Survey on the cost of regulation and its impact on the Luxembourg financial centre

June 2021



€548 million

Spent by the banking sector in Luxembourg on regulatory matters (extrapolated data)

16%

Compounded annual growth rate of the regulatory investment cost per institution between 2015 and 2020

€1.7 million

Highest AML spend for one bank of the mid size segment vs. €630k on average

Sustainable Finance

Identified as the next priority

38%

Of the banks' total investment in 2019 is spent on regulation. 52% for smaller institutions

13.9%

The average proportion of the banking workforce employed for regulatory matters

S		1. Key take-aways	
	-	2. Managing regulations	
O	-	3. Impact on employment	
7	1	4. Priorities for banks	
0	1	5. Insights from respondents	
Ŭ		6. Methodology	1

Key take-aways

This is the third time that EY and the ABBL have conducted this survey, aimed at measuring the cost of regulation for the banking sector in Luxembourg. This quantitative and qualitative inquiry looks to identify the trends in spending response to regulatory requirements, and to take stock of the efforts made in recent years by market participants.

Although our sample (16 banks) is not as large as our 2016 sample (28 banks), we consider it to be representative of the banking sector in Luxembourg, as it is diverse enough to be able to capture market trends. It is made up of banks of a range of sizes and business activities, from various countries of origin.

The fact that our sample accounts for 22% of the market's total assets and 41% of the market's total employment in Luxembourg comforts us in our ability to draw market-relevant conclusions. Notwithstanding that the sample is sufficiently broad to be analysed, we have nevertheless observed high standard deviations in quantitative answers.

The sample-wide development of the investment spending on regulatory matters between 2015 and 2020 corroborates what had been forecast in the previous edition of this survey. After an upsurge in investment costs between 2015 and 2017, a period when these costs tripled, they seem to have reached a plateau that oscillates between two and two and a half times the 2015 amount. The 2017 regulatory peak was forecast in our previous report, where we predicted that the implementation of many new regulations would drive the costs higher before stabilising after this chaotic period.

Based on the data provided by participating institutions extrapolated to the whole marketplace, it is estimated that banks from the Luxembourg marketplace have spent close to €550 million on regulatory matters in 2019. This gives a 17% increase compared to the same estimate made in the previous edition of this report in 2016.

Regulatory spending is disproportionally spread among segments as our data shows that small and medium institutions support a larger share of total spending than their size in total assets would suggest. Conversely, large institutions account for only 52% of total estimated spending while representing 67% of the marketplace's total assets. The average number of employees who work on regulatory requirements has not followed the same pattern, as it has probably trailed the investment trend. The average "regulatory" employment has steadily increased in the past few years and the average proportion of regulatory employees per institution has increased by 73% between 2016 and 2019. In 2019, regulatory employees accounted for an average of 13.9% of banks' total workforce, with more than 40 FTEs per institution, on average. What we can conclude from this is that new regulatory

requirements led to an evolution in workforce composition, with a change in qualifications and expertise of new hires to fulfill needs of the management of regulatory projects and reinforcement of compliance and control functions. These figures do not include external support from consultants, advisors or lawyers, which have been called upon significantly to manage regulatory change.

Out of the 23 regulations included in the survey, we have selected 11 for an analysis of quantitative and qualitative data. This selection was based on the number of respondents, the coefficient of variation of gathered data, and the priority ranking provided by the respondents.

Looking at individual data that was gathered for each regulation, market trends are clear: our representative sample indicated a strong focus on AML and MiFID, but also heavy spending on PSD2 and CRD5/CRR2. AML and MiFID have also been placed significantly higher than other regulations in the priority ranking of our sample.

In addition to being considered as a top priority, MiFID is judged to be the most difficult regulation to implement. In the same vein, AnaCredit is perceived as being very difficult to implement, but also to be the regulation with the most disproportionate regulatory impact and the least likely to generate positive outcomes for the institutions. DAC6 and AnaCredit are the regulations for which there seem to be fewer available guidelines from the authorities or the regulator.

On the more positive side, the Governance regulation is perceived as the regulation that can generate the most opportunities. FATCA/CRS and CRD5 are considered to be well documented in terms of guidelines.

The perception of our representative sample is also that in general, regulations are more adapted to large institutions and are judged disproportionate by most of the smaller institutions. We can also point that most banks choose to manage their regulatory investment in the form of projects.

When asked about the future trends of regulatory matters, the banking community indicated a sharp interest in sustainable finance, which is forecast by our representative sample to be the next important regulatory subject.

Overall, this survey offers an insightful perspective on the current regulatory landscape, it highlights today's and tomorrow's trending topics.

We hope you will enjoy reading it as much as we enjoyed writing it.

Olivier Maréchal Partner, EY Luxembourg

Yves Maas CEO, ABBL

Managing regulations

2.1. Cost of regulation

Segmented data: A sharp difference in spending among segments

This graph was obtained after a segmentation of our sample's data according to three clusters determined by the total balance sheet figures of the respondents. More detail about this data segmentation is available in the last section of this report.

Regulatory budgets vary widely according to the size of the bank; in 2019 the investment costs were almost 15 times higher for large institutions than for smaller institutions in our sample.

The costs structure is different in this year's survey compared with our 2016 survey. In 2016, recurring costs were in total 57% higher than investment costs, in 2019 investment costs are 41% higher.

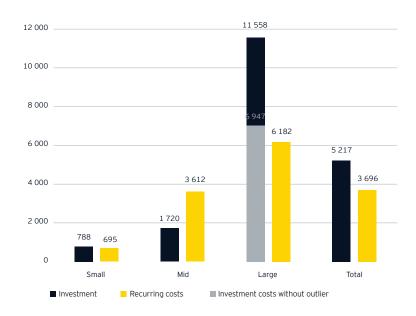
In the 2016 report, the sum of the average total investment costs and recurring costs amounted to €6 million, the same measure is up to nearly €9 million. This sharp increase can be explained by the implementation of numerous new regulations such as MiFID and AML.

In total, it is estimated that banks from the Luxembourg marketplace have spent €548 million on regulatory matters in 2019. This figure was obtained by extrapolating the data provided by participating institutions to the whole marketplace. This total amount is made up of 40% of investment costs and 60% of recurring cost. Comparing this figure to the same estimate made in our previous report from 2016 (€458 million), it gives us a 17% increase of total regulatory costs since the last edition of this survey. This aggregated compliance budget for the marketplace still represents nearly 1% of the Luxembourg GDP.

38%

Of the banks' total investment in 2019 is spent on regulatory investment

Average budget for institution in 2019 (K€)

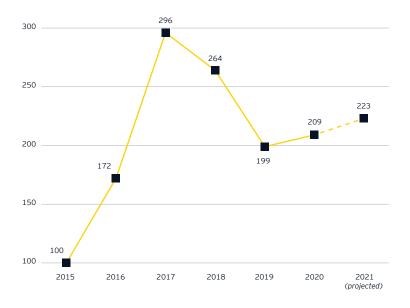


Our extrapolated estimates also suggest that there is a disproportionate distribution of the regulatory burden among segments. According to our estimates, large banks have spent a total of €288 million, which represents 52% of total regulatory spending, even though these institutions represent 67% of total assets in the marketplace. The mid segment have spent an estimated total of €230 million, which represents 42% of total spending while accounting for only 30% of total assets. Finally, small institutions support approximatively 6% of total costs even though they represent only 2% of the marketplace's total assets.

The banks in our sample reported that regulatory investment costs represented on average 38.2% of their total investment in 2019. This proportion depends on the size of the institution, as small institutions proportionally spend more than mid and large sized banks. Small banks spend on average 52% of their investment budget on regulatory matters. For the mid segment, this level is 40%, and for the large segment, this level is only 26% of their investment budget. This contributes to the significant difference in the perception of regulations from the different segments observed in the qualitative part of the survey.

All segments considered, regulatory investment budget represents 38% of total investment, similar to what was observed in the two previous editions of this survey: 41% in 2013 and a slight decrease to 35% in 2016. This important proportion of necessary investment for regulatory matters significantly reduces the amount of capital available to answer business needs and support their development. This phenomenon is even more impactful for smaller institutions, as they spend more than half of their investment capacity on regulatory topics.

Indexed evolution of the average regulatory investment costs per institution (base year 2015)



Year on year development: Confirming our predictions from 2016

Retrospectively, we can consider that the evolution pattern of regulatory costs was largely anticipated in our last report. It was foreseen that the regulatory wave coming in 2017 would cause costs to soar and reach a peak before plateauing in the following years. This pattern is displayed on the indexed chart, where we can see that average regulatory investment costs nearly tripled between 2015 and 2017.

This wave was due to the busy regulatory agenda between 2015 and 2020, resulting from the consecutive implementations of AML, MiFID, GDPR, and PSD2, among others.

The current and expected levels of expenses for the next two years, whilst stagnating, remain very high, at a level that varies between two and two and a half times what it was before the regulatory wave in 2015. This steady increase represents a compounded annual growth rate of 16% between 2015 and 2020.

52%

Percentage of investment allocated to regulation by small banks

16%

Compounded annual growth rate of the regulatory investment cost per institution between 2015 and 2020

Managing regulations

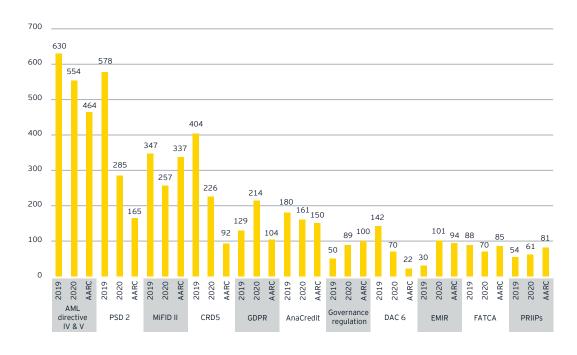
Total cost per regulation: AML, PSD2 and MiFID make the Top ${\bf 3}$

Taking a closer look at the data, AML, PSD, MiFID and CRD are the regulations for which the banks spent the most in 2019, but AML and MiFID represent the highest recurring costs. AML and MiFID also dominate the priority ranking established by our sample. Our respondents spent on average €630K in 2019 for AML, €578K for PSD2 and €347K for MiFID. In total, our 16-bank-sample has reported spending €5.6 million on AML and €3.8 million on MiFID in 2019.

The highest annual spend reported for AML by a respondent was €1,732K

When we compare the topics for which institutions spent the most in 2016, we see that top priorities have shifted. In 2016, institutions were already spending a lot on MiFID and CRD but less on regulations such as AML and PSD2. At that time, high priority regulations were EMIR, FATCA/CRS or AIFMD. These regulations are now considered secondary and do not require much regulatory budget.

Average Costs of regulations (K EUR)



€630K

Spent on average on AML in 2019

million
Highest AML spend for one bank of the mid size segment

2.2. Budget management

Project management remains the norm

For 54% of respondents, regulatory investment is managed as projects, whereas 13% indicate that regulation is a separate budget item, identified as such. Other respondents have stated having different approaches to managing their regulatory budgets that often mix both rules. While regulatory costs are high overall, there seems to be only limited visibility on actual total numbers, something we already observed in the last two editions of this survey.

In 2016, the proportion of banks that managed regulatory investment as projects was as high as 67%.

How do you manage the regulatory budgets in your company?

38%
Regulatory investment is managed as projects

"Costs are divided based on our general ledger among which those which can be considered "Regulation"" 33% Other

"Via individual projects, however we have a regulatory team that monitors and advises on all regulatory areas"

"They are implemented Group-wide. Costs for Luxembourg is not directly split on projects"

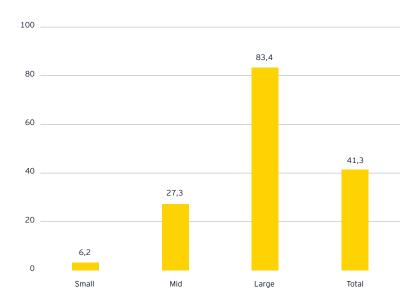
"Embedded in business operations"

"Business as usual and projects"

13% Regulation is a specific budget item, identified as such in all budgets

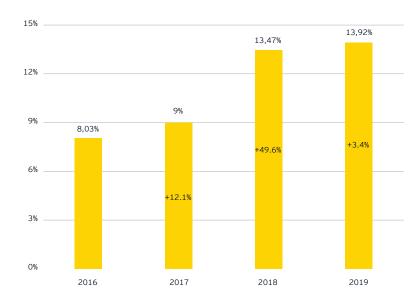
Impact on employment

Average regulatory employees per institution in 2019 (FTE)



On the "regulatory" employment subject, the banks were asked about staff working mainly on regulatory matters, measured in number of FTE's. The proportion of regulatory employees in institutions' total workforce varies depending on the size of the institution. In small institutions, on average, 24% of the employees work mainly on regulatory matters. This average is 11% for the banks from the mid segment and only 7% for large institutions. In 2019, regulatory employees represented almost 14% of the banks' workforce.

Evolution of the average proportion of regulatory employees per institution (2016-2019)



In 2016, the proportion of regulatory employees was 8% of total workforce. When comparing how this proportion has changed since 2016, we see a 73% increase over a three year period.

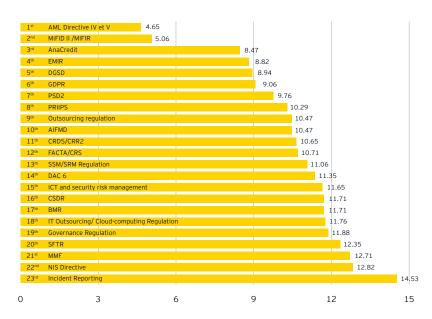
The largest increase was observed between 2017 and 2018, which coincided with the wave of large regulations that became applicable at that time.

13.9%

The average proportion of the banking workforce employed for regulatory matters

Priorities for banks

Average ranked priorities



Evolution of top 10 regulatory priorities

2014		2016		2020			
Ranking	Regulation	Ranking	+/-	Regulation	Ranking	+/-	Regulation
1 st	CSSF 12/552	1 st	+1	CRD IV	1 st	+1	AML IV & V
2 nd	CRD IV	2^{nd}	+4	AML IV	2^{nd}	+2	MiFID II
3 rd	FATCA	3 rd	-2	CSSF 12/552	3 rd	New	AnaCredit
4 th	AIFMD	4 th	+4	MiFID II	4 th	+4	EMIR
5 th	CRS	5 th	=	CRS	5 th	New	DGSD
6 th	AML IV	6 th	-3	FATCA	6 th	+9	GDPR
7 th	EMIR	7^{th}	New	IT Security	7 th	+7	PSD2
8 th	MiFID II	8 th	-1	EMIR	8 th	+5	PRIIPS
9 th	UCITS V & VI	9 th	New	AQR	9 th	New	Outsourcing
10 th	SEPA	10 th	-6	AIFMD	10 th	=	AiFMD

As in past editions, this year's survey analyses banks' regulatory priorities considered to be the most significant and relevant.

The first takeaway is that two regulations seem to be far ahead on banking organisations' priority list. AML and MiFID II dominate this priority ranking, and are considered to be the most important regulations, probably due to the level of effort required to comply with them, but also due to the fact that both of these regulations have a strong impact on core banking relationships.

If we look at 2016 and 2013 rankings, we see that these regulations were already amongst the top priorities. AML was ranked 6^{th} and MiFID was ranked 8^{th} in 2013. They were respectively ranked 2^{nd} and 4^{th} in the 2016 edition. This evolution denotes an increasing focus on conduct regulations. In 2016 rankings, the gap between the top 2 priorities and the rest was not as significant. The first position was occupied by CRD IV. Its successor CRD V is in the middle of this year's ranking (11^{th}). Likewise, FATCA and CRS, which were featured amongst top priorities in 2014 and 2016 now rank 12^{th} as these regulations are currently running in Business as Usual mode.

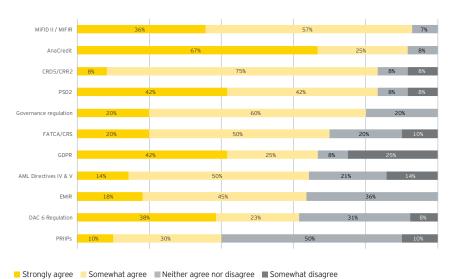
When we match the results of this priority assessment with the costs analysis, we find that AML and MiFID are two of the top three regulations in terms of spending in addition to being considered top priorities. The other top spend regulation PSD2, is also fairly high in terms of priority (7th).

As observed in the two previous reports, some differences in priority rankings can be observed depending on the banking activities. We observe that AIFMD is ranked first by banks providing asset and fund services, whereas it is ranked only 10th by the overall sample. Universal banks have shown a sharp interest in SSM/SRM, ranking in the top 3 of their priorities, although it is only 13th in overall ranking.

We can also observe that priorities are slightly different depending on the size of the institution. Regulations such as GDPR or ICT and Risk Management are perceived to be more important by smaller institutions, whilst EMIR and DGSD are considered more important by larger institutions.

Insights from respondents

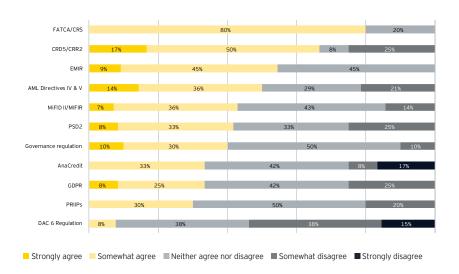
It is difficult to implement



Through four qualitative questions, we have asked respondents to give us insights on their perception of each regulation.

In the first question, we asked banks to assess how difficult it was to implement each regulation. MiFID is considered to be the most difficult regulation to implement, followed closely by AnaCredit. Five regulations are seen as difficult or very difficult to implement by 80% or more of our respondents (MiFID, AnaCredit, CRD5/CRD2, PSD2, Governance). Only PRIIPs is considered difficult to implement by less than half of the respondents (40%), which may indicate that overall, banks find the regulatory landscape difficult to comply with.

There are enough guidelines and rules are clearly defined

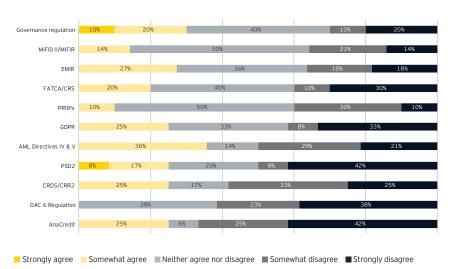


This second survey question aims at assessing banks' perception of clarity of defined rules and availability of guidelines for implementation from the authorities or regulator. Only four regulations merit more than 50% of respondents' positive answers (FATCA, CRD5, EMIR, AML).

Only 43% of respondents consider that there are enough guidelines for MiFID, even if a large volume of documentation has been produced, echoing banks' responses to the previous question, in which they considered that it was the most difficult regulation to implement.

DAC6 and AnaCredit have caused the strongest rate of disagreement with this statement, some of our respondents consider that there is a significant lack of rules and guidelines regarding this regulation.

It creates opportunities and positive outcomes for my institution

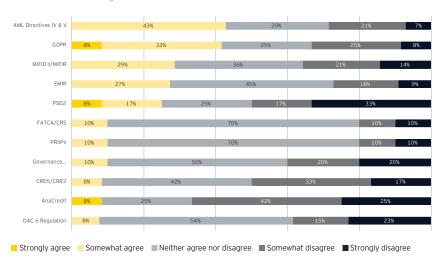


When asked to determine if regulations create opportunities and positive outcomes for their institutions, respondents have expressed their overall disagreement with this statement.

Indeed, there are only two regulations for which more than 30% of respondents consider they created opportunities and a positive outcome (Governance regulation and AML).

The two regulations that are seen as the least likely to create positive outcomes are DAC6 and AnaCredit, which were also two regulations for which our respondents highlighted that there were not enough guidelines.

The regulatory impacts are proportional to the size and type of our institution: All segments

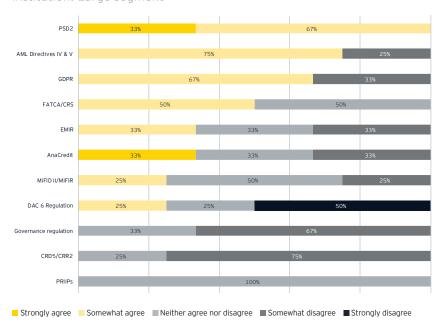


As we have seen through different examples in this report and in its previous editions, perception varies depending on the type of bank, their size and type of services they provide. We have classified the answers to this last qualitative question to highlight the differences of perception among our three segments.

But first, across all segments, AnaCredit is seen as the regulation with the most disproportionate impact, which confirms the rather negative opinions gathered in previous qualitative questions. On the other hand, AML and GDPR are considered as the regulations with the most appropriate impact cross-segment, even if they do not rate more than 43% of positive perception.

Insights from respondents

The regulatory impacts are proportional to the size and type of our institution: Large segment

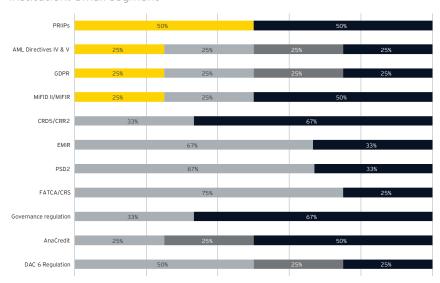


We can clearly see that the smaller the institution, the less likely it will consider regulations to be appropriate for its size. For the small segment, only four regulations out of eleven received at least one positive answer. For the large segment, it is observed to be twice as high, with eight regulations.

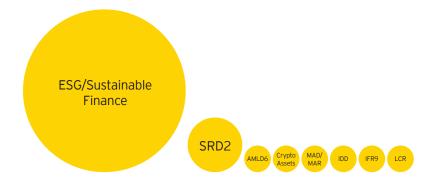
We also note the high proportion of "Strongly disagree" answers within the small segment in which every regulation received at least one positive answer.

We can conclude that small and large institutions have opposite perceptions of the proportionality of regulatory impacts. The regulatory landscape is seen as more adapted to larger institutions, as their perception is more positive in general.

The regulatory impacts are proportional to the size and type of our institution: Small segment



The next high priority subject: Sustainable Finance



Our survey featured an open-ended question about the regulations that weren't included in our study, but could be identified as potential major subjects in coming years. As you can see in this graphic representation, the only subject that has been cited multiple times (6) is sustainable finance. It is expected to be a major topic in coming years. The EU Action Plan for Financing Sustainable Growth will have a significant impact on the financial centre, as its multiple regulations will consecutively enter into application. The SRD2 regulation, which aims to foster greater transparancy in terms of shareholders' identification, has also been cited twice.

Methodology

The survey was conducted in November and December 2020. It was administrated via Qualtrics and sent to the management role of 98 member banks of the Luxembourg Bankers' Association (ABBL). Out of these 98 banks, 16 of them responded to our survey, giving a smaller sample than in our previous edition, where we had a pool of 28 respondents. Nevertheless, our respondent sample shows a good mix in the variety of banks, both in terms of size and type of activity.



Description of the sample

By key figures

To provide some perspective, the table below represents two of the key figures from the survey compared to the total banking environment in Luxembourg.

	Sample	Luxembourg market	Coverage ratio
Employment (FTE - 31/12/2019)	10,824	26,334	41%
Total Balance Sheet (M € - 31/12/2019)	183,498	814,978	23%

Representativity is satisfactory even if we have a lower number of participants.

By segment

The banks in the sample were ranked by size based on their total balance sheet figure which allowed us to create three segments (small, mid, large).

Segments	Number of banks	%	Total balance sheet average	FTE Average
Large	6	38%	24,747,130,635	1,559
Mid	6	38%	6,057,471,000	350
Small	4	25%	766,352,288	29.7
Total	16			

By sector

Once again, the private banking sector is highly represented (44% of respondents) but proportionally less than in our previous edition (61%). The corporate banking respondents indicated that they also performed other activities, namely covered bonds.

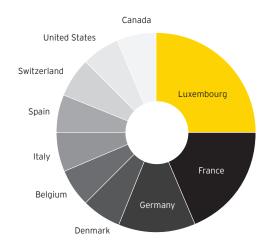
Please note that this classification is based on the bank's own judgment of its main business.

Activities	Number of banks	%
Private banking	7	44%
Universal banking/Retail	2	13%
Fund servicing/Asset management	3	19%
Corporate banking	2	13%
All banking activities	2	13%
Total	16	100%



By country of origin

The 16 participants in our 2020 cost of regulation survey come from 10 different countries, 14 from European countries, of which four of them are from Luxembourg, three from France and two from Germany. The two non-European respondents are North American banks.



Selection of regulations for the analysis

To perform most of the analysis, we focused on 11 of the survey's 23 regulations.

The main criteria were:

- ► The number of respondents to the quantitative answers
- The coefficient of variation of the regulation's quantitative answers
- The relative priority level according to our priority ranking

Priority ranking methodology

Respondents were asked to include in rankings only regulations that applied to their institution. To eliminate biases caused by limited number of answers for some regulations, we have harmonised the initial ranking by entering the average number of answers per institution (12) where no answer was given. The displayed figures on our priority ranking chart were obtained following this methodology.

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