

CED-2021



Simon Kuznets Kharkiv National University of Economics

**Open Science and OpenAir**  
*Bulgarian Portal for Open Science*



***Петрова Мариана***

**Великотырновский университет  
им. Св. Кирилла и Св. Мефодия, Болгария**



# Open access to scientific publications

## THE EUROPEAN COMMISSION

### Commission recommendation (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information

Recommendation to the EU member states regarding the move towards open science and the implementation and adjusting of national policies with regard to conducting and funding of research activities.

“Open scientific research data should be easily discoverable, accessible, assessable, intelligible, useable, and wherever possible interoperable to specific quality standards.”



# The eight ambitions of Open Science

- **Open Data: FAIR (Findable, Accessible, Interoperable and Re-usable data)** and open data sharing should become the default for the results of EU-funded scientific research.
- **European Open Science Cloud (EOSC):** a ‘federated ecosystem of research data infrastructures’ will allow the scientific community to share and process publicly funded research results and data across borders and scientific domains.
- **New Generation Metrics:** New indicators must be developed to complement the conventional indicators for research quality and impact, so as to do justice to open science practices.
- **Future of scholarly communication:** all peer-reviewed scientific publications should be freely accessible, and the early sharing of different kinds of research outputs should be encouraged.
- **Rewards:** research career evaluation systems should fully acknowledge open science activities.
- **Research integrity:** all publicly funded research in the EU should adhere to commonly agreed standards of research integrity.
- **Education and skills:** all scientists in Europe should have the necessary skills and support to apply open science research routines and practices.
- **Citizen science:** the general public should be able to make significant contributions and be recognised as valid European science knowledge producers.



# FAIR guiding principles

**To be FINDABLE:** F1. (meta)data are assigned a globally unique and persistent identifier; F2. data are described with rich metadata; F3. metadata clearly and explicitly include the identifier of the data it describes; F4. (meta)data are registered or indexed in a searchable resource

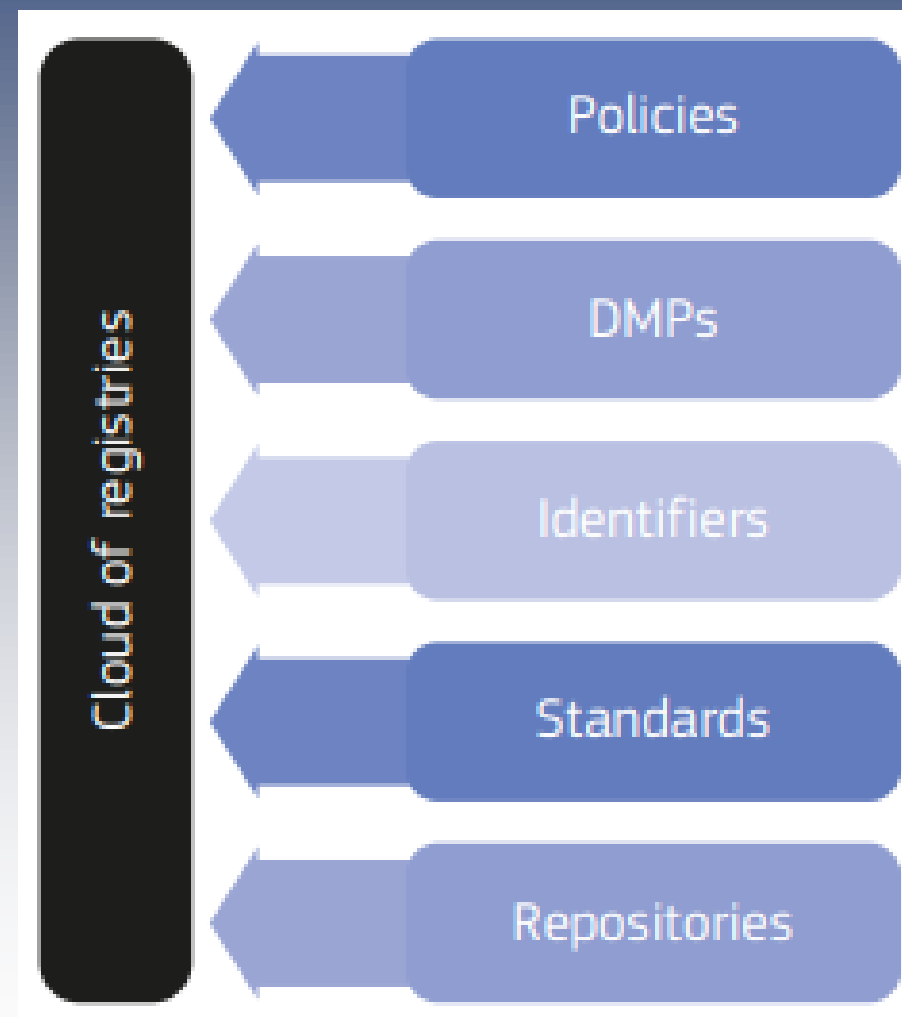
**To be ACCESSIBLE:** A1. (meta)data are retrievable by their identifier using a standardized communications protocol A1.1. the protocol is free, open and universally implementable A1.2. the protocol allows for an authentication and authorization procedure, where necessary; A2. metadata are accessible, even when the data are no longer available

**To be INTEROPERABLE:** I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation I2. (meta)data uses vocabularies that follow FAIR principles I3. (meta)data include qualified references to other (meta)data

**To be REUSABLE:** R1. (meta)data are richly described with a plurality of accurate and relevant attributes R1.1. (meta)data are released with a clear and accessible data usage license R1.2. (meta)data are associated with data provenance R1.3. (meta)data meet domain relevant community standards.

# Develop components of a FAIR ecosystem

The realisation of FAIR data relies on, at minimum, the following essential components: policies, Data Management Plans, identifiers, standards and repositories. There need to be registries cataloguing each component of the ecosystem, and automated workflows between them.





# Open access to scientific publications

The EU supports bodies and platforms such as Plan S, the Research Data Alliance (RDA), the ISC's Committee on Data of the International Science Council (CODATA), as well as efforts of the OECD, UN and the G20/G7/Carnegie Groups, with the aim of accelerating the transition to full and immediate open access to scientific publications and of making research data as open and reusable as possible, as soon as possible.

*Plan S is an initiative for open access requiring that, with effect from 2021, all scholarly publications on research results funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in open access journals, on open access platforms, or made immediately available through open access repositories.* The plan is supported by cOAlition S, an international consortium of research funders committed to implementing Plan S principles in a coordinated way.





# OpenAIRE, EOSC, OpenDOAR

The system aims to provide coordination and connectivity with other European infrastructures and initiatives, such as OpenAIRE and the European Open Science Cloud. In compliance with the latest interoperability standards the resources of the Bulgarian Portal for Open Science are indexed by OpenAIRE.

<https://explore.openaire.eu/>

The development of the Portal and the integration with OpenAIRE infrastructure is an important step towards the active participation of the Bulgarian research community in the EOSC initiative.

<https://eosc-portal.eu/>

The EOSC Portal is part of the EOSC implementation roadmap as one of the expected “federating core” services contributing to the implementation of the “Access and interface” action line. It has been conceived to provide a European delivery channel connecting the demand-side and the supply-side of the EOSC and all its stakeholders.

# NATIONAL STRATEGY



## **National plan for the development of the open science initiative in Bulgaria**

The plan sets out the strategic goals, the necessary steps and tools for the transition towards open science as a standard practice when conducting research.

## **National strategy for the development of the scientific research 2017 – 2030**

Ambitions, strategic objectives and action points, including open access to scientific information.

## **Implementation plan – phase I – for the National strategy for the development of the scientific research 2017 – 2030**

Planned action points for the delivery of the strategic objectives, including open access to scientific information.

## **National concept for open access to scientific information**





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**СПАСИБО ЗА ВАШЕ  
ВНИМАНИЕ!**

**Мариана Петрова**

**ВТУ им. Св.Кирилла и Св. Мефодия**  
**E-mail: [m.petrova@uni-vt.bg](mailto:m.petrova@uni-vt.bg)**