Организиране и провеждане на "12-ти Информационен ден: Отворена наука, отворени данни, отворен достъп, Български облак за отворена наука", 23.09.2021, Бургас

Теми:

- Европейски Облак за Отворена Наука (EOSC)
- Национални инициативи за отворена наука
- Изграждане на хранилища с отворен достъп
- Хармонизация на националното и европейското законодателство и практики
- Обучение за изграждане и управление на научни цифрови хранилища и оперативна съвместимост

Участници от: МПН, Българска национална комисия за ЮНЕСКО, БАН, университети

Организатори: ИМИ-БАН и ИИКТ-БАН

Създаване на среда, платформа и модел за отворени научни резултати за Български списания с отворен достъп



Брой на Български списания с отворен достъп

Разработване на услуги за:

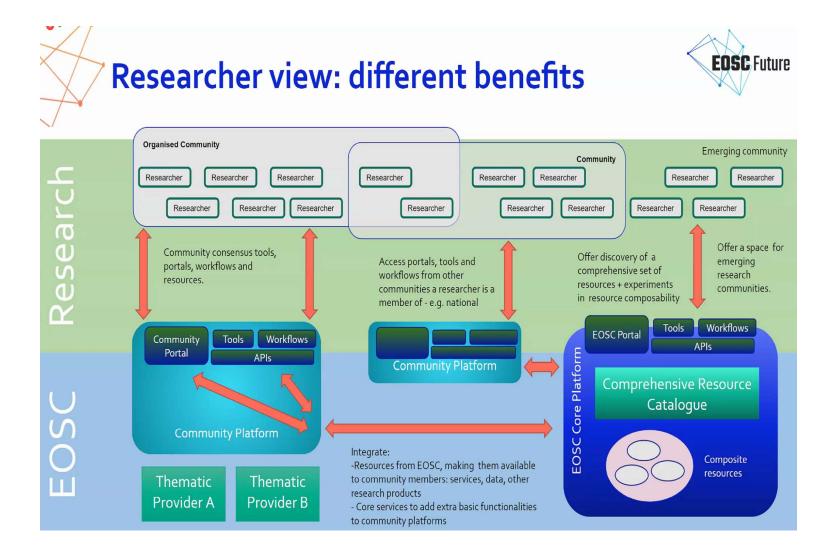
- Въвеждане на публикации, доклади, препринтове и резултати в специално отделени колекции в цифрово хранилище
- 2. Предоставяне на уникални идентификатори от Handle NET

Извършени дейности:

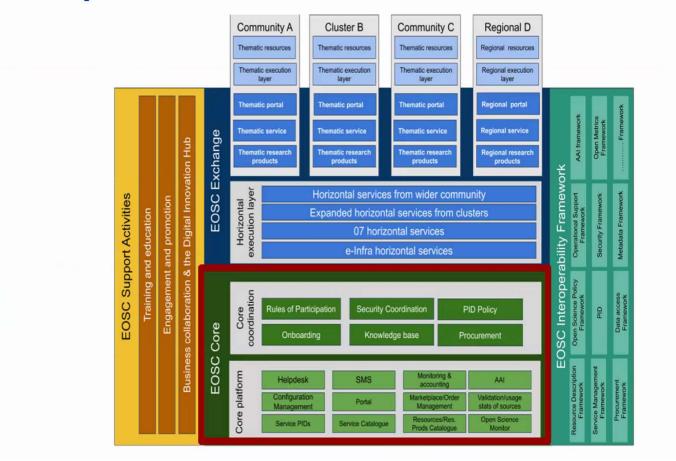
- Бяха извлечени адреси и частично метаданни от списания с отворен достъп на издателства от България. Голяма част от тях не са в машинно четим формат, тоест в свободен текст и неструктурирани данни.
- 2. Проведен е web crawling и web scraping за над 80 сайта. Бяха разработвани различни скриптове за всеки сайт по отделно.
- 3. Извършено е индексиране с обхождане на всички страници чрез SOLR и алтернативата Elastic Search.

The 12th National Information Day: Open Science, Open Data, Open Access, Bulgarian Open Science Cloud

Peter Stanchev^{1, 2}, Hristiyaniya Ancheva³, Aneta Karaivanova⁴ Radoslav Pavlov¹, George Simeonov¹ ¹ Institute of Mathematics and Informatics, BAS, Bulgaria ² Kettering University, Flint, USA ³ Ministry of Education and Science, Bulgaria ⁴ Institute of Information and Communication Technologies, BAS, Bulgaria <u>pstanche@kettering.edu</u>, <u>ancheva.h@gmail.com, anet@parallel.bas.bg, radko@cc.bas.bg, gsimeonov@math.bas.bg</u>



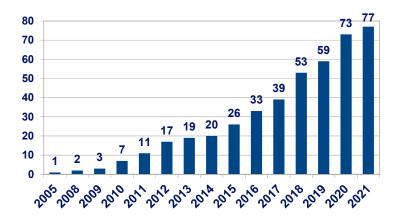
Setup the EOSC-Core

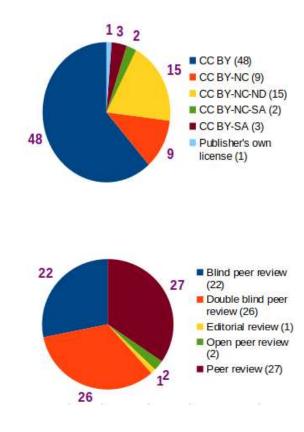


Bulgarian Open Access Repositories

Open Access Bulgarian Repositories 2020	Software	Link
New Bulgarian University Repository	EPrints 3.3.12	http://eprints.nbu.bg
BulDML at IMI-BAS	DSpace 1.6	http://sci-gems.math.bas.bg
Digital repository of Sofia University	DSpace 1.8.2	https://research.uni-sofia.bg
D.A.Tsenov Academy of Economics - Digital Library	DSpace 6.3-SNAPSHOT	http://dlib.uni-svishtov.bg/
Academic Research Repository at the Burgas Free University	Dspace 1.8.1	http://research.bfu.bg/
Central Medical Library - MU, Sofia	Dspace 6.3	http://cml.mu-sofia.bg:8080/jspui/community-list
Medical Academic Repository - Medical University - Varna Prof. Dr. Paraskev Stoyanov	Dspace 6.2	http://eprints.mu-varna.bg
BGOpenAIRE at IMI-BAS	DSpace 1.6.2	http://www.bg-openaire.eu
Bulgarian Portal for open science	Elastic	https://bpos.bg/

Bulgarian Open Access Journals





The National Priorities within the OS Initiative:

- Provide the necessary trusted infrastructure for long-term storage, sharing and access to scientific publications and other research results from publicly funded research.
- Foster new skills and competences.
- Raise awareness on Open Science and ensure the active involvement of researchers, universities and research organizations.
- Consolidate ambitions and planned actions in the National Open Science Plan.

National Policy and Infrastructure

- Bulgaria has a National Open Science Plan since January 2021. The general ambition of the plan is to provide the research community and society with access to scientific publications and research data in an open and non-discriminatory way at the earliest stage possible and ensure the possibility for their use and re-use.
- The plan provides for the adaptation of the national policies, initiatives and research infrastructures with a view to integrating and creating conditions for inclusion and interoperability with the European Open Science Cloud. The plan provides for the following lines of action:
 - Coordination of policies
 - Research data management in compliance with the FAIR principles
 - Incentives
 - Skills and competences

Sustainable development of the Open Science Initiative

- Building a National Open Science Cloud Initiative (NOSCI) is a very important element of the OS sustainable development in each country. In Bulgaria the setting up of a NOSCI under the name National Initiative for Open Data and Cloud Computing is in progress. The founding members of the Bulgarian National Initiative are 9 research organizations: Institute of Information and Communication Technologies (IICT-BAS), Sofia University (SU), Institute of Mathematics and Informatics (IMI-BAS), Technical University – Sofia (TUS), Medical University – Sofia (MU), NIGGG-BAS, Institute of Mechanics (IMeh-BAS), Plovdiv University "Paisij Hilendarski", University of Library Studies and Information Technologies. The initiative is open for new members.
- The Memorandum of Understanding was presented and discussed on a dedicated meeting of these organizations held on 22 of July.

The main priorities of the Bulgarian NI are:

- Engaging stakeholders at national level into EOSC
- Disseminating and promoting EOSC at national level
- Coordinating EOSC activities at national level
- Offering training on EOSC specific topics at national level

Training and Support

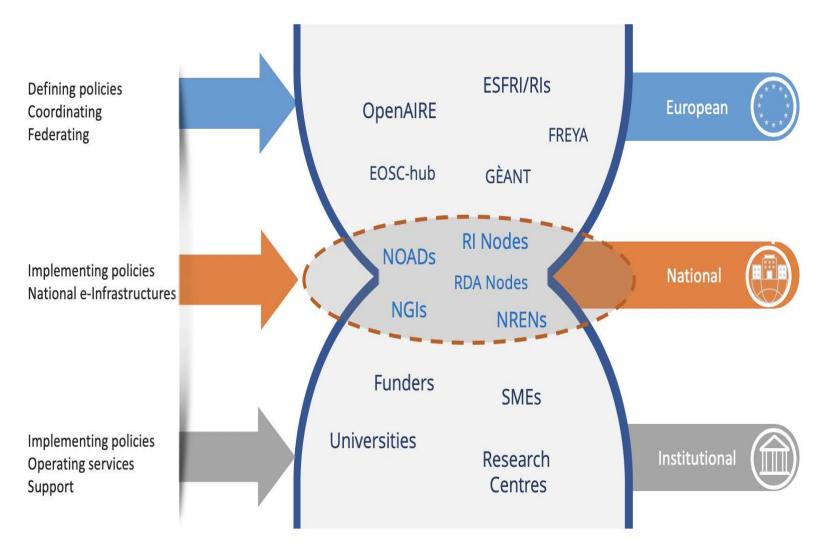
- The National Centre for Information and Documentation, the Ministry of education and science undertook the task to raise awareness on Open Science and ensure the active involvement of researchers, universities and research organizations. Specific trainings on working with BPOS and the national repository were organized by NACID for more than 20 RPOs, including universities and institutes of the Bulgarian Academy of Science and the Agricultural Academy.
- Series of events were held jointly by NACID and the Ministry of education and science, RPOs and infrastructures on the topic "Building a common vision towards Open Science".
- NACID revised and published new documents related to the work of the National repository, including a Long-term storage and preservation policy of the national repository, description of the Deposit process in the national repository, Deposited items lifecycle, a Deposit agreement, etc. (https://bpos.bg/en/documents).
- The Institute of Information and Communication Technologies at BAS started organizing a series of Open Science capacity building events. First two training events were held in July and November 2020, next event is expected in October 2021. The main goal of these training events is to give an opportunity to the trainees to gain knowledge and skills about different aspects of EOSC, FAIR principles, OpenAIRE, NI4OS, certification and open research data management (ORDM).

Outreach and Dissemination

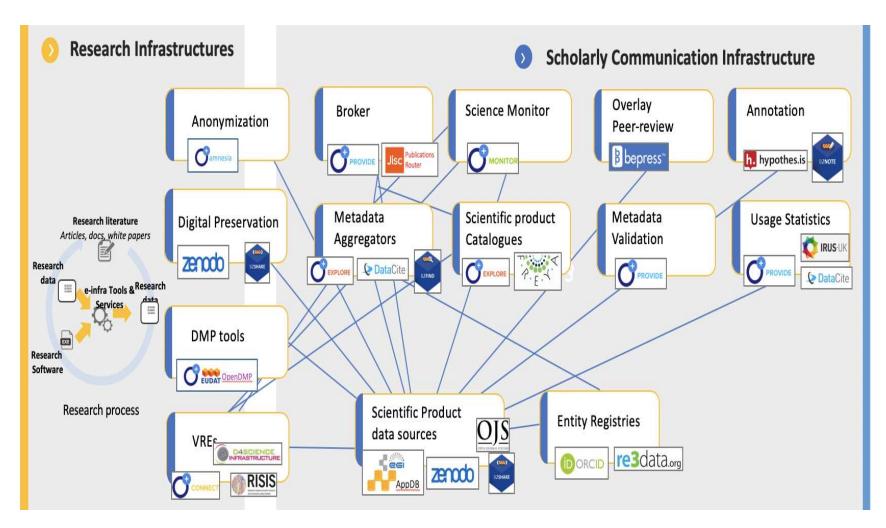
- Bulgaria was invited by the EC to present BPOS and the National Open Science Plan at the 8th meeting Expert Group "National Points of Reference on Scientific Information" that took place March 17, 2021. The focus of the meeting was on challenges in research assessment and its link to open science.
- NACID presented the Bulgarian portal for open science and the opportunities it presents to the research community at the Spring Science Session of the Faculty of mathematics and informatics at Sofia University held on March 27, 2021.
- The NI4OS-Europe national dissemination event in Bulgaria was held on 20 November 2020 online with the aim to gather Open Science Cloud stakeholders in Bulgaria. During this event main Open Science initiatives were presented: EOSC, NI4OS-Europe, Bulgarian Open Science Portal, National Science Program for ICT, RDA.bg, OpenAir.bg, and an overview of the Bulgarian activities in this field.
- A Documentary about open science policies in Bulgaria was released by the RDA BG Node (<u>https://www.youtube.com/watch?app=desktop&v=4HWsfZtQt7k</u>).

Task Forces

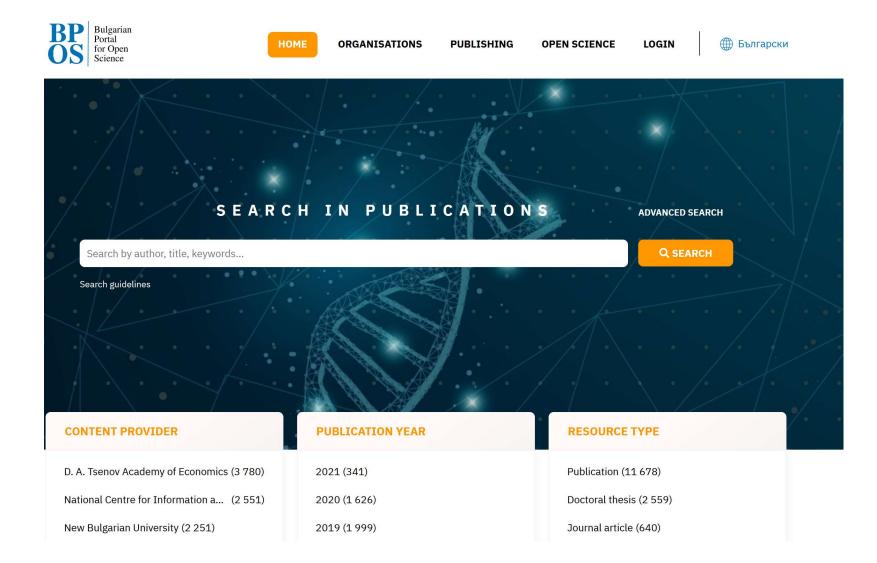
- Participating in the European Open Science Cloud Steering Board;
- Sofia University became a member of the EOSC-Association https://eosc.eu/members/sofia-university-st-kliment-ohridski
- Participating in the Research Data Alliance;
- Participating in the National Initiatives for Open Science in Europe NI4OS Europe (IICT-BAS and IMI-BAS);
- Participating in the OpenAIRE AMKE (IMI-BAS);
- Participation in EOSChub and EGI-ACE (IICT-BAS).



Players in EOSC and their interplay



Key Focus Areas and Priorities for EOSC



- <u>Representative of MES</u>, EOSC: Current status and perspectives
- Todor Gurov, National Initiatives for Open Science in Europa
- Aneta Karaivanova, National OS initiative in Bulgaria
- <u>Hristiyaniya Ancheva</u>, Bulgarian portal for Open Science
- <u>George Simeonv</u>, <u>Emanouil Atanassov</u>, Open Science repositories and services
- Discussion about:

Bulgarian roadmap for open science; European Open Science Cloud and EOSC Association; Bulgarian Open Science Cloud; National Science Program "ICT for science, education and security"; Bulgarian portal for open science and the national repository; Institutional repositories and other e-infrastructures; FAIR data requirements and tools; Open Data; Open Sources; Open Methodology; Open Peer Review; Open Access and Open licenses; Open Access Data E-Infrastructures; Access to Research Facilities; Access to Processing Capabilities; Communication at all Levels of Research Life Cruces; Open Access Indicators; Disseminate Partners' Best Practices; Discuss Research Problems in the Field; Discuss the Possibilities of Establishing a Network of Open-Access Repositories; Contribute to the problems of the Harmonization of National Legislation and Practices.



Institute of Mathematics and Informatics Bulgarian Academy of Sciences

Search DSpace	BulDML at Institute of Mathematics and Informatics >
Home	Bulgarian Digital Mathematics Library (BulDML) at IMI-BAS
Browse	Welcome to our digital repository at Institute of Mathematics and Informatics! Collections in BulDML • Serdica Journal of Computing • Mathematica Balkanica New Series Vol 24 Book 2010 • Pilska Studia Mathematica Bulgarica • Bulletin de l'Institut de Mathématiques 1953-1974 • Fractional Calculus and Applied Analysis • International Journal Information Theories and Applications - 1J ITA • International Journal Information Technologies and Knowledge - 1J ITK Book Series • Mathematica Balkanica New Series Vol 24 Book 2010 • Access to Digital Cultural Heritage: Innovative Applications of Automated Metadata Generation • International Book Series Information Science and Computing (ITHEA) 2009 • International Book Series Information Science and Computing (ITHEA) 2008 Proceedings - Collections List Journals sites external links • Serdica Journal of Computing • Mathematica Balkanica (new link) (old link) • Pilska Studia Mathematica Bulgarica • Bulletin de l'Institute de Mathématiques 1953-1974 (Известия на Математическия институт) • Fractional Calculus and Applied Analysis • Cultural and Historical Heritage: Preservation, Representation, Digitalization (KIN Journal) EuDML: The European Digital Mathematics Library
	SEARCH SUDVI Search term Search

- <u>Representative of MES</u>, EOSC: Current status and perspectives
- Todor Gurov, National Initiatives for Open Science in Europa
- <u>Aneta Karaivanova</u>, National OS initiative in Bulgaria
- <u>Hristiyaniya Ancheva</u>, Bulgarian portal for Open Science
- <u>George Simeonv</u>, <u>Emanouil Atanassov</u>, Open Science repositories and services
- Discussion about:

Bulgarian roadmap for open science; European Open Science Cloud and EOSC Association; Bulgarian Open Science Cloud; National Science Program "ICT for science, education and security"; Bulgarian portal for open science and the national repository; Institutional repositories and other e-infrastructures; FAIR data requirements and tools; Open Data; Open Sources; Open Methodology; Open Peer Review; Open Access and Open licenses; Open Access Data E-Infrastructures; Access to Research Facilities; Access to Processing Capabilities; Communication at all Levels of Research Life Cruces; Open Access Indicators; Disseminate Partners' Best Practices; Discuss Research Problems in the Field; Discuss the Possibilities of Establishing a Network of Open-Access Repositories; Contribute to the problems of the Harmonization of National Legislation and Practices.