

CSC - IT CENTER FOR SCIENCE LTD.

POSITION PAPER ON THE COMMISSION COMMUNICATION "BUILDING A EUROPEAN DATA ECONOMY"

Summary: European Data Economy needs a wider scope where barriers are removed beyond the data localisation restrictions, focusing on what is the most effective way of promoting data movement, building on existing efforts and aligning with relevant parallel initiatives. Semantic and technical interoperability, data security, data ownership and seamless data movement between sectors are issues to be addressed in order to build a functioning data economy.

General remarks

CSC – IT Center for Science Ltd. (CSC) as part of the Finnish research system develops, integrates and offers high-quality ICT services for research, education, culture, public administration and companies. Our services include HPC, data centers, data storage, curation and long-term preservation, data analytics, data publication, software development, research networks, and data interoperability services.

CSC supports promoting the free flow of data in Europe. The EC Communication (COM(2017) 9) is a step in the right direction. Data and data analytics are essential for growth and innovation. It is crucial for European competitiveness to create a consistent and coherent legislative basis to enable an effective and efficient data economy. Europe's global competitiveness is at stake, and now is the time to act.

We are witnessing an enormous change in how both business and research are done, caused by exponentially growing volumes of data. This revolutionary phenomenon is similar to the birth of the Internet and all of its implications are not yet known. What we already know is that data is a crucial element in creation of new business all over the world, and Europe is lagging behind in this development. The focus should not be too much on what new regulation Europe needs, but instead, how data movement and usability can best be ensured and what is the most effective way of doing it - whether it is regulation or something else. Creating new regulation at this point might be a risk as it can cause barriers that are difficult to remove afterwards. What is needed now is a critical analysis of existing regulation and removal of legislative barriers. Promoting data movement should not only be seen as mechanical elimination of barriers, but as a strategic competitiveness factor for Europe.

CSC supports the following specific viewpoints presented in the Commission Communication:

 The regulative uncertainty concerning data usage and storage as well as the fragmentation between organisations, diverse regulation and practices in Member States are recognised as serious hindrances for the development of data economy, data re-use and innovation. In order to achieve a genuine Digital Single Market, these uncertainties must be systematically removed. CSC warmly welcomes the Communication suggestion that any Member State action



affecting data storage or processing should be guided by a "principle of free movement of data within the EU" when General Data Protection Regulation (GDPR) is not applied or it allows Member States to regulate specific matters.

2. In its Communication and future stakeholder discussions, the EC emphasizes technical solutions for reliable identification and exchange of data. CSC has expertise in AAI (Authentication and Authorization Infrastructure) technologies and wants to emphasize that the planning and implementation of data re-use environment/infrastructure should be carried out comprehensively, focusing on reliable user authentication and the infrastructure as a whole.

Suggestions for improvements

There are issues that are not sufficiently addressed in the EC Communication. This relates first and foremost to the scope of the Communication which focuses heavily on data location and storage of data. However, data location restrictions are only one and a rather mechanical approach to data movement. If this is the scope of data economy, the most substantial question of how to enable the actual usability, portability and re-use of data cannot be properly addressed.

Below some more detailed suggestions for widening the scope:

- 1. The interoperability of systems and data is one of the key requirements for promoting the free flow of data. In addition to technical interoperability, semantic interoperability is essential, meaning the ability to provide data in an explicit and high-quality format so that it can be easily re-used. Similarly, data management guidelines and the quality and reliability of metadata affect the findability and re-use of data. It is necessary to acknowledge the importance of data chain management and the possibility to reliably track data and its history. In order to ensure the smooth movement of data between countries, actors and sectors, every effort must be made to develop common data models and data content, semantic interoperability and standards¹. Standards are highlighted also in the Communication on ICT Standardisation Priorities for the Digital Single Market, and coherence with this initiative must be ensured.
- 2. Questions regarding data ownership and data producer rights can result in uncertainty concerning the re-use and openness of data. More clarity is needed in defining the responsibilities: for example, which actor is responsible for data validity? In addition, further examination is required with regard to the rights, responsibilities and ownership issues of registers. The MyData concept² introduces the principle of human centric control, according to

¹ Research Data Alliance (<u>RDA</u>) offers tools and recommendations which can be used to increase the openness and more extensive use of data.

² Report: MyData - A Nordic Model for human-centered personal data management and processing.



which individuals are empowered actors, not passive targets, in the management of their personal lives both online and offline. Thus individuals have the right and practical means to manage their data and privacy. CSC urges the Commission to emphasise also the individual point of view in building the European data economy.

- 3. Enabling seamless data movement between different sectors (commercial, research, public) should also fall under the scope of data economy in order to leverage innovation potential that is created from e.g. combining commercial and research data. Any barriers that prevent data movement between sectors should be identified and removed.
- 4. Attention must be given to ensuring that all data-related initiatives under the EU's Digital Single Market (DSM) strategy are coherent and transparent, and the EU actors such as EC DGs should work together to ensure this. If we want to build a data economy, all parallel EU initiatives should be in line with the targets of data economy. Below we have listed key points from some of the most relevant parallel initiatives that should be aligned from a strategic point of view:
 - a) In the EC Proposal for a Copyright <u>directive</u>, a mandatory Text and Data Mining (TDM) exception for research purposes is proposed. This is an important step in creating new innovation and service development. However, in order to make data-based services grow and flourish, TDM exception must be widened to cover also commercial purposes. Otherwise the development of a data economy is not possible.
 - b) The EC has already systematically brought the open science agenda further under e.g. the *Horizon 2020* framework programme and the development of the *European Open Science Cloud (EOSC)*. Openness and movement of data are core elements in promoting the open science agenda and these efforts need to be aligned with data economy, both on the strategic, policy, infrastructure and technical levels. On the research side, a lot of work has already been done, and this work, expertise and existing data infrastructures should be used as a basis for building cross-sectoral data movement.
 - c) EC Skills Agenda, aiming to combine and utilise different datasets and big data, is another relevant initiative, which should be taken into consideration when analysing the data skills needs and how they are met at the European level.
 - d) In developing the data economy, it should be noted that different types of data pose different requirements for the processing and transfer of data. In particular, the processing of personal data (*MyData*, sensitive data) requires high-level data protection system solutions, for which the EU General Data Protection Regulation (GDPR) also sets requirements. On this account, data protection and information security should be seen as a cross-cutting theme in building the data economy.