3. Fostering a data-driven economy in the EU

An adequate regulatory framework to encourage data-driven services

The European Commission (EC) intends to foster an efficient competitive single market for data services like cloud computing, among others. To achieve its goal, it needs to identify legal, economic and regulatory challenges. It will enter into a dialogue with cross-sector stakeholders to find out about barriers and current industry practices. Before reaching conclusions, the EC plans to go through a phase of experimentation and testing.

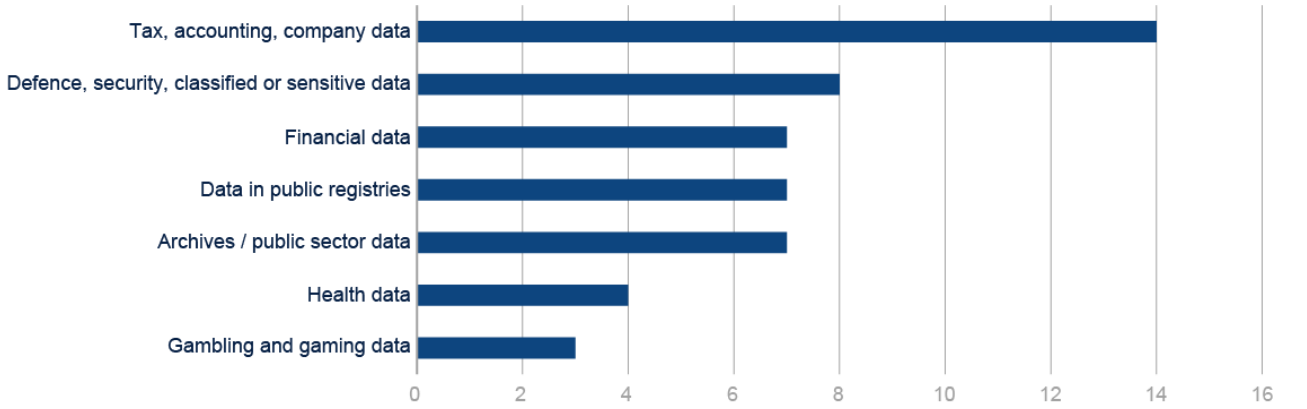
Free flow of data and localisation restrictions

Data localisation restrictions derive from national legislation or administrative disposals, guidelines or practices that constrain, either directly or indirectly, localisation of data for its storage or processing. Restrictions for reasons of personal data protection are already covered in the General Data Protection Regulation (GDPR). However, the EC plans to tackle obstacles impeding the free flow of data within EU borders for other reasons beyond the protection of personal data. Removing existing data localisation measures would lead to GDP gains of up to €8bn a year[10].

Some legal provisions of EU Member States include localisation of invoices, books and records and accounting documents to stay on the premises of the company or on servers within the country. Sector specific restrictions include health, gaming and gambling or financial data. Not only privately held data are affected by restrictions but also public sector data. For instance, in France there is a prohibition for local authorities to use cloud computing services without a special certification for storing and processing any document received by public authorities. According to the analysis performed so far by the EC[11], in a sample of 50 restrictive measures identified in 21 Member States, the highest share of data localisation restrictions applies across sectors and, in many cases, to privately held data. Moreover, it is not only a matter of restrictive rules but also of perception. In this respect, a recent study outlined that "perceptions are as powerful as hard restrictions in deterring cross-border data transfers"[12]. Policy initiatives aimed at promoting existing relevant certifications and standards and at removing data localisation restrictions would increase benefits for users and providers of cloud computing, as well as for society as a whole to a total of over €19bn between 2015 and 2020[13].

10: *The Costs of Data Localisation: Friendly Fire on Economic Recovery*, ECIPE, 2014.
11: *EC Staff Working Document accompanying the EC Communication on Building a European Data Economy*, January, 2017.
12: *Facilitating cross border data flow in the Digital Single Market*, London Economics, 2016.
13: *Measuring the economic impact of cloud computing in Europe*, Deloitte, 2016.

Figure 3.1 Data localisation measures per sector/type of data



Source: Staff working document on the Free Flow of Data and emerging issues of the European data economy, accompanying the Communication on Building a European Data Economy, January 2017

Access and re-use of non-personal machine-generated data

In the IoT (Internet of Things) or smart devices context, non-personal machine generated data do not have a specific regulatory framework, as regards their access, transfer and re-use. There is no clear framework either for interoperability, portability or standards in relation to non-personal machine-generated data. The EC is currently analysing the extent to which this type of data are exchanged and traded and whether there is a need for any regulatory or EU policy initiative to foster access and re-use of this type of data and incentivise the sharing of such data. As for the possibilities for addressing the issue, the EC is considering the following: a) guidance on incentivising businesses to share data; b) fostering the development of technical solutions for reliable identification and exchange of data; c) default contract rules; d) access for public interest and scientific purposes; e) data producer's rights; f) access against remuneration.

A number of companies are opening up some of the data they hold through Application Programming Interfaces (APIs) for access by third party applications. However, making data available to third parties remains uncommon. Data sharing can take a number of forms: merger & acquisition and venture capital investment, joint ventures, data trading among independent economic operators, the usage of data innovation spaces or adding data gathering and analysis to traditional services and products. However, data trading among independent economic operators accounts for a very low number of companies[14].

As a comprehensive policy framework does not exist, the solution in the meantime is largely left to contractual agreements. The most common issues occurring in complex data clauses are: the possibility for a party to re-use or communicate data to third parties; ownership of data generated or processed; allocation of any IP rights at stake

14: "Impact assessment support study on emerging issues of data ownership, interoperability, (re)usability and access to data and liability (Deloitte, first interim report forthcoming)", on *EC Staff working document accompanying the EC Communication on Building a European Data Economy,* January 2017.

generated by technical devices; and the extent to which parties who have access to data are allowed to commercialise it[15]. Sector-specific legislation regulates access to privately-held non-personal or anonymised data in certain contexts. For instance, access to in-vehicle data for the purpose of opening up the market for after-sales services like maintenance and repair is subject to a regulated regime. Also, the PSD2 (new Payments Services Directive) opens up payment information under certain conditions, affecting both personal and non-personal data.

Liability, interoperability, portability and standards

As for data products based on IoT (Internet of Things) or AI (Artificial Intelligence), highly complex interdependencies which are being formed between their different layers are significant elements of their operation. When damages occur in the context of the use of such technologies, legal challenges arise in relation to liability assignment, as well as regarding product compliance, safety and insurance-related aspects. Liability in relation to IoT products and services has been identified as a specific issue to be tackled as part of the Digital Single Market Strategy. The EC has invited stakeholders to explore the feasibility of other approaches that may provide interesting avenues for addressing this challenge. Discussions revolve around the following options: a) strict liability regime; b) risk-generating approach; c) risk-management approach; d) voluntary or mandatory insurance schemes.

Portability is understood as the ability to move, copy or transfer data. The GDPR introduces a portability right in the context of personal data, so that data subjects can benefit under certain circumstances and download their data or have their data directly transmitted to another service provider. However, uncertainty remains as regards portability in a non-personal machine-generated data context. Data portability considerations are closely related to questions of data interoperability, which enables multiple digital services to exchange data seamlessly, facilitated by appropriate technical specifications and standards. According to the EC, there are several possible ways to tackle this issue: a) developing recommended contract terms to facilitate switching of service providers; b) developing further rights to data portability; c) sector-specific experiments on standards.

Conclusion

Data has become the new oil of the twenty-first century and the EC is aware of it. European authorities are now analysing and engaging in a dialogue with the industry and other stakeholders to foster data-driven services and the free flow of data within EU borders. Data localisation restrictions for other reasons apart from the protection of personal data, access and re-use of non-personal machine generated data, liability, interoperability and standards in this context are among the issues to be tackled by the EC in its Free Data Flow Initiative. The EC is aware that before reaching conclusions, there is a need to test these issues in a real-life environment in partnership with stakeholders.

15: Legal study on ownership and access to data, Osborne Clarke for the European Commission, 2016.

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