

A united effort towards the implementation of the EOSC vision: The first EOSC Tripartite Event in the Nordic and Baltic Countries

The first EOSC Tripartite Event in the Nordic & Baltic countries was organised on the 4th of October 2022 in Tallinn, Estonia, supported by the [EOSC-Nordic project](#) and collocated with its [final event](#) and other regional EOSC events. It gathered 85 participants from the European Commission (EC), EOSC Association (EOSC-A), EOSC Steering Board (EOSC-SB), Research Performing (RPO) and Funding Organisations (RFO), EOSC National Structures and other relevant Open Science actors from the Nordic and Baltic countries to **discuss the impact of EOSC on the region and how the region is contributing to the EOSC implementation**. The event was a continuation of the successful series of EOSC national and regional tripartite events that the European Member states and Associated Countries have eagerly started to organize this year.

EOSC tripartite collaboration – how to get all the noses to point to same direction



EOSC Association President **Karel Luyben** started the meeting by recapping the EOSC vision and the guiding principles and highlighted that the research process has to be at the center of the EOSC

initiative. Finding, sharing, accessing and reusing a relevant data set should be as easy as doing every-day Google searches, and not just within Europe but world-wide. Creating EOSC, a web of FAIR data and related services, that will act as a crosscutting data space for science, research and innovation connecting all sectoral data spaces, is not straightforward. The EOSC Association, Luyben said, is the voice of the community in this endeavor.

Thomas Neidenmark, Policy Officer from the Open Science Unit in the Directorate General Research and Innovation (DG RTD) of the European Commission, took first a retro perspective on the EOSC implementation and then talked about the benefits of [the co-programmed Horizon Europe EOSC Partnership \(2021–2030\)](#) for achieving EOSC. The Tripartite collaboration is a level-playing field for the European Commission on behalf of the European Union, EOSC Association on behalf of the research community and the European Member States and the Associated Countries represented in the EOSC Steering Board, to discuss, coordinate and implement EOSC. The partnership is crucial for directing investments to maximize the impact of creating EOSC, a new Data Commons that will revolutionize the way research is done.

EOSC is mentioned in [the ERA Policy Agenda 2022–2024](#) as number one action for the priority area of deepening a truly functioning internal market for knowledge. It is closely related to many other ERA priority actions connecting the dots on the European, national, and institutional levels. “We need multiple levels and multiple commitments, not just financial ones” Neidenmark concluded.

Anu Nuutinen, Senior Science Adviser at Academy of Finland, spoke for the Nordic and Baltic countries as EOSC Steering Board member (listed soon on the brand-new [EOSC tripartite collaboration page](#) on the EOSC Association web site). Nuutinen reinforced the need for strategic coordination and stressed the importance of the multi-level cooperation in implementing EOSC and Open Science. Earlier this year, the EOSC Steering Board identified three key policy priorities for EOSC: the role of commercial partners, sovereignty of FAIR data and data literacy. The steering board will present three policy papers on these topics including tentative recommendations how to address them at the [EOSC Symposium 14-17 November in Prague](#). Also, the outcomes of the national and regional EOSC Tripartite events will be discussed in the full EOSC tripartite event at the Symposium.

The first part of the day ended with an interactive panel chaired by **Wilhelm Widmark**, Library Director of Stockholm University and EOSC Association Board Director. The speakers debated whether EOSC already exists or not. Karel Luyben compared EOSC to the internet and emphasized that it is not possible to define exact date when EOSC is in place. Anu Nuutinen encapsulated the discussion by saying “EOSC is not ready yet, but everything you are doing in your countries are steps in a long and gradual process towards it.” Lastly, Thomas Neidenmark appraised the openness and collaborative spirit in the Nordic and Baltic countries and encouraged the countries to lead by example but also to “bench-learn” i.e., to listen to and learn from the initiatives in other countries and adapt the learning outcomes to national settings.

Full commitment from the Nordic and Baltic countries toward EOSC and Open Science



In the session of pursuing strategic alignment between national agendas and EOSC, the representatives of the Nordic and Baltic countries gave lightning talks on how the Nordic and Baltic priorities fit in and support the EOSC agenda and vice versa. There is a strong political commitment to EOSC and Open Science. All the countries support the European Research Area (ERA) priority action number one *Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the European Open Science Cloud (EOSC)*. In addition, there are many different Open Science policies, strategies, and other ambitions either in place or in the making on the national level.

Hanne-Louise Kirkegaard, Ministry of Higher Education and Science, Denmark, informed that even though there is no formal Open Science policy in the country, there are many policies on constituent elements of Open Science. For example, the Danish National strategy for data management based on the FAIR principles. **Martin Eessalu**, Ministry of Education and Research, Estonia, presented Estonian Research and Development, Innovation and Entrepreneurship Strategy (RDIE) 2021–2035 that is the first strategy in the country to put Open Science on the pedal and set specific goals for making all research outputs available. Estonia will also produce an action plan that will tie Open Science and High-Performance Computing (HPC) closely together.

Sami Niinimäki, Ministry of Education and Culture, Finland said that the country is preparing a national target of increasing the research and development (R&D) investment to 4% of the gross domestic product by 2030 to increase the volume and quality of R&D activities and strengthen

competencies and partnerships. Responsible research evaluation, Open Science, Data Management & HPC, and the development of research.fi database are the priorities to be covered by the increase. The presentation of **Edvards Francis Kuks**, Ministry of Education and Science, Latvia, showed that the country's commitment to EOSC is articulated among other things through the standards set on interoperability and data management derived from EOSC. One of the strongest national norms presented in the session was the Law on Research and Higher Education in Lithuania which states that all results of research and development activities funded by state budget funds in research and higher education institutions shall be made public insofar in compliance with other legal acts like intellectual property regulation. In his presentation, **Tadas Juknevičius**, Ministry of Education, Science and Sport, Lithuania, told also that there are dedicated funds available in the country for joining EOSC.

Norway is enthusiastic about Open Science too, said **Ola Berge**, Ministry of Education and Research. All central Norwegian policy documents such as the strategy for digital transformation in the higher education sector and the national strategy on access to and sharing of research data refer to EOSC. Lastly, **Beate Eellend**, Ministry of Education and Research, Sweden, presented the Open Science priorities in Sweden. She explained that Open Science has been prioritized by the Swedish Government for many years now and that higher education institutions are assigned by the government to continue the work on Open Science. In addition, National Library of Sweden is assigned by the government to develop national policies for Open Science which are foreseen to be published in September 2023.

All speakers brought up similar challenges and gaps with respect to EOSC implementation at national level. Engaging national stakeholders and raising awareness as well as lack of skills on FAIR data, competencies and human resources were mentioned often as highlighted by Neidenmark when presenting the results of the European Research Data Landscape study in the intro session (the study will be published soon). In addition, the governance of research IT services, FAIRification of institutional and national research infrastructures, and in some cases lack of research infrastructures at institutional and national level, were raised as challenges. Also, legislation and the researchers' merit system which maintains the "publish or perish-culture" were seen as major obstacles for Open Science.

Finally, the speakers were challenged in a panel moderated by **Ute Gunsenheimer**, EOSC Association Secretary General, about their country's commitments to other ERA priority actions remarking that the selection of certain ERA actions was only a reflection of their national priorities for which they can commit resources. The panelists also discussed the long-term commitments to EOSC and agreed that the planning for the post-2027 era when the EOSC Partnership finishes needs to start already now.

RFOs and RPOs are the conduits to researchers for the EOSC uptake. EOSC is also an institutional responsibility.



The third part of the day focused on exploring successful practices in the Nordic and Baltic countries to boost the EOSC uptake. The first half of the afternoon session addressed the best practices on how to engage funders and research performing organisations in EOSC.

Ola Berge, Ministry of Education and Research, Norway, said that the country's mandated organisation, Norwegian Research Council, is well-placed to understand the needs of research communities and implement Open Science requirements among them. The Council aims to encourage the participation of RPOs and service providers in EOSC Association and maintain synergies between Horizon Europe research infrastructure Work Program and national level actors. "EOSC is as good as its value for researchers", he emphasized.

Sabina Anderberg, Swedish Association of Higher Education Institutions (SUHF) & co-chair of the EOSC-A Task Force on Upskilling countries, explained how Swedish higher education institutions (HEI) are involved in EOSC. Since 2016, SUHF has organized different kind of activities to support their engagement, for example national meetings with stakeholders, EOSC-related webinars, and research data management surveys. The association has formulated a national *Roadmap for Open Science* to support the HEIs in their work. The roadmap includes eight overall recommendations for actions that need to be implemented to be able to achieve the Government's target scenario of a transition to an open scientific system in 2026. To complement the roadmap there is also a *Guide for Implementation of the Open Science Roadmap*. The guide contains specific proposals and a proposed schedule for actions and capabilities. SUHF is also part of the National Reference Group for EOSC which has been established to support the Swedish Research Council in their role as the mandated organisation ensuring a good communication flow with the HEIs.

John Renner Hansen, Professor, Chairman of Danish e-Infrastructure Cooperation Consortium (DeiC) explained that the Danish Strategy Towards a National e-Infrastructure for Research defines

DeiC as the national coordination body for the collaboration on the public research e-Infrastructures. Mandated by the Ministry of Higher Education and Research DeiC will formulate the national strategy for Data Management based on FAIR, but strategies alone will not do it. Renner highlighted that it is of utmost importance to teach students and researchers that FAIR is necessary. “Without FAIR, there is no sharing”, he noted.

The session ended to an interactive panel moderated by **Sverker Holmgren**, Director of Chalmers eInfrastructure Commons, Chalmers University of Technology, and co-chair of the EOSC Association Task Force on Research Engagement and Adoption. In the panel, the speakers discussed the roles and responsibilities of different actors in the EOSC implementation and noted that it is the responsibility of research funders to try and understand the needs of researchers and ensure the resources for their work. This is not an easy task since FAIR is different from one scientific discipline to another and the communication from the level of an individual researcher up until the respective Ministry is complex. It was also noted the success of EOSC depends on researchers filling it with data and reusing the data. Researchers do not necessarily need to know much about EOSC, but they do need services that support their work. What we can do is to keep up the good spirit and continue working on EOSC. It's complicated and will take time but we are creating future here, the panel concluded.

EOSC national structures provide a network and communication channel for national stakeholders



The second half of the afternoon focused on exploring successful practices on how to organise EOSC Coordination at national level. The national EOSC structures can take many different forms, but they do share similar objectives.

Sofia Abrahamsson, Swedish Research Council (SRC), explained that SRC is the country's mandated organisation in EOSC Association and also the organisation representing Sweden in the EOSC Steering Board. SRC also runs National Reference Group on EOSC which supports it in its role as the mandated organisation. The objective of the National Reference Group on EOSC is ensure that stakeholders' perspectives, such as HEIs represented via SUHF, are represented in the EOSC Partnership.

Finland on the other does not have a mandated organisation but has since January 2021, supported by the Ministry of Education and Culture, a national coordination structure in place that brings together national stakeholders to discuss and exchange information on EOSC developments raising awareness of EOSC. The EOSC Finnish Forum also aims to provide coordinated feedback and input to the EOSC Association and represent as much as possible the Finnish interest in the association, told **Marita Kari**, Federation of Finnish Learned Societies who is also part of the Coordinating Committee planning and guiding the activities of the Forum.

One of the newest EOSC national structures is the EOSC Denmark Coordination Forum which was established by the Danish Agency for Higher Education and Science, and DeiC which is also Denmark's mandated organisation. Inspired by the Finnish Forum, it aims to collect, share and use knowledge about EOSC nationally to integrate the EOSC in the research infrastructure, services and other support initiatives build up and provided for research in Denmark. Expanding the national EOSC knowledge base and increasing the participation in EOSC are some of the national critical success factors that the Coordination Forum will help to meet **Anne Sofie Fink**, DeiC, explained.

Sarmite Mickevica, Ministry of Education and Science of Latvia, presented the latest developments from Latvia where the country's mandated organisation Shared IT Service Center represents the majority of Latvian students, researchers and scientists, and cooperates with the industry, too. The organisation concentrates on technical expertise and aims to reduce the fragmentation of service providers in the country and provide economies of scale. Development of services roadmap and coordination of data stewards' network are some of the next steps in terms of national EOSC coordination in Latvia.

This session too was concluded with an interactive panel moderated this time by **Lars Fischer**, Strategy & Policy Officer, NORDUnet and Member of the Board of Directors, GÉANT Association. He interviewed the panelists about the role of service providers in the national EOSC structures and the interactions between the national structures across countries. Service providers are there in one way or the other, but Latvia has a special focus on them due to the technical nature of Shared IT Service Center. What comes to the cooperation across the countries, the panelists agreed on that they can learn from each other, share best practices, and have collaboration projects on certain topics but there is no specific Nordic & Baltic EOSC agenda that would differentiate from the joint EOSC agenda articulated in the SRIA.

Finally, **Sara Garavelli**, EOSC Association Director, the EOSC Finnish Forum Coordinator and EOSC Programme Manager at CSC summarized the discussions of the day by noting that all Nordic and Baltic countries are committed to Open Science and ERA actions, and even beyond. She emphasized that we all have responsibility in implementing EOSC. Hence, all the partners in the EOSC tripartite collaboration need to be proactive and advocate EOSC. Garavelli also echoed Neidenmark's comment on following what is happening in other countries and noted that the event had been very useful and provided an excellent arena for exchanging information and insights. A similar regional event will surely follow, and of course, the countries will come up with suggestions for follow-up activities on a national level.



Photos by Henri Narits, University of Tartu