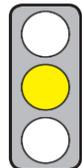


KEY ISSUES

Objective of the Communication: The Commission wants to facilitate the cross-border flow of data by creating a "data economy", enhancing digital interoperability inter alia by way of standardisation, improving the digital skills of employees and digitising public services.

Affected parties: Companies, authorities and citizens.



Pro: (1) The free flow of data within the EU can lead to significant cost reductions.

(2) The 'Once Only' principle whereby the electronic data of citizens and companies is only recorded once, increases the efficiency of public administration and reduces bureaucracy costs.

Contra: (1) Administrative action to combat lock-in effects which make it more difficult to change ICT service providers are only justifiable for cases involving anti-competitive practices by powerful providers with a dominant market position.

(2) The conflict of objectives in the case of standard essential patents – standards are intended to open up the market whilst patents aim to achieve a time-limited monopoly – is reasonably resolved by way of the existing "FRAND terms" so there is no need for action by the Commission.

CONTENT

Title

Communication COM(2015) 192 of 6 May 2015: **Digital Single Market Strategy for Europe**

Brief Summary

► Context and objectives

- With the Digital Single Market Strategy, the Commission wants to make the EU the "leader of the digital economy", combat the "fragmentation" of digital markets and break down barriers.
- The strategy consists of three pillars:
 - Pillar 1: Better cross-border online access to goods ([cepPolicyBrief](#)),
 - Pillar 2: Creating the conditions for digital networks and services ([cepPolicyBrief](#)) and
 - Pillar 3: Maximising the growth potential of the digital economy (this [cepPolicyBrief](#)).
- Pillar 3 covers, in particular, the following subject areas:
 - building a "data economy" (big data, cloud services and the Internet of Things),
 - interoperability and standardisation particularly of "digital components",
 - digital skills and expertise and
 - e-government.

► Building a "data economy"

- Big data, cloud services - such as the storage of data on external servers - and the Internet of Things, which enables communication between objects, are "central" to the EU's competitiveness. Companies are unable to make full use of the economies of scale to which this gives rise because (p. 14)
 - some Member States have requirements to keep data inside their territory which means that local data centres have to be set up, and
 - fragmented copyright rules and a lack of clarity over rights to use data further obstruct inter alia the development of cross-border data use.
- The cross-border transfer of data between services is also obstructed by
 - a lack of "open and interoperable systems" (p. 14) and
 - cloud service contracts which limit the liability of the provider for loss of data or make it difficult to terminate the contract (p. 14).
 This gives rise to lock-in effects.
- In order to free the cross-border flow of data in the EU from the legal and technical obstacles which currently exist, the Commission wants to build a "data economy". For this purpose, it will submit a European "Free flow of data" initiative and "a European Cloud initiative" in 2016. The subject areas of the initiatives are inter alia (p. 15 and 20):
 - reducing the restrictions imposed by Member States on cross-border data traffic and on the location of data for storage or processing purposes,
 - questions relating to the ownership of data, the usability of data and access to data such as in the case of machine-generated data,
 - cloud services certification, cloud services contracts, switching of cloud services providers.

► **Interoperability and standardisation particularly of "digital components"**

- Interoperability plays an important role particularly in relation to digital components such as devices, networks or data storage (p. 15).
- In 2015, the Commission wants to "revise and extend the European Interoperability Framework" - which aims to improve the interoperability of public services such as by the use of common terms [Communication COM(2010) 744].
- Standardisation plays "an essential role" in interoperability, especially in the case of new technologies such as the digitisation of manufacturing (Industry 4.0), cloud services and mobile payment services. Industry often determines for itself ("bottom up") which standards to develop. However, this increasingly takes place outside the EU which undermines the EU's competitiveness. (p. 15)
- The "missing technological standards" necessary for new technologies will be identified. In 2015, the Commission therefore wants (p. 16 and 20) to launch an "integrated standardisation plan" focussing on standards in the areas of health, transport, environment and energy. Another "essential instrument" is the "EU Rolling Plan" for the standardisation of information and communication technology (ICT), which contains the EU's priorities for standardisation. European standardisation bodies will then be mandated with "fast" delivery of the standards which are identified (p. 15).
- The Commission wants to stand up for "fair licensing conditions" and a "balanced framework for negotiations" between right holders and users of "standard essential patents" (p. 15).
 - Standard essential patents are patents which are essential for compliance with standards. Companies that are not the owners of patents have to acquire licences in order to use them. (p. 15)
 - Standard essential patents are a common feature of the digital economy in particular.
- Standards do not always result in interoperability as their use is voluntary. In order to promote the adoption of standards, especially in relation to public procurement, Member States have created catalogues of ICT-standards and interoperability specifications. The Commission believes that "integrating" these catalogues into EU catalogues would be sensible. (p. 15 -16).

► **Digital skills and expertise**

- The Commission estimates that by 2020 there will be 825,000 unfilled vacancies in the digital economy due to the shortage of skilled employees. In addition, there is also "a long way to go" when it comes to the digital skills of EU citizens. (p. 16)
- Responsibility for curricula lies with the Member States. The Member States "urgently" need to address the "essential digital skills" of e.g. employees and job seekers (p. 16).
- The Commission wants to make digital skills and expertise a key component of its future initiatives on skills and training e.g. for employees and job seekers. It wants to improve recognition of digital skills and qualifications and increase the "level of ICT professionalism". (p. 16)

► **E-Government**

- The Commission believes that more can be done to modernise the technology of public administrations, achieve cross-border interoperability of electronic public services and facilitate easy electronic interaction between authorities and EU citizens (p. 16).
- In 2016, the Commission wants to submit a new e-Government Action Plan for 2016-2020. The components of the plan include (p. 16 and 17):
 - A pilot project for using the 'Once Only' principle whereby public authorities only have to record the electronic data of citizens and companies once and can then continue to use it and - subject to compliance with data protection rules - can pass it on to other public authorities. The Commission thereby wants to increase the cost-efficiency and quality of public services.
 - The interconnection of business registers by 2017. This and the 'Once Only' principle will enable EU companies to expand their operations online to other Member States and become pan-European within a month.
 - The accelerated introduction of an exclusively electronic public procurement process. The Directives on public procurement from 2014 provide for the transition to electronic procurement by October 2018 (2014/24/EU, see [cepPolicyBrief](#) and 2014/25/EU, see [cepPolicyBrief](#)). In this regard, the Commission calls for "increased efforts" by the Member States.

Policy Context

Commission President Juncker has declared that the completion of a Digital Single Market is one of the priorities of his period of office. The Commission, Council and European Parliament are currently negotiating a new EU General Data Protection Regulation (see [cepPolicyBrief](#)). In a Communication in 2012, the Commission submitted a strategy on the subject of cloud computing [COM(2012) 529]. The Regulation on European standardisation [(EU) No. 1025/2012; see [cepPolicyBrief](#)] includes rules on the development of European standards. In the area of e-government, an Action Plan 2011-2015 already exists, together with programmes for its implementation. In 2014, the EU passed the Regulation on electronic identification and trust services for electronic transactions [(EU) No. 910/2014; see [cepPolicyBrief](#)], which regulates the cross-border recognition and acceptance of electronic identification means. In Autumn 2015, the Commission launched consultations on standards in ICT, on the free flow of data, cloud computing and e-government.

Options for Influencing the Political Process

Leading Directorate General:	DG Communications Networks, Content & Technology
Leading Committees of the EP:	Internal Market and Consumer Protection, Rapporteur: Evelyne Gebhardt (S&D Group, DE) and Industry, Research and Energy, Rapporteur: Kaja Kallas (ALDE Group, EE)
Leading Federal Ministry:	Federal Ministry for Economic Affairs and Energy
Leading Committee of the BT:	Committee for Economic Affairs and Energy

ASSESSMENT

Economic Impact Assessment

Restrictions imposed by Member States on the free cross-border flow of data give rise to considerable costs because data cannot be collected, stored and processed in those locations where this would be most efficient. It also prevents the use of economies of scale such as in the case of mass data processing. In addition, it is more difficult for companies and authorities to demand innovative services on foreign markets.

Allowing the free flow of data within the EU - building a "data economy" - may therefore contribute to significant cost reductions. This must not obscure the fact, however, that many alleged barriers to the cross-border flow of data are not legal in nature. For reasons of data protection and security, as well as for the protection of trade secrets, many cloud users require data to be stored in their home country. Such barriers are difficult to break down by way of legislative provisions. Although full harmonisation by way of the forthcoming General Data Protection Regulation [COM(2012) 11, see [cepPolicyBrief](#)] may be an important step, **without increasing user confidence in data protection and security, an unrestricted cross-border flow of data is unlikely to be achieved.**

Uncertainty about rights to use data hampers the development of many data-based technologies and services. Thus, in the case of cloud services, there is regularly a lack of clarity about the applicable law and the competent jurisdiction when data is stored or processed in several countries. In addition, in the "Internet of Things" or in the case of "Big Data", data is now frequently generated by machine with no human intervention. Whether machine manufacturers, suppliers or users are the owners of this data - and therefore entitled to use it - is often unclear. In view of the complexity of the value-added chain and the high number of parties involved in it, not all uncertainties can be resolved by way of contract.

Contractual commitments and technical barriers make it more difficult to change supplier (lock-in effect) and thus also restrict competition for customers. Contractual provisions such as limitations of liability and long notice periods for cloud services are, however, unproblematic as long as there is sufficient competition between the service providers. In that case, providers will not be able to impose their contractual conditions on users. Technical barriers - such as the inability to assign data to another provider due to a lack of interoperability - are often the direct consequence of the development of an innovative service. The developer is entitled to protection against the straight-forward "imitation" of his idea as otherwise the incentive to innovate will decline. **Government action to combat lock-in effects is therefore only justifiable in cases involving anti-competitive practices by ICT service providers with a dominant market position.**

The Commission's statements on "missing technical standards" for "digital components" do not make it clear whether the Commission plans to intervene more strongly in the standardisation process. This would only be justifiable, if at all, where the private economic operators involved are unable to agree on standards due to insurmountable problems of coordination. Otherwise, due to the lack of knowledge of the market on the part of policy-makers, there is a risk of standards with little market relevance, over-standardisation due to bureaucratic action and a policy which is not technology-neutral and could hinder superior technologies. The Commission should therefore coordinate closely with the relevant economic operators on the plans containing its priorities for the future standardisation process.

In the case of standard essential patents, there is a conflict of objectives: whilst standards serve to open up the market and to spread innovation, patents aim to bring about a time limited monopoly for the

holder of the patent in order to maintain incentives for innovation and investment. Licensing conditions for the use of standard essential patents, which are balanced and take account of both aspects, are therefore necessary. **The currently used "FRAND terms"** ("Fair, Reasonable And Non-Discriminatory"), under which a standard can only be established if the holder of the patent consents to the issue of licenses under "fair, reasonable and non-discriminatory conditions", **provide a reasonable balance. There is no need for action by the Commission.**

The European Interoperability Framework for national e-government services makes it easier for companies and citizens to exercise the basic economic freedoms of the EU. In particular, they facilitate the establishment of companies and the ability to take up work in other EU countries. Overall this strengthens the internal market. The digital transformation of society gives rise to new areas of business. This change requires the building and development of digital skills and expertise particularly among employees. More important than European initiatives on skills and vocational training is the cross-border recognition of these qualifications. This increases mobility of employees who are able to deploy their qualifications in those locations where they are most needed.

The 'Once Only' principle, whereby the electronic data of citizens and companies is only recorded once, increases the efficiency of public administration and reduces bureaucracy costs. This avoids duplicated structures and repeated, time-consuming requests for data. The increase in data exchange between authorities must, however, be arranged such that the transfer of personal data between authorities does not circumvent existing data protection regulations.

Legal Assessment

Legislative Competency

The EU can base legal acts, in particular, on the internal market competence (Art. 114 TFEU) and on the power to coordinate national provisions concerning the taking-up and pursuit of self-employed activities (Art. 53 (1) TFEU). In the field of general education, the EU has the power to undertake supportive action, and in the field of vocational training to take measures to achieve EU objectives. This does not permit harmonisation of the legal and administrative rules of the Member States. The Member States are responsible for organising general education and vocational training. (Art. 165 and Art. 166 TFEU)

Subsidiarity

Dependent on the design of the follow-up measures. Likely to be unproblematic, however, due to the cross-border nature of the internet.

Proportionality with Respect to Member States

Dependent on the design of the follow-up measures.

Compatibility with EU Law in other Respects

Dependent on the design of the follow-up measures.

Impact on German Law

Dependent on the design of the follow-up measures.

Conclusion

Allowing the free flow of data within the EU - building a "data economy" - may contribute to significant cost reductions; without increasing user confidence in data protection and security, however, an unrestricted cross-border flow of data is unlikely to be achieved. Government action to combat lock-in effects, which make it more difficult to change ICT service providers, are only justifiable for cases involving anti-competitive practices by providers with a dominant market position. The conflict of objectives in the case of standard essential patents – standards are intended to open up the market whilst patents aim to achieve a time limited monopoly – is reasonably resolved by way of the existing "FRAND terms" ("Fair, Reasonable And Non-Discriminatory") so there is no need for action by the Commission. The 'Once Only' principle, whereby the electronic data of citizens and companies is only recorded once, increases the efficiency of public administration and reduces bureaucracy costs.