



**2016/2145(INI)**

22.11.2016

# **AMENDMENTS**

## **1 - 27**

**Draft opinion**  
**Michal Boni**  
(PE593.831v01-00)

European Cloud Initiative  
(2016/2145(INI))



**Amendment 1**  
**Notis Marias**

**Draft opinion**  
**Recital A**

*Draft opinion*

A. whereas cooperation among European scientists, the use and exchange of data, and the use of new technological solutions, including cloud computing and digitisation of European science, are key to the development of the Digital Single Market; whereas the European Open Science Cloud will have positive effects on scientific development in Europe; and whereas it must be developed and used with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR);

*Amendment*

A. whereas cooperation among European scientists, the use and exchange of data, ***always in accordance with the data protection authorities*** and the use of new technological solutions, including cloud computing and digitisation of European science, are key to the development of the Digital Single Market; whereas the European Open Science Cloud will have positive effects on scientific development in Europe; and whereas it must be developed and used with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR);

Or. en

**Amendment 2**  
**Nathalie Griesbeck**

**Draft opinion**  
**Paragraph -1 (new)**

*Draft opinion*

*Amendment*

***-1. Stresses that high standards of quality, reliability, confidentiality, security and protection of personal data are needed for consumer confidence in this European Cloud initiative***

Or. en

**Amendment 3**  
**Judith Sargentini**

**Draft opinion**

## Paragraph 1

### *Draft opinion*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that ***additional safeguards, such as*** pseudonymisation or anonymisation, ***can enhance protection*** when personal data are used in big data applications or cloud computing;

### *Amendment*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that ***while the application of*** pseudonymisation or anonymisation ***to personal data can reduce the risks to the data subjects concerned*** when personal data are used in big data applications or cloud computing, ***any processing of sensitive data should take into account the risks of future abuses of these measures; recalls that anonymisation must be an irreversible process by which personal data can no longer be used to identify a natural person; calls on the Commission to develop stricter guidelines and best practices on how to correctly anonymise data;***

Or. en

## **Amendment 4** **Daniele Viotti**

### **Draft opinion** **Paragraph 1**

### *Draft opinion*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and

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### *Amendment*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and

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by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation *or* anonymisation, **can** enhance protection when personal data are used in big data applications or cloud computing;

by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation **and** anonymisation, enhance protection when personal data are used in big data applications or cloud computing; ***further stresses that all data in the European Science Cloud should be held within the territory of the EU;***

Or. en

## **Amendment 5**

**Laura Ferrara, Ignazio Corrao, Fabio Massimo Castaldo, Laura Agea**

### **Draft opinion**

#### **Paragraph 1**

##### *Draft opinion*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation or anonymisation, can enhance protection when personal data are used in big data applications or cloud computing;

##### *Amendment*

1. Stresses that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation or anonymisation, ***and cryptography***, can enhance protection when personal data ***and metadata*** are used in big data applications or cloud computing;

Or. en

## **Amendment 6**

**Notis Marias**

### **Draft opinion**

#### **Paragraph 1**

*Draft opinion*

1. **Stresses** that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation or anonymisation, can enhance protection when personal data are used in big data applications or cloud computing;

*Amendment*

1. **Notes** that the development of the European Open Science Cloud must take place with due regard for the fundamental rights enshrined in the Charter of Fundamental Rights (CFR), in particular for the rights of data protection, privacy, liberty and security, and that it must abide by the principles of privacy by design and by default, and the principles of proportionality, necessity, data minimisation and purpose limitation; recognises that additional safeguards, such as pseudonymisation or anonymisation, can enhance protection when personal data are used in big data applications or cloud computing;

Or. en

**Amendment 7**  
**Judith Sargentini**

**Draft opinion**  
**Paragraph 1 a (new)**

*Draft opinion*

*Amendment*

**1 a. Stresses that the use of open standards and free and open source software are especially important in guaranteeing the necessary transparency into how personal and other sensitive types of data are in fact being protected;**

Or. en

**Amendment 8**  
**Daniele Viotti**

**Draft opinion**  
**Paragraph 1 a (new)**

*Draft opinion*

*Amendment*

**1 a. Believes that strong and full end-**

*to-end encryption should be used throughout all interactions to, from and within the European Open Science Cloud;*

Or. en

**Amendment 9**  
**Notis Marias**

**Draft opinion**  
**Paragraph 2**

*Draft opinion*

2. Believes that current EU data protection legislation, in particular the recently adopted General Data Protection Regulation (GDPR), *provides* strong safeguards for personal data protection; recognises that a harmonised approach to the implementation of the GDPR, including guidelines, compliance toolkits and awareness-raising campaigns for citizens, researchers and businesses, is crucial, especially for the development of the European Open Science Cloud and the facilitation of research cooperation, including by high-performance computing;

*Amendment*

2. Believes that current EU data protection legislation, in particular the recently adopted General Data Protection Regulation (GDPR), *should provide* strong safeguards for personal data protection; recognises that a harmonised approach to the implementation of the GDPR, including guidelines, compliance toolkits and awareness-raising campaigns for citizens, researchers and businesses, is crucial, especially for the development of the European Open Science Cloud and the facilitation of research cooperation, including by high-performance computing;

Or. en

**Amendment 10**  
**Judith Sargentini**

**Draft opinion**  
**Paragraph 2 a (new)**

*Draft opinion*

*2 a. Underlines that the recently adopted General Data Protection Regulation provides strong safeguards for the protection of personal data collected for scientific research purposes, including sensitive data related to health; recalls that specific conditions should apply in particular as regards the publication or*

*Amendment*

*otherwise disclosure of personal data in the context of scientific research purposes; calls on the Commission to take these safeguards into account for the development of the European Open Science Cloud;*

Or. en

**Amendment 11**  
**Nathalie Griesbeck**

**Draft opinion**  
**Paragraph 2 a (new)**

*Draft opinion*

*Amendment*

*2 a. is concerned by the extraterritorial reach of law enforcement authorities to access data in the context of criminal investigations and underlines the need to implement strong rules regarding access to data stored in European data centres in the framework of the European Cloud initiative*

Or. en

**Amendment 12**  
**Daniele Viotti**

**Draft opinion**  
**Paragraph 2 a (new)**

*Draft opinion*

*Amendment*

*2 a. Stresses the need to ensure, when pseudonymised and anonymised data are being used and aggregated, that reidentification of data subjects is avoided; should this never the less happen, especially when using anonymised data, full personal data protection provisions then apply;*

Or. en



## Amendment 13

Daniele Viotti

### Draft opinion

#### Paragraph 2 b (new)

*Draft opinion*

*Amendment*

**2 b. Underlines the need to ensure effective opt-out processes for data subjects for further processing of their personal data for the purposes of the European Open Science Cloud;**

Or. en

## Amendment 14

Laura Ferrara, Ignazio Corrao, Fabio Massimo Castaldo, Laura Agea

### Draft opinion

#### Paragraph 3

*Draft opinion*

*Amendment*

3. Believes that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's economy;

3. Believes that the free flow of data is paramount to the digital economy, ***on the condition of reciprocity***, and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data ***within the EU territory***, as these would hamper the development of Europe's economy; ***believes that data of European citizens should not circulate, be stored or used in countries that cannot guarantee a level of data protection safeguards similar to the one provided by the EU, in particular an effective right to redress to EU citizens before a court or tribunal;***

**Amendment 15**  
**Judith Sargentini**

**Draft opinion**  
**Paragraph 3**

*Draft opinion*

3. Believes that the free flow of data is ***paramount*** to the digital economy and ***essential for*** the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; ***stresses*** that the Initiative should ***also aim to lift any arbitrary*** restrictions as to where companies should place infrastructure or store data, ***as these would hamper the development of Europe's economy***;

*Amendment*

3. Believes that the free flow of data is ***beneficial*** to the digital economy and the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; ***recalls that any transfer of personal data to cloud infrastructures or other recipients located outside the Union should respect the rules for transfers foreseen in the GDPR***; ***believes that not all data is equally well-suited for export to non-EU jurisdictions and that the Commission initiative on the free flow of data should take that concern into account***; ***stresses that reasonable*** restrictions as to where companies should place infrastructure or store data ***are necessary to prevent future abuses***;

Or. en

**Amendment 16**  
**Daniele Viotti**

**Draft opinion**  
**Paragraph 3**

*Draft opinion*

3. Believes that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of

*Amendment*

3. Believes that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of

data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; *stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's economy;*

data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes;

Or. en

**Amendment 17**  
**Csaba Sógor**

**Draft opinion**  
**Paragraph 3**

*Draft opinion*

3. Believes that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's economy;

*Amendment*

3. Believes that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's *digital economy and inhibit scientists reaping the full benefits of data-driven science;*

Or. en

**Amendment 18**  
**Notis Marias**

**Draft opinion**  
**Paragraph 3**

*Draft opinion*

3. **Believes** that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's economy;

*Amendment*

3. **Notes** that the free flow of data is paramount to the digital economy and essential for the development of science and research; emphasises that the Commission initiative on the free flow of data should enable the growing European cloud computing sector to be in the forefront of the global innovation race, including for science and innovation purposes; stresses that the Initiative should also aim to lift any arbitrary restrictions as to where companies should place infrastructure or store data, as these would hamper the development of Europe's economy;

Or. en

**Amendment 19**  
**Csaba Sógor**

**Draft opinion**  
**Paragraph 4**

*Draft opinion*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, **researchers** and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy **European** solutions.

*Amendment*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, **including SMEs**, and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable **the creation of** innovative and trustworthy solutions **and market opportunities, while ensuring an adequate**

*level of security.*

Or. en

**Amendment 20**

**Daniele Viotti**

**Draft opinion**

**Paragraph 4**

*Draft opinion*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary *technology*, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

*Amendment*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary *technologies, including cryptographic technologies*, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

Or. en

**Amendment 21**

**Laura Ferrara, Ignazio Corrao, Fabio Massimo Castaldo, Laura Agea**

**Draft opinion**

**Paragraph 4**

*Draft opinion*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches,

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*Amendment*

4. Notes that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches,

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cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

cyber-attacks or misuse of personal data, especially when large amounts of data *and metadata* are collected, *stored* and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

Or. en

**Amendment 22**  
**Daniele Viotti**

**Draft opinion**  
**Paragraph 4**

*Draft opinion*

4. Notes that the scientific community needs a secured *and safe* high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

*Amendment*

4. Notes that the scientific community needs a secured, *safe and open source* high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

**Amendment 23**  
**Notis Marias**

**Draft opinion**  
**Paragraph 4**

*Draft opinion*

4. *Notes* that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

*Amendment*

4. *Stresses* that the scientific community needs a secured and safe high-capacity infrastructure in order to advance research and prevent potential security breaches, cyber-attacks or misuse of personal data, especially when large amounts of data are collected and processed; calls on the Commission and the Member States to support and incentivise the development of the necessary technology, taking into account the security by design approach; supports the Commission's efforts to enhance cooperation among public authorities, European industry, researchers and academia in the area of big data and cybersecurity from the early stages of the research and innovation process in order to enable innovative and trustworthy European solutions.

Or. en

**Amendment 24**  
**Judith Sargentini**

**Draft opinion**  
**Paragraph 4 a (new)**

*Draft opinion*

*Amendment*

**4 a. *Strongly believes that the EU should be on the vanguard of the protection of personal and other sensitive data and should offer systems of increased protection to those seeking protection outside of the EU; believes that***

*exploiting the EU privacy competitive advantage could allow European companies to compete with US and Asian IT industries;*

Or. en

**Amendment 25**  
**Nathalie Griesbeck**

**Draft opinion**  
**Paragraph 4 a (new)**

*Draft opinion*

*Amendment*

**4 a.** *Emphasizes that the European Cloud initiative should be accompanied by a complete and inclusive cyber security strategy, as we need reliable data infrastructures that can be used without exposing the activities and data stored in the Cloud to data loss, intrusion or attacks.*

Or. en

**Amendment 26**  
**Judith Sargentini**

**Draft opinion**  
**Paragraph 4 b (new)**

*Draft opinion*

*Amendment*

**4 b.** *Urges the Commission to ensure a strong and vital development of the strongest possible encryption systems that cannot be compromised, even by hostile foreign state actors, and that will protect the scientific community's work within the EU, where necessary;*

Or. en

**Amendment 27**

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**Judith Sargentini**

**Draft opinion**  
**Paragraph 4 c (new)**

*Draft opinion*

*Amendment*

***4 c. Urges the Commission to ensure that the European Cloud Initiative is built in such a way as to ensure scientific independence from the commercial interests of the parties involved with building the necessary infrastructure; warns that the opening up of data could lead to a situation where all the world's data is being controlled by a small number of commercial entities that would then be able to wield outsized influence over policy and people's lives;***

Or. en