

# The Sixth National Information Day: Open Access to Scientific Information

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**Abstract.** The paper discusses in brief the Open Access (OA) Initiative, the European Union's and the main Bulgarian activities in this field. The discussion question for the Sixth National Information Day: Open Access to Scientific Information and workshop are outlined.

**Keywords:** Open Access, OpenAIRE2020 project, Responsible Research & Innovation, Access to Knowledge

## 1 Introduction

In 2001 a meeting on scientific publicizing held in Budapest adopted the phrase "Open Access". Open Access (OA) is the provision of free access to peer-reviewed, scholarly and research information to all. It envisages that the rights holder grants worldwide irrevocable right of access to copy, use, distribute, transmit, and make derivative works in any format for any lawful activities with proper attribution to the original author. The Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities is a major international statement on OA/access to knowledge. It emerged in 2003 from a conference on open access hosted in the Harnack House in Berlin by the Max Planck Society. Organizations that commit to implementing this definition of open access can sign the declaration. As of August 6, 2015 there are 516 organizations all over the world having signed the declaration.

Countries have started to support OA for the benefit of the global flow of knowledge, innovation and equitable socio-economic development. Access to scientific information is a problem even for the best endowed universities, especially due to the high and increasing cost of peer-reviewed journals and fluctuations in the exchange rates. OA has inspired a global movement that is revolutionizing the way research information is shared, disseminated and utilized. Essentially, it is about removing the financial and access barriers and restrictions on use present in traditional publishing, allowing key stakeholders and the public to view and use research and documentation generated within one's own country and around the world. Requirements for such credible research and data are critical for policymakers, and those that are part of the decision-making process, to help them take informed action in seeking

solutions to national issues. It has also made scholarly research and information, which had been the privilege of elite universities and wealthy countries that could afford it, freely available to the public. Further, OA is evolving the way research is reviewed, developed and measured, creating new paradigms of interaction and evaluation.

Open access to scientific peer reviewed publications has been anchored as an underlying principle in Horizon 2020. For open access publishing, researchers can publish in open access journals or in journals that sell subscriptions and also offer the possibility of making individual articles openly accessible (hybrid journals). Where applicable, the Author Processing Charges (APCs) incurred by beneficiaries are eligible for reimbursement during the duration of the action. For APCs incurred after the end of their grant agreement, a mechanism for paying some of these costs will be piloted. In the case of open access publishing open access must be granted on publication at the latest. In the context of the digital era, the notion of ‘publication’ increasingly includes presenting the data underpinning the publication and results, also referred to as ‘underlying’ data. Beneficiaries must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications, ideally into a data repository, and aim to make open access to this data.

## **2 Main OA activities in Bulgaria during the last year**

Bulgarian is a part of EU OpenAIRE2020 project. The main OA activity in Bulgaria during the last year was the organization of the Fourth International Conference *Digital Presentation and Preservation of Cultural and Scientific Heritage—DiPP2014*, held from 18 to 21 September 2014 in Veliko Tarnovo under the patronage of UNESCO. Its aim was to present innovations, projects, theoretical and applied research in the field of digitisation, documentation, archiving, presentation and preservation of global and national tangible and intangible cultural and scientific heritage. The main stress was placed upon providing open access to digitised national cultural and scientific heritage and the pursuit of sustainable policies for their continued digital preservation and conservation. The digital presentation and preservation of monuments of culture and history under conditions of risk was a priority area.

In the frame of the *Fourth International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage—DiPP2014* the autumn training school *Development and Promotion of Open Access to Scientific Information and Research* was organized. The main organizer was the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences with the support of EU project FOSTER (<http://www.fosteropenscience.eu/>) and the P. R. Slaveykov Regional Public Library in Veliko Tarnovo, Bulgaria. The main objectives of the Autumn Training School *Development and Promotion of Open Access to Scientific Information and Research* was to train young and experienced researchers, managers, regional academic and research organisations in the integrating of open access and open data principles and practices into the current research work-flow in Bulgarian and South-East Europe. In

suitable and intuitive ways the lecturers presented several workable strategies, business models, work plans, best practices and examples of implementation of the open access and open science paradigm for ubiquitous science sharing, dissemination and promotion. Special attention was given to the presentation of successful initiatives and projects for open access, open data sharing and open science; strategies for the promotion of OA; copyright and licenses under OA; best practices and examples of policies for the development and promotion of open access at the national and institutional levels, etc. The training was focused on how to organize and maintain OA repositories in academic and research organizations, how to practice OA from writing an article to publishing/depositing in OA repositories and sharing data, target content for OA, OA repositories interoperability and integration, etc. The training event aimed to contribute to the support of the dialogue between academic staff, research project managers, policy-makers and staff working in research funding bodies and to initiate future joint training and dissemination activities within their institutions and/or disciplinary communities.

In the autumn training school *Development and Promotion of Open Access to Scientific Information and Research* the main lecturers were:

**Eloy Rodrigues**, the Director of the University of Minho Documentation Services. In 2003, Eloy led the project to create RepositóriUM—the institutional repository of Minho University and at the end of 2004 he drafted the formal policy of Minho University on open access to its scientific output.

**DSc. Peter Stanchev** (<http://paws.kettering.edu/~pstanche/>), currently professor at Kettering University, Flint, Michigan, USA and professor and chair of Software engineering and Computer System department at the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, Bulgaria.

**Dr. Radoslav Pavlov** (<http://mdl.cc.bas.bg/radko/>), professor in Informatics at the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences (IMI—BAS), Deputy Director of IMI—BAS (2007—present), PhD (Informatics); Chair of the Mathematical Linguistics Department (1977—2012), Senior Researcher within the same organization.

**Iryna Kuchma** (<http://www.eifl.net/our-organization>), EIFL Open Access programme manager.

**Dr. Bhanu R. Neupane**, Programme Specialist Open Access to Scientific Information and ICT&Sciences, Knowledge Societies Division of UNESCO.

**Dr. Sarah Callaghan** senior researcher and project manager within the British Atmospheric Data Centre.

**Dr. Ivo Grigorov** (<http://dk.linkedin.com/in/ivogrigorov/>) with keen interest on using knowledge transfer mechanisms to bridge the science-society gap.

The main lectures included the following topics:

- Key aspects and approaches of open access, open data and open science. The topic gives an overview of the key aspects and approaches of open access, open data and open science, emphasising on sharing scientific knowledge for sustainable progress and development.

- Importance and benefits of open access for science ubiquitous sharing, dissemination and promotion. The topic explains how OA is important for scholars and research institutions and for developing knowledge societies. The benefits of OA topic emphasizes that OA enhances research process, improving visibility and usage of research works, and therefore the impact of research also rises through citation and impact outside the academia.
- Business models for OA. Copyright and licensing under OA. The topic analyses the traditional business model in scientific communication and describes the new emerging models in the context of OA. The *Copyright and Licensing* part provides an overview of the legal issues and copyright at the heart of OA.
- UNESCO & Open Access—achieving the last mile UNESCO Initiative for Open Access.
- Open Research Data—A step by step guide through the research data lifecycle, data set creation, big data vs long-tail, metadata, data centers/data repositories, open access for data, data sharing, data citation and publication. The topic explains the research data lifecycle, data set creation, big data vs long-tail, metadata, data centres/data repositories, and open access for data, data sharing, data citation and publication.
- Policy framework and roadmap for open access, open data and open science. The topic presents an overview of the growth of policies and a critical appraisal of the issues affecting OA policies. Example policies and a roadmap for open access, open data and open science are included.
- EC policy and recommendations for open access to scientific information and its preservation. The topic discusses EC policy and recommendations for open access to scientific information and its preservation.
- Horizon 2020 mandate on Open Access to publications. The topic provides detailed information on the requirements of the Horizon 2020 mandate of open access to all funded publications (Article 29.2 of H2020 Grant Agreement), and an explanation on how to comply with those requirements.
- Horizon 2020 Open Research Data Pilot The topic provides an overview of open research data and research data management, detailed information on the requirements of the Horizon 2020 Open Research Data Pilot (Article 29.3 of the H2020 Grant Agreement), and an explanation on how to comply with those requirements.
- Institutional repositories & OpenAIRE on Horizon 2020. The topic discusses and describes the roles that institutional repositories, and the set of OpenAIRE services, can perform helping researchers and research institutions to comply with the requirements of H2020 publications mandate and research data pilot.
- National Information Day *Open access to scientific information and data*.

### **3 Main topics for discussion during this year's national information day *Open access to scientific information* and the workshop**

The information day and workshop is organized by: 1) representatives of national institutions (including the Ministry of Education and Science, Ministry of Transport, Information Technologies and Communication, Ministry of Culture) responsible for the development of open access policies, 2) representatives of Bulgarian institutions (research institutes and universities) active in the implementation of the open access policy and programme, 3) specialists at the UNESCO Department of Open Access and scientific information and ICT and science.

The main topics for discussions include:

- Research problems in the field.
- Possibilities for establishing network of open access repositories.
- Dissemination of partners' best practices.
- Development of study on the harmonization problems of national legislation and practices.
- Possibilities for developing a training course for PhD students and young researchers in the field, as well as a training course for developers and managers of scientific digital repositories to ensure interoperability.
- Consideration and formulation of recommendations for the development of policies for the promotion of open access.

