DRAFT REPORT

on the European Cloud Initiative
(2016/2145(INI))

Committee on Industry, Research and Energy

Rapporteur: Jean-Luc Schaffhauser
MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on the European Cloud Initiative
(2016/2145(INI))

The European Parliament,

– having regard to the Commission communication entitled ‘European Cloud Initiative – Building a competitive data and knowledge economy in Europe’ (COM(2016)0178) and the accompanying Commission staff working document (SWD(2016)0106),


– having regard to the Commission communication of 2 July 2014 entitled ‘Towards a thriving data-driven economy’ (COM(2014)0442),

– having regard to the Commission communication of 10 October 2012 entitled ‘A stronger European industry for growth and economic recovery’ (COM(2012)0582),

– having regard to the Commission Communication of 27 September 2012 entitled ‘Unleashing the potential of cloud computing in Europe’ (COM(2012)0529 final),

– having regard to the Commission communication entitled ‘High-Performance Computing: Europe’s place in a global race’ (COM(2012)0045),

– having regard to Council conclusions of 27 May 2016 on the transition towards an Open Science system,

– having regard to Council conclusions of 29 May 2015 on open, data-intensive and networked research as a driver for faster and wider innovation,

– having regard to the Presidency conclusions of the Lisbon European Council of 23/24 March 2000,

– having regard to Decision (EU) 2015/2240 of the European Parliament and of the Council of 25 November 2015 establishing a programme on interoperability solutions and common frameworks for European public administrations, businesses and citizens (ISA² programme) as a means for modernising the public sector¹,


– having regard to its resolution of 10 March 2016 on ‘Towards a thriving data-driven

having regard to its resolution of 19 January 2016 on ‘Towards a Digital Single Market Act’\(^4\),

– having regard to its resolution of 15 January 2014 on 'Reindustrialising Europe to promote competitiveness and sustainability’\(^5\),

– having regard to its resolution of 10 December 2013 on unleashing the potential of cloud computing in Europe\(^6\),

– having regard to the opinion of the European Economic and Social Committee TEN/494 of 16 January 2013 on the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on 'Unleashing the Potential of Cloud Computing in Europe' (COM(2012) 0529 final),

– having regard to Articles 173, 179 and 180 of the Treaty on the Functioning of the European Union (TFEU),

– having regard to Rule 52 of its Rules of Procedure,

– having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on the Internal Market and Consumer Protection and the Committee on Legal Affairs (A8-0000/2016),

A. whereas the Commission's objectives are aligned with those of the US intelligence services\(^7\), which advocate maximum openness for world scientific data in order to maintain their leadership;

B. whereas the bulk of the work produced and published in Europe by scientists exceeds the capacity of peer validation, which prevents an assessment of its strategic importance;

C. whereas the registration systems for authors and scientific publications (the ORCID\(^8\) and DOI\(^9\) systems) are subject to the jurisdiction of the State of Delaware;

D. whereas the GEANT network already connects national research networks, but with a cloud service which includes Amazon Web Service\(^10\);

E. whereas the other powers have a digital strategy of limited access to their data; and

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\(^3\) Text adopted P8_TA(2016)0089.
\(^4\) Text adopted P8_TA(2016)0009.
\(^6\) Texts adopted, P7_TA(2013)0535.
\(^8\) Open Researcher and Contributor ID.
\(^9\) Digital Object Identifier.
China requires every cloud operator to have a minimum of 50% of Chinese capital;

F. whereas High Performance Computing (HPC) is a niche market worth about $15 billion a year, compared to $350 billion for semiconductors and over $400 billion for software;

G. whereas the Commission failed to consult the only European producer of microprocessors, the fifth largest worldwide, or Europe's largest cloud computing company, although it did consult their non-European rivals;

H. whereas the free Linux software would not only produce tens of billions of euros in savings, but also allow the European digital sector to play a leading role, but this is not a priority for the Commission;

I. whereas the Commission calls any company with a European subsidiary a 'European company'; and that erroneous designation means that it supports foreign companies engaged in lobbying while neglecting European companies;

**General**

1. Rejects the Commission communication entitled ‘European Cloud Initiative – Building a competitive data and knowledge economy in Europe’,

2. Invalidates and wishes to review its previous resolutions based on a biased analysis of open mass data, motivated by the interests of non-European powers;

3. Believes that a digital company may be considered European only if its registered office and its main decision-taking centres, R & D centres and manufacturing sites are on European territory and if it is controlled by European capital and subject to the consolidated tax on European territory;

4. Asks the Commission and the Council to reorient EU policies to concentrate support on European digital companies with high added value;

**Open science**

5. Recalls that data are the raw material of the digital economy and play a fundamental role in the added value chain; stresses that storing or processing data outside Europe is tantamount to killing off Europe's digital economy; demands that the storage, exploitation and use optimisation of data be carried out by European companies on the territory of the Union;

6. Proposes that the governance of ORCID and DOI be under European jurisdiction with regard to European scientists and their work;

7. Warns against the risk of research being exploited outside the Union, if there is no support for applied research and venture capital;

**Interoperability**

8. Stresses that the resilience of an information system depends on the security of national
systems and of the interconnections between these systems and that data fragmentation can therefore ensure digital resilience;

9. Calls for the national security authorities (ANSSI, BSI ...) to be fully involved in securing interconnections;

**Public-private partnership contract on High Performance Computing**

10. Proposes that the amounts earmarked for ETP4HPC be re-allocated for the development of digital companies with high added value;

11. Stresses the existing potential that quantum technologies have for computers and encryption keys;

**Controlling and building the IT hardware and software sector**

12. Believes that the failure to control the European digital industry poses a threat to civil liberties, respect for privacy and the current and future employment;

13. Calls for an audit of the digital industry in Europe, the investments necessary to face foreign competition and the takeover of European companies;

14. Asks Member States and the Union to encourage and fund the writing of secure free software with Linux, firstly within public administrations and schools and then in businesses and for the general public;

15. Considers it essential to encourage synergies between European hardware manufacturers, software developers and European cloud computing providers;

16. Highlights the importance of security of supply in critical raw materials such as rare earths in order to keep the construction of electronic components in Europe;

17. Considers it essential to invest massively in the semiconductor industry;

18. Proposes the creation of European computer assembly chains, with robotics enabling them to be competitive;

19. Demands a European preference for reciprocal trade;

**For a new data governance**


21. Maintains that it is vital to adopt high encryption standards for the security of all data transfers, together with the implementation of the principle of express consent;

22. Calls for a Copernican revolution in the digital economic model: 'all data is the property of the provider' and anyone using these data should remunerate the data provider, with class actions being filed against any company using data without remuneration;

23. Proposes that Member States impose dissuasive fines on companies illegally using data,
amounting to four to ten times their turnover, thereby making Europe a safe haven for data storage in the world;

24. Instructs its President to forward this resolution to the Council and the Commission.
EXPLANATORY STATEMENT

This report is the result of the work of experts and hearings involving trade unions and key companies in the sector.

The Commission communication has been unanimously considered to be confused in a ‘catch-all’ document.

The Commission has adopted an open approach: ‘Open Society' 'Open Science'! But it fails to analyse how this concept has been hijacked by the US Intelligence Community and financial speculators.

This is a no borders approach, dispensing with any control over or regulation of public digital data; it prevents the Commission from analysing the consequences of its policy: a European digital industry deprived of its own raw material.

Moreover, our European companies, not having any lobbyists in Brussels, do not exist in the Commission's eyes. Foreign digital oligopolies, with their army of lobbyists, dictate Commission policy, which reflects their interests. The public interest and the common good are ignored.

Since they are ignored, our companies cannot be consulted about their market approach. The products they supply, which are often more competitive, are not taken into consideration by the Commission.

For the Commission, any foreign company having a subsidiary in the EU is European. In the name of free competition worldwide, foreign competitors are involved in European programmes and funded by European taxpayers; The most important European companies are excluded. A competitive data and knowledge economy is thus being promoted, but without European companies!

The refusal by the Commission to consider an adjusted and structured European supply approach, with a strong, demand-based policy, practically only serves to support the world's leading digital firms, which are already very well established in Europe. Far from resisting foreign monopolies, the Commission is encouraging them!

Open science and the opening-up of access to public data

The communication seeks to allow a better exchange of data between scientists with a view to supporting technological progress and economic growth, taking advantage of the way we 'move rapidly towards Open Science'.

In the public data and its aggregates, the Commission fails to identify those that are strategic and how they are selected.

All data have an intrinsic value for those who know how to exploit them. Scientific data and the utilisation of these data are the current and future basis of competitiveness on which corporate growth will be built. The opening-up of and freedom of access to such data are not therefore possible without a risk analysis such as States, and especially foreign powers,
normally undertake.

The Commission also bases its Communication on the assessment that 'Data ... is not always open'. It argues that the lack of interoperability and automatic and efficient exchanges of data undermines the pursuit of multidisciplinarity owing to the fragmentation of data.

However, modern science, is open as far as basic research is concerned, through cooperation between European laboratories. The publication capacity of scientists in the form of self-publishing, online publishing or publishing by public administrations already allows access to scientific data via the various connected networks. On the other hand, a new factor which is being ignored is the registration of scientists and the indexing of their publications, monopolised by the US institutions (ORCID and DOI). Moreover, the link between data-sharing, research and economic development, pointed out in the communication, is only valid if it takes place in a specific territory.

The Commission's policy means that European territory is being turned into a mere data repository and place of digital consumption without having its own companies taking decisions and utilising data. Jobs exploiting our data will be for the most part based abroad. Europe is in a state of technological submission vis-à-vis the digital sector.

**Europe's High-Performance Computer project**

The Commission begins by noting that in Europe we need 'a world-class High Performance Computing (HPC) infrastructure to process data'. However, High-Performance Computers are only essential in some areas (in nuclear simulation, fluid mechanics, crash tests, seismology and meteorology). It is therefore a niche market: laboratories and companies use computing solutions involving clusters of computers.

The ETP4HPC consortium, a platform for the construction of the HPC experimental computer and for the design and manufacture of more energy-efficient chips and microprocessors, brings together not only European public research centres, but also a significant number of non-European companies: Intel, IBM et Nvidia (USA), Lenovo and Huawei (China) and Fujitsu (Japan). This programme will support Intel whose energy-guzzling microprocessors already supply the HPCs. On the other hand, the European company STM, which manufactures energy-efficient microprocessors with an ARM design has not been involved. We are therefore subsidising foreign multinationals in technologies they lack to the detriment of European companies which master these technologies.

Moreover, the Commission seems to be unaware that quantum technology represents a source of added value which could make Europe world leader in the field. A Canadian company already sells so-called ‘quantum’ computers. This technology is also effective for the distribution of encryption keys for the protection of strategic and personal data.

It is inappropriate to allocate massive budgetary resources to HPCs; These resources must be redirected towards sectors with a future, such as quantum computing, semiconductors, free software and the construction of data centres.

**Cloud computing in Europe**
The United States, China and South Korea have a digital strategy of technological independence. Furthermore, the Chinese government sees cloud computing as 'telecommunications services with a high added value' and requires every operator to be at least 50% controlled by Chinese capital\textsuperscript{11}. As data are the raw material of the digital economy, storing or processing data outside Europe is tantamount to killing off Europe's digital economy. According to the European Economic and Social Committee, the leading European player in the field of cloud computing services is OVH. It was not consulted by the Commission.

**Mastering and building the hardware and software industry**

A study of added value in the digital sector shows that the technological components with high added value are microprocessors, operating systems and cloud services. The manufacture of microprocessors is thus an essential part of the added value of the hardware sector.

Faced with the leading American (Intel) and Asian companies (TSMC in Taiwan and Samsung in South Korea), Europe has the world's fifth largest microprocessor manufacturing company, STMicroelectronics. Even though it is supported by France and Italy, this company, which is of key importance if Europe is to be a leading player in the digital sector, requires massive investment to remain globally competitive. This is a blatant case of a project of common interest which is being ignored by the Commission.

As far as the software industry is concerned, the operating systems market is dominated by three American firms: Microsoft with Windows, Apple with OS X and IOS and Google with Android. This is also the case with browsers and search engines that are dominated by these oligopolies.

The writing of free, secure software, based on Linux, would enable Europe to save tens of billions of euros, without relying on software that extracts our data. This solution of having independent software, should be generally applied by States so as to avoid the financial blackmail practised by US monopolies over operating systems. Back doors and other monitoring capabilities would thus be avoided.

In the field of industrial software, Europe has two key actors in the global market: SAP (Germany) and Dassault Systèmes (France). A study of the sector has shown the acute lack of synergy between these software companies, the European microprocessor manufacturer, STMicroelectronics, and the cloud providers in digitising the industry.

A report urgently needs to be drawn up on the state of the digital industry in Europe, its strengths and weaknesses, and how to improve it so that it can resist international competition. Europe must acquire the means to support the strategically important digital sector and strengthen our industrial and services players. H2020 resources must be reoriented to this end. Parliament must demand this change in direction.

**The Economy and data governance**

The lecture on 'The cloud conspiracy' by former senior Microsoft executive Caspar Bowden and the note by the European Parliament's LIBE Committee have shown that companies whose parent company is based in the United States are subject to the Patriot Act in their activities on European soil. The notion of United States Security allows many abuses.

Furthermore, despite some improvements, global governance of the Internet remains under US jurisdiction. This is the case of ICANN, for example, a company established under Californian law, which is linked to the US Department of Commerce.

In addition, many software systems transfer data by default, without specifying the uses to which they are put. This is a violation of our liberties. The principle of prohibiting data transfer by default should be adopted. The proper functioning of supposedly 'free' services must be neutral from the perspective of data transfers, especially if this service is only a pretext for plundering data. The practice of subjecting customers to technological and other forms of dependence in return for renewing software and hardware must be resisted and be banned.

Your rapporteur also proposes a revolution in the data economy, returning ownership of the data to the citizen who supplies them. She must get a fair return for her property from the use that is made of the data. Such an economy could take the form of a surcharge on companies, or a percentage of corporate turnover to be paid to the owners of the data. Citizens must be able to participate in the management of these companies, in forms that have yet to be worked out, such as as employee participation in company boards.