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# ESAs Report on the landscape of ICT third-party providers in the EU

*Overview of the high-level exercise*

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# 1.  Executive Summary

1. The European Supervisory Authorities (ESAs), together with the competent authorities (CAs), in 2022 carried out a joint high-level analysis with the objective of getting a preliminary overview of the provision of information and communication technology (ICT) services to the EU financial entities by ICT third-party service providers (TPPs). The analysis was performed to inform preparations for the application of the Digital Operational Resilience Act[1] (DORA).

2. The analysis was carried out on the basis of voluntary information provided on a best-effort basis by a sample of financial entities across the EU[2] representing different parts of the financial sector and providing information on their use of services (and, where relevant, the use of services by other entities in their corporate group) from ICT TPPs. The sample was selected to ensure broad coverage, but its degree of statistical representativeness is unknown.

3. The high-level results of this analysis provide a first overview of ICT TPPs across the financial sector, including the services they provide to financial entities in the sample. The ESAs identified around 15,000 ICT TPPs directly serving financial sector entities across the EU.

4. According to the results, the frequently used ICT TPPs directly support many critical or important functions and provide a large range of services. Moreover, where financial entities use services to support critical or important functions, or where service continuity would have a high impact, most of such services are non-substitutable.

5. In addition to the first mapping of the ICT TPP landscape in the EU, the analysis also offered valuable input to the ESAs policy making process. In particular, the experience of the data collection, its analysis and the actual data analysed have already been taken into account when drafting the discussion paper on the joint ESAs advice to the European Commission on two delegated acts specifying further criteria for critical ICT TPPs and determining oversight fees levied on such providers[3] and the first batch of DORA consultation papers, in particular the ITS to establish the templates for the register of information[4].

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[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022R2554

[2] Sample included 30 countries across the EEA

[3] https://www.eba.europa.eu/esas-launch-discussion-criteria-critical-ict-third-party-service-providers-and-oversight-fees

[4] https://www.eba.europa.eu/esas-consult-first-batch-dora-policy-products

# 2. Introduction

6. On 27 December 2022, Regulation (EU) 2022/2554 of the European Parliament and the Council of 14 December 2022 on DORA was published in the Official Journal of the European Union. It entered into force on 16 January 2023 and will apply from 17 January 2025.

7. DORA will create a comprehensive framework addressing various core components of the digital operational resilience of financial entities, with the overall objective to strengthen and align the digital operational resilience across the different Union financial areas.

8. With regard to ICT third-party risk management, financial entities will have to maintain, at entity, sub-consolidated and consolidated level, a register of information on all their contractual arrangements on the use of ICT services provided by ICT TPPs. The requirement to maintain a register will oblige financial entities to gather a certain amount of information about their contracts with the ICT TPPs and about the ICT TPPs themselves.

9. In addition, to address potential systemic and concentration risks posed by the financial sector's reliance on a small number of ICT TPPs, DORA introduces a Union oversight framework for the ICT TPPs deemed critical from the perspective of the EU financial sector.

10. As part of the preparations for the application of DORA and the establishment of the oversight framework the ESAs have jointly conducted a high-level exercise identifying and mapping ICT TPPs, with a focus on concentration and substitutability of service provision. For this purpose, the ESAs designed a template to collect data from a sample of financial entities covering all ICT-related contractual arrangements. Following data collection and work to check and improve data quality, the ESAs analysed the data.

11. The collection of ICT TPP data was the first of its kind, covering contractual arrangements for many types of entities across the financial sector. Lessons learned and insights from its design and performance may prove to be useful during DORA implementation. For instance, the exercise underlined the importance of ensuring that financial entities provide unique identifiers in the data submitted and the need to develop an appropriate ICT services taxonomy. It has also supported the preparation of future DORA tasks, including the development of the consultation paper on ITS to establish the templates for the register of information and the discussion paper on a delegated act specifying further criteria for critical ICT third-party service providers. However, the template used in the exercise cannot be considered equivalent to the tables proposed by the ESAs in the consultation paper dedicated to the register of information.[5] Additionally, the analysis does not identify critical TPPs for DORA purposes.

12. The sample of financial entities was selected to ensure coverage across entity types and across the EEA. However, the results cannot be extrapolated to the entire EU financial sector, as the

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[5] https://www.eba.europa.eu/esas-consult-first-batch-dora-policy-products

degree of statistical representativeness of the sample is unknown (at national and EU level) in terms of ICT TPPs and ICT services.

# 3.   Landscape of ICT third-party providers

13. The exercise identified around 15,000 ICT TPPs directly serving around 1600 EU financial entities included in the sample. These EU financial entities comprise not just signatories to a given contract with an ICT TPP, but all Entities Making use of the Contract (EMCs).[6] When subcontractors are included, thereby capturing indirect exposure of the financial sector to ICT TPPs via chain outsourcing, the number of ICT TPPs increases to around 20,000. Among the ICT TPPs directly serving the entities, around 9,000 supported critical or important functions.[7]

14. To gain further insight into the role of different ICT TPPs in the financial sector, the number of financial entities to which they provide a contracted service was examined. Based on the analysis a few ICT TPPs serve between 250 and 500 EMCs, beyond which the number of EMCs served declines gradually.

15. The concentration risk posed by third-party provision of ICT services depends on the criticality of the services in question. However, in the sample studied, the top 20 ICT TPPs by the number of EMCs is similar whether or not attention is restricted solely to 'critical services', i.e. ICT services used by a financial entity to support a critical or important function.

16. In general, whether a service is deemed critical or important depends on the judgement of the financial entity, informed by its standard risk management practices. In some cases, however, the function supported by the ICT service deemed critical or important seems unlikely to in fact be so. Such instances will be instructive for the ESAs when considering how different types of ICT services should map into an assessment of criticality.

17. Article 31(2)(d)- of DORA links substitutability to the "lack of real alternatives" as well as the "difficulties in relation to […] migrating the relevant data and workloads from the relevant ICT third- party service provider to another ICT third-party service provider". To analyse substitutability of the sampled entities, the ICT TPPs providing services both directly and indirectly (as subcontractors) were considered.

18. Subcontracting may take place through long chains of service provision. However, given the available data and its quality, the analysis focuses on subcontractors at the first level only, i.e. those reported as serving the ICT TPP.

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[6] In other words, to avoid potential ambiguity, the term 'EMCs' refers to all financial entities that have the right to use an ICT service provided by an ICT TPP under the terms of a given contract.

[7] Precise figures can only be estimated, as it was necessary to make assumptions when cleaning the data to identify different provider names in the data as referring to the same entity, or to entities in the same corporate group. Estimated totals were 15,077 ICT TPPs directly serving entities, 19,986 ICT TPPs when subcontractors are included, and 8,783 providers supporting services deemed critical or important by reporting entities.

19. According to the data, around half of EMCs use a critical service that is not substitutable[8]. When considering only the frequently used ICT TPPs, the number of EMCs using a critical service that is not substitutable rises to around three-quarters. The results also seem to be very similar when the analysis includes subcontractors.

# 4.  Overview of ICT services

20. According to the DORA definition, 'ICT services' means "digital and data services provided through the ICT systems to one or more internal or external users on an ongoing basis, including hardware as a service and hardware services which include the provision of technical support via software or firmware updates by the hardware provider, excluding traditional analogue telephone services". The regulation does not provide any further breakdown of ICT services.  However, for the purpose of the data collection and to facilitate the analysis, the following seven ICT service categories were used:

- software and application services (IT development; off the shelf software packages, licensing, and installation thereof etc);

- network infrastructure services (excluding telecommunication services);

- data centre (physical data centre space and basic utilities);

- ICT consultancy and managed ICT services;

- information security and cybersecurity services (including control and monitoring, penetration testing, security operations centre, etc.);

- cloud computing (covering all service models and types);

- data analysis and other data services (provision of data, data entry, data storage, data processing and reporting services, data monitoring as well as data-based business and decision support services);

21. An additional category, 'other services', was added to allow the financial entities to cover any other ICT services that are not adequately described by the seven identified categories. To keep the summary of results simple, this category is omitted from the analysis below.

22. The results of the analysis suggest that two ICT TPPs appear to be among the frequently used for services across all categories. Others appear among the frequently used only in certain categories.

23. Table 1 provides an overview of the number of contractual arrangements by each of these types of service, the number of ICT TPPs providing each type of service, and the number of EMCs using each type of service. Among ICT TPPs providing a given type of service, the

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[8] Here, 'critical service' includes those services whose discontinuity would have a high impact as well as services assessed by entities as supporting a critical or important function.

proportion that do so critically (i.e. in support of critical or important functions) ranges from around a third of ICT TPPs providing consultancy and managed ICT services, to around two-thirds of ICT TPPs providing network infrastructure services. By contrast, among EMCs using any given type of service, a large majority (80% to 92%) do so critically. The difference in these shares indicates that there is a relatively concentrated group of ICT TPPs that provide critical services to most EMCs in the sample.

24. Overall, in the sample used for this analysis, most arrangements include multiple types of ICT services. 'Software and application services' was mentioned by financial entities the most frequently in the contractual arrangements (30 138 out of the total of 56 313 arrangements reported) followed by 'ICT consultancy & managed ICT services', 'cloud computing' and 'data analysis and other data services'). The ranking of services used is similar when considering the number of distinct ICT TPPs (see Table 1).

**TABLE 1. Overview of ICT services provided**

| Service provided | Contractual arrangements | | ICT TPPs providing the service | | EMCs using the service | |
|---|---|---|---|---|---|---|
| | Total number | % of which critical | Total number | % providing critically | Total number | % using critically |
| Software and application services | 30 138 | 45% | 9 055 | 40% | 1 415 | 88% |
| Network infrastructure services | 4 869 | 67% | 1 816 | 65% | 1 066 | 92% |
| Data centre | 3 694 | 70% | 1 417 | 61% | 968 | 92% |
| ICT consultancy & managed ICT services | 13 560 | 49% | 3 991 | 33% | 1086 | 83% |
| Information security & cybersecurity | 5 648 | 49% | 2 050 | 47% | 1018 | 86% |
| Cloud computing | 13 111 | 55% | 3 539 | 37% | 1114 | 85% |
| Data analysis and other data services | 11 873 | 64% | 3 181 | 50% | 1143 | 80% |

Note: "% of which critical" refers to the percentage of contractual arrangements for a given service that support a critical or important function. "% providing critically" refers to the percentage of ICT TPPs providing a given service in support of at least one critical or important function. "% using critically" refers to the percentage of EMCs using a given service in support of at least one critical or important function.

Source: Joint ESAs high-level exercise on ICT third-party providers' landscape. 2022 data collection with end of 2021 as the reference date.

25. Table 2 below lists the 10 ICT TPPs with the most EMCs using at least one service critically.[9] Each percentage represents the share of these EMCs that use a given type of ICT service to support a critical or important function. Within the sample, some ICT TPPs provide critical services across the entire spectrum. Other service providers, in contrast, have most of their critical services concentrated in one or two categories.

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[9] This metric is purely illustrative and does not determine whether an ICT TPP is critical according to DORA Article 31.

26. Taking the first ICT TPP listed in the Table 2 as an example: among the EMCs that use one or more of its services critically, 71% use its software and application services critically, while 68% use its cloud computing services critically. The other types of services are provided to between 15% and 30% of those EMCs.

27. For the remaining ICT TPPs in the Table 2, the share of EMCs receiving critical services is highest for certain types of services. For example, the second listed ICT TPP provides critical services mostly in software and application services (64% of EMCs using critical services), cloud computing (46%) and data analysis (46%). These shares are based solely on the number of EMCs, and do not take into account their size or systemic nature.

**TABLE 2. Share of EMCs using services for critical functions, top 10 ICT TPPs**

| ICT TPP | Software and application services | Network infrastructure services | Data centre | ICT consultancy & managed ICT services | Information security & cybersecurity services | Cloud computing | Data analysis and other data services |
|---------|-----------------------------------|--------------------------------|-------------|----------------------------------------|----------------------------------------------|-----------------|---------------------------------------|
| #1 | 71% | 17% | 15% | 15% | 36% | 68% | 30% |
| #2 | 64% | 7% | 23% | 9% | 1% | 46% | 46% |
| #3 | 66% | 13% | 8% | 6% | 5% | 13% | 56% |
| #4 | 85% | 35% | 35% | 19% | 10% | 7% | 35% |
| #5 | 30% | 32% | 28% | 10% | 18% | 92% | 38% |
| #6 | 30% | 6% | 6% | 4% | 4% | 90% | 26% |
| #7 | 92% | 1% | 52% | 56% | 3% | 87% | 61% |
| #8 | 45% | 2% | 7% | 9% | 2% | 79% | 24% |
| #9 | 97% | 0% | 68% | 0% | 69% | 88% | 70% |
| #10 | 48% | 6% | 9% | 1% | 2% | 15% | 62% |

Note: 'Top 10 ICT TPPs' are estimated on the basis of numbers of EMCs reported as using at least one service critically

Source: Joint ESAs high-level exercise on ICT third-party providers' landscape. 2022 data collection with end of 2021 as the reference date.

# 5. Conclusion

28. The ESAs identified around 15,000 ICT TPPs directly serving EU financial entities. Most ICT TPPs serve only a small number of EU financial entities, though some of these entities may play a significant role in the financial system. The most popular ICT TPPs also tend to provide services supporting the greatest number of critical or important financial functions, which suggests that the market is highly concentrated despite the high number of ICT TPPs identified and the number of ICT services provided. The ICT services supporting most of these critical or important financial functions are often non-substitutable, which exacerbates the concerns over the concentration risk in the sector. In addition, the results of this exercise indicate a potential high degree of interconnectedness and interdependencies between providers.

29. The high-level exercise has informed the work of the ESAs in the preparation of the implementation of DORA. The results and the comments received of both the sampled financial entities and the involved stakeholders, continue to be considered in the preparation of the relevant DORA policy mandates, especially the register of information and the ESAs response to the European Commission call for advice to specify further the criteria referred to in Article 31(2) of DORA to be considered by the ESAs when assessing the critical nature of ICT third-party service providers.