,000	($\$80,000 - \$32,000 - \$16,000$)
Compensation cost for the equity component to be recognized over the remaining service period	<u>138,667</u>	($\$400,000 \times (1 - .1333) \times 40\%$)
Total compensation cost	<u>\$ 446,667</u>	($\$400,000 \times .8667 + \$100,000$)

Although the above example illustrates the modification of an employee award, the same concepts apply to the modification of a nonemployee award. However, the timing of cost attribution may differ since compensation cost for a nonemployee award is recognized as if the entity had paid cash for the goods or services (see section 4.1).

8.7 Equity restructurings

ASC 718 defines an equity restructuring as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Equity Restructuring

A nonreciprocal transaction between an entity and its shareholders that causes the per-share fair value of the shares underlying an option or similar award to change, such as a stock dividend, stock split, spinoff, rights offering, or recapitalization through a large, nonrecurring cash dividend.

ASC 718 states that a change to the terms of an award as a result of an equity restructuring is accounted for as a modification regardless of whether the terms of the award provide for an adjustment in the event of an equity restructuring. Further, a modification to add antidilution protection to an award also is a modification. However, an entity uses the guidance in ASC 718-20-35-2A to determine whether modification accounting is required for changes resulting from an equity restructuring or an antidilution provision.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-6

Exchanges of share options or other equity instruments or changes to their terms in conjunction with an **equity restructuring** or a business combination are modifications for purposes of this Subtopic. An entity shall apply the guidance in paragraph 718-20-35-2A to those exchanges or changes to determine whether it shall account for the effects of those modifications. Example 13 (see paragraph 718-20-55-103) provides further guidance on applying the provisions of this paragraph. See paragraph 718-10-35-10 for an exception.

We discuss these concepts in connection with the examples that follow. The accounting result will depend on whether the modification (either the addition of an antidilution feature or the adjustment resulting from the equity restructuring) affects the value of the award. For example, if an award includes a mandatory antidilution feature designed to equalize the fair value of the award as a result of an equity restructuring, the actual adjustment resulting from the equity restructuring would not affect the fair value of the award (because the adjustment was anticipated and, therefore, contemplated in the value of the award immediately before the equity restructuring).

Some plan documents provide that the entity must make an equitable adjustment in the event of an equity restructuring, but there is discretion in how that adjustment is determined. For example, in the event of a large nonrecurring cash dividend, the entity could choose to adjust the exercise price and number of shares underlying the options to make the grantee whole, or make a cash payment to the grantee and not adjust the terms of the option. We believe that as long as an equitable adjustment is required (even if some discretion is permitted in how to make an equitable adjustment), in many cases no

incremental fair value will result.⁵⁶ Conversely, if the entity has the discretion to choose to not make the adjustment, the adjustment is not *required*, and significant incremental compensation cost generally will result. Because of the dramatically different accounting resulting from a modification in connection with an equity restructuring when an award provides for mandatory antidilution protection compared with when such protection is offered at the entity's discretion, entities should reexamine all their awards to determine whether it is appropriate to add or modify antidilution protection for those awards that do not currently include or require such protection. When contemplating such a modification, the entity also should consider any tax implications of the modification (e.g., potential disqualification of incentive stock options).

8.7.1 Modification to add an antidilution protection to an award

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-2

In accordance with paragraph 718-20-35-6, an entity shall apply the guidance in paragraph 718-20-35-2A to exchanges of share options or other equity instruments or changes to their terms in conjunction with an **equity restructuring** to determine whether it shall account for the effects of those **modifications** as described in paragraphs 718-20-35-3 through 35-9. Example 13 (see paragraph 718-20-55-103) provides additional guidance on accounting for modifications of **awards** in the context of equity restructurings.

Conceptually, the addition of an antidilution protection increases the fair value of an award. However, if an equity restructuring transaction is not anticipated, the FASB has assumed that a market participant would not place significant value on that feature, and the valuation effect of the feature would be difficult to determine (and, therefore, would not change the fair value of the award).

As discussed in the example in section 8.7.2, if the antidilution feature is added to an award in contemplation of an equity restructuring, there would be significant value in that added feature, and the fair value of the award would change. Accordingly, the “before and after” calculation required by ASC 718-20-35-6 must be performed in this circumstance. The “before” calculation would reflect the lack of antidilution protection and the expectation that the value of the award will be diluted as a result of the anticipated equity restructuring. The “after” calculation would assume no dilution because of the protection provided by the added antidilution feature. The incremental fair value generally will approximate the present value of the anticipated distribution(s).

8.7.2 Awards are adjusted and original award does not contain antidilution provisions or award provides for discretionary adjustment

As discussed in section 8.7.1, a modification to add antidilution protection to an award in anticipation of an equity restructuring will result in incremental fair value and compensation cost. As a result, the effect of the modification to add the antidilution protection and the effect of the adjustment resulting from the equity restructuring must be measured and recognized as described in the example below.

⁵⁶ Though the equitable adjustment may not result in additional compensation cost, consideration should be given to whether the adjustment results in the acceleration of compensation cost. See the example in section 8.6.3.2 for further discussion.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

Case B: Original Award Does Not Contain Antidilution Provisions

718-20-55-105

In this Case, the original award does not contain antidilution provisions. On May 1 there is an announcement of a future equity restructuring. On July 26 the terms of an award are modified to add antidilution provisions in contemplation of an equity restructuring. On September 30, the equity restructuring occurs. In this Case, there are two modifications to account for. The first modification occurs on July 26, when the terms of the award are changed to add antidilution provisions. There must be a comparison of the fair value of the award pre- and postmodification on July 26 in accordance with paragraph 718-20-35-2A to determine whether the entity should account for the effects of the modifications as described in paragraphs 718-20-35-3 through 35-9. The premodification fair value on July 26 is based on the award without antidilution provisions taking into account the effect of the contemplated restructuring on its value. The postmodification fair value is based on an award with antidilution provisions, taking into account the effect of the contemplated restructuring on its value. Any incremental value transferred would be recognized as additional compensation cost. Once the equity restructuring occurs, there is a second modification event on September 30 when the terms of the award are changed in accordance with the antidilution provisions. A second comparison of pre- and postmodification fair values is then required to determine whether the fair value of the award has changed as a result of the modification. If there is no change in fair value, vesting conditions, or the classification of the award, the entity would not account for the effect of the modification on September 30 (see paragraph 718-20-35-2A). Changes to the terms of an award in accordance with its antidilution provisions typically would not result in additional compensation cost if the antidilution provisions were properly structured. If there is a change in fair value, vesting conditions, or the classification of the award, the incremental value transferred, if any, would be recognized as additional compensation cost.

Case C: Original Award Does Not Contain an Antidilution Provision but Is Modified on the Date of Equity Restructuring

718-20-55-106

Assume the same facts as in Case B except the terms of the awards are modified on the date of the equity restructuring, September 30. In contrast to Case B in which there are two separate modifications, there is one modification that occurs on September 30 and the fair value is compared pre- and postmodification to determine whether any incremental value is transferred as a result of the modification. Any incremental value transferred would be recognized as additional compensation cost.

Assuming the terms of the equity restructuring transaction were announced before the modification to add antidilution protection, we believe that the additional fair value recognized in both examples described above would be approximately the same. As discussed in section 8.7.1, the incremental fair value would approximate the present value (in the first example) or the actual value (in the second example) of the expected distribution.

As previously discussed, some plans provide that any antidilution adjustments are made at the discretion of the entity's compensation committee or board of directors. If the adjustment is not *required*, the award should be treated as if no antidilution protection is provided. In some cases, it may not be clear whether the entity's discretion involves *whether* an adjustment must be made (which would result in incremental compensation cost) or *how* the adjustment must be made (which, in most cases, would not

cause incremental compensation cost). If the language in the plan document is not clear, we believe that a legal determination must be made about whether an adjustment is required with respect to the anticipated equity restructuring transaction. We believe it generally would be appropriate to obtain the opinion of legal counsel about whether an equitable adjustment is required in connection with the contemplated equity restructuring transaction. If legal counsel provides an opinion that an antidilution adjustment is required for the contemplated transaction, the following factors also should be considered:

- ▶ Understanding of compensation committee or board of directors – If the compensation committee or board of directors believes that it does not have discretion in determining whether an adjustment must be made, this would be an indicator that an adjustment is required.
- ▶ Past practice – If the entity has in the past consistently made equitable adjustments for similar equity restructuring transactions, this would be an indicator that an adjustment is required.

If legal counsel is unable to offer an opinion that the adjustment is required, we would conclude that an adjustment is not required.

8.7.3 Original award contains antidilution provisions

The following example from ASC 718 describes how and when the compensation cost associated with an adjustment for an equity restructuring is measured when the award provides for antidilution protection. As previously discussed, if an award includes an antidilution feature designed to equalize the fair value of the award as a result of an equity restructuring, the actual adjustment resulting from the equity restructuring normally would not affect the fair value of the award (because the adjustment was anticipated and, therefore, contemplated in the value of the award immediately before the equity restructuring).

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

Case A: Original Award Contains Antidilution Provisions

718-20-55-104

In this Case, assume an award contains antidilution provisions. On May 1 there is an announcement of a future equity restructuring. On October 12 the equity restructuring occurs and the terms of the award are modified in accordance with the antidilution provisions. In this Case, the modification occurs on October 12 when the terms of the award are changed. The fair value of the award is compared pre- and postmodification on October 12. The calculation of fair value is necessary to determine whether there is any incremental value transferred as a result of the modification, and if so, that incremental value would be recognized as additional compensation cost. If there is no change in fair value, vesting conditions, or the classification of the award, the entity would not account for the effect of the modification (see paragraph 718-20-35-2A).

As described above, if an award provides for an adjustment as a result of a transaction like an equity restructuring and that transaction is contemplated in advance, the measurement of the fair value of the award immediately before the change in terms will always approximate the fair value of the award after the change (because a market participant would have anticipated that change). However, because there is significant discretion involved in whether an entity makes a nonreciprocal transfer like a cash dividend or a spinoff, we believe that this logic should only apply when the provisions of the award are designed to maintain the value of the award in the event of an equity restructuring. For example, if the antidilution feature provided for an adjustment to an award designed to double the value of a cash dividend, we believe that the excess value should be recognized as incremental compensation cost, even though a

hypothetical trading price of the instrument would contemplate this adjustment immediately before the dividend is paid. In effect, the feature is designed to provide incremental value to the grantee whenever a dividend is paid.

Most options provide for antidilution adjustments to be calculated based on the intrinsic value of an award rather than its fair value. This is in part because the intrinsic value approach is more objective and, therefore, less subject to disputes over the required adjustment, which is one of the reasons why antidilution protection included in warrants and similar instruments sold to investors typically is based on intrinsic value. We believe that if antidilution protection is designed to maintain the same aggregate intrinsic value and ratio of intrinsic value to fair value, the actual adjustment resulting from the operation of that feature in most cases would not result in incremental compensation cost. However, in the event of a spinoff in which options are adjusted such that the grantee does not receive proportionate interests in both the spinor and spinnee, incremental compensation could result.

For example, if grantees receive in connection with a spinoff options only on the shares of the spinnee, and the expected volatility of the spinnee's shares is significantly higher than that of the entity before the spinoff, maintaining the intrinsic value will lead to the grantees receiving options with a greater fair value than those they held before the spinoff transaction.

8.7.3.1 Adjustments in connection with a spinoff

The adjustment to an award illustrated in the example included in ASC 718-20-55-104 (see section 8.7.3) normally would not affect the fair value of an award because the adjustment was already provided for in the terms of the award and is intended to maintain the same value before and after the equity restructuring. However, in some cases, the manner in which the adjustment is calculated could result in incremental fair value. Specifically, the issue of the appropriate share prices to use in the analysis based on timing of events associated with a spinoff must be considered. That is, what price of the spinor's share should be used to determine the fair value immediately before the spinoff, and what prices of the spinor's and spinnee's shares should be used to determine the fair value immediately after the spinoff?

The SEC staff discussed⁵⁷ which share prices should be used to determine whether the equity restructuring criteria in Interpretation 44 (later codified into ASC 718-10-35-10) are met, and we believe that this guidance should also be considered in connection with the measurement of incremental value under ASC 718. The SEC staff said that the parent entity's share price to use in the analysis should be based on the price of the parent entity's share immediately before and after the distribution of the spinnee's shares, as follows:

- ▶ The fair market value of the parent's shares immediately before the modification should be the share price immediately before the distribution of the spinnee's shares. Generally, the distribution of the spinnee's shares will occur after the exchange closes on the distribution date (also commonly referred to as the record date). In these cases, the closing price on the distribution date of the parent entity's shares is the fair market value of the shares immediately before the modification to be used in the analysis.

The parent entity's shares often will begin trading "ex-dividend" approximately three days before the distribution date until the distribution occurs. As a result, the price at which the parent entity's share closes on the distribution date may already exclude the value of the spinnee. If that is the case, and the

⁵⁷ An SEC staff member provided the guidance in 1998 during a speech at the AICPA's Twenty-Sixth Annual National Conference on Current SEC Developments.

spinnee's shares are trading on a when-issued basis,⁵⁸ the distribution-date closing price of the spinnee's shares (adjusted as appropriate if the number of shares of the spinnee to be distributed differs from the outstanding shares of the parent) should be added to the market price of the parent's shares to determine the fair value of the shares immediately before the modification. However, if the parent's share price is trading "with due bills" (i.e., with rights to the dividend of the spinnee shares), then that closing share price should be used.

The fair value of the shares to be used in the analysis "immediately after the modification" is calculated for awards in the former parent's shares as follows:

- ▶ The fair value of the parent entity's shares immediately after the modification should be based on the closing price on the distribution date, adjusted to reflect the distribution of the spinnee's shares (no adjustment is necessary if the parent's share price is quoted on an ex-dividend basis as described above).
- ▶ If the spinnee's shares are traded on a when-issued basis before the distribution date, the entity can determine the "adjusted" parent entity's shares' fair value by deducting the closing price of the spinnee's shares (adjusted as appropriate if the number of shares of the spinnee to be distributed differs from the outstanding shares of the parent) from the closing price of the parent entity's shares on the distribution date.
- ▶ If the parent's shares did not trade on an ex-dividend basis, and the spinnee's shares are not traded on a when-issued basis, the fair value of the parent entity's shares immediately after the modification is the opening price on the first trading date following the distribution date.

The fair value of the shares to be used in the analysis immediately after the modification is calculated for awards in the former spinnee's shares as follows:

- ▶ The fair value of the spinnee entity's shares immediately after the modification should be based on the closing price of the shares on the distribution date, if traded on a when-issued basis.
- ▶ If the spinnee entity's shares are not traded on a when-issued basis before the distribution date, the fair value of the shares immediately after the modification should be the opening price on the first trading date following the distribution date.

The SEC staff has made it clear that the share prices to be used when performing this analysis must be at a point in time. That is, if the entity bases the adjustment on average share prices of the spinnor's or the spinnee's shares over a period, regardless of how short that period is, the measurement of incremental fair value must be made at the two points in time specified above. Accordingly, incremental compensation cost may result from the modification. In addition, as previously discussed, if the grantees do not receive securities in the same entities and proportions as other shareholders, there may be incremental compensation cost.

8.7.4 Awards to individuals who are no longer employees as a result of a spinoff (updated June 2019)

In some spinoff transactions, an employee of Entity A that held awards in Entity A becomes an employee of a spinnee (Entity B) but retains the awards in Entity A. Therefore, from Entity A's perspective, the individual option holder's status technically has changed from that of an employee to a nonemployee. Alternatively, Entity A employees may receive awards in Entity B in connection with the spinoff, in which case the employee technically has received awards in shares of an entity that is not his or her employer.

⁵⁸ Once a spinnee's registration statement is filed and declared effective, the spinnee's shares generally will begin trading on a when-issued basis until the date that the shares are distributed.

In Interpretation 44, the FASB provided an exception for changes in employee status resulting from spinoff transactions and concluded in Question 5(c) in the interpretation that a change in status as a result of the spinoff does not change the grantor's accounting method. This exception applies only to changes in status occurring as a result of a spinoff transaction (i.e., a pro rata distribution to owners of an enterprise of shares of a subsidiary, such that the enterprise no longer consolidates the former subsidiary) and only to share-based payments that were granted and outstanding at the date of the transaction. After the spinoff, if one entity grants awards to the employees of the other, the entity would determine whether the share-based payment transaction is in the scope of ASC 718 as an award to a nonemployee (i.e., issued in exchange for goods or services to be consumed in the entity's own operations). Although ASC 718 does not address this point, the FASB agreed at a public meeting to provide a similar exception under ASC 718 so that remeasurement would not be required after a spinoff. The FASB decided to grant this exception until the Board addresses nonemployee awards in the next phase of its equity-based compensation project. However, because the FASB did not address the accounting for share-based payments in a spinoff in ASU 2018-07, we believe that exception provided in Interpretation 44 continues to apply.

The FASB also said in the minutes of the September 2004 meeting that it reached the following decision at that meeting:

"In connection with a spinoff transaction and as a result of the related modification, employees of the former parent may receive nonvested equity instruments of the former subsidiary, or employees of the former subsidiary may retain nonvested equity instruments of the former parent. The Board decided that, based on the current accounting model for spinoff transactions, the former parent and former subsidiary should recognize compensation cost related to the nonvested modified awards for those employees that provide service to each respective entity. For example, if an employee of the former subsidiary retains nonvested equity instruments of the former parent, the former subsidiary would recognize in its financial statements the remaining unrecognized compensation cost pertaining to those instruments. In those cases, the former parent would recognize no compensation cost related to its nonvested equity instruments held by those former employees that subsequent to the spinoff provide services solely to the former subsidiary."

While this guidance was not included in ASC 718, we believe it continues to be appropriate.

Similarly, we believe a spinoff does not change the grantor's accounting method for nonemployee awards. For example, consider a nonemployee that provided goods or services to Entity A and received shares in Entity A. When Entity A spins off Entity B, the nonemployee receives shares in both Entity A and Entity B. Even though the nonemployee provides goods or services only to Entity A post-spin, remeasurement of the nonemployee's shares in Entity B would not be required as a result of the spinoff.

8.8 Inducements (updated December 2018)

An inducement is an offer by the entity to its shareholders that encourages the award holder to accept the entity's offer to modify, replace, settle or repurchase an existing award. The offer from a related party or other economic interest holder of an entity is accounted for as if the inducement had been offered by the entity (see section 2.3).

A short-term inducement is defined in ASC 718-10-20 as an offer that would result in the modification of an award to which an award holder may subscribe "for a limited period of time." The FASB has provided little guidance on how to determine whether an inducement is short term or long term beyond the glossary definition. Based on past practices with respect to offers to cancel and replace options, we would not expect the offer period for a short-term inducement to extend beyond the period sufficient (1) to allow the grantee to receive, consider and accept the offer or (2) to comply with any offering period specified in applicable securities laws. We generally do not expect this period to extend beyond a few months. If an inducement does not meet the criteria to be considered short term, it is considered to be long term.

ASC 718 specifies the following accounting for inducements:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-5

Except as described in paragraph 718-20-35-2A, a **short-term inducement** shall be accounted for as a modification of the terms of only the awards of grantees who accept the inducement, and other inducements shall be accounted for as modifications of the terms of all awards subject to them.

As a result of the above guidance, modification accounting is applied differently to short-term and long-term inducements.

Short-term inducements are accounted for as modifications only for award holders who accept the inducement offer. The modification occurs on the date the inducement is accepted. Further, the Board stated that it did not intend for a short-term inducement that is deemed to be a settlement (i.e., for those who accept the offer) to affect the classification of the award (e.g., change the award from an equity instrument to a liability instrument).⁵⁹ However, if an entity has a history of settling its awards for cash, the entity should consider whether at the inception of the awards it has a substantive liability (see section 5.2.5).

Long-term inducements are accounted for as modifications of all awards subject to the inducement offer, regardless of whether the grantee accepts the inducement offer. The modification for a long-term inducement occurs on the date that the inducement is offered (i.e., the date the grantor is obligated to repurchase the award should the grantee choose to accept the offer). If a long-term inducement is an offer to cash-settle awards, the modification results in the change of the award's classification from equity to a liability (see section 8.6.1). However, when the inducement period ends, any awards that the holder did tender for settlement will effectively be modified from a liability to equity (see section 8.6.2).

If modification accounting must be applied to awards held by an employee or nonemployee who is still providing goods and services to the entity, the principles in this chapter are applied. If modification accounting must be applied, and the award is held by a former employee or a nonemployee who is no longer providing goods and services to the entity, the modification accounting is the same as if the award holder was still an employee or a nonemployee providing goods and services to the entity, and any incremental fair value resulting from the modification must be recognized as compensation cost in accordance with ASC 718-10-35-14. However, if the award is not settled as a result of the inducement, the award held by a former employee or nonemployee becomes subject to other guidance as a result of the modification (see section 8.4.5).

For details on the application of modification accounting, see section 8.3.

8.9 Repurchases or settlement of awards of equity instruments (updated June 2019)

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-7

The amount of cash or other assets transferred (or liabilities incurred) to repurchase an equity award shall be charged to equity, to the extent that the amount paid does not exceed the fair value of the equity instruments repurchased at the repurchase date. Any excess of the repurchase price over the

⁵⁹ Background of FASB Staff Position FAS 123(R)-6: *Technical Corrections of FASB Statement No. 123(R)*.

fair value of the instruments repurchased shall be recognized as additional compensation cost. An entity that repurchases an award for which the promised goods have not been delivered or the service has not been rendered has, in effect, modified the employee's requisite service period or nonemployee's vesting period to the period for which goods have already been delivered or service already has been rendered, and thus the amount of compensation cost measured at the grant date but not yet recognized shall be recognized at the repurchase date.

As discussed in section 5.2.5, a pattern of cash settling equity awards before the grantee is exposed to the risks and rewards of share ownership for a reasonable period of time (i.e., six months or more) may suggest that the substantive terms of the awards were modified to provide for cash settlement. As a result, when a grantor establishes a pattern of cash settling awards, all options and immature shares would be classified as a liability, and variable accounting is required (see section 8.6.1 for accounting for a modification of an award that changes classification from equity to a liability).

When determining whether the purchase price of an option is in excess of fair value, the fair value immediately before settlement is based on a new estimate of the expected term based on *current* circumstances (i.e., the originally estimated expected term is no longer relevant).

The following is an example of the accounting for a cash settlement of a vested option:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-93

The following Cases illustrate the accounting for **modifications** of the terms of an award (see paragraphs 718-20-35-3 through 35-4) and are based on Example 1, Case A (see paragraph 718-20-55-10) [section 4.4.1.6], in which Entity T granted its employees 900,000 share options with an exercise price of \$30 on January 1, 20X5:

- a. Modification of vested share options (Case A)
- b. Share settlement of vested share options (Case B)
- c. Modification of **nonvested share** options (Case C)
- d. Cash settlement of nonvested share options (Case D).

Case B: Share Settlement of Vested Share Options

718-20-55-97

Rather than modify the option terms, Entity T offers to settle the original January 1, 20X5, share options for fully vested equity shares at January 1, 20X9. The fair value of each share option is estimated the same way as shown in Case A [see section 8.3.1.1], resulting in a fair value of \$3.67 per share option. Entity T recognizes the settlement as the repurchase of an outstanding equity instrument, and no additional compensation cost is recognized at the date of settlement unless the payment in fully vested equity shares exceeds \$3.67 per share option. Previously recognized compensation cost for the fair value of the original share options is not adjusted.

Although the example illustrates the modification of an employee award, ASC 718-20-55-93A and 55-93B state that the guidance also applies to a nonemployee award with the same features.

The following is an example of the accounting for a cash settlement of an unvested option:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Implementation Guidance and Illustrations

718-20-55-93

The following Cases illustrate the accounting for modifications of the terms of an award (see paragraphs 718-20-35-3 through 35-4) and are based on Example 1, Case A (see paragraph 718-20-55-10) [section 4.4.1.6], in which Entity T granted its employees 900,000 share options with an exercise price of \$30 on January 1, 20X5:

- a. Modification of vested share options (Case A)
- b. Share settlement of vested share options (Case B)
- c. Modification of nonvested share options (Case C)
- d. Cash settlement of nonvested share options (Case D).

Case D: Cash Settlement of Nonvested Share Options

718-20-55-102

Rather than modify the share option terms, Entity T offers on January 1, 20X6, to settle the original January 1, 20X5, grant of share options for cash. Because the share price decreased from \$30 at the grant date to \$20 at the date of settlement, the fair value of each share option is \$5.36, the same as in Case C [see section 8.3.1.2]. If Entity T pays \$5.36 per share option, it would recognize that cash settlement as the repurchase of an outstanding equity instrument and no incremental compensation cost would be recognized. However, the cash settlement of the share options effectively vests them. Therefore, the remaining unrecognized compensation cost of \$9.79 per share option would be recognized at the date of settlement.

Although the example illustrates the modification of an employee award, ASC 718-20-55-93A and 55-93D state that the guidance also applies to a nonemployee award with the same features.

If, however, a grantor repurchases an award that is not probable of vesting at the settlement date (for example, a grantor cash-settles an award for a terminating employee), the entire amount paid by the grantor to repurchase the award would be charged to compensation cost. This accounting is required because the fair value of the original award immediately before settlement is zero, so the entire repurchase price represents incremental compensation cost that should be recognized. This accounting result is consistent with a modification of an award that was not expected to vest before the modification but is expected to vest after the modification (see section 8.3.3 for a discussion of Type III modifications, including the effect of an entity's forfeiture policy election).

8.9.1 Repurchases or settlement of awards of equity instruments to occur in the future

If an equity award is not immediately settled but instead is exchanged for a promise of cash or other assets in the future, the transaction must be evaluated to determine whether it represents a modification (that results in liability classification) or a settlement. We understand from discussions with the FASB staff that there are two key factors that must be considered when determining whether a transaction represents a settlement or modification, including whether:

- ▶ The obligation continues to be indexed to the grantor's shares
- ▶ Future service is required

If either of these conditions exists, the transaction is accounted for as a modification that changes the classification from equity to a liability as described in section 8.6.1. If neither condition exists, the transaction is accounted for as a settlement. Accordingly, if an award is exchanged for a promise to pay an amount in the future that is not indexed to the entity's shares and does not require future service (e.g., a note payable), the transaction is accounted for as a settlement. If the present value of the settlement amount does not exceed the fair value of the settled award, no incremental compensation cost will result from the settlement. This treatment differs from the liability model that would require compensation cost to be recognized for any appreciation in the share price since the grant date. When an entity issues a note payable in exchange for awards, it must recognize interest expense on the note in accordance with the payment terms of the note. In contrast, if an entity settles an award in cash to be paid in the future, it should assess whether there is any interest expense to be recognized.

8.10 Cancellation of awards of equity instruments

8.10.1 Cancellation and replacement of awards of equity instruments

Rather than modifying an award, a grantor in some cases may choose to grant a new award in exchange for the cancellation of an old award. Such a transaction is accounted for as a modification.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-8

Except as described in paragraph 718-20-35-2A, cancellation of an award accompanied by the concurrent grant of (or offer to grant) a **replacement award** or other valuable consideration shall be accounted for as a modification of the terms of the cancelled award. (The phrase *offer to grant* is intended to cover situations in which the **service inception date** precedes the grant date.) Therefore, incremental compensation cost shall be measured as the excess of the fair value of the replacement award or other valuable consideration over the fair value of the cancelled award at the cancellation date in accordance with paragraph 718-20-35-3. Thus, the total compensation cost measured at the date of a cancellation and replacement shall be the portion of the grant-date fair value of the original award for which the promised good is expected to be delivered (or has already been delivered) or the service is expected to be rendered (or has already been rendered) at that date plus the incremental cost resulting from the cancellation and replacement.

The replacement award generally will be granted concurrently with the cancellation to compensate the grantee for the cancellation. The fact that the new award is a replacement of the old award usually will be apparent.

8.10.2 Cancellation of awards of equity instruments with no replacement (updated December 2018)

If an award is canceled without the *concurrent*⁶⁰ grant or offer of a replacement award, the cancellation should be treated as a settlement for no consideration.

⁶⁰ The FASB previously concluded that a modification of an award, regardless of whether that modification is in the form of a cancellation of an existing award and grant of a replacement award, would be explained as such to the grantees affected by the transaction. Thus, a cancellation and grant of (or offer to grant) a replacement award must occur concurrently if the transaction is to be accounted for as a modification. Otherwise, cancellation of an award is accounted for as a settlement for no consideration in accordance with ASC 718-20-35-7 and 35-9.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Awards Classified as Equity

Subsequent Measurement

718-20-35-9

A cancellation of an award that is not accompanied by the concurrent grant of (or offer to grant) a replacement award or other valuable consideration shall be accounted for as a repurchase for no consideration. Accordingly, any previously unrecognized compensation cost shall be recognized at the cancellation date.

The cancellation of an award is different from the forfeiture of an award. For a cancellation, the employee is prevented from vesting in the award after satisfying the requisite service, so unrecognized compensation cost must be recognized immediately upon cancellation. However, for a forfeiture, the requisite service was not expected to be rendered, so no compensation cost is recorded for the forfeited award.

For nonemployee awards, we believe that if the cancellation of the award relates to the termination by both parties of the related supplier agreement to provide goods or services, the cancellation is, in substance, a forfeiture since both parties have effectively agreed to render the arrangement null and void.

8.10.2.1 Cancellation in conjunction with a reduction in responsibilities (added December 2018)

If a grantee takes a new role in an entity with reduced responsibilities (e.g., a demotion, transition from a full-time employee to a board role or a consultant), the entity may require the grantee to surrender a previously issued share-based payment award. Generally, the surrender of an award is deemed a cancellation, resulting in the recognition of unrecognized compensation cost. However, if the entity can demonstrate that the original award is no longer commensurate with the new role and the service required by the grantee's previous position will not be provided in the grantee's new role, the surrender may be considered a forfeiture. These arrangements would generally be accounted for as if the grantee had been terminated and, as a result, forfeited the award, requiring the reversal of previously recognized compensation cost, in accordance with ASC 718-10-35-3. For example, consider an employee who is granted an award as the CEO. The employee is then demoted from CEO to a part-time position, and the entity cancels the award. Although the employee has not been terminated from the entity, the entity concludes that the level of service provided by the employee in his or her new part-time position is not commensurate with the level of service expected under the original award. Therefore, the entity concludes that the award has effectively been forfeited and reverses the previously recognized compensation cost.

8.10.3 Exchanges of awards in a business combination

ASC 718-20-35-6 states that exchanges of options or other equity instruments or changes to their terms in conjunction with a business combination are modifications. However, ASC 718 provides no specific guidance on the accounting for employee or nonemployee options or nonvested share awards exchanged for acquired entity awards in a business combination. ASC 805 provides guidance on the accounting for share-based payment arrangements in a business combination.

Please refer to section 6 of our FRD, *Business combinations*, for a discussion of considerations related to share-based payment arrangements in a business combination.

Please refer to section 22 of our FRD, *Income taxes*, for a discussion of the accounting for the income tax effects of share-based payments issued in a business combination.

9 Income tax accounting considerations

The accounting for the income tax effects of share-based payments is one of the most complex aspects of ASC 718, particularly for multinational companies that grant share-based payments to employees in numerous jurisdictions.

Under ASC 718, the income tax effects of share-based payments are recognized for financial reporting purposes only if such awards result in deductions on the company's income tax return. Determining whether a share-based payment will result in a future tax deduction depends on the type of award. Under current United States federal income tax law, employee stock options are treated as either statutory (e.g., incentive) stock options or nonstatutory (e.g., nonqualified) stock options.

Section 22 of our FRD, *Income taxes*, includes a comprehensive discussion about the accounting for income tax effects of share-based payments.

10 Earnings per share accounting considerations

Share-based payments have several unique characteristics that can have a significant effect on EPS calculations. Under ASC 260, employee stock options and nonvested stock generally are not included in the calculation of basic EPS (even though nonvested shares may be legally outstanding). However, these equity awards are factored into the computation of diluted EPS using the treasury stock method. Further, in some cases, equity awards may be deemed participating securities and affect basic EPS as a result of the application of the two-class method.

Our FRD, *Earnings per share*, includes a comprehensive discussion about the accounting for the effects of share-based payments on EPS.

11

Employee stock purchase plans

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Overview and Background

718-50-05-1

This Subtopic provides guidance to entities that use **employee** share purchase plans. The entity must first determine whether the plan is compensatory or noncompensatory. This is determined by the terms of the plan (see paragraphs 718-50-25-1 through 25-2). A plan with an option feature, for example a look-back feature, is considered compensatory. For a compensatory plan the calculation of the amount of the compensation is important (see Section 718-50-55).

Scope and Scope Exceptions

718-50-15-1

This Subtopic has its own discrete scope, which is separate and distinct from the pervasive scope for this Topic as outlined in Section 718-10-15.

718-50-15-2

The guidance in this Subtopic applies to all entities.

ESPPs generally provide a broad group of employees the right to acquire employer shares through payroll deductions. A typical plan (e.g., one that qualifies for favorable tax treatment under Section 423 of the Internal Revenue Code, also known as a Section 423 Plan) allows employees to buy the employer's shares over a period of time (e.g., two years) at a discount from the market price at the grant date. Many ESPPs provide for (1) purchases at a discount from the current share price and (2) option features.

ASC 718 provides specific criteria to determine whether an ESPP would be considered compensatory or noncompensatory.

11.1

Noncompensatory plans

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Recognition

718-50-25-1

An employee share purchase plan that satisfies all of the following criteria does not give rise to recognizable compensation cost (that is, the plan is noncompensatory):

- a. The plan satisfies either of the following conditions:
 1. The terms of the plan are no more favorable than those available to all holders of the same class of shares. Note that a transaction subject to an employee share purchase plan that involves a class of equity shares designed exclusively for and held only by current or former employees or their beneficiaries may be compensatory depending on the terms of the arrangement.

2. Any purchase discount from the market price does not exceed the per-share amount of share issuance costs that would have been incurred to raise a significant amount of capital by a public offering. A purchase discount of 5 percent or less from the market price shall be considered to comply with this condition without further justification. A purchase discount greater than 5 percent that cannot be justified under this condition results in compensation cost for the entire amount of the discount. Note that an entity that justifies a purchase discount in excess of 5 percent shall reassess at least annually, and no later than the first share purchase offer during the fiscal year, whether it can continue to justify that discount pursuant to this paragraph.
- b. Substantially all employees that meet limited employment qualifications may participate on an equitable basis.
 - c. The plan incorporates no option features, other than the following:
 1. Employees are permitted a short period of time – not exceeding 31 days – after the purchase price has been fixed to enroll in the plan.
 2. The purchase price is based solely on the market price of the shares at the date of purchase, and employees are permitted to cancel participation before the purchase date and obtain a refund of amounts previously paid (such as those paid by payroll withholdings).

11.1.1

Terms of the plan are available to all shareholders

An ESPP is not deemed compensatory if its terms aren't more favorable than those offered to all other shareholders of the same class of shares and it meets the requirements described in sections 11.1.3 and 11.1.4. We expect this criteria to rarely to be met because the terms of an ESPP are generally more favorable than those offered to all other shareholders. An example of when this criteria might be met is when employees participate in a dividend reinvestment plan (DRIP) and the employees purchase shares based on the same terms available to any other shareholders who participate in the DRIP. The following example illustrates the assessment of whether the terms offered to the employees are no more favorable than to other shareholders:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Implementation Guidance and Illustrations

718-50-55-35

Another criterion is that the terms are no more favorable than those available to all holders of the same class of shares. For example, Entity A offers all full-time employees and all nonemployee shareholders the right to purchase \$10,000 of its common stock at a 5 percent discount from its market price at the date of purchase, which occurs in 1 month. The arrangement is not compensatory because its terms are no more favorable than those available to all holders of the same class of shares. In contrast, assume Entity B has a dividend reinvestment program that permits shareholders of its common stock the ability to reinvest dividends by purchasing shares of its common stock at a 10 percent discount from its market price on the date that dividends are distributed and Entity B offers all full-time employees the right to purchase annually up to \$10,000 of its common stock at a 10 percent discount from its market price on the date of purchase. Entity B's common stock is widely held; hence, many shareholders will not receive dividends totaling at least \$10,000 during the annual period. Assuming that the 10 percent discount cannot be justified as the per-share amount of share issuance costs that would have been incurred to raise a significant amount of capital by a public offering, the arrangement is compensatory because the number of shares available to shareholders at a discount is based on the quantity of shares held and the amounts of dividends declared. Whereas, the number of shares available to employees at a discount is

not dependent on shares held or declared dividends; therefore, the terms of the employee share purchase plan are more favorable than the terms available to all holders of the same class of shares. Consequently, the entire 10 percent discount to employees is compensatory. If, on the other hand, the 10 percent discount can be justified as the per-share amount of share issuance costs that would have been incurred to raise a significant amount of capital by a public offering, then the entire 10 percent discount to employees is not compensatory. If an entity justifies a purchase discount in excess of 5 percent, it would be required to reassess that discount at least annually and no later than the first share purchase offer during the fiscal year. If upon reassessment that discount is not deemed justifiable, subsequent grants using that discount would be compensatory.

ASC 718-50-25-1(a)(1) states “a transaction subject to an employee share purchase plan that involves a class of equity shares designed exclusively for and held only by current or former employees or their beneficiaries may be compensatory depending on the terms of the arrangement.”

We believe the objective of this guidance is to preclude potential abuses by ESPPs that provide terms that are more favorable than those offered to all holders of that class of shares.

For example, assume an entity creates a series of Class B common shares to be sold only to employees. This series of Class B common shares has substantially the same rights as the employer’s Class A common shares. The employer sells the Class B shares at a 20% discount from the fair value of the Class A shares and does not sell the Class A shares at a discount. While the employer may technically offer this discounted price to all Class B shareholders and comply with the requirements of ASC 718-50-25-1(a)(1), we believe that the sale of Class B shares is compensatory. This is because the Class B shares held only by employees are not substantively different from the Class A shares held by other shareholders, and a 20% discount from the value of the Class A shares is not justifiable under ASC 718-50-25-1(a)(2).

11.1.2

Discount does not exceed the estimated issuance costs for a public offering

As discussed in section 11.1, an ESPP is deemed noncompensatory if its terms provide for a purchase discount that does not exceed the issuance costs that would have been incurred to raise a significant amount of capital by a public offering, and the requirements outlined in sections 11.1.3 and 11.1.4 are met. The focus of this assessment is on whether a per-share discount provided under an ESPP results in the employer receiving less proceeds than it would have received in a public offering of its shares to raise a significant amount of capital. That is, the discount offered to employees cannot be greater than the underwriter’s discount that would be incurred in connection with a significant public offering of shares. The FASB’s basis for this exception from compensatory accounting is that if the discount offered to employees is no greater than offering costs avoided, the transaction is a capital-raising transaction rather than a compensatory transaction.

ASC 718 states that a “safe harbor” discount of 5% is allowed. If an entity provides employees a discount greater than 5% and cannot justify that discount under these criteria, the entire discount is treated as compensation cost, not just the incremental portion above 5%.

To justify a discount of greater than 5%, the employer will have to obtain objective data on costs incurred by similar entities in underwritten offerings. Factors to consider when determining whether entities are similar include size, industry, growth stage, relative profitability and any other factors expected to affect an offering cost. Generally, we believe that only smaller public entities or nonpublic entities would be able to justify a discount materially greater than 5%.

If an entity is able to justify that a discount of greater than 5% is noncompensatory, ASC 718-50-25-1(a)(2) requires that the employer reassess that discount “at least annually, and no later than the first share purchase offer during the fiscal year.” If that discount is no longer justifiable as noncompensatory upon reassessment, all subsequent grants using that discount would be compensatory.

11.1.3 Substantially all employees may participate on an equitable basis

ASC 718 specifies that for a plan to be considered noncompensatory, substantially all employees who meet limited employment qualifications must be allowed to participate on an equitable basis in the plan.

We believe that the term “substantially all” has been interpreted to mean that entities do not have to offer the plan to all employees worldwide. However, to qualify as noncompensatory, a plan must be offered to substantially all employees in any country where the plan is offered who meet limited employment qualifications.

Although ASC 718 does not define the term “limited employment qualifications,” the standard provides the following example:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Implementation Guidance and Illustrations

718-50-55-34

Paragraph 718-50-25-1 stipulates the criteria that an employee share purchase plan must satisfy to be considered noncompensatory. One of those criteria specifies that substantially all employees that meet limited employment qualifications may participate on an equitable basis. Examples of limited employment qualifications might include customary employment of greater than 20 hours per week or completion of at least 6 months of service.

Generally, employment qualifications should be evaluated based on the facts and circumstances such that if the qualifications are designed to exclude a large group of employees, they likely would cause the plan to be considered compensatory.

We believe that if shares are offered to eligible employees equally or based on a uniform percentage of salary or wages (the plan may limit the number of shares that an employee may purchase through the plan), participation in the plan would be on an “equitable basis.”

11.1.4 The plan incorporates no option features

An entity would not normally offer options to investors without receiving consideration in return (with the exception of certain rights distributed to all shareholders). Accordingly, the FASB decided that option features, with limited exceptions, preclude characterizing a plan as noncompensatory. The following are examples of option features that would preclude treating a plan as noncompensatory:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Recognition

718-50-25-2

A plan provision that establishes the purchase price as an amount based on the lesser of the equity share's market price at date of grant or its market price at date of purchase, commonly called a look-back plan, is an example of an option feature that causes the plan to be compensatory. Similarly, a plan in which the purchase price is based on the share's market price at date of grant and that permits a participating employee to cancel participation before the purchase date and obtain a refund of amounts previously paid contains an option feature that causes the plan to be compensatory. Section 718-50-55 provides guidance on determining whether an employee share purchase plan satisfies the criteria necessary to be considered noncompensatory.

ESPPs often include an option that establishes the exercise price at a specified percentage of the lower of the underlying share's market price on two dates, which is commonly referred to as a "look-back option." For example, an ESPP with a look-back option may have a participation period that begins on 1 January and ends on 30 June and allows employees to purchase the entity's shares at 85% of the share closing price on either 1 January or 30 June, whichever is lower. The ability to purchase shares at a price based on the lower of the purchase-date share price or the grant-date share price is an option feature and, therefore, any plan with such a feature is compensatory.

Further, the ability to fix the purchase price at the grant date and subsequently choose whether to purchase the shares is an option, and, therefore, any plan with such a feature is compensatory.

Below are option features that ASC 718 indicates would *not* cause a plan to be considered compensatory:

- ▶ Employees are given a short period of time, not exceeding 31 days, after the purchase price has been fixed to enroll in the plan. An enrollment period limited to 31 days is not considered an option feature that would cause the plan to be considered compensatory. However, a plan with such an enrollment term may nonetheless have one of the other option features described above that would cause the plan to be considered compensatory. For instance, a plan would be considered compensatory if the purchase price is established on the grant date rather than the purchase date, and the employees have the ability to cancel their participation after enrollment.
- ▶ The purchase price is based solely on the market price of the shares at the date of purchase, and employees are permitted to cancel their participation before the purchase date and obtain a refund of amounts previously paid (such as those paid by payroll withholdings). While the employees have the "option" to purchase the shares, this feature would not provide the economics of an option and, therefore, the plan would not require compensatory accounting since the purchase price is established on the purchase date rather than the grant date.

11.2

Valuation of ESPPs (including look-back options)

As discussed in section 11.1.4, look-back options establish the exercise price at a specified percentage of the lower of the underlying share's market price on two dates. Section 423 of the Internal Revenue Code permits the exercise price to be set at no less than 85% of the lower of the share's value at the beginning or at the end of a period of up to 27 months while retaining favorable tax treatment. ASC 718-50 illustrates the approach to estimating the fair value of a variety of look-back options.

The concept underlying the estimation of the fair value of a look-back option is to separate the option into components that can be more easily valued. This approach is demonstrated in the following example in ASC 718:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Initial Measurement

718-50-30-1

Paragraph 718-10-30-6 states that the objective of the **fair value** measurement method is to estimate the fair value of the equity instruments, based on the share price and other measurement assumptions at the **grant date**, that are **issued** in exchange for providing goods or rendering services. Estimating the fair value of equity instruments at the grant date, which are issued in exchange for **employee** services, also applies to the fair value measurements associated with grants under a compensatory employee share purchase plan and is the basis for the approach described in Example 1, Case A (see paragraph 718-50-55-10).

718-50-30-2

Many employee share purchase plans with a look-back option have features in addition to or different from those of the plan described in Example 1, Case A (see paragraph 718-50-55-10). For example, some plans contain multiple purchase periods, others contain reset mechanisms, and still others allow changes in the withholding amounts or percentages after the grant date (see Example 1, Cases B through E [see paragraphs 718-50-55-22 through 55-33]).

718-50-30-3

In some circumstances, applying the measurement approaches described in this Subtopic at the grant date may not be practicable for certain types of employee share purchase plans. Paragraph 718-20-35-1 provides guidance on the measurement requirements if it is not possible to reasonably estimate fair value at the grant date.

Implementation Guidance and Illustrations**718-50-55-1**

This Section may contain summaries or references to specific tax code or other regulations that existed at the time that the standard was issued. The Financial Accounting Standards Board (FASB) does not monitor such code or regulations and assumes no responsibility for the current accuracy of the summaries or references. Users must evaluate such code or regulations to determine consistency of the current code or regulation with that presented.

718-50-55-2

The following are some of the more common types of employee share purchase plans with a look-back option that currently exist and the features that differentiate each type:

- a. Type A plan – Maximum number of shares. This type of plan permits an employee to have withheld a fixed amount of dollars from the employee's salary (or a stated percentage of the employee's salary) over a one-year period to purchase stock. At the end of the one-year period, the employee may purchase stock at 85 percent of the lower of the grant date stock price or the exercise date stock price. If the exercise date stock price is lower than the grant date stock price, the employee may not purchase additional shares (that is, the maximum number of shares that may be purchased by an employee is established at the grant date based on the stock price at that date and the employee's elected withholdings); any excess cash is refunded to the employee. This is the basic type of employee share purchase plan shown in Example 1, Case A [see paragraph 718-50-55-10]).
- b. Type B plan – Variable number of shares. This type of plan is the same as the Type A plan except that the employee may purchase as many shares as the full amount of the employee's withholdings will permit, regardless of whether the exercise date stock price is lower than the grant date stock price (see Example 1, Case B [paragraph 718-50-55-22]).
- c. Type C plan – Multiple purchase periods. This type of plan permits an employee to have withheld a fixed amount of dollars from the employee's salary (or a stated percentage of the employee's salary) over a two-year period to purchase stock. At the end of each six-month period, the employee may purchase stock at 85 percent of the lower of the grant date stock price or the exercise date stock price based on the amount of dollars withheld during that period (see Example 1, Case C [paragraph 718-50-55-26]).
- d. Type D plan – Multiple purchase periods with a reset mechanism. This type of plan is the same as the Type C plan except that the plan contains a reset feature if the market price of the stock at the end of any six-month purchase period is lower than the stock price at the original grant date. In that case, the plan resets so that during the next purchase period an employee may purchase

stock at 85 percent of the lower of the stock price at either the beginning of the purchase period (rather than the original grant date price) or the exercise date (see Example 1, Case D [paragraph 718-50-55-28]).

- e. Type E plan – Multiple purchase periods with a rollover mechanism. This type of plan is the same as the Type C plan except that the plan contains a rollover feature if the market price of the stock at the end of any six-month purchase period is lower than the stock price at the original grant date. In that case, the plan is immediately cancelled after that purchase date, and a new two-year plan is established using the then-current stock price as the base purchase price (see Example 1, Case D [paragraph 718-50-55-28]).
- f. Type F plan – Multiple purchase periods with semifixed withholdings. This type of plan is the same as the Type C plan except that the amount (or percentage) that the employee may elect to have withheld is not fixed and may be changed (increased or decreased) at the employee's election immediately after each six-month purchase date for purposes of all future withholdings under the plan (see Example 1, Case D [paragraph 718-50-55-28]).
- g. Type G plan – Single purchase period with variable withholdings. This type of plan permits an employee to have withheld an amount of dollars from the employee's salary (or a stated percentage of the employee's salary) over a one-year period to purchase stock. That amount (or percentage) is not fixed and may be changed (increased or decreased) at the employee's election at any time during the term of the plan for purposes of all future withholdings under the plan. At the end of the one-year period, the employee may purchase stock at 85 percent of the lower of the grant date stock price or the exercise date stock price (see Example 1, Case D [paragraph 718-50-55-28]).
- h. Type H plan – Multiple purchase periods with variable withholdings. This type of plan combines the characteristics of the Type C and Type G plans in that there are multiple purchase periods over the term of the plan and an employee is permitted to change (increase or decrease) withholding amounts (or percentages) at any time during the term of the plan for purposes of all future withholdings under the plan (see Example 1, Case D [paragraph 718-50-55-28]).
- i. Type I plan – Single purchase period with variable withholdings and cash infusions. This type of plan is the same as the Type G plan except that an employee is permitted to remit catch-up amounts to the entity when (and if) the employee increases withholding amounts (or percentages). The objective of the cash infusion feature is to permit an employee to increase withholding amounts (or percentages) during the term of the plan and remit an amount to the entity such that, on the exercise date, it appears that the employee had participated at the new higher amount (or percentage) during the entire term of the plan (see Example 1, Case E [paragraph 718-50-55-32]).

718-50-55-3

The distinguishing characteristic between the Type A plan and the Type B plan is whether the maximum number of shares that an employee is permitted to purchase is fixed at the grant date based on the stock price at that date and the expected withholdings. Each of the remaining plans described above (Type C through Type I plans) incorporates the features of either a Type A plan or a Type B plan. The above descriptions are intended to be representative of the types of features commonly found in many existing plans. The accounting guidance in this Subtopic shall be applied to all plans with characteristics similar to those described above.

718-50-55-4

The measurement approach described in Example 1, Case A (see paragraph 718-50-55-10) was developed to illustrate how the **fair value** of an **award** under a basic type of employee share purchase plan with a look-back option could be determined at the grant date by focusing on the substance of the arrangement and valuing separately each feature of the award. Although that general technique of valuing an award as the sum of the values of its separate components applies to all types of employee share purchase plans with a look-back option, the fundamental components of an award may differ from plan to plan thus affecting the individual calculations. For example, the measurement approach described in that Case assumes that the maximum number of shares that an employee may purchase is fixed at the grant date based on the grant date stock price and the employee's elected withholdings (that is, the Type A plan described in paragraph 718-50-55-2). That approach needs to be modified to appropriately determine the fair value of awards under the other types of plans described in that paragraph, including a Type B plan, that do not fix the number of shares that an employee is permitted to purchase.

718-50-55-5

Although many employee share purchase plans with a look-back option initially limit the maximum number of shares of stock that the employee is permitted to purchase under the plan (Type A plans), other employee share purchase plans (Type B plans) do not fix the number of shares that the employee is permitted to purchase if the exercise date stock price is lower than the grant date stock price. In effect, an employee share purchase plan that does not fix the number of shares that may be purchased has guaranteed that the employee can always receive the value associated with at least 15 percent of the stock price at the grant date (the employee can receive much more than 15 percent of the grant date value of the stock if the stock appreciates during the look-back period). That provision provides the employee with the equivalent of a put option on 15 percent of the shares with an exercise price equal to the stock price at the grant date. In contrast, an employee who participates in a Type A plan is only guaranteed 15 percent of the lower of the stock price as of the grant date or the exercise date, which is the equivalent of a call option on 85 percent of the shares (as described more fully in paragraph 718-50-55-16). A participant in a Type B plan receives the equivalent of both a put option and a call option.

Case A: Basic Look-Back Plans**718-50-55-10**

Some entities offer share options to employees under Section 423 of the U.S. Internal Revenue Code, which provides that employees will not be immediately taxed on the difference between the market price of the stock and a discounted purchase price if several requirements are met. One requirement is that the exercise price may not be less than the smaller of either:

- a. 85 percent of the stock's market price when the share option is granted
- b. 85 percent of the price at exercise.

718-50-55-11

A share option that provides the employee the choice of either option above may not have a term in excess of 27 months. Share options that provide for the more favorable of two (or more) exercise prices are referred to as look-back share options. A look-back share option with a 15 percent discount from the market price at either grant or exercise is worth more than a fixed share option to purchase stock at 85 percent of the current market price because the holder of the look-back share option is assured a benefit. If the share price rises, the holder benefits to the same extent as if the exercise price was fixed at the grant date. If the share price falls, the holder still receives the benefit of purchasing the stock at a 15 percent discount from its price at the date of exercise. An employee share purchase plan offering share options with a look-back feature would be compensatory because the look-back feature is an option feature (see paragraph 718-50-25-1).

718-50-55-12

For example, on January 1, 20X5, when its share price is \$30, Entity A offers its employees the opportunity to sign up for a payroll deduction to purchase its stock at either 85 percent of the share's current price or 85 percent of the price at the end of the year when the share options expire, whichever is lower. The exercise price of the share options is the lesser of \$25.50 ($\$30 \times .85$) or 85 percent of the share price at the end of the year when the share options expire.

718-50-55-13

The look-back share option can be valued as a combination position. (This Case presents one of several existing valuation techniques for estimating the fair value of a look-back option. In accordance with this Topic, an entity shall use a valuation technique that reflects the substantive characteristics of the instrument being granted in the estimate of fair value.) In this situation, the components are as follows:

- a. 0.15 of a share of nonvested stock
- b. 0.85 of a 1-year share option held with an exercise price of \$30.

718-50-55-14

Supporting analysis for the two components is discussed below.

718-50-55-15

Beginning with the first component, a share option with an exercise price that equals 85 percent of the value of the stock at the exercise date will always be worth 15 percent (100% – 85%) of the share price upon exercise. For a stock that pays no dividends, that share option is the equivalent of 15 percent of a share of the stock. The holder of the look-back share option will receive at least the equivalent of 0.15 of a share of stock upon exercise, regardless of the share price at that date. For example, if the share price falls to \$20, the exercise price of the share option will be \$17 ($\$20 \times .85$), and the holder will benefit by \$3 ($\$20 - \17), which is the same as receiving 0.15 of a share of stock for each share option.

718-50-55-16

If the share price upon exercise is more than \$30, the holder of the look-back share option receives a benefit that is worth more than 15 percent of a share of stock. At prices of \$30 or more, the holder receives a benefit for the difference between the share price upon exercise and \$25.50 – the exercise price of the share option ($.85 \times \$30$). If the share price is \$40, the holder benefits by \$14.50 ($\$40 - \25.50). However, the holder cannot receive both the \$14.50 value of a share option with an exercise price of \$25.50 and 0.15 of a share of stock. In effect, the holder gives up 0.15 of a share of stock worth \$4.50 ($\$30 \times .15$) if the share price is above \$30 at exercise. The result is the same as if the exercise price of the share option was \$30 ($\$25.50 + \4.50) and the holder of the look-back share option held 85 percent of a 1-year share option with an exercise price of \$30 in addition to 0.15 of a share of stock that will be received if the share price is \$30 or less upon exercise.

718-50-55-17

An option-pricing model can be used to value the 1-year share option on 0.85 of a share of stock represented by the second component. Thus, assuming that the fair value of a share option on one share of Entity A's stock on the grant date is \$4, the compensation cost for the look-back option at the grant date is as follows.

0.15 of a share of nonvested stock ($\$30 \times 0.15$)	\$ 4.50
Share option on 0.85 of a share of stock, exercise price of \$30 ($\$4 \times .85$)	<u>3.40</u>
Total date value	<u>\$ 7.90</u>

718-50-55-18

For a look-back option on a dividend-paying share, both the value of the nonvested stock component and the value of the share option component would be adjusted to reflect the effect of the dividends that the employee does not receive during the life of the share option. The present value of the dividends expected to be paid on the stock during the life of the share option (one year in this Case) would be deducted from the value of a share that receives dividends. One way to accomplish that is to base the value calculation on shares of stock rather than dollars by assuming that the dividends are reinvested in the stock.

718-50-55-19

For example, if Entity A pays a quarterly dividend of 0.625 percent ($2.5\% \div 4$) of the current share price, 1 share of stock would grow to 1.0252 (the future value of 1 using a return of 0.625 percent for 4 periods) shares at the end of the year if all dividends are reinvested. Therefore, the present value of 1 share of stock to be received in 1 year is only 0.9754 of a share today (again applying conventional compound interest formulas compounded quarterly) if the holder does not receive the dividends paid during the year.

718-50-55-20

The value of the share option component is easier to compute; the appropriate dividend assumption is used in an option-pricing model in estimating the value of a share option on a whole share of stock. Thus, assuming the fair value of the share option is \$3.60, the compensation cost for the look-back share option if Entity A pays quarterly dividends at the annual rate of 2.5 percent is as follows.

0.15 of a share of nonvested stock ($\$30 \times 0.15 \times 0.9754$)	\$ 4.39
Share option on 0.85 of a share of stock, \$30 exercise price, 2.5%, dividend yield ($\$3.60 \times 0.85$)	<u>3.06</u>
Total grant date value	<u>\$ 7.45</u>

718-50-55-21

The first component, which is worth \$4.39 at the grant date, is the minimum amount of benefits to the holder regardless of the price of the stock at the exercise date. The second component, worth \$3.06 at the grant date, represents the additional benefit to the holder if the share price is above \$30 at the exercise date.

Case B: Look-Back Plan Variable versus Maximum Number of Shares**718-50-55-22**

On January 1, 20X0, when its stock price is \$50, Entity A offers its employees the opportunity to sign up for a payroll deduction to purchase its stock at the lower of either 85 percent of the stock's current price or 85 percent of the stock price at the end of the year when the options expire. Thus, the exercise price of the options is the lesser of \$42.50 ($\50×85 percent) or 85 percent of the stock price at the end of the year when the option is exercised. Two employees each agree to have \$4,250 withheld from their salaries; however, Employee A is not allowed to purchase any more shares than the \$4,250 would buy on the grant date (that is, 100 shares [$\$4,250/\42.50]) and Employee B is permitted to buy as many shares as the \$4,250 will permit under the terms of the plan. In both cases, the 15 percent purchase price discount at the grant date is worth \$750 (100 shares \times \$50 \times 15 percent). Depending on the stock price at the end of the year, the value of the 15 percent discount for each employee is as follows.

	Stock Price at the End of the Year	Number of Shares Purchased	Value of the 15 Percent Discount
<i>Scenario 1:</i> ^(a)			
Employee A (Type A plan)	\$ 60	100	\$ 1,750
Employee B: (Type B plan)	\$ 60	100	\$ 1,750
<i>Scenario 2:</i> ^(b)			
Employee A (Type A plan)	\$ 50	100	\$ 750
Employee B: (Type B plan)	\$ 50	100	\$ 750
<i>Scenario 3:</i> ^(c)			
Employee A (Type A plan)	\$ 30	100	\$ 450
Employee B: (Type B plan)	\$ 30	167	\$ 750
<i>Scenario 4:</i> ^(d)			
Employee A (Type A plan)	\$ 10	100	\$ 150
Employee B: (Type B plan)	\$ 10	500	\$ 750

^(a) The purchase price in this scenario would be \$42.50 ($\50×0.85) because the stock price increased during the withholding period.

^(b) The purchase price in this scenario would be \$42.50 ($\50×0.85) because the stock price at the end of the period was the same as the stock price at the beginning of the period.

^(c) The purchase price in this scenario would be \$25.50 ($\30×0.85) because the stock price decreased during the withholding period.

^(d) The purchase price in this scenario would be \$8.50 ($\10×0.85) because the stock price decreased during the withholding period.

718-50-55-23

As illustrated above, both awards provide the same value to the employee if the stock price at the exercise date has increased (or remained unchanged) from the grant date stock price. However, the award under the Type B plan is more valuable to the employee if the stock price at the exercise date has decreased from the grant date stock price because it guarantees that the employee always will receive at least 15 percent of the stock price at the grant date, whereas the award under the Type A plan only guarantees that the employee will receive 15 percent of the ultimate (lower) stock purchase price.

718-50-55-24

Using the component measurement approach described in Case A as the base, the additional feature associated with a Type B plan that shall be included in the fair value calculation is 15 percent of a put option on the employer's stock (valued by use of a standard option-pricing model, using the same measurement assumptions that were used to value the 85 percent of a call option). If the plan in that Case had the provisions of a Type B plan (that is, a plan that does not fix the number of shares that may be purchased), the fair value of the award would be calculated at the grant date as follows.

0.15 of a share of nonvested stock ($\$50 \times 0.15$)	\$ 7.50
One-year call on 0.85 of a share of stock, exercise price of \$50 ($\7.56×0.85)	6.43
One-year put on 0.15 of a share of stock, exercise price of \$50 ($\4.27×0.15) ^(a)	0.64
Total grant date fair value	<u>\$ 14.57</u>

^(a) Other assumptions are the same as those used to value the call option; \$50 stock price, an expected life of one year, expected volatility of 30 percent, risk-free interest rate of 6.8 percent, and a zero dividend yield.

With the same values the fair value of the Type A employee share purchase plan award described in Case A is determined as follows.

0.15 of a share of nonvested stock ($\$50 \times 0.15$)	\$ 7.50
One-year call on 0.85 of a share of stock, exercise price of \$50 ($\7.56×0.85)	6.43
Total grant date fair value	<u>\$ 13.93</u>

718-50-55-25

In Cases B through E, total compensation cost would be measured at the grant date based on the number of shares that can be purchased using the estimated total withholdings and market price of the stock as of the grant date, and not based on the potentially greater number of shares that may ultimately be purchased if the market price declines. In other words, assume that on January 1, 20X0, Employee A elects to have \$850 withheld from his pay for the year to purchase stock. Total compensation cost for the Type B plan award to Employee A would be \$291 ($\14.57×20 grant-date-based shares [$\$850/\42.50]). For purposes of determining the number of shares on which to measure compensation cost, the stock price as of the grant date less the discount, or $\$50 \times 85$ percent in this case, is used.

Case C: Look-Back Plan with Multiple Purchase Periods**718-50-55-26**

In substance, an employee share purchase plan with multiple purchase periods (a Type C plan) is a series of linked awards, similar in nature to how some view a graded vesting stock option plan. Accordingly, the fair value of an award under an employee share purchase plan with multiple purchase periods shall be determined at the grant date in the same manner as an award under a graded vesting stock option plan. Under the graded vesting approach, awards under a two-year plan with purchase periods at the end of each year would be valued as having two separate option tranches both starting on the initial grant date (using the Case A approach if the plan has the characteristics of a Type A plan or using the Case B approach if the plan has the characteristics of a Type B plan) but with different lives of 12 and 24 months, respectively. All other measurement assumptions would need to be consistent with the separate lives of each tranche.

718-50-55-27

For example, if the plan in Case A was a two-year Type C plan with purchase periods at the end of each year, the fair value of each tranche of the award would be calculated at the grant date as follows.

Tranche No. 1:

0.15 of a share of nonvested stock ($\$50 \times 0.15$)	\$ 7.50
One-year call on 0.85 of a share of stock, exercise price of \$50 ($\7.56×0.85) ^(a)	<u>6.43</u>
Total grant date fair value of the first tranche	<u>\$ 13.93</u>

Tranche No. 2:

0.15 of a share of nonvested stock ($\$50 \times 0.15$)	\$ 7.50
Two-year call on 0.85 of a share of stock, exercise price of \$50 ($\11.44×0.85) ^(a)	<u>9.72</u>
Total grant date fair value of the second tranche	<u>\$ 17.22</u>

(a) The other assumptions are \$50 stock price, an expected life of 1 year, expected volatility of 30 percent, risk-free interest rate of 6.8 percent, and a zero dividend yield (same assumptions as in footnote [a] of the table in paragraph 718-50-55-24). To simplify the illustration, the fair value of each of the tranches is based on the same assumptions about volatility, the risk-free interest rate, and expected dividend yield. In practice, each of those assumptions would be related to the expected life of the respective tranche, which means that at least the risk-free interest rate, and perhaps all three assumptions, would differ for each tranche.

The valuation approach for look-back options described above does not apply to all forms of look-back options. Some look-back options may provide for the purchase of a variable number of shares (e.g., because the number of options is determined based on payroll withholdings and, potentially, the share price on the exercise date). Other look-back options may provide for multiple option periods. ASC 718-50-55 provides examples on how to estimate the fair value of some of these more complicated look-back options. In addition, ASC 718-50 reiterates the exception to fair value measurement in

ASC 718-10-30-21 and 30-22. Accordingly, although we expect such situations to be rare, for complex ESPPs it may be appropriate to measure compensation cost as the ultimate value conveyed to the employee on a share purchase (i.e., the discount on current market value on the purchase date), with interim estimates of compensation cost based on the discount that would result if the share was purchased at that date.

11.3 Requisite service period for ESPPs

ASC 718 provides the following guidance on the requisite service period for ESPPs:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Recognition

718-50-25-3

The requisite service period for any compensation cost resulting from an employee share purchase plan is the period over which the employee participates in the plan and pays for the shares.

Generally, the requisite service period for an ESPP begins at the start of the offering period and ends on the date the shares are purchased. If there is no offering period (and no post-purchase service requirements), any resulting compensation cost is recognized on the purchase date.

In many cases, an ESPP may provide for multiple purchase periods beginning on a single date. For example, an ESPP may provide for four purchase periods beginning on 1 January 20X5 and ending on 30 June 20X5, 31 December 20X5, 30 June 20X6 and 31 December 20X6, and the purchase price for each tranche is based on the lower of 85% of the grant-date fair value (1 January 20X5) or the purchase-date fair value. These awards effectively include options that are subject to graded vesting. We believe that the accounting policy decision to use either an accelerated or straight-line cost attribution method for awards subject to graded vesting (see section 4.4.1.4) applies to ESPPs with multiple purchase periods and should be applied consistently to all awards subject to graded vesting. If the effect of the policy is material to the financial statements, the policy should be disclosed as a significant accounting policy.

11.4 Changes in withholdings and rollovers

The guidance for measuring the cost of ESPPs is found primarily in ASC 718-50. Under the approach described in that guidance, the compensation cost resulting from an ESPP is measured on the grant date based on the employee's expected withholdings (i.e., the amounts the employee agreed to have withheld from his or her cash compensation before the purchase period). ASC 718-50 also addresses the accounting implications when an employee elects to increase or decrease those withholdings prospectively or elects to roll those withholdings over into a new purchase contract. Increases in withholdings for reasons other than increases in cash compensation are accounted for as modifications as described in section 8. Decreases in withholdings are essentially ignored (they are the equivalent of an employee failing to exercise an option), unless the employee fails to provide the requisite service, in which case the event is accounted for as a forfeiture and any recognized compensation cost is reversed.

11.4.1 Increase in withholdings

ASC 718-50 describes how to account for increases in withholdings that apply prospectively (i.e., the employee is not allowed to retroactively increase withholdings in prior periods). The guidance distinguishes between (1) a change in the percentage of the employee's compensation to be withheld (which is a modification measured on the date of the change in election) and (2) a change due to salary increases (i.e., that changes the total amount of withholdings, but not the percentage), which is measured based on the incremental number of shares that may be purchased, multiplied by the grant-date (not modification-date) fair value of the award.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Subsequent Measurement

718-50-35-1

Changes in total **employee** withholdings during a purchase period that occur solely as a result of salary increases, commissions, or bonus payments are not plan modifications if they do not represent changes to the terms of the **award** that was offered by the employer and initially agreed to by the employee at the grant (or measurement) date. Under those circumstances, the only incremental compensation cost is that which results from the additional shares that may be purchased with the additional amounts withheld (using the **fair value** calculated at the **grant date**). For example, an employee may elect to participate in the plan on the grant date by requesting that 5 percent of the employee's annual salary be withheld for future purchases of stock. If the employee receives an increase in salary during the term of the award, the base salary on which the 5 percent withholding amount is applied will increase, thus increasing the total amount withheld for future share purchases. That increase in withholdings as a result of the salary increase is not considered a plan **modification** and thus only increases the total compensation cost associated with the award by the grant date fair value associated with the incremental number of shares that may be purchased with the additional withholdings during the period. The incremental number of shares that may be purchased is calculated by dividing the incremental amount withheld by the exercise price as of the grant date (for example, 85 percent of the grant date stock price).

Implementation Guidance and Illustrations

718-50-55-29

Likewise, although not a change to the terms of the employee share purchase plan, an election by an employee to increase withholding amounts (or percentages) for future services (Type F through Type H plans) is a modification of the terms of the award to that employee, which, in substance, is similar to an exchange of the original award for a new award with different terms. Accordingly, the fair value of an award under an employee share purchase plan with variable withholdings shall be determined at the grant date (using the Type A, Type B, or Type C measurement approach, as applicable) based on the estimated amounts (or percentages) that a participating employee initially elects to withhold under the terms of the plan. After the grant date (except as noted in paragraph 718-50-35-1), any increases in withholding amounts (or percentages) for future services shall be accounted for as a plan modification in accordance with the guidance in paragraph 718-20-35-3.

718-50-55-30

To illustrate, if the plan described in Case C allowed an employee to elect to change withholdings at the end of the first year, modification accounting would be applied at the date the employee elected to increase withholdings to determine the amount, if any, of incremental compensation cost. Assume that on January 1, 20X0, Employee A initially elected to have \$850 per year withheld from his pay for each purchase period. However, at the end of Year 1 when the stock price is \$60 (and assume that no other factors have changed), Employee A elects to have a total of \$1,275 withheld for the second purchase period. At that date, \$1,275 is equivalent to 30 shares eligible for purchase at the end of the second year ($\$1,275/\42.50). At the date Employee A elects to increase withholdings, modification accounting shall be applied to determine the amount of any incremental fair value associated with the modified award as follows.

Fair value of the old option (Tranche No 2) before modification:

0.15 of a share of nonvested stock ($\$60 \times 0.15$)	\$ 9.00
One-year call on 0.85 of a share of stock, exercise price of \$50 ($\15.10×0.85)	<u>12.84</u>
Total fair value of each option	<u>\$ 21.84</u>
Number of grant date shares ($\$850 \div \42.50)	<u>x 20</u>
Total fair value	<u>\$ 437</u>

Fair value of the new option after modification:

0.15 of a share of nonvested stock ($\$60 \times 0.15$)	\$ 9.00
One-year call on 0.85 of a share of stock, exercise price of \$50 ($\15.10×0.85)	<u>12.84</u>
Total fair value of each option	<u>\$ 21.84</u>
Number of modification date shares ($\$1,275 \div \42.50)	<u>x 30</u>
Total fair value	<u>\$ 655</u>
Incremental compensation	<u>\$ 218</u>

718-50-55-31

The incremental value is determined based on the fair value measurements at the date of the modification using the then-current stock price. To simplify the illustration, the fair value at the modification date is based on the same assumptions about **volatility**, the risk-free interest rate, and expected dividend yield as at the grant date.

ASC 718-50 describes the accounting for changes in withholdings that may be applied retroactively as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Implementation Guidance and Illustrations

Case E: Look-Back Plans with Retroactive Cash Infusion Election

718-50-55-32

As with all employee share purchase plans, the objective of the measurement process for employee share purchase plans with a look-back option is to reasonably measure the fair value of the award at the grant date. Unlike Type F through Type H plans, which permit an employee to increase withholding amounts (or percentages) only prospectively, the Type I plan permits an employee to make a retroactive election to increase withholdings. Under a Type I plan, an employee may elect not to participate (or to participate at a minimal level) in the plan until just before the exercise date, thus making it difficult to determine when there truly is a mutual understanding of the terms of the award, and thus the date at which the grant occurs. For example, assume that the Type A employee share purchase plan in Case A permits an employee to remit catch-up amounts (up to a maximum aggregate withholding of 15 percent of annual salary) to Entity A at any time during the term of the plan. On January 1, 20X0, Employee A elects to participate in the plan by having \$100 (0.04 percent) of her \$250,000 salary withheld monthly from her pay over the year. On December 20, 20X0, when the stock price is \$65, Employee A elects to remit a check to Entity A for \$36,300, which, together with the \$1,200 withheld during the year, represents 15 percent of her salary.

718-50-55-33

In that situation, December 20, 20X0 is the date at which Entity A and Employee A have a mutual understanding of the terms of the award in exchange for the services already rendered and Entity A becomes contingently obligated to issue equity instruments to Employee A upon the fulfillment of vesting requirements. The fair value of the entire award to Employee A is therefore measured as of December 20, 20X0.

11.4.2 Decrease in withholdings

As discussed in section 11.4, an employee's failure to purchase shares or an employee's election to decrease withholdings (except pursuant to a withdrawal from the plan, which is accounted for as a cancellation and results in the immediate recognition of any unrecognized compensation costs, as discussed in section 8.10.2) is essentially ignored when accounting for the compensation cost resulting from an ESPP.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Subsequent Measurement

718-50-35-2

Any decreases in the withholding amounts (or percentages) shall be disregarded for purposes of recognizing compensation cost unless the employee services that were valued at the grant date will no longer be provided to the employer due to a termination. However, no compensation cost shall be recognized for awards that an employee forfeits because of failure to satisfy a service requirement for vesting. The accounting for decreases in withholdings is consistent with the requirement in paragraph 718-10-35-3 that the total amount of compensation cost that must be recognized for an award be based on the number of instruments for which the requisite service has been rendered (that is, for which the requisite service period has been completed).

11.4.3 Rollover of plan withholdings

The FASB also addressed the accounting for an employee's failure to purchase shares at the end of a purchase period and the rollover of withheld amounts into a new purchase agreement.

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Employee Share Purchase Plans

Implementation Guidance and Illustrations

Case D: Look-Back Plans with Reset or Rollover Mechanisms

718-50-55-28

The basic measurement approach described in Case C for a Type C plan also should be used to value awards under employee share purchase plans with multiple purchase periods that incorporate reset or rollover mechanisms (that is, Type D and Type E plans). The fair value of those awards initially can be determined at the grant date using the graded vesting measurement approach. However, at the date that the reset or rollover mechanism becomes effective, the terms of the award have been modified (the exercise price has been decreased and, for a grant under a Type E plan, the term of the award has been extended), which, in substance, is similar to an exchange of the original award for a new award with different terms. Share-based payment modification accounting (see paragraphs 718-20-35-3 through 35-9) shall be applied at the date that the reset or rollover mechanism becomes effective to determine the amount of any incremental fair value associated with the modified grant.

11.5 ESPPs with a fixed monetary value

As discussed in section 5.2.1, compensation cost for award that provides a "fixed monetary value" would be classified as a liability on the balance sheet based on the requirements of ASC 480. Contracts for which the monetary value is predominantly fixed are sometimes characterized as "stock-settled debt" (e.g., an award in which the employee will receive a variable number of shares with a fair value equal to a predominantly fixed dollar amount on the delivery date).

Awards with predominantly fixed values will arise most frequently in connection with ESPPs that provide a fixed discount from the share price on the purchase date (no look-back features). For example, assume that an employer and employee agree that the employer will withhold from the employee's payroll \$1,000 over the course of a six-month period and, at the end of that period, the \$1,000 will be applied to buy shares at a 10% discount from the market price of the employer's shares on the purchase date. That is, regardless of the market price of the shares on the purchase date, the employee will receive shares with a fair value of \$1,111 in exchange for \$1,000. As a result, the benefit to the employee is fixed at \$111. Accordingly, the \$111 compensation cost should be recognized ratably over the six-month purchase period and recognized, along with any payroll withholdings, as a liability (i.e., stock-settled debt) on the balance sheet. We do not believe this liability classification applies to circumstances in which the ESPP incorporates option features (including look-back options) because the monetary value of the instrument as a whole is not fixed in those circumstances.

11.6 Accounting for disqualifying dispositions

The disqualifying disposition (i.e., a disposition of shares before the end of the holding period specified in Section 423 of the Internal Revenue Code) of shares acquired through an ESPP can give rise to an employer's tax deduction for an ESPP that otherwise would not have provided the employer a tax deduction. Although many entities with ESPPs and similar qualified plans have a sufficient history of employee actions to reasonably estimate an expected level of disqualifying dispositions, ASC 718-740-25-3 precludes entities from accounting for anticipated disqualifying dispositions by employees. In other words, the tax benefits from disqualifying dispositions must be recognized in the period the employee makes the disqualifying disposition. On the occurrence of the future event that converts nondeductible awards into deductible awards (e.g., disqualifying dispositions), the tax benefit recognized in earnings is equal to the lesser of (1) the actual benefit of the tax deduction or (2) the cumulative compensation cost previously recognized in earnings for the disqualified award multiplied by the appropriate statutory tax rate. Refer to section 22 of our FRD, *Income taxes*.

11.7 Earnings per share

The effect of ESPPs on EPS is discussed in section 4.5.2 of our FRD, *Earnings per share*.

12 Effective date and transition

12.1 ASC 718 – general

Certain provisions of ASC 718 are different for public entities and nonpublic entities. The standard defines a public entity as follows:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Glossary

718-10-20

Public Entity

An entity that meets any of the following criteria:

- a. Has equity securities that trade in a public market, either on a stock exchange (domestic or foreign) or in an over-the-counter market, including securities quoted only locally or regionally
- b. Makes a filing with a regulatory agency in preparation for the sale of any class of equity securities in a public market
- c. Is controlled by an entity covered by the preceding criteria. That is, a subsidiary of a public entity is itself a public entity.

An entity that has only debt securities trading in a public market (or that has made a filing with a regulatory agency in preparation to trade only debt securities) is not a public entity.

See section 2.8 for the definition of a nonpublic entity.

12.1.1 Nonpublic entities that become public entities

The guidance on measuring share-based payments and on the transition alternatives under ASC 718 is significantly different for public entities and nonpublic entities. The differences result in additional complexities when an entity becomes a public entity. A newly public entity should apply the provisions that are applicable to its new status as of the beginning of the first interim or annual period after it becomes a public entity.

The SEC staff has provided the following guidance on transition to fair-value-based measurements by nonpublic entities that become public entities:

Excerpt from SAB Topic 14.B

Facts: Company A is a nonpublic entity⁸ that first files a registration statement with the SEC to register its equity securities for sale in a public market on January 2, 20X8.⁹ As a nonpublic entity, Company A had been assigning value to its share options¹⁰ under the calculated value method prescribed by FASB ASC Topic 718¹¹ and had elected to measure its liability awards based on intrinsic value. Company A is considered a public entity on January 2, 20X8 when it makes its initial filing with the SEC in preparation for the sale of its shares in a public market.

Question 1: How should Company A account for the share options that were granted to its employees prior to January 2, 20X8 for which the requisite service has not been rendered by January 2, 20X8?

Interpretive response: Prior to becoming a public entity, Company A had been assigning value to its share options under the calculated value method. The staff believes that Company A should continue to follow that approach for those share options that were granted prior to January 2, 20X8, unless those share options are subsequently modified, repurchased or cancelled.¹² If the share options are subsequently modified, repurchased or cancelled, Company A would assess the event under the public company provisions of FASB ASC Topic 718. For example, if Company A modified the share options on February 1, 20X8, any incremental compensation cost would be measured under FASB ASC subparagraph 718-20-35-3(a), as the fair value of the modified share options over the fair value of the original share options measured immediately before the terms were modified.¹³ [SAB Topic 14.B, Footnotes 8, 10 and 11 omitted]

⁹ For the purposes of these illustrations, assume all of Company A's equity-based awards granted to its employees were granted after the adoption of FASB ASC Topic 718.

¹² This view is consistent with the FASB's basis for rejecting full retrospective application of FASB ASC Topic 718 as described in Statement 123R, paragraph B251.

¹³ FASB ASC paragraph 718-20-55-94. The staff believes that because Company A is a public entity as of the date of the modification, it would be inappropriate to use the calculated value method to measure the original share options immediately before the terms were modified.

The SEC staff's guidance described above is consistent with the concept in ASC 718 that entities are not permitted to retrospectively estimate fair value for share-based payments that previously were measured on another basis (whether intrinsic value, minimum value or calculated value). Therefore, in the above example all options granted on or before 1 January 20X8 would be measured at calculated value and all options granted on or after 2 January 20X8 would be measured at fair value.

This transition requirement for nonpublic entities that become public entities is reiterated below.

Excerpt from SAB Topic 14.B

Question 3: After becoming a public entity, may Company A retrospectively apply the fair-value-based method to its awards that were granted prior to the date Company A became a public entity?

Interpretive response: No. Before becoming a public entity, Company A did not use the fair-value-based method for either its share options or its liability awards granted to the Company's employees. The staff does not believe it is appropriate for Company A to apply the fair-value-based method on a retrospective basis, because it would require the entity to make estimates of a prior period, which, due to hindsight, may vary significantly from estimates that would have been made contemporaneously in prior periods.¹⁷ [SAB Topic 14.B, Footnote 17 omitted]

The SEC staff also indicates in Question 1 above that if an award granted prior to an entity becoming public is modified after the grantor becomes a public entity, the incremental value of the modification should be measured based on incremental *fair value*. Although it is not explicitly stated in Question 1, we believe that in connection with the modification the remainder of the originally measured but unrecognized compensation cost (e.g., measured under calculated value) must continue to be recognized over the remaining vesting period.

Excerpt from SAB Topic 14.B

Question 2: How should Company A account for its liability awards granted to its employees prior to January 2, 20X8 which are fully vested but have not been settled by January 2, 20X8?

Interpretive response: As a nonpublic entity, Company A had elected to measure its liability awards subject to FASB ASC Topic 718 at intrinsic value.¹⁴ When Company A becomes a public entity, it should measure the liability awards at their fair value determined in accordance with FASB ASC Topic 718.¹⁵ In that reporting period there will be an incremental amount of measured cost for the difference between fair value as determined under FASB ASC Topic 718 and intrinsic value. For example, assume the intrinsic value in the period ended December 31, 20X7 was \$10 per award. At the end of the first reporting period ending after January 2, 20X8 (when Company A becomes a public entity), assume the intrinsic value of the award is \$12 and the fair value as determined in accordance with FASB ASC Topic 718 is \$15. The measured cost in the first reporting period after December 31, 20X7 would be \$5.¹⁶ [SAB Topic 14.B, Footnotes 14 and 15 omitted]

¹⁶ \$15 fair value less \$10 intrinsic value equals \$5 of incremental cost.

Question 2 above does not explicitly address how to present the adjustment of the liability balance from intrinsic value to fair value in the financial statements. That is, should the effect of the change on net income be recognized as compensation cost or as the cumulative effect of a change in accounting principle? Because the change results from the required adoption of a new measurement principle (fair value rather than intrinsic value), we believe the effect on net income of the change from intrinsic to fair value measured on the date the entity becomes a public entity as defined in ASC 718 (i.e., 2 January 20X8) should be recognized as the cumulative effect of a change in accounting principle. This adjustment is recognized as a reduction in net income consistent with other cumulative effect adjustments recognized on initial adoption of ASC 718.

Excerpt from SAB Topic 14.B

Question 4: Upon becoming a public entity, what disclosures should Company A consider in addition to those prescribed by FASB ASC Topic 718?¹⁸

Interpretive response: In the registration statement filed on January 2, 20X8, Company A should clearly describe in MD&A the change in accounting policy that will be required by FASB ASC Topic 718 in subsequent periods and the reasonably likely material future effects.¹⁹ In subsequent filings, Company A should provide financial statement disclosure of the effects of the changes in accounting policy. In addition, Company A should consider the applicability of SEC Release No. FR-60²⁰ and Section V, "Critical Accounting Estimates," in SEC Release No. FR- 72²¹ regarding critical accounting policies and estimates in MD&A. [SAB Topic 14.B, Footnotes 18 through 21 omitted]

As indicated by the response to Question 4 above, the disclosure requirements for public entities are incremental to the disclosures they may have otherwise been making as a nonpublic entity. For instance, public entities are required to provide a description of their critical accounting policies and estimates, which would now incorporate their accounting policy with respect to share-based payments. Entities should be mindful of these increased disclosures both in the registration statement as well as in subsequent filings.

12.2

ASU 2018-07 (added December 2018)

As discussed in section 1.1.1, in June 2018, the FASB issued ASU 2018-07 to simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. The new guidance expands the scope of ASC 718 to include

share-based payments granted to nonemployees and supersedes the guidance in ASC 505-50. The guidance applies to nonemployee awards issued in exchange for goods or services used or consumed in an entity's own operations and to awards granted by an investor to employees and nonemployees of an equity method investee for goods and services used or consumed in the investee's operations. It does not apply to instruments issued to a lender or investor in a financing (e.g., in a capital raising) transaction. It also does not apply to equity instruments granted by the vendor when selling goods or services to customers in the scope of ASC 606.

12.2.1 **Effective date and transition (added December 2018)**

ASU 2018-07 is effective for PBEs in annual periods beginning after 15 December 2018, and interim periods within those annual periods. For all other entities, it is effective in annual periods beginning after 15 December 2019, and interim periods within annual periods beginning after 15 December 2020.

Entities will apply the new guidance to equity-classified nonemployee awards for which a measurement date has not been established and to liability-classified nonemployee awards that have not been settled as of the date of adoption. Entities will compare the cumulative amounts that were recorded for their nonemployee share-based payments through the end of the reporting period immediately preceding the date of adoption to the cumulative amounts that should be recognized at the adoption date when applying the new guidance to calculate the transition adjustment.

Assets that include nonemployee share-based payment costs, such as work-in-process inventory and construction-in-progress, will be remeasured at the adoption date. However, assets that have been completed (e.g., finished goods inventory, equipment that has been placed into service and has begun depreciating) will not be remeasured.

The cumulative effect of the transition adjustment is recorded as an adjustment to retained earnings as of the beginning of the annual period of adoption.

Entities are required to disclose the nature of and reason for the change in accounting principle in the financial statements for the first interim and annual period of adoption.

12.2.2 **Early adoption (added December 2018)**

The ASU permits early adoption, including in an interim period for which financial statements have not been issued (PBEs) or made available for issuance (non-PBEs), but not before an entity adopts ASC 606. Therefore, a calendar year-end PBE that adopted ASC 606 on 1 January 2018 may adopt the new guidance as early as the beginning of the first interim period for which financial statements have not been issued. A non-PBE that intends to early adopt ASC 606 may also early adopt the guidance in ASU 2018-07 in the same interim or annual period for which it has not made available for issuance interim or annual financial statements. However, a calendar year-end non-PBE that has not early adopted ASC 606 can early adopt the guidance in ASU 2018-07 when it adopts ASC 606 on 1 January 2019.

As written, the adoption date was intended to be the first day of the interim period in which the entity early adopts the guidance. Therefore, if a calendar year-end PBE early adopts the guidance in its second quarter, the cumulative-effect adjustment is calculated as of 1 April 2018 but recorded as an adjustment to retained earnings as of 1 January 2018 (the beginning of the annual period of adoption). An entity will not apply the new ASU to previously issued interim-period financial statements and will not restate those financial statements the next time they are presented.

Based on discussions with the FASB staff, we understand that an alternative approach is also acceptable under which entities will calculate the transition adjustment as of the beginning of the annual period in which the standard is early adopted. Under this alternative, entities would compare the cumulative

amounts that were recorded as of the prior period (e.g., 31 December 2017 for a calendar year-end PBE) to the cumulative amounts that should be recognized as of that date when applying the new guidance to calculate the transition adjustment.

When using this alternative approach, entities will retrospectively adopt the new guidance at the beginning of the annual period with the effect of adoption on the previously issued interim financial statements recognized in the period-to-date financial information. The entity will recast previously issued interim financial information the next time it is presented. For example, if a calendar year-end PBE early adopts the guidance in its second quarter, the results for the six-month period ended 30 June 2018 will reflect the effect of adoption on the three-month period ended 31 March 2018, and those results will be recast under the new guidance the next time they are presented.

13 Presentation and disclosure

13.1 Presentation

ASC 718 provides little guidance on how entities should present in the financial statements compensation cost arising from share-based payments. That guidance is limited to the balance sheet classification of awards (i.e., liability versus equity, as discussed in section 5) and an indication that compensation cost should be *expensed or capitalized* as appropriate (see section 4.1.3 for a more detailed discussion of capitalizing compensation cost).

13.1.1 Income statement presentation

The SEC staff provided its views on the income statement classification of compensation expense relating to share-based payments in SAB Topic 14.F:

Excerpt from SAB Topic 14.F

The staff believes Company G should present the expense related to share-based payment arrangements in the same line or lines as cash compensation paid to the same employees.⁶⁷ The staff believes a company could consider disclosing the amount of expense related to share-based payment arrangements included in specific line items in the financial statements. Disclosure of this information might be appropriate in a parenthetical note to the appropriate income statement line items, on the cash flow statement, in the footnotes to the financial statements, or within MD&A. [SAB Topic 14.F, Footnote 87 omitted]

Prior to the above guidance in SAB Topic 14.F, a variety of practices developed under which entities highlighted share-based compensation cost in the statement of operations, including presenting such costs as a single line item, with a footnote on the face of the statement of operations indicating to which line item the share-based compensation cost relates. Based on this guidance, we believe that presentation is not appropriate.

13.1.2 Presentation in the statement of cash flows

The grant of equity instruments in exchange for goods or services is a noncash transaction and, therefore, it is not presented in the statement of cash flows (noncash compensation cost should be reflected as an item reconciling net income to cash flow from operations when using the indirect method for presenting the statement of cash flows). However, the tax benefits associated with share-based payments and any cash paid by the grantees for those instruments are reflected in the statement of cash flows.

ASC 230-10-45-17 requires that entities classify cash flows related to income taxes, including excess tax benefits, as operating activities.⁶¹

Cash paid by grantees to exercise awards is classified as financing activities consistent with ASC 230-10-45-14(a). ASC 230-10-45-15 requires an entity to classify as a financing activity in its statement of cash flows the cash paid to a tax authority when shares are withheld (repurchased from the employee) to satisfy the employer's statutory income tax withholding obligation (see section 5.2.6.2). This classification is consistent with how other repurchases of an entity's equity instruments are classified.

⁶¹ The FASB explained in paragraph BC9 of the Basis for Conclusions of ASU 2016-09 that excess tax benefits are not separate cash flows and should be classified in the same manner as other cash flows related to income taxes.

13.2 Disclosure requirements (updated October 2017)

ASC 718-10-50-1 requires entities to provide disclosures about share-based payments that satisfy the following objectives:

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Disclosure

718-10-50-1

An entity with one or more **share-based payment arrangements** shall disclose information that enables users of the financial statements to understand all of the following:

- a. The nature and terms of such arrangements that existed during the period and the potential effects of those arrangements on shareholders
- b. The effect of compensation cost arising from share-based payment arrangements on the income statement
- c. The method of estimating the **fair value** of the equity instruments granted (or offered to grant), during the period
- d. The cash flow effects resulting from share-based payment arrangements.

This disclosure is not required for interim reporting. For interim reporting see Topic 270. See Example 9 (paragraphs 718-10-55-134 through 55-137) for an illustration of this guidance.

Although ASC 718 appears to take a principles-based approach to disclosure requirements, the implementation guidance in ASC 718-10-50-2 expands on these requirements and provides detailed disclosure requirements described as the “minimum information” required to achieve the disclosure objectives described above.

Excerpt from Accounting Standards Codification

718-10-50-2

The following list indicates the minimum information needed to achieve the objectives in paragraph 718-10-50-1 and illustrates how the disclosure requirements might be satisfied. In some circumstances, an entity may need to disclose information beyond the following to achieve the disclosure objectives:

- a. A description of the share-based payment arrangement(s), including the general terms of awards under the arrangement(s), such as:
 1. The employee’s **requisite service period(s)** and, if applicable, the nonemployee’s vesting period and any other substantive conditions (including those related to vesting)
 2. The maximum contractual term of equity (or liability) **share options** or similar instruments
 3. The number of shares authorized for awards of equity share options or other equity instruments.
- b. The method it uses for measuring compensation cost from share-based payment arrangements.

- c. For the most recent year for which an income statement is provided, both of the following:
 - 1. The number and weighted-average exercise prices (or conversion ratios) for each of the following groups of share options (or **share units**):
 - i. Those outstanding at the beginning of the year
 - ii. Those outstanding at the end of the year
 - iii. Those exercisable or convertible at the end of the year
 - iv. Those that during the year were:
 - 01. Granted
 - 02. Exercised or converted
 - 03. Forfeited
 - 04. Expired.
 - 2. The number and weighted-average **grant-date** fair value (or **calculated value** for a **nonpublic entity** that uses that method or **intrinsic value** for awards measured pursuant to paragraph 718-10-30-21) of equity instruments not specified in (c)(1), for all of the following groups of equity instruments:
 - i. Those nonvested at the beginning of the year
 - ii. Those nonvested at the end of the year
 - iii. Those that during the year were:
 - 01. Granted
 - 02. Vested
 - 03. Forfeited.
- d. For each year for which an income statement is provided, both of the following:
 - 1. The weighted-average grant-date fair value (or calculated value for a nonpublic entity that uses that method or intrinsic value for awards measured at that value pursuant to paragraphs 718-10-30-21 through 30-22) of equity options or other equity instruments granted during the year
 - 2. The total intrinsic value of options exercised (or share units converted), share-based liabilities paid, and the total fair value of shares vested during the year.
- e. For fully vested share options (or share units) and share options expected to **vest** (or unvested share options for which the **employee's** requisite service period or the nonemployee's vesting period has not been rendered but that are expected to vest based on the achievement of a performance condition, if an entity accounts for forfeitures when they occur in accordance with paragraph 718-10-35-1D or 718-10-35-3) at the date of the latest statement of financial position, both of the following:
 - 1. The number, weighted-average exercise price (or conversion ratio), aggregate intrinsic value (except for nonpublic entities), and weighted-average remaining contractual term of options (or share units) outstanding

2. The number, weighted-average exercise price (or conversion ratio), aggregate intrinsic value (except for nonpublic entities), and weighted-average remaining contractual term of options (or share units) currently exercisable (or convertible).
- f. For each year for which an income statement is presented, both of the following (An entity that uses the intrinsic value method pursuant to paragraphs 718-10-30-21 through 30-22 is not required to disclose the following information for awards accounted for under that method):
1. A description of the method used during the year to estimate the fair value (or calculated value) of awards under share-based payment arrangements
 2. A description of the significant assumptions used during the year to estimate the fair value (or calculated value) of share-based compensation awards, including (if applicable):
 - i. Expected term of share options and similar instruments, including a discussion of the method used to incorporate the contractual term of the instruments and grantees' expected exercise and postvesting termination behavior into the fair value (or calculated value) of the instrument.
 - ii. Expected **volatility** of the entity's shares and the method used to estimate it. An entity that uses a method that employs different volatilities during the contractual term shall disclose the range of expected volatilities used and the weighted-average expected volatility. A nonpublic entity that uses the calculated value method shall disclose the reasons why it is not practicable for it to estimate the expected volatility of its share price, the appropriate industry sector index that it has selected, the reasons for selecting that particular index, and how it has calculated historical volatility using that index.
 - iii. Expected dividends. An entity that uses a method that employs different dividend rates during the contractual term shall disclose the range of expected dividends used and the weighted-average expected dividends.
 - iv. Risk-free rate(s). An entity that uses a method that employs different risk-free rates shall disclose the range of risk-free rates used.
 - v. Discount for postvesting restrictions and the method for estimating it.
- g. An entity that grants equity or liability instruments under multiple share-based payment arrangements shall provide the information specified in paragraph (a) through (f) separately for different types of awards (including nonemployee versus employee) to the extent that the differences in the characteristics of the awards make separate disclosure important to an understanding of the entity's use of share-based compensation. For example, separate disclosure of weighted-average exercise prices (or conversion ratios) at the end of the year for options (or share units) with a fixed exercise price (or conversion ratio) and those with an indexed exercise price (or conversion ratio) could be important. It also could be important to segregate the number of options (or share units) not yet exercisable into those that will become exercisable (or convertible) based solely on fulfilling a **service condition** and those for which a **performance condition** must be met for the options (share units) to become exercisable (convertible). It could be equally important to provide separate disclosures for awards that are classified as equity and those classified as liabilities. In addition, an entity that has multiple share-based payment arrangements shall disclose information separately for different types of awards under those arrangements to the extent that differences in the characteristics of the awards make separate disclosure important to an understanding of the entity's use of share-based compensation.

- h. For each year for which an income statement is presented, both of the following:
 - 1. Total compensation cost for share-based payment arrangements
 - i. Recognized in income as well as the total recognized tax benefit related thereto
 - ii. Capitalized as part of the cost of an asset.
 - 2. A description of significant **modifications**, including:
 - i. The terms of the modifications
 - ii. The number of grantees affected
 - iii. The total incremental (or lack of) incremental compensation cost resulting from the modifications.
- i. As of the latest balance sheet date presented, the total compensation cost related to nonvested awards not yet recognized and the weighted-average period over which it is expected to be recognized
- j. Subparagraph superseded by Accounting Standards Update No. 2016-09
- k. If not separately disclosed elsewhere, the amount of cash used to **settle** equity instruments granted under share-based payment arrangements
- l. A description of the entity's policy, if any, for **issuing** shares upon share option exercise (or share unit conversion), including the source of those shares (that is, new shares or treasury shares). If as a result of its policy, an entity expects to repurchase shares in the following annual period, the entity shall disclose an estimate of the amount (or a range, if more appropriate) of shares to be repurchased during that period.
- m. If not separately disclosed elsewhere, the policy for estimating expected forfeitures or recognizing forfeitures as they occur.

718-10-50-2A

Another item of minimum information needed to achieve the objectives in paragraph 718-10-50-1 is the following:

- a. If not separately disclosed elsewhere, the amount of cash received from exercise of share options and similar instruments granted under share-based payment arrangements and the tax benefit from stock options exercised during the annual period.

ASC 505-50-50-1 required disclosures relating to an entity's grant of share-based payments to nonemployees by reference to the disclosure requirements in ASC 718 for employee awards. After the adoption of ASU 2018-07, in the Basis for Conclusions, the FASB said it considered whether to add disclosure requirements for nonemployee share-based payment transactions. ASC 718-10-50-2(g) requires entities to separately disclose information related to share-based payment transactions if the disclosures are important to understanding the effects of those transactions on the financial statements. While there is no specific provision that requires entities to separately disclose arrangements made with nonemployees, if the differences in the characteristics of the awards make separate disclosure important to understanding the entity's share-based payment arrangements, the entity should separately disclose the related transactions.

Because entities can choose to either estimate expected forfeitures or recognize forfeitures as they occur, ASC 718-10-50-2(m) requires entities to disclose their accounting policy elections.

ASC 718-10-50-2(h)(2) requires entities to disclose significant modifications. A modification to an award could be significant and therefore require disclosure even if modification accounting is not required. This might be the case if there are changes to the economic characteristics of an award, the risk of dilution or management's future plans for share-based payments. ASC 718-10-50-2(h)(2) also requires entities to disclose the lack of compensation cost resulting from a significant modification.

Appendix D includes an example of a note to financial statements.

13.3 Interim disclosure requirements

The requirements described in section 13.2 apply only to disclosures in annual financial statements. ASC 718 does not explicitly require any disclosures about share-based payments in financial statements for interim periods. When the FASB originally deliberated this issue, it deferred to the disclosure requirements of ASC 270.⁶²

Many entities grant a substantial portion of their share-based payments at a single time each year. We generally believe it would be appropriate for entities for which those annual grants have a significant effect on the financial statements to provide additional disclosures contemplated by ASC 718 in the interim period when those annual grants are made.

13.4 Disclosures required for changes in accounting estimates

ASC 718-10-55-27 provides that "assumptions used to estimate the fair value of equity and liability instruments granted in share-based payment transactions shall be determined in a consistent manner from period to period...A change in either the valuation technique or the method of determining appropriate assumptions used in a valuation technique is a change in accounting estimate for purposes of applying Topic 250, and shall be applied prospectively to new awards."

The guidance in ASC 718-10-55-27 does not preclude changing assumptions from period to period when circumstances have changed or when a refinement of the methodology used to develop assumptions is warranted, if the changes are believed to provide a better estimate of fair value. Further, it would not preclude a change in the option-pricing model if the new model is expected to provide a better estimate of fair value (as would normally be the case if a change were made from using a Black-Scholes-Merton formula to a lattice model).

A change in either the valuation technique or the method of determining appropriate assumptions for a valuation technique is a change in accounting estimate for purposes of applying ASC 250 and should be applied prospectively to new awards (unless the previous valuations were materially in error, in which case the requirements relating to the correction of an error in ASC 250 must be applied). If the effect of the change in estimate is material, the disclosures required by ASC 250 must be provided, including the nature of the change and the effect of the change on net income and related per-share amounts of the current period as required by ASC 250-10-50-4 (e.g., by disclosing what the estimate of fair value would

⁶² Paragraph B239 of the Basis for Conclusions of Statement 123(R) stated: "Some respondents said that certain of the minimum disclosures, such as the total amount of compensation cost, also should be required on a quarterly basis. The Board notes that paragraph 30 of APB Opinion No. 28, Interim Financial Reporting, specifies information to be included in quarterly financial reports, including information about changes in accounting principles or estimates and significant changes in financial position. The Board concluded that this Statement should not specify information about share-based compensation arrangements to be provided quarterly. Rather, entities should look to the general requirements of Opinion 28. The Board also notes that entities for which share-based compensation cost is significant may wish to provide additional information, including the total amount of that cost, on a quarterly basis to help users better understand their quarterly financial reports."

have been had the entity used the prior methodology, and the amounts by which current year expense would have differed if the prior methodology had been used). If a change in estimate does not have a material effect in the period of change but is reasonably certain to have a material effect in later periods, the entity has to provide a description of that change in estimate whenever the financial statements of the period of change are presented.

We believe that an entity must use judgment to determine whether a change represents a refinement to the methodology that might not be required to be disclosed as a change in accounting estimate (e.g., if the entity begins to add the implied volatilities of longer-term options that recently began to trade to the implied volatilities of shorter-term options used previously to estimate expected volatility). However, in all cases, we believe that a change in methodology is appropriate only when the entity believes the change will produce a better estimate of fair value.

In addition to providing the disclosures on changes in estimates required by ASC 250, public entities should consider whether additional disclosure is required in MD&A if the changes in estimates had a material effect on the entity's results of operations.

13.5

Disclosure in management's discussion and analysis

As stated in SEC Release FR-72, the principal objectives of MD&A are to give readers a view of the entity through the eyes of management, provide the context within which financial information should be analyzed and provide information about the quality and potential variability of an entity's earnings and cash flow so that investors can ascertain the likelihood that past performance is indicative of future performance. Accordingly, MD&A disclosures should include a discussion of any material share-based payment transactions that may cause variability in earnings, including significant judgments and estimates underlying the accounting.

For example, as described below in SAB Topic 14.D, entities should consider disclosing the method used to estimate expected volatility in their discussion of critical accounting policies in MD&A. Entities also should consider providing a sensitivity analysis in their critical accounting policies that describes the effect of changes in option-pricing model inputs (e.g., expected volatility and expected term) on the measurement of compensation cost.

Excerpts from SAB Topic 14.D

Question 5: What disclosures would the staff expect Company B to include in its financial statements and MD&A regarding its assumption of expected volatility?

Interpretive Response: FASB ASC paragraph 718-10-50-2 prescribes the minimum information needed to achieve the Topic's disclosure objectives.⁵⁷ Under that guidance, Company B is required to disclose the expected volatility and the method used to estimate it.⁵⁸ Accordingly, the staff expects that at a minimum Company B would disclose in a footnote to its financial statements how it determined the expected volatility assumption for purposes of determining the fair value of its share options in accordance with FASB ASC Topic 718. For example, at a minimum, the staff would expect Company B to disclose whether it used only implied volatility, historical volatility, or a combination of both.

In addition, Company B should consider the applicability of SEC Release No. FR 60 and Section V, "Critical Accounting Estimates," in SEC Release No. FR-72 regarding critical accounting policies and estimates in MD&A. The staff would expect such disclosures to include an explanation of the method used to estimate the expected volatility of its share price. This explanation generally should include a discussion of the basis for the company's conclusions regarding the extent to which it used historical volatility, implied volatility or a combination of both. A company could consider summarizing its evaluation of the factors listed in Questions 2 and 3 of this section as part of these disclosures in MD&A. [SAB Topic 14.D.1, Footnotes 57 and 58 omitted]

Nonpublic entities that previously measured options using the calculated-value method or liability-classified awards using the intrinsic value method will be required to measure such awards based on their fair values after they become public entities (the change would apply prospectively to equity-classified awards and immediately to liability-classified awards, recognized on a cumulative basis in the first financial statements issued after becoming a public entity). The SEC staff's recommendations for disclosure in MD&A in those circumstances are described in section 12.1.1.

13.6 Non-GAAP financial measures

Measures that exclude compensation cost resulting from share-based payments are considered non-GAAP financial measures. The SEC staff's guidance on non-GAAP financial measures can be found in the Division of Corporation Finance's Non-GAAP Financial Measures Compliance and Disclosure Interpretations (C&DIs). Question 102.03 of the non-GAAP C&DIs provides more information about the presentation and disclosure of non-GAAP financial measures that exclude recurring items such as compensation costs resulting from share-based payments.

Non-GAAP C&DI 102.03

Question: Item 10(e) of Regulation S-K prohibits adjusting a non-GAAP financial performance measure to eliminate or smooth items identified as non-recurring, infrequent or unusual when the nature of the charge or gain is such that it is reasonably likely to recur within two years or there was a similar charge or gain within the prior two years. Is this prohibition based on the description of the charge or gain, or is it based on the nature of the charge or gain?

Answer: The prohibition is based on the description of the charge or gain that is being adjusted. It would not be appropriate to state that a charge or gain is non-recurring, infrequent or unusual unless it meets the specified criteria. The fact that a registrant cannot describe a charge or gain as non-recurring, infrequent or unusual, however, does not mean that the registrant cannot adjust for that charge or gain. Registrants can make adjustments they believe are appropriate, subject to Regulation G and the other requirements of Item 10(e) of Regulation S-K. [Jan. 11, 2010]

When an entity presents a non-GAAP financial performance measure that excludes a recurring item (e.g., income before stock-based compensation), it must provide the disclosures specified in Item 10(e) of Regulation S-K that apply to any non-GAAP financial measure. For example, an entity must disclose the reasons management believes the non-GAAP financial measure provides useful information to investors regarding the entity's financial condition and results of operations. In most circumstances, an entity would not be permitted to present a measure of operating results that excludes compensation cost for share-based payments on the face of the income statement, in the accompanying notes to the financial statements or in pro forma financial information under Article 11 of Regulation S-X.

At the 2016 AICPA National Conference on Current SEC and PCAOB Developments, Mark Kronforst, then-Chief Accountant in the SEC's Division of Corporation Finance, indicated that the SEC staff would not object to non-GAAP measures that include adjustments for share-based compensation, but that there are best practices entities should follow to determine whether such adjustments are appropriate (e.g., considering whether share-based compensation is integral to understanding the business).

For more information about the SEC's guidance on non-GAAP measures, see our Technical Line publication, [*Spotlight on non-GAAP financial measures*](#), and our To the Point publication, [*SEC staff updates guidance on non-GAAP financial measures*](#).

A Abbreviations used in this publication

Abbreviation	FASB Accounting Standards Codification
ASC 230	FASB ASC Topic 230, <i>Statement of Cash Flows</i>
ASC 250	FASB ASC Topic 250, <i>Accounting Changes and Error Corrections</i>
ASC 260	FASB ASC Topic 260, <i>Earnings Per Share</i>
ASC 270	FASB ASC Topic 270, <i>Interim Reporting</i>
ASC 320	FASB ASC Topic 320, <i>Investments – Debt and Equity Securities</i>
ASC 321	FASB ASC Topic 321, <i>Investments – Equity Securities</i>
ASC 323	FASB ASC Topic 323, <i>Investments – Equity Method and Joint Ventures</i>
ASC 340-40	FASB ASC Topic 340-40, <i>Contracts with Customers</i>
ASC 410	FASB ASC Topic 410, <i>Asset Retirement and Environmental Obligations</i>
ASC 480	FASB ASC Topic 480, <i>Distinguishing Liabilities from Equity</i>
ASC 505-50	FASB ASC Topic 505-50, <i>Equity-Based Payments to Non-Employees</i>
ASC 605-50	FASB ASC Topic 605-50, <i>Customer Payments and Incentives</i>
ASC 606	FASB ASC Topic 606, <i>Revenue from Contracts with Customers</i>
ASC 610-20	FASB ASC Topic 610-20, <i>Gains and Losses from the Derecognition of Nonfinancial Assets</i>
ASC 710	FASB ASC Topic 710, <i>Compensation – General</i>
ASC 715	FASB ASC Topic 715, <i>Compensation – Retirement Benefits</i>
ASC 718	FASB ASC Topic 718, <i>Compensation – Stock Compensation</i>
ASC 740	FASB ASC Topic 740, <i>Income Taxes</i>
ASC 805	FASB ASC Topic 805, <i>Business Combinations</i>
ASC 810	FASB ASC Topic 810, <i>Consolidation</i>
ASC 815	FASB ASC Topic 815, <i>Derivatives and Hedging</i>
ASC 820	FASB ASC Topic 820, <i>Fair Value Measurement</i>
ASC 860	FASB ASC Topic 860, <i>Transfers and Servicing</i>
ASC 946	FASB ASC Topic 946, <i>Financial Services – Investment Companies</i>
Abbreviation	Other Authoritative Standards
ASR 268	SEC Accounting Series Release No. 268, <i>Presentation in Financial Statements of “Redeemable Preferred Stocks”</i>
ASU 2015-02	Accounting Standards Update, <i>Amendments to the Consolidation Analysis</i>
ASU 2016-01	Accounting Standards Update, <i>Financial Instruments – Overall (Subtopic 825-10)</i>
ASU 2016-09	Accounting Standards Update, <i>Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting</i>
ASU 2017-09	Accounting Standards Update, <i>Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting</i>
ASU 2018-07	Accounting Standards Update, <i>Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting</i>

Abbreviation	Other Authoritative Standards
IFRS 2	International Financial Reporting Standard No. 2, <i>Share-based Payment</i>
SAB Topic 1.B	SEC Staff Accounting Bulletin Topic 1.B, <i>Allocation Of Expenses And Related Disclosure In Financial Statements Of Subsidiaries, Divisions Or Lesser Business Components Of Another Entity</i>
SAB Topic 3.C	SEC Staff Accounting Bulletin Topic 3.C, <i>Redeemable Preferred Stock</i>
SAB Topic 14	SEC Staff Accounting Bulletin Topic 14, <i>Share-Based Payment</i>
SAB Topic 14.D	SEC Staff Accounting Bulletin Topic 14.D, <i>Certain Assumptions Used in Valuation Methods</i>
SAB Topic 14.E	SEC Staff Accounting Bulletin Topic 14.E, <i>FASB ASC Topic 718, Compensation – Stock Compensation, and Certain Redeemable Financial Instruments</i>
Abbreviation	Other Non-Authoritative Standards
ASR 268	Accounting Series Release No. 268, <i>Redeemable Preferred Stocks</i>
EITF 00-23	EITF Issue No. 00-23, "Issues Related to the Accounting for Stock Compensation under APB Opinion No. 25 and FASB Interpretation No. 44"
FAS 123(R) Guide	FASB Statement No. 123 (revised 2004), <i>Share-Based Payment</i> AICPA Accounting and Valuation Guide, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation"
Interpretation 44	FASB Interpretation No. 44, <i>Accounting for Certain Transactions Involving Stock Compensation</i>
Opinion 25	APB Opinion No. 25, <i>Accounting for Stock Issued to Employees</i>
Opinion 28	APB Opinion No. 28, <i>Interim Financial Reporting</i>
SEC Release FR-72	SEC Release FR-72, <i>Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations</i>
Section 423 Plan	Section 423 of the Internal Revenue Code
Statement 123	FASB Statement No. 123, <i>Accounting for Stock-Based Compensation</i>
Statement 123(R)	FASB Statement No. 123 (revised 2004), <i>Share-Based Payment</i>
Statement 150	FASB Statement No. 150, <i>Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity</i>
Statement of Position 93-6	AICPA Statement of Position 93-6, <i>Accounting for Employee Stock Ownership Plans</i>

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718-10-55-108	4.3.1.3	Performance or market condition must be satisfied before the grant date
718-10-55-108	4.3.1.4	Bonuses settled partly or entirely in shares
718-10-55-108	4.3.2	Accounting for an award when the service inception date precedes the grant date
718-10-55-111	4.3.1.1	Service inception date cannot occur before obtaining all necessary approvals
718-10-55-113	4.3.1.2	No substantive service requirement subsequent to the grant date
718-10-55-114 to 55-115	4.3.1.3	Performance or market condition must be satisfied before the grant date
718-10-55-116 to 55-130	7.4.6	Tandem plans
718-10-55-120 to 55-130	5.2.3.1	Grantee has the right to put shares

ASC Paragraph	Section	
718-10-55-120 to 55-130	7.4.6	Tandem plans
718-10-55-131 to 55-133	5.2.3.1	Grantee has the right to put shares
718-10-55-131 to 55-133	5.2.9	Application of classification guidance to book (formula) value share purchase plan
718-10-55-135 to 55-137	Appendix D	Required disclosures
718-10-S99-2	2.6	Placing vesting requirements on previously issued shares (i.e., escrowed share arrangements)
718-20-20	4.4.5.2	Accounting for an award that has multiple conditions
718-20-35-1	3.2.3	If an entity cannot reasonably estimate fair value
718-20-35-2	6.3.5	Certain contingent features (e.g., clawbacks)
718-20-35-2A	8.2	Modifications
718-20-35-2A	8.3.5	Example – modification to accelerate vesting with no change in fair value
718-20-35-2A	8.7	Equity restructurings
718-20-35-3 to 35-3A	8.3	Accounting for modifications of award terms other than market conditions
718-20-35-3	8.5	Modifications of market conditions
718-20-35-3	8.6	Modifications that change an award's classification
718-20-35-3	8.6.1	Modification that changes classification from equity to a liability
718-20-35-3A	8.3.3.2	Type III modification of awards with service conditions
718-20-35-5	8.8	Inducements
718-20-35-6	8.7	Equity restructurings
718-20-35-6	8.7.1	Modification to add an antidilution protection to an award
718-20-35-6	8.10.3	Exchanges of awards in a business combination
718-20-35-7	5.2.3.1	Employee has the right to put shares
718-20-35-7	8.6.3.2	Example – options were nonvested before modification; cash consideration is vested
718-20-35-7	8.9	Repurchases or cancellations of awards of equity instruments
718-20-35-7	8.10.2	Cancellation of awards of equity instruments with no replacement
718-20-35-8	8.10.1	Cancellation and replacement of awards of equity instruments
718-20-35-9	8.10.2	Cancellation of awards of equity instruments with no replacement
718-20-55-2	8.7.1	Modification to add an antidilution protection to an award
718-20-55-4A	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-4C	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-6 to 55-21	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-6 to 55-9	4.4.2.2	Compensation cost is recognized if it is probable that the performance condition will be achieved

ASC Paragraph	Section	
718-20-55-6 to 55-9	4.4.2.3	Changes in estimate of the probability of achievement of the performance condition
718-20-55-10	8.6.1.2	Example – modification that changes classification from equity to a liability not indexed to the entity's shares
718-20-55-12	8.6.1.1	Example - modification that changes classification from equity to a liability that continues to be indexed to entity's shares
718-20-55-23 to 55-23A	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-25 to 55-26	4.4.1.4	Accounting for employee awards subject to graded vesting
718-20-55-26	4.4.2.5	Effect of performance conditions on cost attribution (accelerated attribution)
718-20-55-26	4.4.3.4	Effect of market conditions on cost attribution (accelerated attribution)
718-20-55-28 to 55-34	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-35A	3.4.3.2	Performance conditions that affect vesting (or exercisability) of an award
718-20-55-35A	4.4.2.4.1	Multiple performance conditions that affect the number of instruments that will vest
718-20-55-34A to 55-34G	4.4.1.6	Comprehensive examples of the accounting for awards subject to service vesting
718-20-55-36 to 55-37	3.4.3.2	Performance conditions that affect vesting (or exercisability) of an award
718-20-55-36 to 55-40	4.4.2.4.1	Multiple performance conditions that affect the number of instruments that will vest
718-20-55-40	4.4.2.2	Compensation cost is recognized if it is probable that the performance condition will be achieved
718-20-55-41A	3.4.3.3	Performance (or service) conditions that affect factors other than vesting or exercisability
718-20-55-41A	4.4.2.4.2	Performance conditions that affect the fair value of instruments that vest
718-20-55-42 to 55-46	3.4.3.3	Performance (or service) conditions that affect factors other than vesting or exercisability
718-20-55-42 to 55-46	4.4.2.4.2	Performance conditions that affect the fair value of instruments that vest
718-20-55-42 to 55-46	4.4.5.2.2	Example – award that 'vests' based on the achievement of a performance condition or a market condition
718-20-55-48	4.4.2.4	Performance conditions that affect factors other than vesting or exercisability
718-20-55-50	8.4.1	Modifications to provide for transferability of employee options
718-20-55-51A to 55-60	7.4.5	Options with indexed exercise prices
718-20-55-70	7.4.5	Options with indexed exercise prices

ASC Paragraph	Section	
718-20-55-78 to 55-79	7.4.2.5	Example of use of calculated value
718-20-55-77 to 55-83	Appendix D	Required disclosures
718-20-55-84A	3.5.2	Contingent features
718-20-55-85 to 55-86	3.5.2	Contingent features
718-20-55-85	4.4.1.2.2	Noncompete arrangement as an in-substance service condition
718-20-55-88 to 55-92	4.4.1.2.2	Noncompete arrangement as an in-substance service condition
718-20-55-93	8.3.1.2	Example – Type I modification of nonvested options
718-20-55-93	8.9	Repurchases or settlement of awards of equity instruments
718-20-55-93 to 55-96	8.3.1.1	Example – Type I modification of vested options
718-20-55-93A	8.3.1.1	Example – Type I modification of vested options
718-20-55-93A	8.3.1.2	Example – Type I modification of nonvested options
718-20-55-93A	8.9	Repurchases or settlement of awards of equity instruments
718-20-55-93B	8.3.1.1	Example – Type I modification of vested options
718-20-55-93B	8.9	Repurchases or settlement of awards of equity instruments
718-20-55-93C	8.3.1.2	Example – Type I modification of nonvested options
718-20-55-93D	8.9	Repurchases or settlement of awards of equity instruments
718-20-55-97	8.9	Repurchases or settlement of awards of equity instruments
718-20-55-98 to 55-101	8.3.1.2	Example – Type I modification of nonvested options
718-20-55-102	8.9	Repurchases or cancellations of awards of equity instruments
718-20-55-104	8.7.3	Original award contains antidilution provisions
718-20-55-104	8.7.3.1	Adjustments in connection with a spinoff
718-20-55-105 to 55-106	8.7.2	Awards are adjusted and original award does not contain antidilution provisions or award provides for discretionary adjustment
718-20-55-107	8.3	Accounting for modifications of award terms other than market conditions
718-20-55-107 to 55-119	8.5	Modifications of market conditions
718-20-55-109 to 55-112	8.3.1	Type I (probable-to-probable) modification
718-20-55-109	8.3.2	Type II (probable-to-improbable) modification
718-20-55-109	8.3.3.1	Type III modification of awards with performance conditions
718-20-55-109	8.3.4.1	Type IV modification of awards with performance conditions
718-20-55-109A	8.3.1	Type I (probable-to-probable) modification
718-20-55-109A	8.3.2	Type II (probable-to-improbable) modification
718-20-55-109A	8.3.3.1	Type III modification of awards with performance conditions
718-20-55-109A	8.3.4.1	Type IV modification of awards with performance conditions

ASC Paragraph	Section	
718-20-55-109B	8.3.1	Type I (probable-to-probable) modification
718-20-55-109B	8.3.2	Type II (probable-to-improbable) modification
718-20-55-109B	8.3.3.1	Type III modification of awards with performance conditions
718-20-55-109B	8.3.4.1	Type IV modification of awards with performance conditions
718-20-55-113 to 55-115	8.3.2	Type II (probable-to-improbable) modification
718-20-55-116 to 55-117	8.3.3.1	Type III modification of awards with performance conditions
718-20-55-117	8.3.3.2	Type III modification of awards with service conditions
718-20-55-118 to 55-119	8.3.4.1	Type IV modification of awards with performance conditions
718-20-55-122A	8.6.1.1	Example – modification that changes classification from equity to a liability that continues to be indexed to entity's shares
718-20-55-122A	8.6.1.2	Example – modification that changes classification from equity to a liability not indexed to the entity's shares
718-20-55-122A	8.6.2.1	Example – modification that changes classification from a liability to equity
718-20-55-123 to 55-133	8.6.1.1	Example – modification that changes classification from equity to a liability that continues to be indexed to entity's shares
718-20-55-124	8.6.3.3	Example – options were nonvested before modification, cash consideration is subject to vesting
718-20-55-135 to 55-138	8.6.2.1	Example – modification that changes classification from a liability to equity
718-20-55-144	8.6.1.2	Example – modification that changes classification from equity to a liability not indexed to the entity's shares
718-20-55-144	8.6.3.3	Example – options were nonvested before modification, cash consideration is subject to vesting
718-30-30-1	5.4	Measurement objective and measurement date for liabilities
718-30-30-2	5.4.2	Nonpublic entities – measurement and recognition of liability-classified awards
718-30-35-1	3.2.2	Fair value-based measurement
718-30-35-1 to 35-2	5.4	Measurement objective and measurement date for liabilities
718-30-35-2	4.1.4	Recognizing the change in fair value or intrinsic value for certain awards
718-30-35-3	5.4.1	Public entities – measurement and recognition of liability-classified awards
718-30-35-4	5.4.2	Nonpublic entities – measurement and recognition of liability-classified awards
718-30-55-1A to 55-1B	5.4.1.1	Comprehensive example of accounting for a share-based liability
718-30-55-2	8.6.2.1	Example – modification that changes classification from a liability to equity
718-30-55-2 to 55-11	5.4.1.1	Comprehensive example of accounting for a share-based liability

ASC Paragraph	Section	
718-30-55-12A to 55-20	5.4.2.1	Comprehensive example of accounting for a share-based liability at intrinsic value
718-50-05-1	11	Employee stock purchase plans
718-50-15-1 to 15-2	11	Employee stock purchase plans
718-50-25-1	11.1	Noncompensatory plans
718-50-25-1	11.1.1	Terms of the plan are available to all shareholders
718-50-25-1	11.1.2	Discount does not exceed the estimated issuance costs for a public offering
718-50-25-2	11.1.4	The plan incorporates no option features
718-50-25-3	11.3	Requisite service period for ESPPs
718-50-30-1 to 30-3	11.2	Valuation of ESPPs (including look-back options)
718-50-35-1	11.4.1	Increase in withholdings
718-50-35-2	11.4.2	Decrease in withholdings
718-50-55-1 to 55-5	11.2	Valuation of ESPPs (including look-back options)
718-50-55-10 to 55-27	11.2	Valuation of ESPPs (including look-back options)
718-50-55-28	11.4.3	Rollover of plan withholdings
718-50-55-29 to 55-33	11.4.1	Increase in withholdings
718-50-55-34	11.1.3	Substantially all employees may participate on an equitable basis
718-50-55-35	11.1.1	Terms of the plan are available to all shareholders
718-740-25-3	11.6	Accounting for qualifying dispositions
805-10-55-25	2.6	Placing vesting requirements on previously issued shares (i.e., escrowed share arrangements)
805-20-55-50 to 55-51	4.4.2.2.1	Performance conditions based on IPOs, change in control and other liquidity events
805-20-55-51	5.3.5	Examples
815-10-45-10	2.5	Awards issued based on another entity's shares

C IRS Revenue Ruling 87-41 common law employee guidelines

As discussed in section 2.2, IRS Revenue Ruling 87-41 provides 20 factors, designed as guidelines, for determining whether an individual is an employee under the common law rules. Those factors should be used in determining whether individuals subject to US law⁶³ meet the definition of an employee for purposes of ASC 718 and are listed below. These factors are also summarized more broadly in IRS Publication 1779, which can be accessed at [irs.gov](https://www.irs.gov).

1. **Instructions** – A worker who is required to comply with other persons' instructions about when, where and how he or she is to work is ordinarily an employee. This control factor is present if the person or persons for whom the services are performed have the right to require compliance with instructions.
2. **Training** – Training a worker by requiring an experienced employee to work with the worker, by corresponding with the worker, by requiring the worker to attend meetings or by using other methods indicates that the person or persons for whom the services are performed want the services performed in a particular method or manner.
3. **Integration** – Integration of the worker's services into the business operations generally shows that the worker is subject to direction and control. When the success or continuation of a business depends to an appreciable degree upon the performance of certain services, the workers who perform those services must necessarily be subject to a certain amount of control by the owner of the business.
4. **Services rendered personally** – If the services must be rendered personally, presumably the person or persons for whom the services are performed are interested in the methods used to accomplish the work as well as in the results.
5. **Hiring, supervising and paying assistants** – If the person or persons for whom the services are performed hire, supervise and pay assistants, that factor generally shows control over the workers on the job. However, if one worker hires, supervises and pays the other assistants pursuant to a contract under which the worker agrees to provide materials and labor, and under which the worker is responsible only for the attainment of a result, this factor indicates an independent contractor status.
6. **Continuing relationship** – A continuing relationship between the worker and the person or persons for whom the services are performed indicates that an employer-employee relationship exists. A continuing relationship may exist where work is performed at frequently recurring, although irregular, intervals.
7. **Set hours of work** – The establishment of set hours of work by the person or persons for whom the services are performed is a factor indicating control.

⁶³ IRS Revenue Ruling should not be used to determine whether individuals subject to the laws of other jurisdictions are common law employees for purposes of applying the provisions of ASC 718. A reporting entity based in a foreign jurisdiction would determine whether an employee-employer relationship exists based on the pertinent laws of that jurisdiction.

8. **Full time required** – If the worker must devote substantially full time to the business of the person or persons for whom the services are performed, such person or persons have control over the amount of time the worker spends working and impliedly restrict the worker from doing other gainful work. An independent contractor, on the other hand, is free to work when and for whom he or she chooses.
9. **Doing work on employer's premises** – If the work is performed on the premises of the person or persons for whom the services are performed, that factor suggests control over the worker, especially if the work could be done elsewhere. Work done off the premises of the person or persons receiving the services, such as at the office of the worker, indicates some freedom from control. However, this fact by itself does not mean that the worker is not an employee. The importance of this factor depends on the nature of the service involved and the extent to which an employer generally would require that employees perform such services on the employer's premises. Control over the place of work is indicated when the person or persons for whom the services are performed have the right to compel the worker to travel a designated route, to canvass a territory within a certain time or to work at specific places as required.
10. **Order or sequence set** – If a worker must perform services in the order or sequence set by the person or persons for whom the services are performed, that factor shows that the worker is not free to follow the worker's own pattern of work but must follow the established routines and schedules of the person or persons for whom the services are performed. Often, because of the nature of an occupation, the person or persons for whom the services are performed do not set the order of the services or set the order infrequently. It is sufficient to show control, however, if such person or persons retain the right to do so.
11. **Oral or written reports** – A requirement that the worker submit regular or written reports to the person or persons for whom the services are performed indicates a degree of control.
12. **Payment by hour, week or month** – Payment by the hour, week or month generally points to an employer-employee relationship, provided that this method of payment is not just a convenient way of paying a lump sum agreed upon as the cost of a job. Payment made by the job or on a straight commission basis generally indicates that the worker is an independent contractor.
13. **Payment of business and/or traveling expenses** – If the person or persons for whom the services are performed ordinarily pay the worker's business and/or traveling expenses, the worker is ordinarily an employee. An employer, to be able to control expenses, generally retains the right to regulate and direct the worker's business activities.
14. **Furnishing of tools and materials** – The fact that the person or persons for whom the services are performed furnish significant tools, materials and other equipment tends to show the existence of an employer-employee relationship.
15. **Significant investment** – If the worker invests in facilities that are used by the worker in performing services and are not typically maintained by employees (such as the maintenance of an office rented at fair value from an unrelated party), that factor tends to indicate that the worker is an independent contractor. On the other hand, lack of investment in facilities indicates dependence on the person or persons for whom the services are performed for such facilities and, accordingly, the existence of an employer-employee relationship. Special scrutiny is required with respect to certain types of facilities, such as home offices.
16. **Realization of profit or loss** – A worker who can realize a profit or suffer a loss as a result of the worker's services (in addition to the profit or loss ordinarily realized by employees) is generally an independent contractor, but the worker who cannot is an employee. For example, if the worker is subject to a real risk of economic loss due to significant investments or a bona fide liability for

expenses, such as salary payments to unrelated employees, that factor indicates that the worker is an independent contractor. The risk that a worker will not receive payment for his or her services, however, is common to both independent contractors and employees and, thus, does not constitute a sufficient economic risk to support treatment as an independent contractor.

17. ***Working for more than one firm at a time*** – If a worker performs more than de minimis services for a multiple unrelated persons or firms at the same time, that factor generally indicates that the worker is an independent contractor. However, a worker who performs services for more than one person may be an employee of each of the persons, especially where such persons are part of the same service arrangement.
18. ***Making service available to general public*** – The fact that a worker makes his or her services available to the general public on a regular and consistent basis indicates an independent contractor relationship.
19. ***Right to discharge*** – The right to discharge a worker is a factor indicating that the worker is an employee, and the person possessing the right is an employer. An employer exercises control through the threat of dismissal, which causes the worker to obey the employer's instructions. An independent contractor, on the other hand, cannot be fired so long as the independent contractor produces a result that meets the contract specifications.
20. ***Right to terminate*** – If the worker has the right to end his or her relationship with the person for whom the services are performed at any time he or she wishes without incurring a liability, that factor indicates an employer-employee relationship.

D Illustrative examples of disclosures

Example note to financial statements (required annual disclosures – public entity)

The implementation guidance in ASC 718 includes the following example note to financial statements, illustrating how ASC 718's required disclosures may be presented for a public entity.

It is important to note that the following example note does not illustrate every possible disclosure that may be required for share-based payment plans. Based on the specific fact pattern in this example, the following disclosures were not required. However, entities must consider whether these disclosure requirements are relevant to their share-based payment plans:

- ▶ Separately present all required disclosures for awards to employees and nonemployees
- ▶ Separately present all required disclosures for equity- and liability-classified awards
- ▶ Any discount for post-vesting restrictions and the method for estimating that discount
- ▶ Changes in valuation methodologies or assumptions
- ▶ The amount of cash used to settle equity instruments granted under share-based payments
- ▶ The accounting policy for the method of recognizing compensation cost for awards with graded vesting
- ▶ Nonpublic entities must disclose the method for valuing equity awards and liability awards
- ▶ The policy for estimating expected forfeitures or recognizing forfeitures as they occur, if not separately disclosed elsewhere

Excerpt from Accounting Standards Codification

Compensation – Stock Compensation – Overall

Implementation Guidance and Illustrations

718-10-55-135

On December 31, 20Y1, the Entity has two share-based compensation plans: The compensation cost that has been charged against income for those plans was \$29.4 million, \$28.7 million, and \$23.3 million for 20Y1, 20Y0, and 20X9, respectively. The total income tax benefit recognized in the income statement for share-based compensation arrangements was \$10.3 million, \$10.1 million, and \$8.2 million for 20Y1, 20Y0, and 20X9, respectively. Compensation cost capitalized as part of inventory and fixed assets for 20Y1, 20Y0, and 20X9 was \$0.5 million, \$0.2 million, and \$0.4 million, respectively.

718-10-55-136

Case A: Share Option Plan

The following illustrates disclosure for a share option plan.

The Entity's 20X4 employee share option plan, which is shareholder-approved, permits the grant of share options and shares to its employees for up to 8 million shares of common stock. Entity A believes that such awards better align the interests of its employees with those of its shareholders. Option awards are generally granted with an exercise price equal to the market price of Entity A's stock at the date of grant; those option awards generally vest based on 5 years of continuous service

and have 10-year contractual terms. Share awards generally vest over five years. [We would normally expect companies to disclose whether dividends are paid on unexercised options and whether the dividends are subject to vesting]. Certain option and share awards provide for accelerated vesting if there is a change in control (as defined in the employee share option plan).

The fair value of each option award is estimated on the date of grant using a lattice-based option valuation model that uses the assumptions noted in the following table. Because lattice-based option valuation models incorporate ranges of assumptions for inputs, those ranges are disclosed. Expected volatilities are based on implied volatilities from traded options on Entity A's stock, historical volatility of Entity A's stock, and other factors. Entity A uses historical data to estimate option exercise and employee termination within the valuation model; separate groups of employees that have similar historical exercise behavior are considered separately for valuation purposes. The expected term of options granted is derived from the output of the option valuation model and represents the period of time that options granted are expected to be outstanding; the range given below results from certain groups of employees exhibiting different behavior. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

	20Y1	20Y0	20Y9
Expected volatility	25%-40%	24%-38%	20%-30%
Weighted-average volatility	33%	30%	27%
Expected dividends	1.5%	1.5%	1.5%
Expected term (in years)	5.3-7.8	5.5-8.0	5.6-8.2
Risk-free rate	6.3%-11.2%	6.0%-10%	5.5%-9.0%

A summary of option activity under the employee share option plan as of December 31, 20Y1, and changes during the year then ended is presented below:

Options	Shares (000)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value (\$000)
Outstanding at January 1, 20Y1	4,660	\$ 42		
Granted	950	60		
Exercised	(800)	36		
Forfeited or expired	(80)	59		
Outstanding at December 31, 20Y1	<u>4,730</u>	<u>\$ 47</u>	<u>6.5</u>	<u>\$85,140</u>
[Vested or expected to vest at December 31, 20Y1]	<u>4,320</u>	<u>\$ 46</u>	<u>6.4</u>	<u>\$81,255</u>
Exercisable at December 31, 20Y1	<u>3,159</u>	<u>\$ 41</u>	<u>4.0</u>	<u>\$75,816</u>

The weighted-average grant-date fair value of options granted during the years 20Y1, 20Y0, and 20X9 was \$19.57, \$17.46, and \$15.90, respectively. The total intrinsic value of options exercised during the years ended December 31, 20Y1, 20Y0, and 20X9, was \$25.2 million, \$20.9 million, and \$18.1 million, respectively. [The fair value of nonvested shares is determined based on the opening trading price of the company's shares on the grant date. The weighted-average grant-date fair value of shares granted during the years 20Y1, 20Y0, and 20X9 was \$63.50, 56.00, and \$51.25, respectively.]

A summary of the status of Entity A's nonvested shares as of December 31, 20Y1, and changes during the year ended December 31, 20Y1, is presented below:

Nonvested Shares	Shares (000)	Weighted-Average Grant-Date Fair Value
Nonvested at January 1, 20Y1	980	\$ 40.00
Granted	150	63.50
Vested	(100)	35.75
Forfeited	<u>(40)</u>	55.25
Nonvested at December 31, 20Y1	<u><u>990</u></u>	\$ 43.35

As of December 31, 20Y1, there was \$25.9 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the employee share option plan. That cost is expected to be recognized over a weighted-average period of 4.9 years. The total fair value of shares vested during the years ended December 31, 20Y1, 20Y0, and 20X9, was \$22.8 million, \$21 million, and \$20.7 million, respectively. [Note that this disclosure is provided in the aggregate for all awards that vest based on service conditions. Disclosure is provided separately for awards subject to performance vesting.]

During 20Y1, the Entity extended the contractual life of 200,000 fully vested share options held by 10 employees. As a result of that modification, the Entity recognized additional compensation expense of \$1.0 million for the year ended December 31, 20Y1.

718-10-55-137

Case B: Performance Share Option Plan

The following illustrates disclosure for a performance share option plan.

Under its 20X7 performance share option plan, which is shareholder-approved, each January 1 Entity A grants selected executives and other key employees share option awards whose vesting is contingent upon meeting various departmental and company-wide performance goals, including decreasing time to market for new products, revenue growth in excess of an index of competitors' revenue growth, and sales targets for Segment X. Share options under the performance share option plan are generally granted at-the-money, contingently vest over a period of 1 to 5 years, depending on the nature of the performance goal, and have contractual lives of 7 to 10 years. The number of shares subject to options available for issuance under this plan cannot exceed 5 million.

The fair value of each option grant under the performance share option plan was estimated on the date of grant using the same option valuation model used for options granted under the employee share option plan and assumes that performance goals will be achieved. If such goals are not met, no compensation cost is recognized and any recognized compensation cost is reversed. The inputs for expected volatility, expected dividends, and risk-free rate used in estimating those options' fair value are the same as those noted in the table related to options issued under the employee share option plan. The expected term for options granted under the performance share option plan in 20Y1, 20Y0, and 20X9 is 3.3 to 5.4 years, 2.4 to 6.5 years, and 2.5 to 5.3 years, respectively.

A summary of the activity under the performance share option plan as of December 31, 20Y1, and changes during the year then ended is presented below:

Performance Options	Shares (000)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value (\$000)
Outstanding at January 1, 20Y1	2,533	\$ 44		
Granted	995	60		
Exercised	(100)	36		
Forfeited	<u>(604)</u>	59		
Outstanding at December 31, 20Y1	<u>2,824</u>	<u>\$ 47</u>	<u>7.1</u>	<u>\$ 50,832</u>
[Vested or expected to vest at December 31, 20Y1]	<u>2,051</u>	<u>\$ 46</u>	<u>7</u>	<u>\$ 39,500</u>
Exercisable at December 31, 20Y1	<u>936</u>	<u>\$ 40</u>	<u>5.3</u>	<u>\$ 23,400</u>

The weighted-average grant-date fair value of options granted during the years 20Y1, 20Y0, and 20X9 was \$17.32, \$16.05, and \$14.25, respectively. The total intrinsic value of options exercised during the years ended December 31, 20Y1, 20Y0, and 20X9, was \$5 million, \$8 million, and \$3 million, respectively. As of December 31, 20Y1, there was \$16.9 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the performance share option plan; that cost is expected to be recognized over a period of 4 years.

Cash received from option exercise under all share-based payment arrangements for the years ended December 31, 20Y1, 20Y0, and 20X9, was \$32.4 million, \$28.9 million, and \$18.9 million, respectively. The actual tax benefit realized for the tax deductions from option exercise of the share-based payment arrangements totaled \$11.3 million, \$10.1 million, and \$6.6 million, respectively, for the years ended December 31, 20Y1, 20Y0, and 20X9.

Entity A has a policy of repurchasing shares on the open market to satisfy share option exercises and expects to repurchase approximately 1 million shares during 20Y2, based on estimates of option exercises for that period.

Example note to financial statements (required annual disclosures – nonpublic entity)

The previous example illustrated how ASC 718's required annual disclosures might be presented for a public entity. A nonpublic entity that uses the calculated value method to measure compensation cost must provide additional details regarding how it values its share-based payments and the volatility assumptions used to estimate calculated value. The following is an example of the disclosures a nonpublic entity might provide regarding its use of the calculated value method to value options. The disclosure is based on the fact pattern in ASC 718-20-55-77 through 55-83.

Example note to financial statements (required annual disclosures – nonpublic entity)

The entity estimates the value of its options using the calculated value on the grant date. The entity measures compensation cost of options based on the calculated value instead of fair value because it is not practical to estimate the volatility of its share price. The entity does not maintain an internal market for its shares, and its shares are rarely traded privately. The entity has not issued any new equity or convertible debt instruments in several years and has not been able to identify any similar public entities. The calculated value method requires that the volatility assumption used in an option-pricing model be based on the historical volatility of an appropriate industry sector index.

The entity uses the Black-Scholes-Merton formula to estimate the calculated value of its share-based payments. The volatility assumption used in the Black-Scholes-Merton formula is based on the volatility of the Dow Jones Small Cap Medical Equipment Index. The entity calculated the historical volatility of that index using the daily closing total returns for that index for the five years immediately prior to January 1, 20X5.

Note that the disclosures regarding all other assumptions used in the option-pricing model would be similar to the information disclosed in the preceding public entity example.

As discussed in section 3.2.4.1, we would expect that in many cases a nonpublic entity that is able to identify an appropriate industry sector index for purposes of using the calculated value method would be able to extract from that index similar entities on which to base an estimate of its own share price volatility and, therefore, would be required to use the fair-value-based method.

E Building a lattice model

A lattice model is not an equation or a formula, but is instead a framework for calculating the fair value of an option using discounted cash flows. A lattice model is a flexible, iterative approach to valuation that can better capture the valuation effect of the unique aspects of options than the Black-Scholes-Merton formula. To create a lattice model, a tree whose branches represent alternative future share price movements is created. Those share price paths are then used to calculate the value of the option. To illustrate how a lattice model is used, we will first develop a simple lattice model with just a few nodes that does not differ in essence from a Black-Scholes-Merton valuation.⁶⁴ We will then illustrate how the lattice model can be augmented to incorporate a more robust set of assumptions, as discussed in section 7.

Assume that an option is issued with an exercise price of \$10 and that the share price on the grant date is \$10. For purposes of this example, we will assume a constant volatility (30%) and risk-free rate (5%) although, as discussed later, static assumptions may be less appropriate assumptions when valuing a longer-term option. We will also assume that the grantor pays no dividends on its shares. Finally, we will assume that the term of the option is five years and will set the period between nodes at six months.

At $t = 0$ (the grant date), the lattice is started at the grant-date share price (\$10). At each node, two possible price changes (one increase and one decrease) are computed based on the share's volatility. The two new share prices are computed as follows:

Upward movements are calculated as $u = e^{\sigma\sqrt{t}}$ where

- σ = annualized volatility
- t = time between nodes
(based on a fraction of a year)

Downward movements are calculated as $d = 1/u$

Therefore, we calculate the upward movement as:

$$u = e^{.30 \times \sqrt{.5}} = 1.236$$

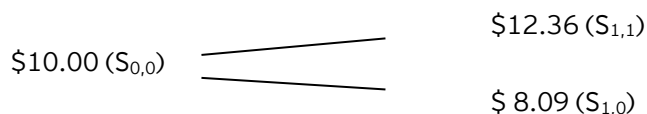
So, the price at $S_{1,1} = \$10 \times 1.236 = \12.36

The downward movement is calculated as:

$$d = 1/1.236 = 0.809$$

So, the price at $S_{1,0} = \$10 \times 0.809 = \8.09

Accordingly, the share price moves from $S_{0,0}$ to $S_{1,0}$ and $S_{1,1}$ as follows:



This process of expanding the tree continues in the same fashion at each node, until the end of the contractual term is reached. The tree of share price movements is illustrated in Exhibit E.1.

⁶⁴ The relevant difference between this simple lattice model and a Black-Scholes-Merton valuation is the specification of a very small number of nodes in the lattice model. This specification is for illustration purposes only.

Exhibit E.1 – Share price tree

One of the advantages of a lattice model is its ability to depict a large number of possible future paths of share prices over the life of the option. In our example above (used for illustration purposes only) the specification of a six-month interval between nodes provides an inappropriately narrow description of future price paths. As the length of the period between nodes decreases, the description of future share price movements becomes richer and the estimate of value more accurate.⁶⁵

In addition to specifying the time between nodes, the lattice model specifies the probabilities that the price will increase or decrease at any given node. As discussed above, if a large number of short periods between nodes is specified, then the lattice model already accurately describes the evolution of share prices. Therefore, no additional accuracy is achieved by setting the probabilities of an upward or a downward movement in share price at anything other than $\frac{1}{2}$ and $\frac{1}{2}$ at every node.

Note that in the tree in Exhibit E.1, an upward price movement followed by a downward movement results in the same end price as a downward movement followed by an upward movement. This recombining characteristic of the share price tree results from the constant volatility assumption and greatly simplifies the valuation task at hand. In the example above there are 66 (1+2+3+...+9+10+11) individual nodes. Were a more complex tree specified in which the branches do not recombine, there would be 2,047 ($2^{11} - 1$) nodes. If a tree were specified for a 10-year option with two periods per month, then in the case of a recombining tree there would be 29,161 nodes, and in the case of a non-recombining tree there would be ($2^{241}-1$) nodes. Alternative assumptions that lead to the construction of a tree that does not recombine are discussed further below.

The computing power required to analyze a non-recombining tree of the magnitude described above (i.e., with $(2^{241}-1)$ nodes) does not exist. However, a lattice model can be simulated (e.g., using Monte Carlo simulation software) in a way that randomly samples a very large number of individual share price paths (i.e., branches of the tree). The values calculated for each of these paths are then used to calculate the value of the option.

After the share price tree is developed, the option must be valued at each node in the tree in a process characterized as “backward induction.” In this process, we start at the end of the tree (at $t = 10$, in our example) and calculate the value at each node. The calculation of value at those end nodes is simple because the option is expiring and, therefore, the fair value of the option is equal to its intrinsic value if the intrinsic value is positive (e.g., nodes $S_{10,10}$ through $S_{10,6}$) and zero if it is negative (e.g., nodes $S_{10,5}$ through $S_{10,0}$). For example, the share prices at nodes $S_{10,10}$ and $S_{10,4}$ are \$83.42 and \$6.54, respectively. Because the option’s exercise price is \$10, the option’s intrinsic values at nodes $S_{10,10}$ and $S_{10,4}$ are \$73.42 and \$0, respectively (see Exhibit E.2 below).

The next step is to calculate the value of the option at node $S_{9,9}$. To do this, we must calculate the present value at $t = 9$ of the two possible outcomes at $t = 10$, $S_{10,10}$ and $S_{10,9}$, based on their relative probabilities of occurring and a discount rate equal to the risk-free rate.

In our example price tree, we have not incorporated an upward drift in share price resulting from the upward pressure of interest rates. One way to incorporate the effect of interest rates is to adjust the probabilities associated with possible upward or downward movements from any node away from $\frac{1}{2}$, $\frac{1}{2}$ so that the probability of an increase (decrease) in share price is greater (less than) $\frac{1}{2}$. This change in the probabilities serves to increase the overall valuation in accordance with the positive upward drift of share prices. The new probability values are calculated as follows:

Upward price movement probability = $p_u = (a-d)/(u-d)$

⁶⁵ Exact equivalence between a Black-Scholes-Merton calculation and a lattice model calculation (under identical static assumptions) is achieved when the time between nodes approaches zero.

where $a = e^{rt}$

Downward price movement = $p_d = 1 - p_u$

If the risk-free rate were 5%, we would calculate the probability of an upward price movement as (note that the calculations of u and d were illustrated earlier in this section):

$$p_u = (e^{(.05)(0.5)} - 0.809) / (1.236 - 0.809) = 0.506$$

We would calculate the probability of a downward price movement as:

$$p_d = 1 - 0.506 = 0.494$$

The discount factor is given by:

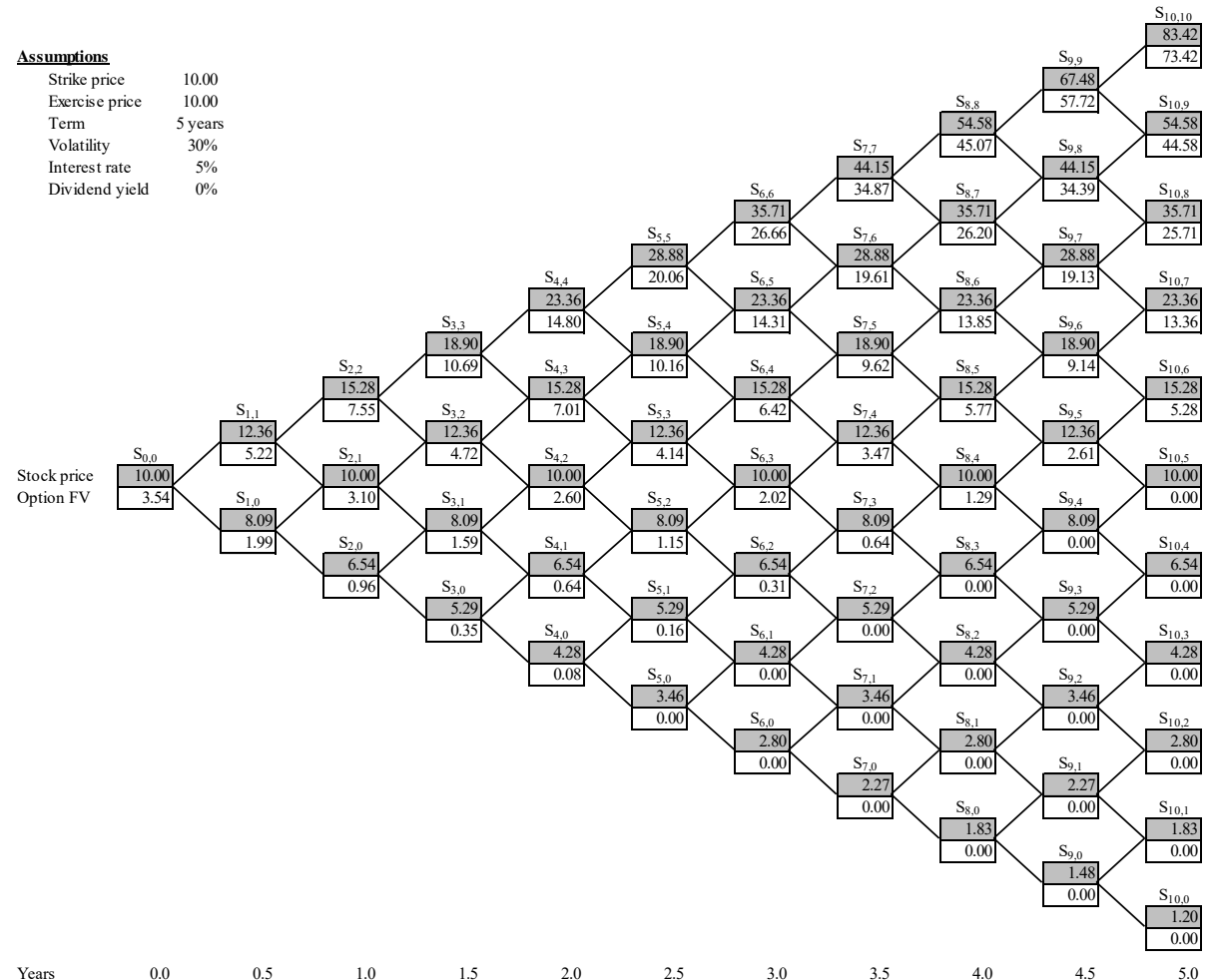
$$e^{(.05)(0.5)} = 1.025$$

The option's discounted present value at node $S_{9,9}$ is, therefore, the greater of zero and:

$$[(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt} = [(0.506 \times \$73.42) + (0.494 \times \$44.58)] / 1.025 = \$57.72$$

Assuming that no early exercise takes place, the expected value computation process (backward induction) continues until the value at $S_{0,0}$, as illustrated in Exhibit E.2, has been determined. Throughout the following discussion, we will refer to the example illustrated in Exhibit E.2 as the "basic example."

Exhibit E.2 – Share price and value tree



Additional complexities of using a lattice model to value ASC 718 options

The lattices reproduced in Exhibits E.1 and E.2 are very simple. In this section, we discuss refinements of the lattice model that illustrate the model's ability to incorporate a rich set of assumptions that can enhance the accuracy of the valuation of ASC 718 options. Below, we discuss alternative assumptions regarding volatility, dividends, and the turnover and exercise behavior of option holders.

Modeling volatility in a lattice

There are a number of assumptions with respect to volatility that would result in a more complex, non-recombining tree. For instance, assuming a term structure of volatility or a path dependence of volatility will cause the tree to fail to recombine.

There is evidence that the implied volatility of an option depends on its term to expiration and, in particular, that short-term options often exhibit higher volatility than similar options with longer terms. Therefore, the volatility used to define price movements at the earlier nodes of the tree (corresponding to longer terms to expiration) may be specified to be different than the volatilities used in the later portions of the tree. Returning to our simple example above, suppose that at the second time period the volatility was 31% instead of 30%. Then, the nodes of the tree corresponding to the first two periods would differ from the basic example.

Exhibit E.3 – Term structure of volatility

Modeling dividends in a lattice

For holders of options on dividend-paying shares, the options generally must be exercised to entitle the holder to the dividends. Therefore, there is a cost to option holders of holding the option that corresponds to the dividend payments foregone. To reflect this cost in the value tree, the probabilities associated with upward and downward movements in the share price are adjusted in a manner similar to the adjustment made to reflect the general upward drift of share prices resulting from interest rates. Unlike interest rates, however, dividends lower the option's value through the dividend foregone relative to the increase associated with the interest rate drift as follows:

Upward price movement probability =

$$p_u = (a/v-d)/(u-d)$$

where

$$v = e^{qt} \text{ and } q \text{ is the annual dividend yield}$$

Downward price movement = $p_d = 1 - p_u$

Therefore, if the risk-free rate were 5% and the dividend yield were 1%, we calculate the probability of an upward price movement as:

$$p_u = ((e^{(.05 \times 0.5)} / e^{(.01 \times 0.5)}) - 0.809) / (1.236 - 0.809) = 0.494$$

We calculate the probability of a downward price movement as:

$$p_d = 1 - 0.494 = 0.506$$

The discount factor is again given by:

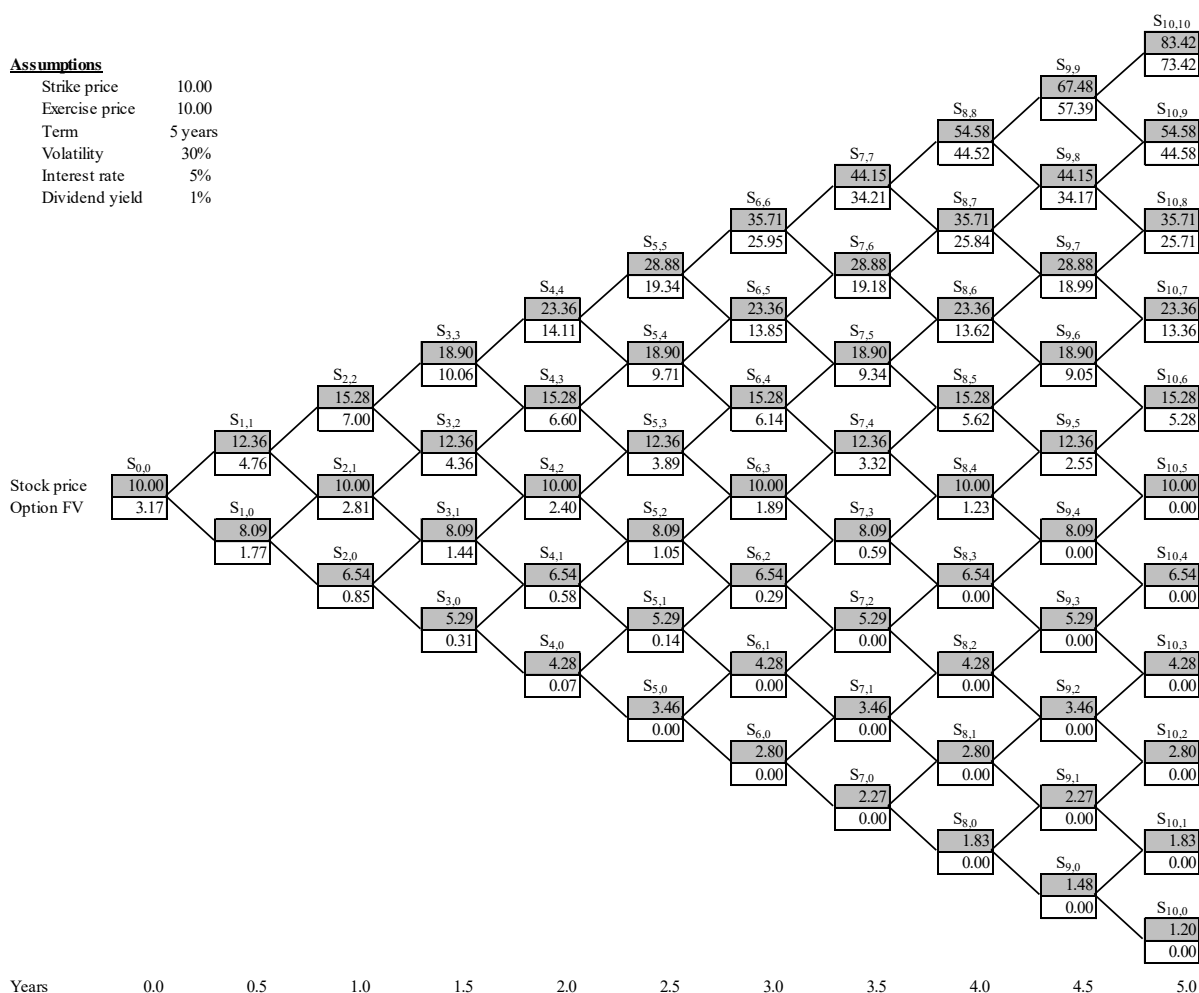
$$e^{(.05 \times 0.5)} = 1.025$$

The option's discounted present value at node $S_{9,9}$ is, therefore, the maximum of zero and:

$$[(0.494 \times \$73.42) + (0.506 \times \$44.58)] / 1.025 = \$57.39$$

Assuming as before that no early exercise takes place, the expected value computation process continues until the value at $S_{0,0}$, as illustrated in Exhibit E.4, has been determined.

Exhibit E.4 – Share price and value tree, assuming a dividend yield of 1%



The above valuation represents a 10.5% decrease from the \$3.54 value calculated in the basic example, in which the dividend yield is assumed to be zero.

Modeling post-vesting termination behavior in a lattice

A rate of turnover of option holders can be specified in the lattice model. Post-vesting terminations⁶⁶ will lower the value of the option since they represent early exercise if the option is in the money at the time of termination and expiration (i.e., zero value) if the option is out of the money at the time of termination. To incorporate post-vesting terminations into the valuation model, we incorporate the probability that an option holder terminates at any given node into the option's discounted present value at that node as follows (building on the basic example):

Let *g* denote the termination rate per period. Then the option's discounted present value at node *S*_{9,9} is the maximum of zero and:

$$(1 - g) \times [(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt} + g \times (\max(\text{intrinsic value}, 0))$$

⁶⁶ Exhibit E.4 assumes that the option is fully vested on the grant date. Pre-vesting terminations are addressed in Exhibit E.5. These terminations are not considered in the valuation of ASC 718 options, but instead determine the number of options for which compensation cost is recognized. See further discussion in Section 3.4.

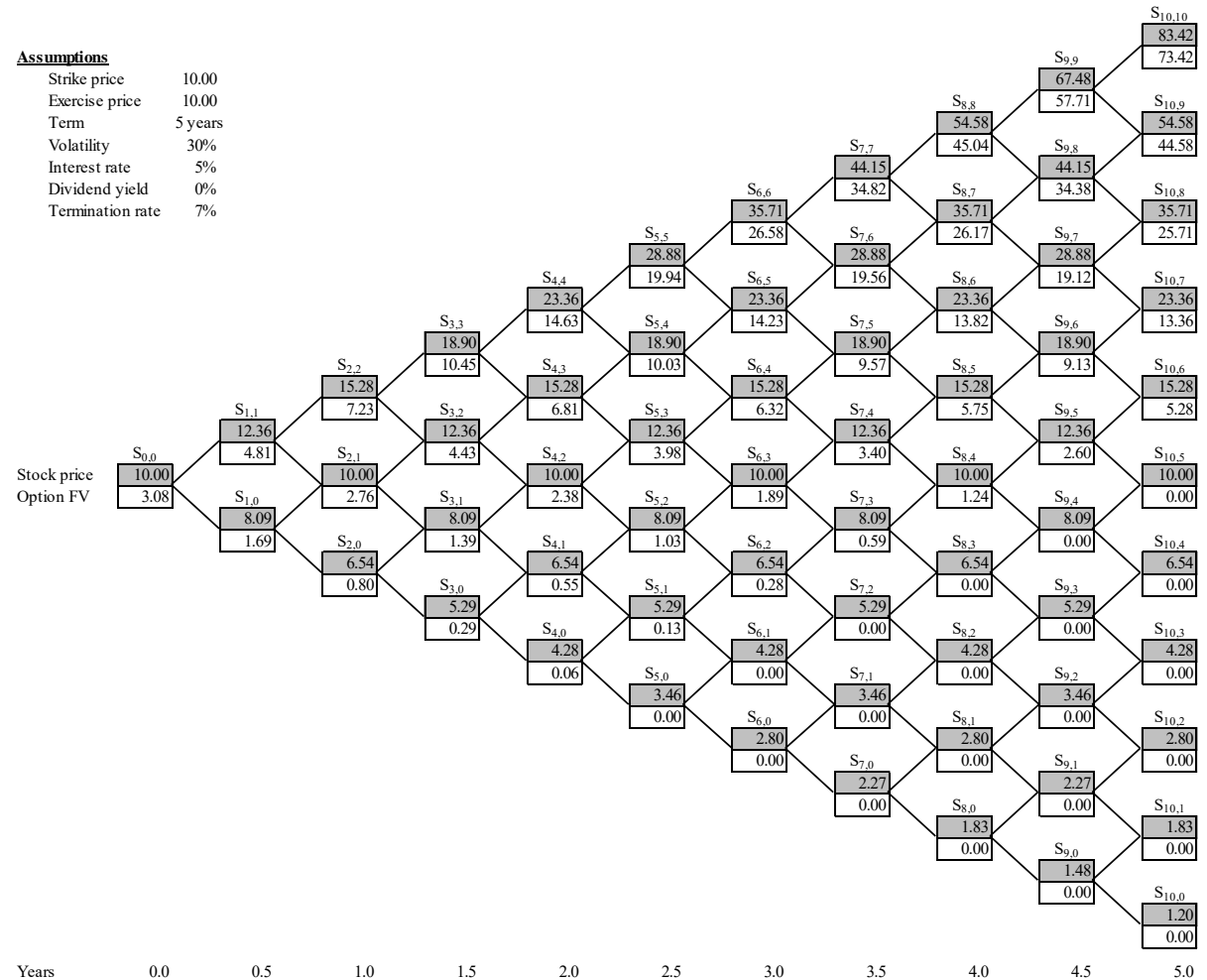
The first term in the above equation denotes the option's discounted present value at node $S_{9,9}$ (as before) multiplied by the proportion of option holders who remain at $t = 9$. Note that if $g = 0$, then there would be no change from the previous calculation. The second term represents the value of the option at node $S_{9,9}$ multiplied by the proportion of grantees who terminate at $t = 9$. Note that the value at $t = 9$ for those who terminate is the greater of the option's intrinsic value and zero (because the departing grantee either exercises an in-the-money option or forfeits an out-of-the-money option).

If the termination rate = 7% per year, then this calculation gives:

$$(1 - 0.035) \times [(0.506 \times \$73.42) + (0.494 \times \$44.58)] / 1.025 + 0.035 \times (\max(\$67.48 - \$10.00, 0)) = \$57.71$$

Assuming as before that no other early exercise takes place except early exercise associated with an option holder's termination, the expected value computation process continues until the value at $S_{0,0}$, as illustrated in Exhibit E.5, has been determined:

Exhibit E.5 – Share price and value tree, assuming an annual departure rate of 7%



The above valuation represents a 13% decrease from the \$3.54 value calculated in the basic example, in which turnover is assumed to be zero.

The option valuation may be further refined by incorporating vesting requirements associated with the option. ASC 718 does not permit the incorporation of pre-vesting forfeitures into the estimate of the value of options. Therefore, the valuation must assume no such forfeitures. However, exercise or

expiration due to termination would be incorporated into the estimate of value for options that have vested as described above. Accordingly, at any node, we would first determine whether the option has vested and then value it appropriately as follows:

If the option has vested, then there is no change from Exhibit E.5 above, and the value at the node is:

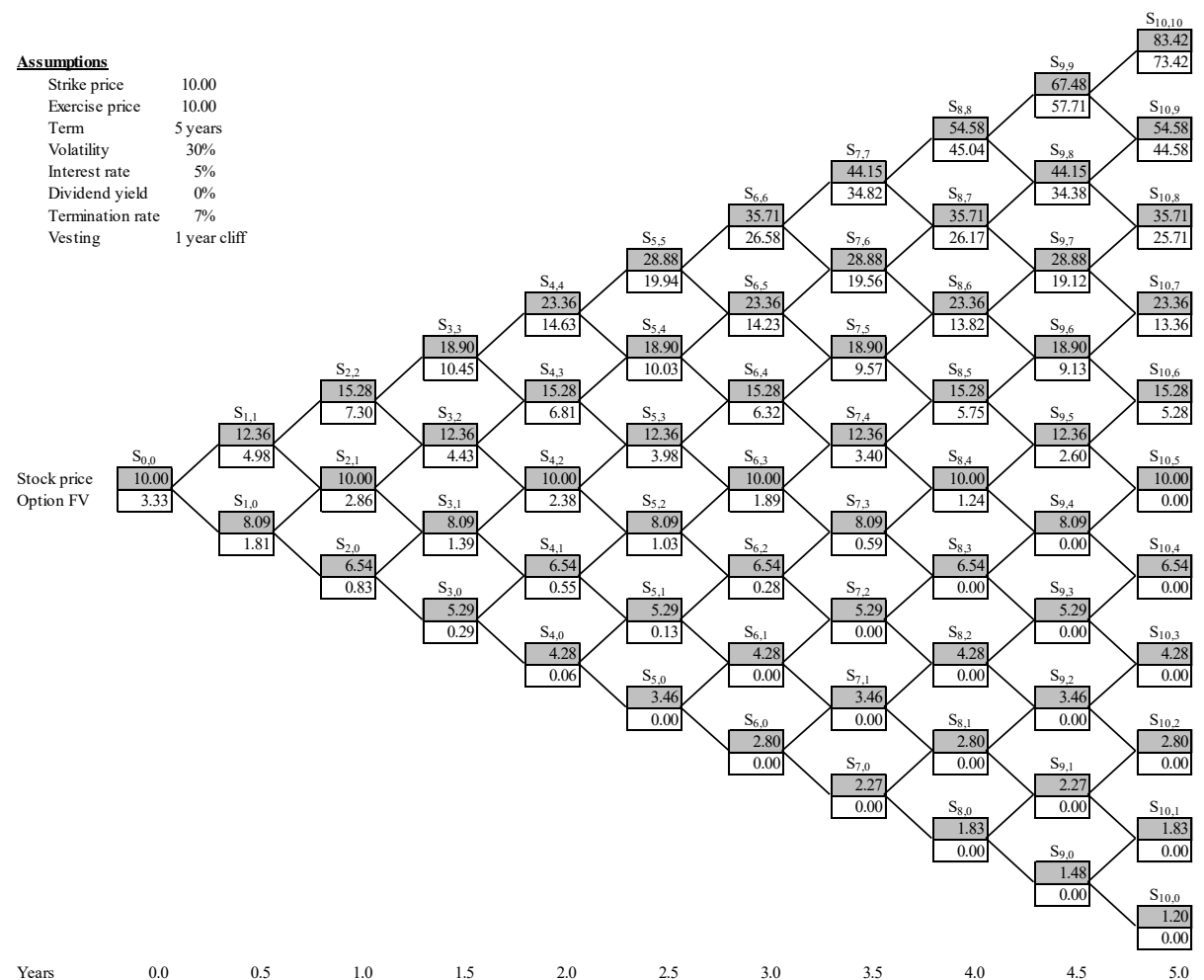
$$(1 - g) \times [(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt} + g \times (\max(\text{intrinsic value}, 0))$$

If the option has not vested, then the value at the node is simply:

$$[(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt}$$

Adding a one-year cliff-vesting feature to the option valuation with a 7% departure rate increases the valuation by 8.1%.

Exhibit E.6 – Share price and value tree, assuming an annual departure rate of 7% and one-year cliff vesting



In comparing Exhibits E.5 and E.6, the only changes in value are at the nodes in times 1 and 2, which represent the pre-vesting period. Note that the 7% turnover estimate would be incorporated into the recognition of compensation cost because only 93% of the measured fair value of the awards would be recognized as compensation cost. However, unlike the assumptions used in the valuation of the options, the estimated forfeiture rate is ultimately adjusted to actual so that compensation cost is only recognized for those awards for which the employees have provided the requisite service, or nonemployees have provided the goods or services underlying the award. Said another way, compensation cost is measured

as the price of the award (P) multiplied by the quantity (Q). P is not subsequently adjusted, but Q is. For example, assume 1,000 options were granted with a fair value per option of \$3.33. We originally expect that 7% of the options will be forfeited and, accordingly, begin to recognize \$3,096.90 (\$3.33 × 1,000 × (1 - .07)) in compensation cost. Ultimately, only 900 options vest. Accordingly, compensation cost of \$2,997 (\$3.33 × 900) would be recognized.

Modeling exercise behavior in a lattice

Grantee exercise behavior can be specified in many ways in a lattice model. For instance, blackout periods during which certain option holders may not trade shares (and, therefore, may be less likely to exercise options) can be incorporated into a lattice model by simply specifying in the value tree that no exercise takes place at the nodes corresponding to those periods. Rules can be specified that relate exercise behavior to the option's moneyness (i.e., the amount of intrinsic value in the option), to changes in moneyness over a prior period, to the option's vesting or the option's coming into the money after a period of being out-of-the-money, and so on.

For illustrative purposes, consider a simple exercise rule whereby all option holders exercise their options if the share price achieves a 1.5x multiple of the exercise price. Building on the example illustrated in Exhibit E.6, our valuation rules become:

If the option has vested and $S_{i,j} > \$15$, then the value at the node is the option's intrinsic value, and that branch of the tree is terminated at that point.

If the option has vested and $S_{i,j} < \$15$, then the value at the node is (as before):

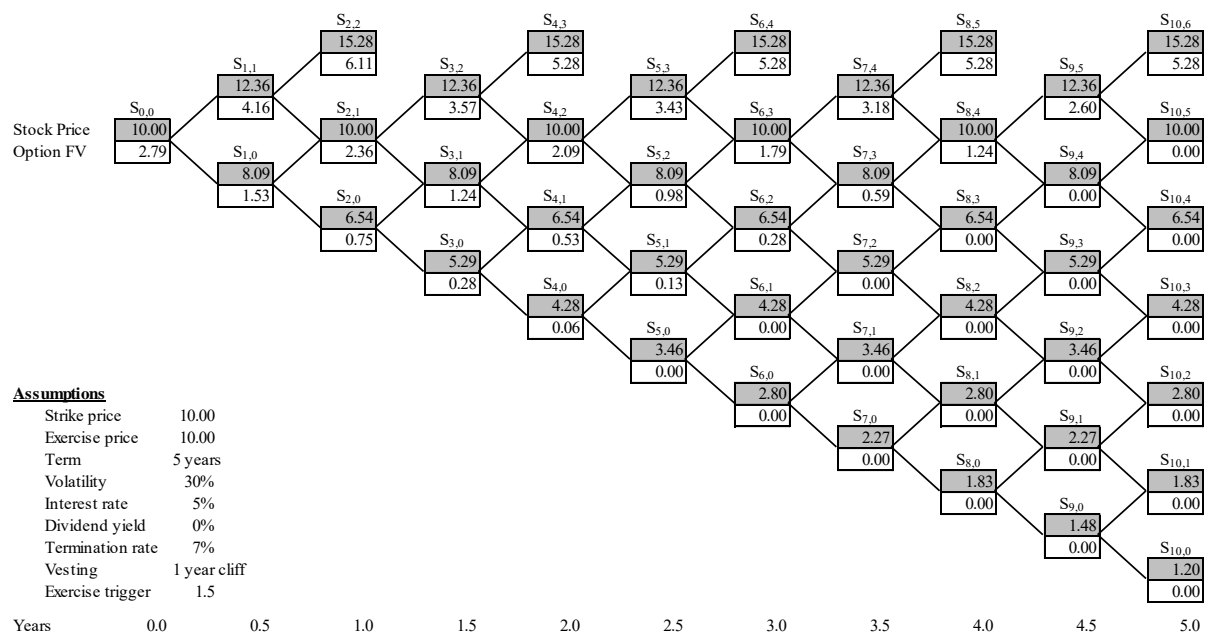
$$(1 - g) \times [(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt} + g \times (\max(\text{intrinsic value}, 0))$$

If the option has not vested, then the value at the node is:

$$[(p_u \times S_{10,10}) + (p_d \times S_{10,9})] / e^{rt}$$

Adding the exercise trigger multiple to the option valuation with a 7% departure rate and one-year cliff vesting decreases the valuation by 16.2%.

Exhibit E.7 – Share price and value tree, assuming an annual departure rate of 7%, one-year cliff vesting and exercise trigger



Assumptions

Strike price	10.00
Exercise price	10.00
Term	5 years
Volatility	30%
Interest rate	5%
Dividend yield	0%
Termination rate	7%
Vesting	1 year cliff
Exercise trigger	1.5

F Summary of important changes

We have updated this publication to reflect the new guidance in ASU 2018-07. This edition assumes that an entity has adopted this guidance. The updated sections are not marked as “updated.” This publication also assumes that entities have adopted the guidance in ASU 2016-09 and ASU 2017-09. We have removed the guidance for periods before adoption from this publication. For guidance before the adoption of the amendments in ASU 2016-09, ASU 2017-09 and ASU 2018-07, refer to our FRD, *Share-based payment (before the adoption of ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting)*.

We also have reorganized the content in this publication. Appendix G shows where certain guidance in our December 2018 edition can now be found. We list other important changes below.

Chapter 2

Scope

- ▶ Section 2.1.1 was updated to discuss the FASB’s proposal to clarify the accounting for share-based payments issued to a customer.

Chapter 4

Recognition of compensation cost

- ▶ Section 4.4.5.2 was updated to clarify the accounting for an award with varying levels of performance and market conditions that, when satisfied in combination, determine the award that vests.

Chapter 5

Accounting for liability instruments

- ▶ Sections 5.1 and 5.2 were added and updated, respectively, to provide an overview on the types of share-based payment awards that may be classified as liabilities.
- ▶ Sections 5.2.2 and 5.2.2.2 were updated and sections 5.2.2.1 and 5.2.2.3 were added to clarify when options and similar instruments are classified as liabilities.
- ▶ Section 5.2.3 was updated to clarify the requirements for liability classification when an award includes share repurchase features. Section 5.2.3.1 was updated and section 5.2.3.2 was added to clarify the accounting for awards where the grantee has a put right and a contingent put right.
- ▶ Section 5.2.6.2 was updated to clarify the classification of awards that allow the employee to elect for the grantor to withhold shares to satisfy statutory withholding requirements.
- ▶ Section 5.4.2.1 was added to provide an example of a nonpublic entity’s accounting for a liability-classified share-based payment award using the intrinsic value method.

Chapter 7

Valuation of options

- ▶ Chapter 7 has been updated to reflect current valuation practices.

Chapter 8

Modifications, exchanges and settlements

- ▶ Section 8.3 was updated to provide an overview of modification accounting.
- ▶ Section 8.3.1 was updated to clarify the accounting for a Type I modification and include illustration 8-2, which provides details on the two alternatives for attributing compensation cost when the modified requisite service period is longer than the original period.

- ▶ Section 8.3.3.4 was added to provide interpretive guidance on accounting for a modification of an award in conjunction with a reduction in the grantee's responsibilities.
- ▶ Section 8.3.4.1 was updated to include illustration 8-4 of a Type IV modification when the award has a performance condition.
- ▶ Section 8.4.5 was updated to provide additional information on the modification of awards held by former employees and the subsequent accounting.
- ▶ Section 8.6.1 was updated to clarify the accounting for a modification that changes the classification from equity to a liability.
- ▶ Section 8.7.4 was updated to provide additional information on accounting for awards to individuals who are no longer employees after a spin-off.

G Reorganization of the FRD, *Share-based payment*

The following table highlights where certain sections of the December 2018 edition of our FRD can now be found in this publication.

Old location and section title		New location and section title	
1.1.3	Issuance of ASU 2018-07	1.1.1	Issuance of ASU 2018-07
1.6.2.1	Accounting for forfeitures – after adopting ASU 2016-09	1.6.2	Accounting for forfeitures
2.1.4	Employee stock ownership plans	2.1.3	Employee stock ownership plans
2.2.1	Definition of 'control'	2.2.1	Common law employees
2.6	Employee stock purchase plans (including look-back options)	2.1.4	Employee stock purchase plans (including look-back options)
2.7	Placing vesting requirements on previously issued shares (i.e., escrowed share arrangements)	2.6	Placing vesting requirements on previously issued shares (i.e., escrowed share arrangements)
2.8	Trusts related to employee benefits	2.7	Trusts related to employee benefits
2.8.1	Rabbi trusts	2.7.1	Rabbi trusts
2.8.2	Other 'employee benefit trusts' (e.g., 'flexitrusts,' 'SECTs')	2.7.2	Other employee benefit trusts (e.g., flexitrusts, SECTs)
2.9	Determining whether a company is public or nonpublic	2.8	Determining whether an entity is public or nonpublic
2.9.1	Private equity investees	2.8.1	Private equity investees
2.9.2	Subsidiaries of companies with equity securities traded on a foreign exchange	2.8.2	Subsidiaries of entities with equity securities traded on a foreign exchange
2.9.3	Transition from nonpublic to public status	2.8.3	Transition from nonpublic to public status
3.9.1.3	An individual ceases to provide substantive service and continues to vest in an award	3.9.1.1	An individual ceases to provide substantive service and continues to vest in an award
4.1.2.2	Account for forfeitures as they occur or estimate forfeitures – after adopting ASU 2016-09	4.4.1.3	Policy elections for forfeitures
4.3.1.1	No substantive service requirement subsequent to the grant date	4.3.1.2	No substantive service requirement subsequent to the grant date
4.3.1.2	Performance or market condition must be satisfied prior to the grant date	4.3.1.3	Performance or market condition must be satisfied before the grant date
4.3.1.3	Bonus settled partly or entirely in shares	4.3.1.4	Bonuses settled partly or entirely in shares
4.3.3	Service inception date cannot occur prior to obtaining all necessary approvals	4.3.1.1	Service inception date cannot occur before obtaining all necessary approvals
4.3.4	Grant date may precede the service inception date	4.3.3	Grant date may precede the service inception date
4.4.1.3	Estimating forfeitures	4.4.1.3	Policy election for forfeitures
4.4.2.1	Implicit service period	4.4.2.1	Period over which to recognize compensation cost
4.4.3.1	Derived service period	4.4.3.1	Period over which to recognize compensation cost

Old location and section title		New location and section title	
5.1	Measurement objective and measurement date for liabilities	5.4	Measurement objective and measurement date for liabilities
5.2.1	Options and similar instruments that allow for cash settlement	5.2.2	Options and similar instruments
5.2.1.1	Accounting for contingently redeemable options and similar instruments	5.2.2.2	Grantee has contingent right to require redemption of options and similar instruments
5.2.1.2	Temporary equity classification considerations	5.2.2.2	Grantee has contingent right to require redemption of options and similar instruments
5.2.1.3	Options to acquire liability instruments	5.2.2.4	Share underlying option is a liability instrument
5.2.2	Applying the classification criteria in ASC 480	5.2.1	Applying the classification criteria in ASC 480
5.2.2.1	Example – application of classification guidance to book (formula) value stock purchase plan	5.2.9	Application of classification guidance to book (formula) value share purchase plan
5.2.3.2	Employer has the right to call shares	5.2.3.3	Grantor has the right to call shares
5.2.3.3	Call feature is contingent	5.2.3.4	Grantor's call feature is contingent
5.2.3.4	Repurchase feature equivalent to a forfeiture provision	5.2.3.5	Repurchase feature equivalent to a forfeiture provision
5.2.3.5	Application of ASR 268 (temporary equity) by SEC registrants	5.3	Temporary equity classification (application of ASR 268) for SEC registrants
5.2.3.5.1	Vested versus nonvested awards	5.3.1	Vested versus nonvested awards
5.2.3.5.2	Redeemable stock options or redeemable shares	5.3.2	Redeemable options or redeemable shares
5.2.3.5.3	Contingent redemption	5.3.3	Contingent redemption
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12	Employee stock purchase plans ⁶⁷	11	Employee stock purchase plans
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14.1.3	Presentation in the statement of cash flows – after adopting ASU 2016-09	13.1.2	Presentation in the statement of cash flows

⁶⁷ This entire chapter, including its sections, has been moved to a new chapter. Individual section reorganization is also noted, if applicable.

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SCORE no. 06440-191US

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