Executive summary

The Ministry of Education and Science, together with the European Open Science Cloud Association (European Open Science Cloud, EOSC) and EOSC Steering Board organized a thematic tripartite conference, which was held in a hybrid format on March 28 in Sofia (09:00-16:00). The aim of this international event was to promote policies, strategies and activities on the topic of open access to scientific information and to give insight into the progress in implementing plans to achieve national and European policies and practices regarding open science.

Open access to scientific information is essential for the dissemination of scientific knowledge in Europe. It has an impact on science, industry and society and is an important element for the more effective use of existing knowledge of scientific value.

This is why the program for the event featured a presentation of the Bulgarian portal for open science, which was created in implementation of the National Open Science Plan. As of February 2023, over 46,000 open access publications, dissertations, books, conference reports have been registered in the portal.

The speakers and panelists gave an international dimension to the event, sharing views from the perspective of EOSC and the European Commission on the subject, and sharing experience, valuable insight on the topic and best practices from Sweden, the Czech Republic, Austria, Spain, Poland, Italy and France.

The moderator of the morning session was prof. Ana Proykova (national representative in ESFRI, St. Kliment Ohridski University EOSC Association member). The moderator of the panel sessions (afternoon) was Dr. Vladimir Bozhilov, Associate Professor in the Department of Astronomy of the Faculty of Physics of St. Kliment Ohridski University (Sofia) and a leading science communicator for Bulgaria.

The event was attended by 80+ participants (cumulative, online and on site).
1. Overview

The Ministry of Education and Science, together with the European Open Science Cloud Association (European Open Science Cloud, EOSC) and EOSC Steering Board organized a thematic tripartite conference, which was held in a hybrid format on March 28 in Sofia. The aim of this international event was to promote policies, strategies and activities on the topic of open access to scientific information and to give insight into the progress in implementing plans to achieve national and European policies and practices regarding open science.

The target audience of the event included universities, scientific institutes, relevant national centers and libraries, researchers, experts, representatives of Ministries and Agencies, associations and representatives of NGOs.

The topics for the morning session featured an EOSC-Association overview, presentation on the European Commission Perspectives on Open Science, the Role of the EOSC Steering Board, relevant ESFRI support and coordination measures and a dedicated session on EOSC development at country level for Bulgaria:

- The national action plan for OS in Bulgaria;
- Publications, open science portal, research registers;
- Sofia university as an EOSC Association member;
- OS Memorandum of understanding of RPOs.

The afternoon session featured two moderated discussion panels:

Panel session 1: Infrastructures in support of Open Science and Fair Data – maximizing the benefit of research data (RIs dealing with data - GDI project, Data center of GATE) and
Panel session 2: EOSC policies and funding mechanisms at national and cross border levels.

2. Main highlights (combined with 5. Relevant quotes)

**Michael Arentoft – Head of DG RTD’s ‘Open Science’ Unit:** “It is important to showcase success stories and best practices examples by various research communities and help build national EOSC communities and new collaborations that align with National Strategies and Roadmaps and of course – with EOSC.”

**Wilhelm Widmark - EOSC Association Director:** “It is necessary to align all projects existing under the EOSC initiative in order for it to become what it is meant to be and to reach its potential. Let’s co-create EOSC together.”

**Pantelis Tziveloglou - Policy Officer, DG RTD’s ‘Open Science’ Unit:** “Open science is a political priority of the EU.”
Yanita Zherkova – EOSC SB member from BG: “The survey launched by EOSC Steering Board in 2021 allowed to benchmark the relevant activities on institutional, national and international level and to monitor the beneficial outcomes from these activities in the Member States and Associated Countries to EOSC, as well as the extent of the implementation of the EOSC policies.”

prof. Giorgio Rossi – SB member from Italy: “EOSC Steering Board recognizes EOSC as the overarching transverse European Data Space for research.”

Karina Angelieva – Bulgarian ESFRI Delegate: “At the ESFRI meeting held in March the Forum decided to set up a joint ESFRI-EOSC taskforce to work on the synergy on the topic between ERICs and EOSC, tackling the fragmentation of research data in Europe and to improve alignment of the ESFRI operation with European infrastructures to support the deployment of EOSC.”

Hristianiya Ancheva and Dr. Jordan Iliev – National Center for Information and Documentation presented the 3-year progress of the implementation in Bulgaria of the National Open Science Plan for the period 2021-2025.

The afternoon session featured 2 moderated discussion panels:

Panel session 1: Infrastructures in support of Open Science and Fair Data – maximizing the benefit of research data (RIs dealing with data - GDI project, Data center of GATE)
  - Wilhelm Widmark - EOSC Association Director and Library Director of Stockholm University (In person)
  - Prof. Radka Kaneva – BBMRI Bulgaria coordinator (In person)
  - Prof. Milena Dobrevska - GATE Research institute (in person)
  - Prof. Jacques Demotes, Director General of ECRIN (online)
  - Dr. Ilire Hasani - Mavriqi - RDM at TU Graz (online)
  - Prof. Giorgio Rossi – EOSC SB member (online)

And

Panel session 2: EOSC policies and funding mechanisms at national and cross border levels.
  - Volker Beckmann - EOSC SB member from France (online)
  - Dr. Donatella Castelli – Research Director at CNR (online)
  - Dr. Anna Walek - NCN coordinator of the East Hub in the EOSC Focus Project (in person)
  - Jiří Marek - Head of EOSC-CZ Secretariat (Masaryk University | Institute of Computer Science) (in person).

The participants shared their insight and experience on the respective thematic subjects as well as examples of the approach their countries adopted, the knowledge gathered so far, and the lessons learned.
Panellists answered the questions about how different countries and research institutions helping to implement the Open Data Policy and what are the best practices for preserving data. They also discussed how to protect the data, make it accessible to particular types of users and what type of IT solutions are available. One topic was also current obstacles in maximising the benefits of research data and what can be done to address these problems. Panellists also discussed what measures different institutions have taken, what the challenges are and what is planned next regarding the performance indicators on the accessibility of the data. They also discussed common standards for data storage and citizens’ access to data and engaging the society as a whole to co-create scientific knowledge.

One of the conclusions of the panel, addressed by Giorgio Rossi, was: Interoperability between infrastructures has obvious consequences on the interoperability of data. We need a technology leap to meet the needs of research communities, allowing for FAIR by design data to be collected automatically.

3. Tripartite collaboration

The event was organised and carried out owe to the cooperation between the involved organisations. Through series of online meetings in addition to the correspondence – the organization team clarified the concept and approach for the event, considering the best practices and approaches adopted up to date for such events hosted in other MS. The organisations finally structured a program and nominated appropriate speakers and panelists. Each Party contributed with suggested program/agenda topics and definitions and with nominating speakers and panelists. Collaboration continued during the actual hosting of the event and with the post-event activities (reports, communication).

4. Government level contributions

The Ministry of Education and Science as the organiser and host for Bulgaria shared with the participants during the event the progress report, status and planned actions on the subject on National level. The key messages in the address by Deputy Minister Chavdarova (read by Science Directorate Director Milena Damyanova) touched upon the following topics:

Scientific research, together with new technologies and innovation, provide answers to the crises of our time and can provide solution to securing our future. The pandemic, the war in Ukraine and the supply chain problems, the climate and energy crisis, and currently, the issue of inflation and the lack of trust in science and democracy, are indeed persisting challenges for European society and economy.
In this context, the member states, and Bulgaria in particular, are preparing the conditions for reforms in the programming and management of scientific research and innovation.

Current priorities for instruments such as the Recovery and Resilience Mechanism, the European Research Area and Horizon Europe show that the strategic objectives for science and innovation are linked with other policy areas, such as foreign, health and agricultural policy, and play a greater role than before.

Bulgaria supported many of the activities of the European Research Area. ERA goals, such as Open Science, the new approach to evaluating scientific activity and strengthening the science and innovation system are elements of the new legislation being prepared and will all be included as measures in the new operational plan for the period 2024-2027 for the implementation of the National Strategy for Scientific Research.

5. Relevant quotes
See Section 2

6. Future plans and actions
Activities are being carried out to create and operate a public open science platform and institutional repositories for open access scientific publications and data with a view to moving from national subscriptions for scientific publications to open science.
On 21 October, 2021, the Council of Ministers approved the National Program "Stimulation of publication activity in authoritative international scientific journals and open access to scientific information" (RMS No. 733 of October 21, 2021).

The aim of the program is to stimulate the publication activity of the scientific research staff and to increase the number of scientific publications in authoritative scientific journals, referenced or indexed in the global databases Web of Science or Scopus, as well as to promote the culture of sharing scientific information with open access and the adoption it as standard practice by the research community.

Universities and scientific organizations with program accreditation for the educational and scientific degree PhD by the National Agency for Assessment and Accreditation and having a profile in the Bulgarian Open Science Portal (BPOS) can apply for funding under the national program. A necessary condition for participation is that scientific organizations and universities have and apply internal mechanisms and rules to stimulate the publication activity of their research teams, as well as open access to scientific information.

Researchers will be provided with additional remuneration, prizes or other financial incentives for authorship of scientific publications in journals referenced or indexed in the
global databases Web of Science or Scopus, tied to sharing scientific results in BPOS and in institutional or international repositories.

In June 2022, the Ministry of Education and Science concluded a new three-year agreement with Elsevier. The agreement is in implementation of the National Strategy for the Development of Scientific Research in the Republic of Bulgaria and provides subscription access for higher schools and scientific organizations to the publishing house’s databases.

The cooperation with Elsevier started in 2008, and the last agreement, which expired at the beginning of 2022, marked over 1,200,000 uses of the services provided for the Bulgarian beneficiaries. Access to the databases contributes to integration in the European Research Area and the expansion of international scientific cooperation.

The new agreement covers the period 2022-2025 and offers an extended scope of the subscription, which also includes a subscription to e-books for the entire period, as well as the organization of an extended seminar on the development of scientific activity in the system of higher education.

The most important feature of the new agreement between the Ministry of Education and Culture and the publishing house is the Open Access pilot project. The service grants the right to publish open access articles in the main hybrid journals owned by Elsevier. Corresponding authors from Bulgaria may publish a certain number of open access articles within the term of the agreement without paying a publication fee. In the event that the maximum number of articles per subscription year is reached, the agreement provides for preferential prices for Bulgarian users included in the list of users.

- A total of 100 open access articles for the subscription year 01.03.2022-28.02.2023;
- a total of 180 articles with open access for the subscription year 01.03.2023-29.02.2024; and
- a total of 260 articles with open access for the subscription year 01.03.2024-28.02.2025.

7. Use cases or practices

Adoption and implementation of a National Plan for the Development of the Open Science Initiative. It sets the strategic objectives and the necessary steps and tools for implementation of the transition towards making open science a standard practice in Bulgarian research system. In addition, it is linked to priorities set out in European and national strategic documents for the development of science, research, innovation and dissemination. The action plan for the implementation of the first stage of our National Strategy for Research Development 2017-2030 and the National Concept for the Implementation of the Principle of Open Access to Scientific Information analyse the trends in the development of the Open Science Initiative and set out the necessary steps, actions and prerequisites for its consolidation.
In pursuit of this goal, in early 2021, the Bulgarian Open Science Portal (https://bpos.bg/) was launched and pulls metadata from the national institutional repositories (mainly the repositories of Bulgarian Academy of Sciences and Research universities). The repository is registered in the OpenDOAR global directory of open access academic repositories and its integration with the Register of Academic Staff and Defended Dissertations allows all defended PhD thesis to be accessible. BPOS continued its development in 2022. 30,619 record updates were made by 108 registered content providers (43 higher education institutions, 56 scientific organizations, 5 publishing houses of scientific literature; in a separate group there are freelance scientists, Scientific Research Fund, the Bulgarian OpenAIRE Repository and the National Centre for Information and Documentation (NACID)). Automated metadata exchange has been established with ten of the content providers. The number of registered users is over 2,900, with a third of the registrations made in 2022; this should be interpreted as an indicator of continued interest in the platform. It is important to note that in 2022 the Bulgarian Open Science Portal successfully completed a certification procedure by the international organization CoreTrustSeal. The national repository is the only one in Bulgaria and among only a few repositories in the Balkans that have met these requirements. A representative of the Bulgarian Open Science Portal is included in the Assembly of Reviewers of the organization; these are qualified experts reviewing applications for certification. In connection with the promotion of the activity during the year, the portal team participates in scientific forums, online meetings, seminars and specialized training.

8. Main indicators

8.1 Indicators organisation event
Official name of the event: EOSC Tripartite event - Bulgaria

Starting Date: 28 March 2023
Ending Date: 28 March 2023

Thematic profile: No specific theme

Target audience: EOSC, EC, Ministry of Education and Science of Bulgaria, the National Center for Accreditation and Documentation, scientific and research institutes of the Bulgarian Academy of Sciences, universities, experts and scientists/researchers.

8.2 Profile of participants
Total number of participants:
In-person: 36
Virtual (online): 48

Gender (%): Male: 35% (29 men) Female: 65% (54 women) Other: NA

8.3 Type of participants affiliation

Research Performing Organisations: 50 (number of participants)
8.4 Sectors (Optional)

8.5 EU HE InfraEOSC funded projects, dataspaces or other partnerships participation

- BBMRI Bulgaria
- GATE Research institute

9. Programme and List of organisations that participated at the National Tripartite Event

https://www.eosc.eu/sites/default/files/NTE%20Bulgaria_Agenda_20032023.pdf