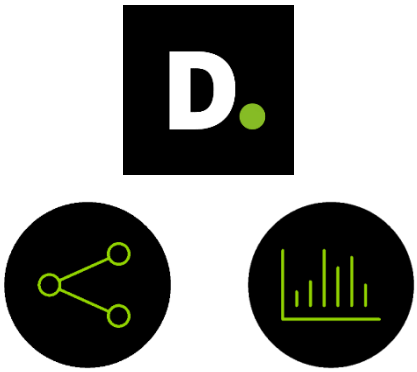
European Commission

Workshop with the Member States on the emerging issues of the data economy

Summary of the discussion

This summary report of the workshop with the Member States on the emerging issues of the data economy is provided by the consortium carrying out the "study on emerging issues of data ownership, interoperability, (re)usability and access to data, and liability' composed of Deloitte Belgium, Open Forum Europe, Open Evidence and Timelex. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the European Commission.



SUMMARY REPORT

Of the Workshop with the Member States on the emerging issues of the data economy

Summary of the event

19 Member States took part in the workshop on the emerging issues of the Data Economy hosted by the European Commission (jointly by DG Connect and DG Justice). The purpose of the workshop was twofold: on the one hand, the Commission aimed at collecting data and evidence on practices and initiatives at the national level concerning access and reuse of data as well as liability. On the other, the Commission wished to discuss these emerging issues with the Member States and presents the status of the reflection taking place at the European level on possible policy options on these matters.

Several key pointers for future policy action emerged from the experience and current preferences of the Member States:

- On liability, while the importance of the issues is acknowledged, the state of progress of internal discussions in the Member States is very heterogeneous. The main message sent by Member States was that any initiative at European level would need to be discussed further and carefully considered before considering about improvements and modifications of the current legislative framework. Priority should be given to additional analysis of the situation as well as to supporting the innovative businesses who have already been encountering these emerging barriers in form of legal uncertainty, for instance through legal guidance and legal clarification. Moreover, some Member States encouraged the European Commission to think beyond policy silos of sector-specific policies like on connected cars and consider the question of liability as horizontal issue. Finally also other, ethical implications of artificial intelligence like discrimination or transparency of algorithms should be considered..

- On access and reuse of data, Member States' positions are not crystallised yet. Most of the Member States in fact are gathering evidence at the national level and consulting stakeholders to elaborate more defined approaches on this matter. For this reason, Member States advocate against any hard policy measure at this stage. Nonetheless, soft policy measures could definitely be encouraged. In this regard, the initiative concerning standard contracts promoted by the Netherlands (Dare2Share) was discussed in depth. In fact, as emerging from this Dutch experience, the promotion of standard contracts could favour more access and reuse of data and facilitate negotiations without hampering contractual freedom which remains essential at this stage of market development.

- Further to the debate on access and reuse of data and liability, Member States also discussed the question of the promotion of the right skills within the data economy. In this respect, Ireland shared the experience of the computer literacy initiatives carried out in Irish schools and the United Kingdom also illustrated their measures in this domain.

In general, Member States agreed that the data economy has not reached yet full maturity, which is the reason why substantial evidence is lacking on these emerging barriers, their impact and possible solutions. In conclusion, for the moment Member States do not support new legislation aimed at tackling the emerging issues of the data economy. However, soft policy measures and

initiatives facilitating SMEs and start-ups for instance should be encouraged while the market situation is constantly monitored. Based on this continuous analysis of the situation, this debate on emerging barriers should be further expanded at the European level through structured dialogue between the Commission and the Member States.

Workshop minutes

Welcome and introduction from the European Commission

Yvo Volman (Head of the Data Policy and Innovation unit at DG Connect) and Dirk Staudenmayer (Head of the Contract Law unit in DG JUST) kicked off the event by welcoming the participants and introducing the background of the workshop; they explained that the workshop is part of a consultation process launched by the European Commission in the context of the "Building a European Data Economy" Communication of January 2017. The aim of this consultation process is to identify new and emerging barriers that inhibit further development of the data economy. As the European Commission illustrated in this occasion, the consultation process is made up of several workshops and a public consultation (which lasted until April 2017 and of which the results will be published in July 2017). Preliminary insights on the outcome of the consultation were provided; in this respect, the Commission mentioned that more than 380 answers from stakeholders were received and that around one third of respondents to the consultation were SMEs. Moreover, it was explained that most of the respondents agreed in identifying geographical restrictions as a barrier that should be dealt with through new legislation at the European level. In relation to access and transfer of data, a majority of respondents supported the idea that companies should be able to access data more and more easily. However most respondents do not favour hard policy intervention but rather soft policy measures to deal with this issue. Concerning liability, it was argued that most consumers and businesses are not fully aware of the applicable legislative framework and that this domain might need clarification. Finally, in relation to data portability, it was mentioned that although the portability of data is high in demand amongst businesses and consumers, it is currently low in supply within the market.

Iordana Eleftheriadou provided a short overview of DG GROW's approach towards the data economy's challenges and opportunities. After underlining the benefits linked to encouraging even further the data economy, she mentioned how this was considered as a big opportunity by CEOs attending the Hannover Messe event. In this regard, the participants to this event elaborated six precise recommendations, advocating, among other things, for a sector by sector analysis of the opportunities for the development of European business platforms. Moreover, it was explained that DG GROW is particularly exploring the issues and analysing the situation of two sectors, which are the automotive and health sector:

- With respect to the automotive sector, it was mentioned that autonomous vehicles could reach 20% of new car sales by 2025. Although Europe is leading at the global level when it comes to automotive manufacture, it is lagging behind with regard to digital platforms and IT networks. This potentially pushes European car manufacturers into the hands of global

companies such as Microsoft and Google. For this reasons, the development of European standards and interoperability approaches is fundamental.

- Concerning the healthcare sector, this is also experiencing tremendous transformation and it relies more and more on data coming from different sources. However, the European health data universe is currently too fragmented to be efficiently exploited, which brings the most advanced European smart health providers to turn to the US when looking for partnership opportunities. Standards and the increase of interoperability can help retaining more investments in Europe.

To summarise, building on the experience of the automotive and health sector, it becomes clear that Big Data and B2B platforms are opportunities Europe cannot miss. In this regard, it is necessary to accelerate the deployment of the data economy. This is one of the objectives of the COSME programme, which is funding some projects aimed at creating pilots in relation to (i) the connected car and (ii) the unified European diabetes related data sets and applications.

Presentation of the preliminary results of the study

After the introduction provided by the European Commission, Mr. Patrick Wauters (from Deloitte) and his team presented the preliminary results of the ongoing study on the emerging barriers related to the data economy. 10 case studies (each covering a different sector) were considered, with stakeholders from those sectors being contacted in order to obtain relevant insights and map the new business models. At the same time, a general and statistically relevant survey was developed aiming at obtaining quantitative evidence on the trends in the sectors covered by the assignment. The presentation of Deloitte covered the two topics of the workshop:

- Access and reuse of data and (Part I)
- Liability (Part II)

Part I : access and reuse of data

As the preliminary results of the study suggest, when new products are developed, and those products are based on data, the development tends to take place in-house. Indeed, currently data sharing and reuse is quite rare, being limited to only 2% of business data[1]. Despite data sharing and reuse currently concerns only a limited number of companies in Europe, the general stakeholders survey showed that there is an appetite for more data, with businesses considering that further access to (in particular machine generated and process generated) data could help them improving existing services as well as delivering completely new services. Regarding the issue of access to data, the evidence collected is contradictory. A majority of respondents to the general survey carried out by the study team replied that their companies can access the data that they

[1] Source: the European Data Market Monitoring Tool, IDC 2016

need. However, many of the stakeholders interviewed said that data access is a problem and this is also confirmed by the preliminary analysis of the data emerging from the public consultation, as mentioned above. Several reasons could possibly help understanding this contradiction:

- As only 6,3% of EU companies are intensive "data users"[2] access to data is not (yet) a problem for the majority of companies in Europe - but it is a problem for the most innovative ones.
- Companies can access the data they strictly speaking need for their business, but would like to have more to provide new products and services beyond what they currently offer.
- It depends mainly on sectors, as in certain sectors (e.g. automotive) access to data is critical while in other is less important.
- There is no common understanding of what data means, which entailed different interpretations of the question.

Further to these explanations, the study tested a number of possible barriers related the problem of access to data for the businesses expressing concerns in this respect. In particular, the following barriers were discussed:

- Data not being made available by data holders: this could happen as a result of many reasons, such as for instance the risk of sharing sensitive information, legal and value uncertainty, technical barriers and lack of skills. In some sectors, access to certain data is granted by law but in many others this is not the case and data holders can simply chose to keep the data for themselves.
- Difficulty in valuing data: the value of data is highly uncertain and can only be established at point and moment of use (experience good). Data holders tend to overestimate the value of their data while across all sectors, the value creation lies in the analytics layer, not in the data themselves. Traditional economic theories predict that uncertainty leads to hierarchy based solutions (in-house and acquisition) rather than market (reselling). Data marketplaces do not work (yet) as pure transaction markets, but rather as curators of public and commercial data.
- Technical interoperability: this remains a barrier and a source of high cost – data wrangling typically takes up the majority of resources of a data project. 86% of the data users and re-users identified lack of interoperability and technical standards as a blocking factor or very important barrier preventing them from deploying new business models. Yet interoperability is also a cost in itself, and especially difficult to achieve for proprietary data from machinery. Nonetheless, there is a market trend towards greater openness and interoperability of data.

[2] Source: the European Data Market Monitoring Tool, IDC 2016

- Other barriers were also mentioned, such as difficulties in establishing "data ownership", lack of data portability or lack of skills can also play a role in limiting the access and reuse of data of companies.

Based on the identification of the abovementioned challenges and the inputs provided by the European Commission Communication on Building a Data Economy, the study team illustrated the preliminary range of policy options that could be envisaged. In addition to the "no intervention" options, other measures can be mapped based on:

- Their sectorial or horizontal nature
- Their hard regulatory or non-regulatory nature

Concerning data access and reuse, it could be envisaged to establish data producers' rights either at sectorial level or horizontally through legislative hard measures. Alternatively, the European Commission could help the data economy through developing sectorial or horizontal standard contract clauses or fostering best practice exchange and funding research. Similarly, concerning data interoperability and portability, it could be decided to act through mandatory portability rights and API and data formats or to privilege non regulatory approaches and provide guidance and recommendations in the areas of portability, APIs and standards as well as foster coordination and research in these domains.

Part II: Liability

Concerning the subject of liability, the study team explained that four key questions are emerging from the data collected and deserved to be analysed. The first question concerns the diversity of the concepts of liability and damages, and the scope of the current legal framework. Indeed, a mapping of the legal practices in the 28 Member States showed that interpretation of this concept and legal regimes varies from country to country. Secondly, the question of applicability of the existing laws to the emerging data technologies was also raised: the line between services and products is in fact harder (and perhaps less meaningful) to draw for technologies such as IoT, drones and artificial intelligence. This makes the interpretation and application of legislation difficult for all stakeholders involved, especially since the harmonisation of product liability is significantly more advanced than for service liability. It is for instance not clear to what extent software or digital data (isolated from a material carrier) can be considered a 'product' across the EU, or how complex offerings that contain a product component and a software component – potentially from different manufacturers) – should be assessed.

A third issue concerns the key role given under product liability law to the concepts of defect and safety of the products. This is traditionally tied to the expectations of safety that the user is entitled to have. However, how should this be assessed for autonomous devices and machine learning, where a product (or a service related to a product) begins to behave in a manner that creates unforeseeable risks. The safety question nowadays also involves the changing role of users

of products and services: whereas traditionally their role was limited to consuming, they now might be asked to participate in the maintenance and evolution of the systems through for instance software updates or by training their products and applications. It is not clear if and to what extent this would affect the liabilities of producers.

Finally, a fourth set of questions regards the effectiveness of the existing legal frameworks and especially when it comes to defining who is responsible for defect in case of composite complex products and services. The identification of the correct (liable) producer may be impossible for an average user, especially given that they bear the burden of proving the defect, the damages, and the link between both. In a robotics and IoT environment, this complexity risks eroding the effectiveness of the legal protection.

Finally, to have a complete view on liability within the data economy, it must also be recognised that complementary laws can exist that affect liabilities in a particular ecosystem, such as laws dealing with drones or self-driving cars, and this can lead to a fragmentation of liability approaches across Member States. To deal with these emerging liability issues, one could decide to rely on sectorial/horizontal and hard/soft policy measures, in addition to the "no intervention option". The hard regulatory measures could include sector specific legislation on minimum liabilities to be borne by certain service providers in certain sectors (e.g. those putting products with an elevated risk profile on the market, such as robotics or IoT manufacturers), or a general revision of liability law (e.g. expanding the scope of the Product Service Directive to unambiguously include data and software, establishing liability allocation based on a risk-opening approach or risk management approach etc.). Alternatively, soft policy measures could include:

- Recommended liability provisions, including model contract clauses and best insurance practices in a specific sector or in general
- Identifying appropriate standards for safety assessments and certification in a specific sector or in general
- Establishing Member State specific coordination and cooperation mechanisms to address cross border data economy challenges
- Funding innovation and research, including in particular in relation to industrial / big data platforms.

Based on these presentations, a debate took place touching upon some key elements such as the access and reuse of data for data analytics companies and the possible preference for horizontal or sector specific approaches, based on the data collected so far.

The Member States' perspective on Liability – moderated roundtable

After the presentation on the ongoing study, the European Commission asked for the Member States' inputs and insights on the issue of liability and especially on the key questions raised. The United Kingdom made a point concerning the opportunities and challenges of liability in the data economy: on the one hand in fact, the more complex the systems are, the harder it will be to trace faults. On the other hand, the more data is available, the easier it gets to identify precisely what went wrong. Therefore, it is important indeed to examine the risks of these new systems with respect to liability but it is also important to keep an open mind and see the positive side of the coin: more data can also mean better options for identifying defects and the responsible parties.

The Commission agreed on this open mind approach and explained that, nonetheless, Europe must be ready for the future as developments happen very quickly. The Czech Republic asked whether there is a relationship between product liability and the proposal for a digital content directive, especially with respect to this issue of liability. The European Commission explained that

- the digital content directive only concerns contractual liability for defective digital content
- applies only in case of a B2C relationship and
- the directive excludes extra- contractual liability for damages and,at least in the version discussed by the Council, also contractual liability.

Finland suggested to avoid working in policy silos when it comes to the digital economy. Indeed, a more horizontal and open approach is needed, also in relation to liability. To establish liability, one should first assess the role of data producers and users - as well as data itself – in the different value chains. Liability is in fact closely linked to rights to access and reuse of data. One way forward could be then to look at liability and data access rights altogether. Ireland supported the point of Finland on horizontal approaches. Indeed, it must be clear that the policy debate is not currently stuck in the "self-driving cars silo". THe Commission work should help considerably to communicate the message to Member States that liability is not to be seen in isolated sectors; it should rather help raising awareness of these emerging barriers at the Member States level. The Commission replied to this by mentioning that there is in fact a lot of focus on self-driving cars, but as the presentations showed it is certainly not the only issue considered when thinking about liability. The Commission also suggested that it might be too early to define whether approaches to liability should be sector based or rather horizontal.

Germany asked whether the Commission is looking into the question of algorithmic transparency and accountability as well as discrimination caused by biases of artificial intelligence. The Commission recognised that this is an important issue.

France thanked the speakers for the presentations and asked whether the Commission has looked only into the Member States existing liability frameworks first or has also searched for experiences

in this domain worldwide. The French representative added that it might be premature to come up with a completely new framework for liability especially if the national approaches are still relevant. The Commission answered that the study focused on the EU and that an assessment of the Member States situation was also performed. On whether there is a need for adaptations of the legislative for liability, the Commission agreed that it is first necessary to find out whether there is a problem that requires to be solved through legislation.

Luxembourg asked whether one could build on any lessons learnt from the digital content directive to approach this liability issue. The Commission answered that the situation is different between contract law, covering digital contents, and liability.

Denmark expressed the view that the Member States currently do not have enough information at this point in time to provide good answers to all the questions raised, also because companies themselves have not been confronted long enough with these issues and they do not know in which directions the market will evolve either.

The Member States' perspective on access and reuse of data – moderated roundtable

In the afternoon, the session was dedicated to the discussion on access and reuse of data and the debated started with two presentations, one from the Netherlands and the second from Germany. The representative of the Netherlands introduced the Dare-2-share initiative, which focuses on encouraging data sharing via cooperation agreements amongst stakeholders' position along the data value chain. For this purpose, the Netherlands developed model contracts with the aim of creating awareness of opportunities and risks as well as of creating trust amongst stakeholders by providing them with a negotiation starting point. This has proven to be very successful and smaller companies also provided a positive feedback on this initiative.

Germany presented the White paper for Digital Platforms, a discussion paper issued by the German Ministry of Economic Affairs and touching upon many elements of the data economy including access and reuse of data. The paper is based on a broad consultation process and supports the idea that regulatory sandboxing is very useful when dealing with platforms, in order not to overregulate the market. Germany also underlined that, although the discussion on "data ownership" for instance was mainly driven by German academics, the stakeholders consulted did not show particular support for this "ownership" approach to the data economy.

Following these presentations, the European Commission asked to the Member States to provide feedback on the barriers to access and reuse of data discussed and on any relevant policy initiative undertaken at the national level in this particular domain.

The United Kingdom mentioned that the British government is very keen on gathering evidence on these emerging barriers especially through consulting stakeholders in order to develop a coherent national approach. The general election slowed down this consultation process but the United Kingdom insists on the need to look for feedback and evidence where these are available and

especially within the academia and by discussing with businesses. The Czech Republic is also carrying out a national consultation of stakeholders, although it just started. Despite this early stage, companies already provided some food for thoughts. In particular, it emerged that one of major concerns for businesses is the differentiation between personal and non-personal data as the border between the two is blurred. Furthermore, the question of how to distinguish between simple "raw data" was also raised, as once again, the differences might not always be straightforward. Finally, the Czech Republic mentioned that, if default contract rules are established, businesses might suffer from less contractual freedom, which could also lead to negative implications for consumers. In response to this, the Netherlands stated that whilst model contracts have been developed under the Dare2Share initiative, these only constitute the starting point for negotiations, and therefore do not represent a barrier for the contractual freedom of companies. Moreover, model contracts were developed in a very participative manner and by including business of various sizes and positioned in different places of the value chain. Of course, reliance on standard contract cannot completely set aside the risk of unfair contractual practices, especially if larger companies do not accept the standard rules.

Finland intervened to describe the country approach to the access and reuse of data. From the Finnish perspective, it is important to address access and reuse of both public and private data as both are relevant. An example for this is the concept of mobility as a service which is currently developed by the Finnish government and which builds on both open data and business data. Another important subject is the question of legitimacy and relevance of data anonymization. Indeed, personal data can change of category and become non-personal if anonymised. However, companies are still unsure about how to approach this. Moreover, as emerged from a recent survey conducted in Finland, companies do not yet clearly see the value of sharing data with third parties. Also for this reasons, there are ongoing initiatives in the country pushing for the development of contract clauses, similarly to what is happening in Netherlands.

The Commission asked then whether there was any interesting approach developed at the national level on other barriers such as the issue of valuing data or the question of skills and how to improve them. Ireland mentioned some initiatives of its Ministry of Education aimed at improving digital skills and the UK added that, also in this country, there are several initiatives having the objective of improving digital literacy by integrating digital skills in schools' curricula. In general, it was acknowledged that there is a need to upgrade data skills in all countries

Denmark recently conducted a study on barriers for businesses, and learned that there is a big gap between companies when it comes to maturity in dealing with data. Immature businesses were characterised by a lack of knowledge on how to use and value data. Therefore the issue of skills is particularly relevant to them. On the other hand, the more mature businesses mentioned legal barriers as main obstacles for deploying innovative business models. Therefore, further research on all these barriers and providing guidance to innovative businesses should be the priorities of the European Commission at this point in time.

Reacting to this, the Commission asked if having a competency centre concerning these emerging barriers and providing material and guidance could be useful. Denmark answered that indeed, this could help, also based on a similar experience concerning the topic of privacy. Romania intervened and advocated to a Member States customised approach to data collection. It was argued that the subject is very new and complex and meeting with stakeholders in the different Member States would help the Commission in framing the debate. Following these remarks the European Commission asked which approaches should be privileged in order to continue working on these emerging barriers. For a number of Member States, the first step would be to raise awareness on the possibilities related to further access and reuse of data and foster the data economy through support for standards, contract clauses and sharing of best practices. Secondly, the Commission needs to increase the level of trust amongst stakeholders. In addition to these steps, Finland also advocated for the development of a number of principles underlying the European data economy and touching upon topics such as the Free Flow of Data, privacy by design and data security. This would allow to start from something more concrete while waiting for stronger evidence. This approach has been adopted by Finland and will be developed at the ministerial level. Slovenia also commented on the best approach for moving forward. It was mentioned that regulatory intervention can only be justified by market failure. For preparing the workshop, Slovenia sought evidence of this market failure but could find none at the moment. Therefore, starting with contract models seems an appropriate approach. It was also mentioned that Slovenia is planning to develop an IoT public platform similar to the open data platform of the government and accessible to anybody. Building on the Slovenian intervention, Netherlands pointed out that standard contracts can also help spotting market failures if these exist as they are a way of structuring the relation between different stakeholders.

Finally, the European Commission mentioned the barriers related to interoperability and portability of data. Member States argued that there is work going on at the national level on these issues and Finland particularly mentioned the need to further consider structured data model and the issue of multilingual data models.

Concluding remarks and next steps

Summarising the main discussion, the Commission underlined that it was understood that the positions of the Member States are not yet crystallized, also due the fast evolving nature of these emerging issues. Therefore, the Commission encouraged the Member States to continue raising awareness and carry out collection of data at the national level, while further workshops on these subjects will be organised in the future to report on new developments.