April 2018

Statement of the Council for Scientific Information Infrastructures (RfII) on the proposals for a European Open Science Cloud (EOSC)

The Council for Scientific Information Infrastructures (RfII) was established in 2014 to advise on the development of a contemporary and sustainable infrastructure for access to scientific information in Germany. RfII recommendations are directed at academia and at the German federal and state governments. They also serve to support the development and communication of German positions in international debates.

The RfII welcomes the European Open Science Cloud as an important step towards countering the current fragmentation of digital resources at the European level. The RfII is aware of the complexity of this task and takes the following position on the EOSC\(^1\):

**Ensuring subsidiarity and adaptation to national structures**

The RfII expressly welcomes the principle of “local-to-central subsidiarity”. However, many of the national, regional, or even domain-oriented structures considered for the federation are themselves still in developmental stage and striving for financial support. Coordinated and continuous investments at the national level are thus needed parallel to the EOSC. Subsidiarity requires functioning coordination between national investment decisions and those made in the EOSC. Such mechanisms have not been presented yet. They are needed urgently and have to be established.

**Strict focus on scientific needs**

In order to gain broad acceptance, the EOSC must focus on the scientific (also interdisciplinary) needs. Ideally, the service portfolio of the EOSC will include attractive services for individual research as well as for collaborative research in large networks (e.g. project consortia or ESFRIs). Providers and scientific users will have to exchange continuously and formulate the scientific value of the services as well as the actual demand together.

**Maintaining academic freedom**

Decisions relevant to science within the EOSC must always be made with the participation of researchers. The RfII warns that the current EOSC governance structure factually excludes important stakeholders. To engage the scientific stakeholders, the Stakeholder Forum focuses on “properly constituted” groups (RDA, Science Europe, EUA, etc.) and individual organisations like universities, funders, or academies. This does not necessarily provide users and their communities with appropriate representation. Also, providers and research users must be equally represented.

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Designing sustainable financing structures

The planned federation of the services and research infrastructures already funded under EU programmes appears as a promising step towards a “functional core” of the EOSC. One problem that remains unsolved, though, is how to ensure the operation of the services over the long term and, in particular, the long-term archiving of the data stored therein. The RfII regards joint financing models as a critical factor for success. Also, a long-term governance structure is necessary. Only reliable and trustworthy services will gain sufficient acceptance among researchers.

Restricting commercialisation

The EOSC is not an instrument for saving costs or generating revenue, it should instead support the advancement of science on a broad basis. The RfII therefore recommends making basic services of the EOSC available for free.

Commercialisation options are viewed critically by the RfII. It would be detrimental to the goal of gaining acceptance among researchers if particularly good data services and tools were to disappear behind paywalls and allow only a few to actually benefit from them.

Clear requirements for providers, services, and data producers

In addition to application of FAIR principles, additional criteria and defined processes are needed to add services to the EOSC portfolio as well as in cases where services will be discontinued. Rules of participation for companies conducting research and for commercial providers must be formulated carefully and be transparent for all users.

A certification process is planned for the data infrastructures in the EOSC to verify the implementation of FAIR principles and compliance with legal frameworks such as the General Data Protection Regulation. A comparable certification process for data producers should also be considered.

Summary

The RfII considers the core aspects of the EOSC feasible. Due to the complex technical, legal, organisational, and cultural challenges, though, the EOSC should be realised in a way that researcher participation is continuously ensured and the federation grows in manageable steps. Providing reliable and trustworthy services and data has to be EOSC’s ultimate objective.