ANDRUS ANSIP
VICE-PRESIDENT OF THE EUROPEAN COMMISSION

Brussels, 08. 07. 2015
ARES (2015)

Mr Benoît Potier
Chairman, ERT
Chairman and CEO, Air Liquide
Karabiniersplein/Place des
Carabiniers, 18a
1030 Brussels
Belgium

Dear President,

On 1st of June, the high level meeting between European Round Table of industrialists (ERT) member CEOs, Chancellor Ms Merkel, President M Hollande and the Commission President M Juncker focusing on the development of the digital economy and the Digital Single Market took place in Berlin. Several themes of interest were identified during the discussions: free flow of data, connectivity, state aid rules, start-ups and level playing field in the area of telecommunications.

As a follow-up to this discussion I have the pleasure to invite you and your fellow CEO colleagues to participate in the working seminar on 20th of July in Brussels with me and my colleagues, Commissioner Oettinger and Commissioner Moedas on free flow of data issues.

Please find attached more detailed information regarding the programme and questions for discussion.

We have been in contact throughout the process with the ERT office in Brussels but if there are any further issues or questions concerning this event, please contact M Jorgen Gren, Member of my Cabinet at jorgen.gren@ec.europa.eu (or +32-498 957 394).

I am looking forward to engaging with you in a lively discussion on 20th of July.

Yours sincerely,

Andrus Ansip

Annex: Working Seminar Programme and the framing questions for the discussion.

RUE DE LA LOI, 200 - B-1049 BRUSSELS - TEL. +32-2-295 54 34 - E-MAIL: andrus.ansip@ec.europa.eu

Meeting European Commission and European Round Table of Industrialists,

Brussels, 20 July 2015

Key Conclusions and Recommendations (data economy)

The meeting was a follow-up to the high-level meeting between ERT member CEOs, Chancellor Merkel, President Hollande and President Juncker, focusing on the development of the digital economy and the DSM in Berlin on 1 June 2015. A second high level meeting will take place in Paris in October 2015. The meeting theme was "Data economy and free flow of data in the EU", list of attendance in annexe.

It was agreed that the importance of data cannot be overstated by policy makers and industry as a growth sector for the European economy with some 40% growth per year, seven times faster than the IT market. It was also agreed that big data and cloud adoption can contribute to GDP growth and jobs: cloud computing can contribute a total of €450 billion to the EU GDP between 2015 and 2020, and lead to the creation of an additional 1 million jobs. Finally, it was noted that this will bring disruptive technological changes with the multiplication of Internet of Things connections from approximately 1.8 billion in 2013 to almost 6 billion in 2020 but that Europe ready for big data and cloud as only 29% of larger EU companies see themselves as ready for these technologies while more than 50% say they are not. For the SMEs the picture is worse, only 6% of SMEs have adopted big data technologies and only one out of every five enterprises in the EU use cloud services.

Digital Single Market (DSM) - general

Industry participants strongly endorsed the Commission's Digital Single Market Strategy which provides the framework to move Europe in the right direction but there is a real pressure to act. Participants noted that there are no further second chances to complete the steps towards a functional DSM. The time is now and law-making should be decisive, showing leadership on the DSM vision. Fragmentation in the European market hurts all European companies and does not allow us to leverage the real political and economic power EU has. Therefore, the Commission needs to produce the DSM proposals, in particular on data and cloud but also on other areas like spectrum coordination or facilitation of connectivity and broadband roll-out, in 2015-2016. The industry also called for the Member States and the European Parliament to deliver on these proposals before the end of the current mandate.

VP Ansip and Commissioners Oettinger and Moedas stated their aim of developing a supportive regulatory environment and in that context called on industry to provide further detail on how they consider the future regulatory environment for data should be designed and on where they consider existing regulatory burden can be reduced. One example mentioned was the need to review the e-privacy directive, targeting mainly telecom operators, not other over-the-top actors, with specific rules for handling eg location data.

Data protection and the "free flow of data initiative" (DSM action)

Industry participants emphasised the global dimension of data flows. The DSM strategy underlines that the openness of the European market should be maintained and developed further in the digital sphere. The data protection reform already includes mechanisms for the international transfer of personal data. The EU should ensure full harmonisation of European data protection laws and the creation of globally interoperable data protection regimes that provide effective protection of personal data wherever it is processed.

Industry leaders expressed the desire for rules on data to be adopted quickly but that they should facilitate new business models and leave as much room to the market as possible. In this context, restrictions and enforcement must focus on the activities that are harmful to the rights and freedoms of individuals, based on objective criteria. ERT also noted that consent should be defined as "unambiguous" (rather than explicit) and that clusterization and anonymisation and pseudonymisation as well as better recognition and guidance on these issues are key elements for the industry. In addition, the industry noted that use of technology to limit the sensitivity of information, such as pseudonymisation, should be encouraged.

Data localisation policies that restrict the international free flow of data should be limited to legitimate measures, mainly for the protection of national security. Protectionism should not be a part of the Commission's agenda.

The industry also noted that the importance of separating more clearly personal and non-personal data but that the boundaries are often blurred. Indeed, the same data may be subject to multiple independent uses by multiple players. Therefore, industry is cautious about defining clearly "data ownership" and "non-personal" data.

With regard to cloud services all agreed with the aim of building trust and confidence in cloud computing to increase the take-up of these services, also for SMEs. High productivity and efficiency growth will follow. Industry leaders indicated that there are many different types of cloud services and the issues are not the same across these various services and that companies are likely to use different data models. For this reason, while common standards for data portability may be necessary, there is a need for caution on a one size fits all approach.

In general, it was requested that the Commission should work on a "single space for data" approach and that the Commission should reflect in terms of 4 linked strands in a data value chain but with different issues needing attention as we move along the chain:

1. Generation of data (how do we generate data; what are the right norms, standards, protocols);
2. Transfer of data (this needs to be as free as possible in order to gain scale)
3. Storage of data (not under fragmented rules eg on national basis, the industry needs to have clear and unhindered access).
4. Value of data (this comes from analytics so investments into High Performance Computing and policy to enhance trust in cloud services are needed in the EU).

Industry leaders finally strongly emphasised the need for a coherent strategy on skills, in particular for high level skills such as privacy engineers or big data analysts, and for stronger collaboration between research institutions and the industry. In this context, industry leaders noted that strengthened R&D cooperation under Horizon 2020 is needed and welcome. The increasing scale of data-driven science implies that a larger-scale and more strategic collaboration with the EU industry will be required.

One issue that was not considered in detail but still remains important is the possibility to create "market or sharing places" for the reuse of business data, notably when there are public interests at stake. One example, mentioned in the discussion, is connected trucks that collect data on road conditions and how this data can be shared and used eg in new apps or public traffic management services.

Annexe: list of participants

ERT Delegation

Benoît Potier, Chairman, ERT, Chairman and CEO, Air Liquide

Joe Kaeser, Chairman, ERT Digital Single Market Working Group, President and CEO, Siemens

Jean-François van Boxmeer, Member of the ERT Steering Committee, Chairman and CEO, Heineken

Leif Johansson, Past Chairman, ERT, Chairman, Ericsson

[redacted], Group External Affairs Director, Vodafone Group

Thierry Sueur, Vice President, European & International Affairs, Air Liquide

[redacted], Convenor, ERT Digital Single Market Working Group, Head of the Siemens EU-Representation Office

Brian Ager, Secretary General, ERT

Germany and France

[redacted], Conseiller Industrie à l'Elysée, France

Frank Wetzel, Head of Division Industrial Policy, Innovation and Technology Policy, IT-Industry, Regional Economic Policy, German Federal Chancellery

European Commission

Vice-President Ansip (accompanied by Jörgen Gren, Member, Piret Potisepp)

Commissioner Moedas (accompanied by Alfredo Sousa, Member)

Commissioner Oettinger (accompanied by Markus Schulte, Member)

Renate Nikolay, Head of Cabinet (replacing Commissioner Jourová)

Pauline Rouch, Member of cabinet of Commission president Juncker

Mario Campolargo, Director, DG CNECT

Fabrice Comptour, Member of cabinet, Ms Bieńkowska

[redacted], Secretariat General (unit G.E.2)

ERT working seminar choreography

20th July, Berlaymont, 9th floor, Salle 9, from 13.00-15.00

Programme for the meeting

13.00-13.30 – Introduction by Vice-President Ansip, Commissioners Oettinger and Moedas

- Introduction by Vice-President Ansip (10 minutes)
- Introduction by Commissioner Oettinger (7 minutes)
- Introduction by Commissioner Moedas (7 minutes)

13.30-14.00 – Introduction by ERT participants, starting with ERT president.

- Introduction by ERT chairman Benoît Potier, Chairman and CEO, Air Liquide (10 minutes)
- Introduction by Joe Kaeser, CEO Siemens (5 minutes)
- Introduction by Jean-François van Boxmeer, CEO Heineken (5 minutes)
- Introduction by Leif Johansson, Chairman, Ericsson (5 minutes)
- Introduction by Matthew Kirk, Vodafone (5 minutes)

14.00-14.55 – Open discussion, all participants, started by:

- Mr.Pouget, Conseiller Industrie à l'Elysée, France
-Frank Wetzel, German Federal Chancellery
- Renate Nikolay, Head of Cabinet

14.55-15.00 – Conclusions and next steps (Vice-President Ansip and ERT president).

- Conclusions by ERT president
- Conclusions by Vice-President Ansip

Background brief

Scene setter

The meeting is a follow-up to the high-level meeting between ERT member CEOs, Chancellor Merkel, President Hollande and President Juncker, focusing on the development of the digital economy and the DSM in Berlin on 1 June 2015. A second high level meeting is planned to take place in Paris in October 2015 (date tbc).

The free flow of data was one of the themes of interest identified during the 1 June 2015 meeting, and President Juncker asked you to organise discussions with the ERT member CEOs and relevant Commissioners on these themes.

The meeting will have a light deliverable in the form of a two-pager on main actions and will be followed-up by President Juncker and yourself. The meeting theme is "Data economy and free flow of data in the EU", and the objectives are threefold:

- To prepare the high level meeting in October 2015;
- To identify key challenges from a business/industrial point of view when implementing the relevant DSM initiatives;
- To determine how ERT and its members can support the DSM throughout the process.

From the Commission side, you will be accompanied by Commissioners Oettinger, Jourova and Moedas.

Although there will be an open discussion, four questions have been prepared in advance. Your file includes a scene setter and LTT for each of the four questions:

1. Complementarity between the personal data protection framework and the DSM free flow of data initiative;
2. The need for additional guidance on 'privacy by design';
3. Cloud (data location requirements, portability of data and cloud security);
4. Interaction with Horizon 2020 projects on data and cloud, open science cloud

The DSM Strategy includes a commitment to launch in 2016 a European free flow of data initiative and a European cloud initiative.

Objectives

- Seek commitment from participants to the objectives of the DSM initiatives for the free flow of data and the European cloud.
- Identify key challenges from an industrial point of view and determine how the ERT and its members could contribute to the implementation of these DSM initiatives.

Background

Personal data protection

Current definition personal data: According to Article 2 (a) of the Data Protection Directive (95/46/EC):

> "'personal data' shall mean any information relating to an identified or identifiable natural person ('data subject'); an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity;"

Data protection reform: The European Council stressed, in October 2013, in June 2014 and last June, how crucial it is to "adopt a strong EU General Data Protection framework by 2015". The two legal instruments of the reform are the General Data Protection Regulation and the Data Protection Directive for Police and Criminal Justice Authorities.

On 12 March 2014 the EP adopted its position in first reading on both acts, confirming its strong support to the Commission's data protection reform.

On 15 June 2015 the JHA Council reached a general approach on the General Data Protection Regulation. Trilogues started immediately (first one took place on 24 June). The Council is still discussing the "Police Directive", but the Luxembourg Presidency makes substantive efforts to reach a general approach in the October 2015 JHA Council, in order to keep the package approach. The Presidency hopes to be able to conclude trilogues on both legal instruments by the end of the year.

Digitisation of Industry

a) National digital transformation initiatives across Europe

ICT are combining and converging with sensor technology and robotics to form an *Internet of Things,* driving profound transformations of the industrial system. This is further reinforced by the advent of next generation adaptive robots, 3D printing, man-machine interfaces, cyber physical systems, advanced sensors, big data and cloud computing.

For this reason, the process of "digital transformation" has been receiving increasing attention, both at national and EU level. Member States have set up national initiatives to support the digital transformation and boost their economy. A selection of initiatives is presented below:

Member State	Initiative	Aim	Objectives	Benefits	Funding	Key Partners
DE	Industrie 4.0	Make German industry fit for the manufacturing of the future	Integrating CPS and IoT into manufacturing and industrial processes	Increased productivity and efficiency; more flexibility; economic growth	Up to EUR 200 million	National Academy of Science and Engineering (Acatech); BITKOM; VDMA; ZVEI

FR	The New Industrial France – the Industrial Plant of the Future	Industrial redevelopment	Supporting SMEs digitalisation and funding; setting up pilot production lines	Retain manufacturing and industrial employment	EUR 1.2 billion of loans available	Dassault; Fives; BPI
UK	The Catapult Programme – the High Value Manufacturing Catapult	Transform the UK innovation capability by accelerating commercialisation of research ideas	Bridging the gap between businesses and academia through a network of 7 cutting-edge research facilities	Reduced technological and financial risk of innovation; develop skills and knowledge	EUR 510 million (GBP 369 million)	Innovate UK
NL	Smart Industry	Harnessing the new wave of digital technology to build the industry of the future	Capitalising on existing knowledge; accelerating in Fields Labs; Expanding research areas	Optimised production; customer-centric business models; creation of new jobs and skills	-	FME; TNO; The Ministry of Economic Affairs; VNO-NCW; the Chamber of Commerce and Netherlands ICT.
IT	Intelligent Factory Cluster	Steer Italian manufacturing towards new products, processes and technologies	Implementing applied research; facilitating technology transfer; improving access to finance	Improved sustainability of manufacturing; valorisation of workforce and skills; economic sustainability	EUR 45 million (34 million public funding + 11 million private funding)	Ministry of Education, University and Research

b) Digital Transformation of Industry and Enterprises

DG GROW has shaped **a strategy to stimulate Digital Entrepreneurship** in Europe, focusing on the **digital transformation and growth of existing enterprises** and the promotion of new digital start-ups in all sectors of the economy.

Governance: Intensive dialogue with industry, academia and policy makers has been established to help understand the needs of EU industry and enterprises and develop an efficient strategy. The following fora were set up in 2014:

- **The Strategic Policy Forum on Digital Entrepreneurship, set up by the Commission** to reinforce dialogue among industry, science, civil society and politics and to advise the Commission on a EU vision and strategy on digital transformation of industry. The Forum analysed the opportunities and challenges

of digitalisation in different industry and services sectors and delivered a report with policy recommendations last March.

- A **Member States Board** on Digital Entrepreneurship composed of policy makers from the Member States, leading the digital transformation in their countries. They exchange experience, coordinate policies and work on a pan-European digital transformation strategy.

Support actions: Relevant support actions and initiatives launched to-date include:

- The **Digital Entrepreneurship Monitor**[1] monitors the key technological and market trends, emerging business opportunities, new business paradigms and their impact on the European economy. It also collects information about policy initiatives to boost digital transformation all over Europe. Over 1000 national policy initiatives have been identified and analysed, highlighting the fragmented nature of such policies and the need for better EU-wide cooperation to maximise impact.
- The **Digital Transformation Scoreboard** measures progress in all EU countries and main international competitors and includes policy recommendations to speed up the process. The first Scoreboard will be published in the 2nd quarter of 2015.
- The study on **"Doing Business in the Digital Age"**[2] identified the key technological trends and proposed recommendations for actions.
- **A pan-European awareness campaign WATIFY**[3] «What If I ...?», focuses on helping entrepreneurs and traditional businesses, to overcome challenges. Digital SMEs have proven to have tremendous job creation potential of up to 10 million new jobs in G20 countries[4]. The objective of the campaign is to inspire new business ideas, as well as to support and provide practical advice to speed-up digital transformation across Europe. Provide practical advice:

  10 Things to know when doing business online tool: 10 Fiches providing users with the information they need to know to legally comply to local and EU regulations when selling online in Europe.

- **EuroMentors**[5]**:** a network of the most prominent mentoring organisations and mentors, launched in November 2014, to inspire and support new entrepreneurs and help enterprises in their transformation plans. Activities include networking, cross-border exchange of experience, hands-on coaching and match-making events among stakeholders to explore new partnerships.
- A **pan-European campaign on "eSkills for jobs"** to boost demand and supply of eLeadership, i.e. the combination of digital, management & creative skills.

[1] http://ec.europa.eu/enterprise/dem.

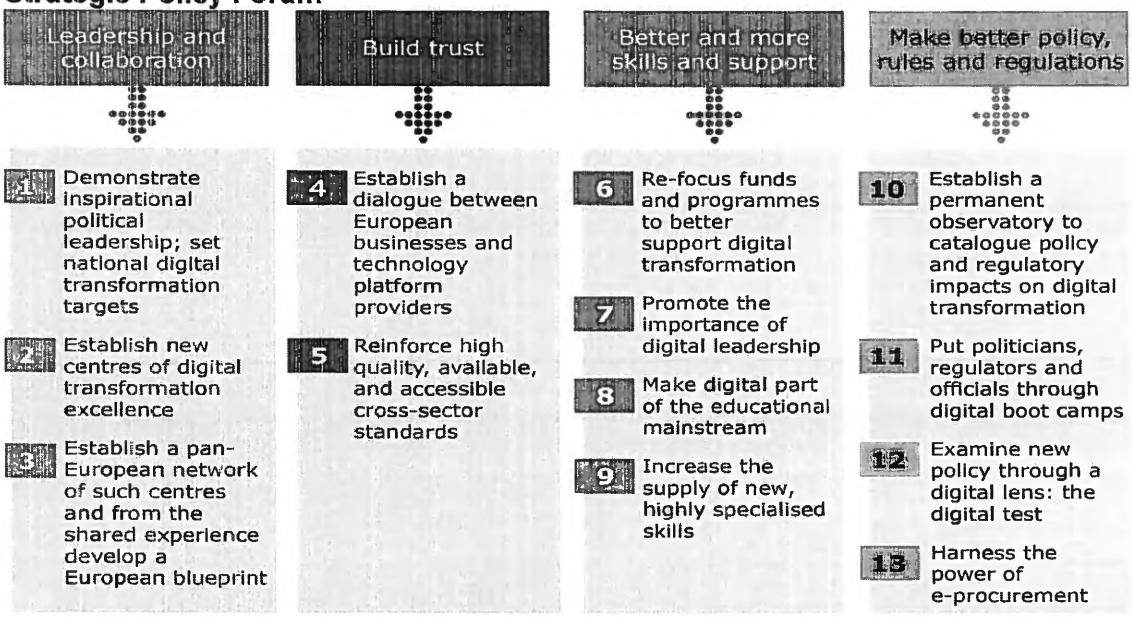
[2] http://ec.europa.eu/enterprise/sectors/ict/ebsn/digital_supply_chains/digital_age_en.htm.

[3] http://ec.europa.eu/enterprise/dem/watify.

[4] Accenture, 2014: The promise of digital entrepreneurs, Creating 10 million youth jobs in the G20 countries.

[5] http://www.euromentors.eu/.

Recommendations "Digital Transformation of Industry and Enterprises" by the Strategic Policy Forum



Network and Information Security (NIS)

The Commission adopted a proposal for a Directive on network and information security (NIS) in February 2013 as part of the EU Cybersecurity Strategy. The Proposal is currently discussed in trilogues. The objectives of the Directive are threefold and are addressed to governments and businesses:

- to lay down minimum obligations for Member States with regard to the prevention of and response to NIS incidents;
- to create a cooperation mechanism between Member States;
- to establish security requirements for businesses in certain sectors and for public administrations overall.

Cloud computing

According to a 2015 IDC study contracted by the Commission cloud computing has the potential to add €450 billion to EU GDP between 2015 and 2020, as well as to create 1.6 million additional jobs and 300.000 companies from 2008 to 2020.

According to Eurostat data from December 2014 only 19% of companies across the EU used paid cloud services and only 21% of the EU population aged 16-74 used cloud-based storage services to save documents.

The EP Research Service estimated the cost of an incomplete DSM for cloud computing at between €31.5 and €63 billion per year in its September 2014 report on "The Cost of Non-Europe in the Single Market".

Internet of Things

The Internet of Things touches upon a lot of aspects in the DSM and beyond (the 'Third Pillar' on the Data Economy, but also trust and security aspects of the Second Pillar, as well as the Telecoms Single Market).

This offers in the next months the opportunity to formulate actions/recommendations as regards how to best adjust the European regulatory framework to support the take up and growth of the IoT markets. An EU vision on Internet of Tings should emerge in the

very near future, to avoid fragmentation between national economies, and to make sure that the benefits of the DSM can be leveraged through IoT.

Operators are all interested in the take up of these new markets, which they see as "relay growth" towards novel application and services to be monetized. All operators around the table are active in IoT initiatives.

In March 2015, the European Commission launched the **Alliance for Internet of Things Innovation (AIOTI)**. AIOTI is an open stakeholder platform encompassing all actors of the IoT value chain, meant to address these barriers within the Internet of Things ecosystem and with the European Commission. This industry-driven initiative will help prepare and catalyse take up of IoT in Europe. AIOTI will be an important asset in support of our DSM objectives.

High Performance Computing

The PPP on High Performance Computing (HPC)[6] (operational in 2014) to support the implementation of the HPC strategy (outlined in the Communication "High Performance Computing: Europe's place in a Global Race") aims ensure European leadership in the supply and use of HPC systems and services by 2020 (€700 million earmarked in Horizon 2020).

An important new area for the European HPC ecosystem is high performance data analysis (HPDA), e.g. the use of HPC for data-intensive simulation and advanced analytics. HPDA requirements are increasing in many scientific domains and are driving more commercial companies, including SMEs, to exploit HPC technology:

- 67% of the HPC sites[7] use their systems for HPDA;
- HPDA use consumes 30% of their HPC cycles on average;
- 23.5% of the HPC sites were using cloud computing, with public and private cloud use about equally represented among the sites.

The 'Free flow of data' initiative is important to create a level playing field for data and HPC-driven innovation.

Data economy

The strategic objective of the 2 July 2014 Communication 'Towards a data-driven economy' is to foster the emergence of a functioning European ecosystem integrating the different stakeholders (data professionals, researchers, software firms, companies from interested sectors, venture capitalists, private and public data owners).

In October 2014, a contractual PPP on data was set up in order to stimulate the creation of such a community with the concrete objective to fund "game-changing" big data ideas building on a Strategic Research and Innovation Agenda. Industry is represented by the Big Data Value Association. Investments are expected to reach around EUR 2.5 billion over 2016-2020. The Commission has earmarked a budget of EUR 535 million in Horizon 2020. Each euro of that EU investment is expected to trigger four euros as private sector investment. The first calls for proposals for research and innovation actions are expected for spring 2016.

In addition, the strategy laid down in the Communication addresses a number of non-regulatory framework conditions to advance the data economy, such as:

---

[6] http://ec.europa.eu/digital-agenda/en/news/high-performance-computing-public-private-partnership-ppp
[7] *International Data Corporation Worldwide Study of HPC End-User Sites*, 2013.

- continued funding on R&I in the area of data analytics, data visualisation and decision-making software tool and on technological solutions that are privacy-by-design;
- Enlarging the skills base (data scientists), including through a newly set up European Data Scientists Academy;

The Communication is followed up by way of in-depth consultations with industry on how data can drive innovation.

Industry position: Stakeholders have not called for any ad hoc regime or specific regulatory instruments related to big data or data ownership. On the contrary, there was a great stress on codes of conduct and soft law instruments such as guidance.

According to industry stakeholders, ex ante regulated access to data could be harmful at this point in time. While personal data would continue to be governed by the GDPR currently in trilogue stage, aggregated and non-personal data should be controlled and exploited by businesses to create value added products and services.

Member States' position: Feedback from Member States shows that the topics likely to gain relevance with a widespread adoption of IoT technologies (i.e. data ownership and access) are considered 'emerging issues' at this stage. Therefore a detailed assessment of the state of play is needed before deciding on any future EU action.

Via the "data market monitoring tool", i.e. the European Data Market study, DG CNECT possesses factual evidence on the size and trends of the EU data economy, information that is essential for further policy development in the big data domain.

Research open science cloud

In the context of the DSM, the Commission will soon launch a European Open Science Cloud initiative. It will combine existing and future data infrastructures and offer secure and seamless access to European researchers for storing, managing and processing data from different sources.[8]

To do so, it will pool demand and supply of services for data analysis and storage. It will have three layers:

- data infrastructure (data storage and accessibility);
- services (advanced services for data mining, merging, analysis and exploitation);
- governance (decision mechanisms, Intellectual Property Rights, privacy).

The initiative will ensure that the scientific community can re-use the enormous amount of scientific data that Horizon 2020 projects generate. Horizon 2020 will provide trigger, scale and scope for a European data-analytics industry and for the emergence of a hybrid (private-public) eco-system of services based on scientific data (including Text and Data Mining).

[8] https://ec.europa.eu/commission/2014-2019/oettinger/blog/open-science-knowledge-and-data-driven-economy_en.

As for access to research data generated in Horizon 2020, **the initiative will set incentives, not obligations for data sharing**: the research open science cloud will need to be as open as possible, and as closed as needed. This is to take into account the sensitiveness of certain data from domains such as security and health, of data that are very close to market and of data that are too big and/or costly to share. Importantly, the initiative will address by design issues of privacy and personal data protection, IPR and security that are linked to research data sharing.

What is not covered?

The initiative is not about building additional scientific data infrastructures. The initiative aims to leverage and co-ordinate the significant public investment ongoing for more than two decades. While funding will be required at various stages of the initiative, it will follow, not drive, decisions on governance and on the extent of federation and services needed by scientists.

The initiative is functionally different from initiatives aimed at sharing public sector information (PSI). Scientific data and the benefits of data-driven science are fundamentally different in nature and greater in scale.

ERT (European Round Table of industrialists) working seminar with Vice-president Ansip and Commissioners Oettinger and Moedas

Theme: Data economy and free flow of data in the EU

20th July, Berlaymont, 9th floor, Salle 9, from 13.00-15.00

The objectives and set-up of the meeting

This discussion is a follow-up to the high level meeting between ERT member CEOs, Chancellor Ms Merkel, President M Hollande and the Commission President M Juncker focusing on the development of the digital economy and the Digital Single Market in Berlin on 1st June. Several themes of interest were identified during the discussions: free flow of data, connectivity, state aid rules, start-ups and level playing field in the area of telecommunications.

The Commission President M Juncker asked Vice-President Ansip to organise discussions with the ERT member CEOs and relevant Commissioner on several of these themes before the second high level meeting planned to take place in Paris (l'Elysée) in October (exact date tbc). The meetings are scheduled to take place in Brussels (Berlaymont) on 20th July and 5th October and will take the form of working seminars.

The objectives of the meetings are:

1. To prepare the high level meetings between Chancellor Ms Merkel and President M Hollande on the digital economy and the digital single market in autumn 2015.
2. To identify key challenges from a business/industrial point of view when implementing the relevant Digital Single Market initiatives.
3. To determine how ERT and its members can support the DSM throughout the process.

The meetings will have a light deliverable in the form of a two-pager on main actions and will be followed-up by President Juncker and Vice-President Ansip.

Programme for the meeting

13.00-13.25 – Introduction by Vice-President Ansip, Commissioners Oettinger and Moedas
13.25-13.50 – Introduction by ERT participants, starting with ERT president.
13.50-14.50 – Open discussion (suggested questions below), all participants.
14.50-15.00 – Conclusions and next steps (Vice-President Ansip and ERT president).

Framing the discussion on "free flow of data"

Big data, cloud services and the Internet of Things are central to the EU's competitiveness. The Big Data sector is growing by 40% per year, seven times faster than the IT market. A fragmented single market does not provide sufficient scale or opportunities for a data driven economy to reach its full

potential in Europe. To benefit fully from the potential of digital and data technologies, there is a need to remove a series of technical and legislative barriers.

The Digital Single Market strategy published on 6th May 2015 clearly recognizes this challenge and also makes reference to the Data Protection Regulation as a foundation for the next steps and the forthcoming initiative on free flow of data in the Union.

There is no contradiction between the two initiatives and they are complementary as both are aimed at helping Europe make data an essential resource for the Digital Single Market.

High data protection standards will strengthen consumers' trust in digital services and businesses will benefit from a single set of rules across 28 countries. The major concern about technology that nearly all users share is privacy. The data protection reform is about ensuring that Europeans remain in control of their data so that they are confident in using technologies and can benefit from digital opportunities. While personal data is covered and protected by EU rules, there are no clear guidelines for other types of data including business or machine data, anonymised data or aggregated data connected to social values or public good which facilitate its use and enable opportunities.

To this end, the Commission will propose, in 2016, a European 'Free flow of data' initiative that tackles restrictions on the free movement of data for reasons other than the protection of personal data within the EU and unjustified restrictions on the location of data for storage or processing purposes. It will also address the emerging issues of ownership, interoperability, usability and access to data in situations such as business-to-business, business to consumer, machine generated and machine-to-machine data. It will encourage access to public data to help drive innovation. The Commission will launch a European Cloud initiative including cloud services certification, contracts, switching of cloud services providers and a research open science cloud. Clearly, the right level to address these issues is the European level as we want to avoid the Member States creating national silos or barriers that may obstruct the free flow of data.

The questions for the discussion

The discussion is open, but certain suggested topics or questions are:

1. Free movement of both personal and business data is essential: the issue of free flow of personal data is covered in the data protection framework (to be adopted rapidly) and ensuring the free flow of business data to help drive innovation is the objective of the DSM initiative on "free flow of data" (interlinked questions):
    a. What is the industry view on how best to ensure complementarity between the two actions?
    b. Outside the Data Protection Regulation, what would be the most useful actions to be undertaken in the framework of the DSM free flow of data initiative?
    c. Are attempts to define data ownership and "non-personal" data, as well as limitations to these definitions, a useful avenue to pursue for the Commission?
    d. How should the global dimension of data flows be best addressed?

2. How useful would it be for industry to have rapid and further official guidance on "privacy by design" (consent, anonymization, pseudonomisation...) as an essential part of the free flow

of data initiative and what are the parameters or issues to keep in mind for the Commission to ensure that European data protection rules are applied to new enablers such as IoT, big data, M2M or cloud computing? Is additional guidance needed eg on technologies (incl. encryption) and other concepts related to data and cloud (code of conducts, certification schemes, etc.) in order to build trust for new digital services? How can the Commission support industry efforts on these subjects within its free flow of data initiative?

3. The industry view on data location requirements, improving portability of data (including "cloud switch" ie the possibility of change cloud providers in particular for SMEs without losing essential data or meta-data) as well as cloud security as key features of the free flow of data initiative?

4. How can the industry interact with the research community and the H2020 projects on data and cloud as well as the open science research cloud (a project planned by the Commission)?

Next meeting

The 5th October a second ERT meeting with commissioners is planned on the following two themes (the session will be split into two separate sections but the participants will be the same for both): connectivity and start-ups.

ERT

ERT Meeting with Vice-President Andrus Ansip, Commissioners Günther Oettinger and Carlos Moedas

20 July 2015

This paper outlines the ERT response to the questions suggested by Vice-President Ansip on July 8, for discussion.

Overarching principles should guide the discussion:

1. **Principles based protections** – Regulations must focus on the desired outcomes, not detailed, prescriptive and administrative requirements. How those outcomes are achieved should be left to the market, standards bodies and codes of conduct.

2. **Risk based restrictions and enforcement** – Restrictions and enforcement must focus on the activities that are harmful to the rights and freedoms of individuals, based on objective criteria. The greater the harm to the individual, the more protections are needed. Where risks are effectively mitigated, fewer restrictions should apply.

3. **Technology and business model neutrality** – Similar services and similar risks warrant similar protections, irrespective of the technology or business model in question.

4. **Harmonisation across the EU and interoperability globally** – To enable the free flow of information while ensuring accountable collection and use of personal data.

Key responses to the Commission's questions

Question 1: Free movement of both personal and business data is essential: the issue of free flow of personal data is covered in the data protection framework (to be adopted rapidly) and ensuring the free flow of business data to help drive innovation is the objective of the DSM initiative on "free flow of data" (interlinked questions)...

General Data Protection Regulation

We are supportive of the Council's approach; however, we think further work is still needed before the end of the year, especially in the following areas:

1. **The "one stop shop":** The proposal does not lead to a "one stop shop" and it is overly bureaucratic, increases uncertainty and cost to business. Furthermore, the data subject is likely to experience lengthy resolution times.
2. **Profiling and the requirement for consent**: Clarity of the kind of profiling that "significantly affects" the individual, and thus requires consent, is required. Consent should be required only when profiling significantly impacts the rights and freedoms of the individual.
3. **Consent:** Consent should be "unambiguous" as opposed to "explicit" to retain flexibility on how consent is acquired. Requirement for consent should not be overly complex[1].
4. **Personal data and Pseudonymisation**: Clear incentives and lighter obligations to use pseudonymised data should be foreseen in the revised regulation. Given the broad definition of personal data, many beneficial uses of data will be severely curtailed unless pseudonymisation of data results into a significant lift of limitations to analytics.
5. **Purpose limitation:** Without sacrificing the existing principle of purpose limitation, more work is needed to ensure that innovation based on Big Data Analytics is not prohibited, for example through better recognition of pseudonymisation.
6. **Accountability obligations:** Companies should continue to have flexibility on how they demonstrate compliance with the law. Audit cannot be the only means. Data processors cannot be subject to documentation requirements. E.g. in a multiparty environment it would be very burdensome, bordering on impossible while delivering little in the way of real data protection.
7. **No burdensome requirements for processing agreements:** Rules and regulations between controllers and processors must be adapted to the demands of the modern IT-world, e.g. formal requirements related to the conclusion of the processing agreements should be limited to the required minimum.

[1] Examination reserve by one company.

Free movement of both personal and other types of data within the EU and globally

The free flow of personal and business data should be ensured. The international free flow of data is a prerequisite for European industry to optimise global business operations through digital technologies. The transfer of data between the EU and third countries should be facilitated, provided that adequate rules and safeguards are in place. Data localisation policies that restrict the international free flow of data should be limited to legitimate measures, mainly for the protection of national security and public order.

It is crucial to ensure that European personal data is subject to adequate protection no matter where it is transferred to or in which part of the world the service provider may be established. Many European companies have invested considerable time and effort to ensure compliance by, for example, negotiating the use of European Commission Model Clauses or implementing Binding Corporate Rules within their group of companies.

Recommendations for action:

1. EU should ensure full harmonisation of European data protection laws and the creation of globally interoperable data protection regimes that provide effective protection of personal data wherever it is processed.
2. The Commission should review all existing international data transfer mechanisms to determine whether they result in a simple, globally interoperable and effective compliance framework. Where this is not the case, overly formalistic regulations should be simplified to foster international business without compromising on data privacy.
3. Decisions and authorisations to allow cross-border transfers of personal data that have been adopted under the Data Protection Directive (95/46/EC) should remain in force.
4. Use of technology to limit the sensitivity of information, such as pseudonymisation, should be encouraged. Where such technologies are effectively used, the limitations for the free flow of data should be largely lifted.
5. Public procurement should be used to create demand for such technologies and, where organisations would want their information to be stored only in Europe, also for European cloud solutions.

Is data ownership and defining "non-personal" data, as well as limitations to these definitions, useful avenue to pursue for the Commission?

The same data may be subject to multiple independent uses by multiple players. Therefore, introducing "data ownership" and defining "non-personal" data would not be a useful avenue for the Commission to pursue. Personal and other types of data are subject to well-established existing legal frameworks tailored for specific needs, e.g. copyrights, database rights, notice and take down as well as data protection laws.

Question 2: How useful would it be for industry to have rapid and further official guidance on "privacy by design" (consent, anonymisation, pseudonymisation...) and its interaction and impact on IoT, M2M and business generated data as an essential part of the free flow of data initiative? What are the parameters or issues to keep in mind for the Commission?

Meaningful "privacy by design" guidelines are going to be challenging to define in a timely manner given the variety and volume of players and industries, data and speed of developments. Regulators should avoid stifling innovation by defining prescriptive measures and instead focus on defining the desired outcomes. More guidance could be beneficial for, for example, processing personal data in a complex multiparty environment, such as IoT and cloud, where the roles of controllers and processors get blurred. If "privacy by design" guidelines are adopted, compliance with such guidelines should be incentivised and honoured by regulators.

Recommendations for action:

To fill existing gaps in the market place, following actions are needed:

1. Education programmes to create privacy professionals, especially privacy engineers.
2. The industry, standardisation bodies and academia should be encouraged to introduce privacy engineering and risk management methodologies, such as the ongoing work by IPEN (Internet privacy Engineering Network), AIOTI (Alliance for Internet of Things Innovation) and NIST (National Institute of Standards and Technology).
3. Industry, academia and regulators should be encouraged to come up with publicly available guidance which should happen in an open and consultative fashion or other industry driven measures (codes of conduct, certifications...).
4. Bodies responsible for technology standardisation need to conduct a Privacy Impact Assessment for the technology to ensure the right privacy considerations support the information society infrastructure.

Question 3: The industry view on data location requirements, improving portability of data (including "cloud switch" i.e. the possibility of change cloud providers in particular for SMEs without losing essential data or meta-data) as well as cloud security as key features of the free flow of data initiative?

"Cloud" is not a monolithic concept. There are many different types of cloud services, for example Infrastructure as a Service, Platform as Service, Software as a Service (examples encompass cloud based billing and enterprise solutions as well as various consumer and other services such as games, social media and email), and the issues are not the same across these various services.

All companies are likely to use different data models. For this reason there is no need for a common comprehensive standard for data portability. Larger organisations may have multiple different data models in use due to different generations of systems and processes. There are, however, good examples of specific industry standards and efforts to make portability possible in specific cases, such as standards to enable transfer of contacts.

Recommendations for action:

1. More wide spread adoption of specific data portability standards should be encouraged.
2. Blanket rights to retrieve data from service provider should be avoided: existing legal structures and the possibility of agreeing on contractual arrangements allow a differentiated and more balanced outcome.
3. Competition law remedies should be used as a tool to balance dominance where harmful dominance prevails.

Asymmetric regulation – Level playing field

Due to outdated definitions in the current telecommunications regulation, a significant and growing share of communications, now being served by Over the Top players (OTTs), do not enjoy any specific privacy protections. For example, telecommunication companies' ("telcos") use of traffic data and location data is heavily restricted while OTT's use of such data is not. Telcos are bound by administrative rules and mandatory investments to features and capabilities such as lawful interception, in each and every country, whereas OTT players are not.

The rules today are not technology neutral. European citizens cannot rely on European rules to consistently protect their personal data and privacy and the competition landscape is not level.

The ePrivacy Directive only contains six data protection related articles, namely articles governing:

i) traffic data and confidentiality of communications;

ii) location data;

iii) data breach notification;

iv) cookies and other tracking technologies;

v) unsolicited communications.

Given the broad spectrum of various types of data and activities covered by the proposed GDPR, it is difficult to justify retaining those articles at all or retaining them outside the GDPR.

Recommendation for action:

1. The ePrivacy Directive and other electronic communications regulations need to be reviewed, in context of the GDPR review, with the objective of combining all relevant privacy protections under one framework and ensuring that similar services are subject to similar protections.

Big Data, Internet of Things and Analytics

Big Data and the Internet of Things (IoT) challenge some of the traditional concepts of data protection. Powerful analytics tools enable the creation of new insights, often resulting in new personal data being created. Many IoT devices don't have user interfaces and they may be observing their surroundings without being visible. Providing meaningful privacy notice and preventing excessive collection of data will be challenging. However, a significant proportion of the societal benefits from Big Data can be achieved through use of anonymised and aggregated data.

Recommendations for action:

1. Existing privacy principles should remain relevant in Big Data and IoT.
2. Restrictions on analytics must be risk-based and minimal: Analytics with pseudonymised data must be possible as long as the privacy impact on individuals is minimised. Limitations on profiling should focus on automated decision making with significant impacts to fundamental rights and freedoms.
3. The creation or use of sensitive personal data (religion, health, sexual preferences etc.) through analytics should remain subject to special restrictions. However, if aggregated anonymous statistics of such nature are created, there is no privacy concern.
4. Organisations need to be held accountable for having effective privacy programmes in place to protect the data against unlawful processing, applying all relevant privacy principles.

Question 4: How can the industry interact with the research community and the H2020 projects on data and cloud as well as the open science research cloud (a project planned by the Commission)?

In Horizon 2020 industry (small & large), research institutes and academy are already involved in collaborative R&D & Innovation proposals and projects in consortia related to the use of data and cloud, like e.g. in the R&D PPPs FoF (Factories of the Future) and in the Big Data Value PPP initiative. Further strengthened R&D cooperation is needed and welcomed.

Specific areas where future collaborative R&D actions related to **big & smart data** would need to be addressed under Horizon 2020 include:

1. Prediction models.
2. Model Applications.
3. Data Handling (Data Mining).
4. Architecture of system analysis.
5. Appropriate visualisation methods.

In the area of cloud, possible research issues suited for support under Horizon 2020 include:

1. Accounting and payment procedures in the Cloud and in a distributed Cloud.
2. Big Data applications in the cloud.
3. Legal and compliance issues in the cloud.
4. Improving the performance of cloud applications.
5. Cloud computing with agile workload placement at the edge of networks.

For the Open Science Data Cloud, from industry perspective the same rules and safety standards should apply as to any other clouds. In particular with respect to personal data or other sensitive data types, there should not be any legal vacuum where scientists can store and process all kinds of data. Also in these cases the right questions need to be addressed regarding protection concepts, control environments and retention periods. Otherwise this Data Cloud could quickly be used not only for scientific purposes, but also for other (e.g. criminal) purposes. Without adequate protection/security concepts this Data Cloud could quickly become a "self-service shop" for e.g. intelligence services in the world.

Further to the question, how the industry can interact with the research community and the H2020 projects on data and cloud, as well as the open science research cloud; various ways exist or can be imagined:

1. Direct participation of industry players in research projects of academic institutions and in H2020 projects.
2. Improved communication from the research community (in particular universities) towards the industry on i) achievements and ii) research in progress.
3. More open information exchange and discussion forums between research projects and vertical industry sectors (automotive, manufacturing etc.). Often it appears there is a wide gap between the research on fundamental technologies and the awareness and needs of vertical industries.
4. H2020 projects could arrange for effective outreach events/conferences to convey findings, results and highlight future developments.
5. Outreach of H2020 projects, where possible, to industry forums (e.g. GSMA for the mobile telecoms industry, something else for manufacturing etc.) in order to present interim and final findings and raise awareness for results.