Switching and interoperability of data processing services

In February 2022, the European Commission published a proposal for a Regulation on harmonised rules on fair access to and use of data (the Data Act)[1]. The proposal includes several provisions to facilitate switching between providers of data processing services and indicates that independent national competent authorities with experience in electronic communications services are well placed to ensure the application and enforcement of specific provisions.

Why is switching and interoperability of data processing services relevant?

Data processing services comprise cloud, edge and other similar services which allow users ubiquitous, flexible, on demand access over the internet to a pool of configurable computing resources, including servers, databases, software applications, storage capacity and computing power. Edge services are a type of cloud services where the location of the data-processing capacity is located close to or in the physical endpoint where the data is generated allowing to offer low- latency distributed computing and storage capabilities as well as other advantages such as control on data location.

Political objectives

According to Eurostat, 41% of EU enterprises used cloud services in 2021 and adoption of these services has increased in the last years. Nevertheless, the EU is still far from the ambition set by the **2030 Digital Compass**. Namely, that by 2030 75% of European enterprises have taken up cloud computing services, big data and Artificial Intelligence and 10 000 climate-neutral highly secure edge nodes are deployed in the Union, distributed in a way that guarantees access to data services with low latency (i.e., a few milliseconds) wherever businesses are located.

Market concentration

The cloud services market is highly concentrated and several studies[2] have identified potential competition concerns including, among others, (technical and financial) switching and interoperability barriers. A recent publication by the Synergy Research Group (2022) states that three leading global cloud providers (Amazon, Microsoft and Google, known as "hyperscalers") account for 72% of the European market and their share continues to steadily rise. The European leaders, SAP and Deutsche Telekom account each for 2% of the European market. They are followed by OVHcloud, Telecom Italia, Orange and a long list of national and regional players.[3] The highest growth, triggered by PaaS with database, IoT and analytics services, confirm that bundle with data and analytics boosts competitiveness.

What is the interplay between cloud and electronic communications services?

Commissioner Breton recently described the future connectivity network as a blend of transmission, storage and computing and signalled the transformation of telecommunication

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[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:68:FIN
[2] See, for instance, ACM Market Study Cloud services https://www.acm.nl/system/files/documents/market-study-def-public.pdf
[3] Synergy 2022 https://www.srgresearch.com/articles/european-cloud-providers-continue-to-grow-but-still-lose-market-share

networks into platforms, where connectivity and computing capacity converge (notably with edge computing) and where physical network interconnections become application programming interfaces. This transformation is a consequence of three main developments: i) virtualization trends that entail an increasing relevance of cloud services for the provision of ECN/S (i.e., the provision of certain network elements by cloud providers); ii) the provision of cloud/edge services by traditional ECS/N providers and iii) the joint commercialization of cloud and ECS by means of bundled products raising in particular the need of ensuring the coherent implementation of telecommunication and data processing switching regulation.

Why a BEREC workshop?

In 2022, BEREC published a general statement on the draft Data Act and a High-Level Opinion on the European Commission's proposal for a Data Act. In this document, BEREC shares some best practices and suggestions gained by its experience in applying similar provisions in the telecommunications sector as it is the case of switching. In its 2023 work program, BEREC has considered the increasing relevance of data processing services in the provision of ECN/S and, in general, for the Internet Ecosystem. Several working lines related to cloud services have been included in the work programme, among those, following closely the developments around the Data Act.

The workshop aims, among others, to the following objectives:

- Foster a **constructive dialogue** with stakeholders (including providers and users), competent authorities and legislators for the implementation of the Data Act provisions.

- Discuss on **competition of data processing services** including the potential impact of the data processing competition issues in the provision of ECS/ECN. Identify the requirements to enhance competition in the provision of data processing services

- Gain a deeper understanding of the **barriers to switching** faced by data processing services users. Identify solutions to reduce those barriers and the possible lock-in effects taking into consideration their impact on security, data protection or innovation. Consider how the experience of switching of telecommunication services can be helpful for the elaboration and implementation of the Data Act,

- Exchange on how to promote the **adoption** of data processing services to meet the EU 2030 targets.