

STATEMENT on the EUROPEAN OPEN SCIENCE CLOUD

By bolstering and interconnecting existing research infrastructure, the European Commission plans to create a European Open Science Cloud (EOSC) that will offer researchers and science & technology professionals a virtual environment to store, share and re-use their data across disciplines and borders. The initiative is part of Europe's ambition to support the transition to Open Science in the context of the Digital Single Market. The emergence of the EOSC is a great opportunity for Europe to ensure that science, business, public services and society will reap benefits of the big data revolution by providing a trusted environment for hosting and processing research data. Reliable worldclass data infrastructure is key to the development of the EOSC.

Building on the

- Conclusions on 'Open, data-intensive and networked research as a driver for faster and wider innovation', adopted at the Competitiveness Council of 28-29 May 2015;
- Report on 'Towards a Digital Single Market Act', adopted by the European Parliament on 19 January 2016;
- Amsterdam Call for Action on Open Science, based on the input of many experts and stakeholders of the Amsterdam Conference 'Open Science – From Vision to Action', hosted by the Netherlands' EU Presidency on 4 and 5 April 2016;
- Communication on 'European Cloud Initiative – Building a competitive data and knowledge economy in Europe', published by the European Commission on 19 April 2016;
- Conclusions on 'Digital Single Market Technologies and Public Services Modernisation' package, adopted by the Council of the European Union on 26 May 2016;
- Conclusions on the transition towards an Open Science system, adopted by the Council of the European Union on 27 May 2016;
- Report 'A Cloud on the 2020 Horizon: first report and recommendations on realising the European Science Cloud' of the Commission High Level Expert Group on the European Open Science Cloud, published on 20 June 2016.

the leading large-scale research infrastructures in the Dutch life sciences field (BBMRI-NL, ELIXIR-NL and EATRIS-NL), DutchTechcentre for Life Sciences (DTL), the Netherlands Federation of University Medical Centres (NFU), SURF, Lygature, Netherlands eScience Center (NLeSC), ZonMw and Topsector Life Sciences and Health (Health~Holland) welcome the European initiative to develop an Open Science Cloud and wish to express their strong support to the further development of the EOSC. We recognize the importance of open science and already demonstrated our own commitment to responsible data sharing within national infrastructures, and embedded in European infrastructures.

The Dutch health sector acts in the frontline by interconnecting research infrastructures. Biomedical research focuses increasingly on the individual patient. By means of 'personalised medicine' treatment will be tailored to the individual patient in order to ensure he or she receives the best possible treatment. The combined capabilities offered by high-end imaging, genomics, big data, and internet technology offer a great promise for a revolution towards personalized medicine and health with optimal citizen participation. However, E-health will only deliver its promises once global interoperability of data, research and health services is achieved. Therefore, connecting local resources within the Dutch network to the international knowledge base is key. In this respect we would like to emphasize that the starting point is that research data should be FAIR (Findable, Accessible, Interoperable and Reusable), which will be of utmost importance within the context of the Open Science Cloud.

The recently launched initiative 'Health-RI' (Health Research Infrastructure) builds on a wide range of existing cross-institutional and international biomedical facilities and resources assembled in the Netherlands, often Dutch nodes in international infrastructure frameworks (ESFRIs and e-infrastructures). Health-RI envisages to have a research infrastructure in the Netherlands by 2025 that will both drive and support cross-disciplinary research into personalised medicine & health and optimise personalised healthcare. This infrastructure will become the national open platform that connects all high-end biomedical resources available: tissue & sample collections (biobanks), imaging collections, data collections, and experimental facilities. Health-RI offers the ability to easily get access to the (global) health & disease knowledgebase, and enables research for treatments & health prevention targeted to the needs of the individual citizen. It will also reduce costs for all participating organisations, while enhancing quality and reproducibility of research and care.

Health-RI is foreseen as a publicly driven infrastructure that connects a broad network of diverse stakeholders (such as knowledge alliances, medical centres, government, patient's organisations, funding organisations), including industry (by public-private partnerships with, for example, insurers, data management organisations and start-ups).

Specifically, we encourage the European Commission to ensure that the EOSC will be created as an accessible, bottom-up environment and to facilitate a FAIR data ecosystem. With respect to this, we would like to cooperate with the European Commission to establish a chain of 'FAIR Open Implementation Labs' in short term. In these environments, all the components needed to make the 'Internet of FAIR data and services' can be agreed upon, tested, assembled and implemented. Under Rules of Engagement being developed in the context of the European Open Science Cloud and the equivalent 'Commons' in the USA, all interested parties from all domains, public or private, will be able to participate.

We are looking forward to a progressive development of the EOSC and we hope to contribute with our expertise, experience and best practices in order to achieve optimal synergy between the local, national and European infrastructures.

