



# OPEN ACCESS PUBLISHING: HOW, WHERE, WHY

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## PRESENTER

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A



SOFIA UNIVERSITY  
ST. KLIMENT OHRIDSKI



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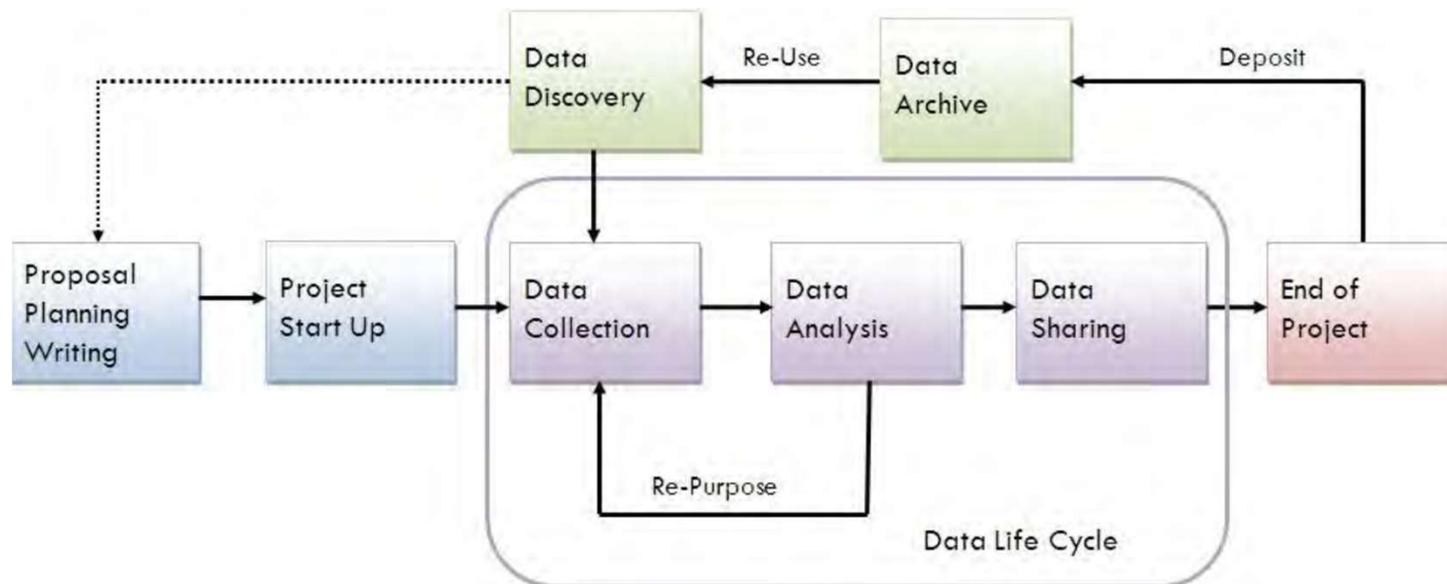


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# RESEARCH LIFECYCLE



# RESEARCH LIFECYCLE



## OPEN ACCESS – DEFINITIONS

- Peter Suber (2012) defines OA “Open Access literature is digital, online, free of charge, and free of most copyright and licensing restrictions”.
- The OA movement uses the term *Gold OA* for OA delivered by journals, regardless of the journal’s business model, and *Green OA* for OA delivered by repositories. *Self-archiving* is the practice of depositing one’s own work in an OA repository. All three of these terms were coined by Stevan Harnad.



Open access   
logo, originally  
designed by  
[Public Library of  
Science](#)







## OPEN ACCESS – PHILOSOPHY

- The Budapest Open Access Initiative (2002) - <https://www.youtube.com/watch?v=zqInyXuYGoQ>
- Bethesda Statement (2003).



# WHY OPEN ACCESS



## **Extend your impact**

When your research is freely available and easily discoverable, it can achieve its full potential—for readership, for citations, and for change. Articles published under an Open Access license have the power to influence all types of readers, including policymakers, educators, and the public, as well as researchers worldwide..



## **Show the strength of your science**

Sharing the foundational components of your research reduces opportunities for bias and increases transparency into the investigatory and peer review processes, demonstrating both the rigor of your research and the screening it has undergone.



## **Maximize your contribution**

Sharing more of your research earlier in the process reduces waste across the scientific ecosystem and helps create opportunities for inspiration, reuse, and collaboration.



## **Increase trust and ensure long term viability**

Take advantage of Open Science tools that integrate open methods, open data and study designs into published articles, to ensure that the ingredients necessary for reproduction become part of the permanent scientific record.



# LICENSES

LICENSES	TERMS
	 <b>Attribution</b> Others can copy, distribute, display, perform and remix your work if they credit your name as requested by you
	 <b>No Derivative Works</b> Others can only copy, distribute, display or perform verbatim copies of your work
	 <b>Share Alike</b> Others can distribute your work only under a license identical to the one you have chosen for your work
	 <b>Non-Commercial</b> Others can copy, distribute, display, perform or remix your work but for non-commercial purposes only.
	



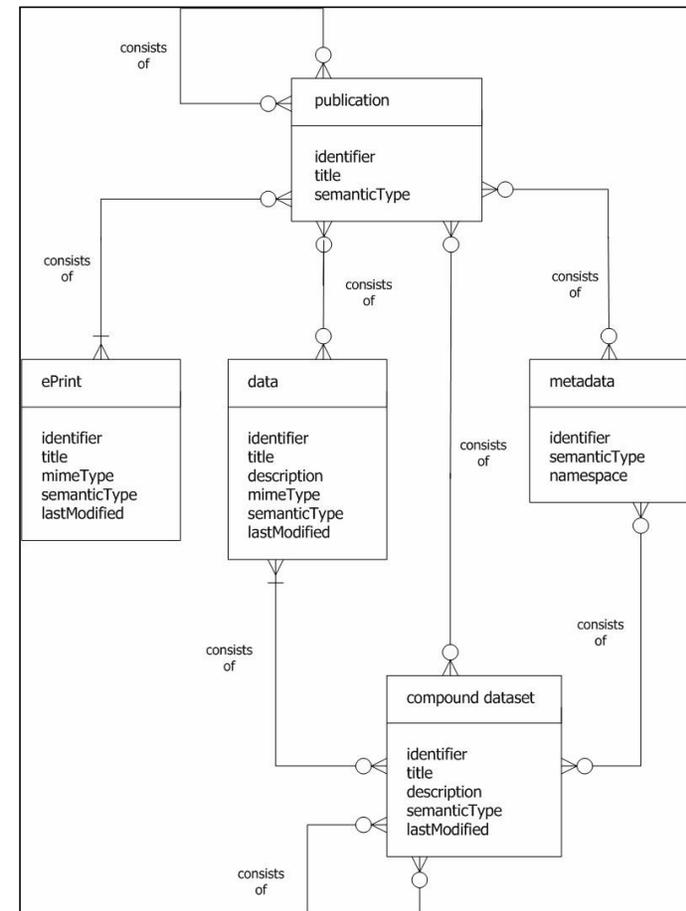
# ENHANCED PUBLICATIONS

*Compound information objects:* information objects that represent the aggregation of distinct information objects through meaningful relationships

*Example of SURF-EPs:* textual publications enhanced with links to datasets (e.g., e-learning material, queries, db entries)

OpenAIREplus refines EP data model and provides EP services (repository) for:

- Management: creation and curation
- Visualization, browsing, querying
- Import: OAI-PMH/ORE harvesting of EPs from external providers, others
- Export: OAI-PMH/ORE publishing of EPs, Linked Data representation, others





# DEFINITIONS

## What is open data?

We believe that all research data, including research files and code, should be as open as possible and want to make it easier for researchers to share the data that support their publications, making them accessible and reusable.

## What is a preprint?

A preprint is a version of a scientific manuscript posted on a public server prior to formal peer review. Once posted, the preprint becomes a permanent part of the scientific record, citable with its own unique [DOI](#). Early sharing is recommended as it offers an opportunity to receive feedback on your work, claim priority for a discovery, and help research move faster. In Review is one of the most innovative preprint services available, offering real time updates on your manuscript's progress through peer review.

## What is open peer review?

Open peer review refers to the process of making peer reviewer reports openly available. Many publishers and journals offer some form of open peer review, including BMC who were one of the first publishers to open up peer review in 1999.



# Types of Peer Review



## ANONYMOUS

*Single Anonymized:* Reviewers know the authors' identities, but reviewer names are protected.

*Double Anonymized:* Reviewer and author names are protected.



## SIGNED

Reviewers sign their comments. Authors receive reviewer names in the decision letter.



## COLLABORATIVE

Reviewers collaborate and submit joint comments, or in some cases confer with authors and editors during the review process.



## PORTABLE

Reviewers are sought by an organization or journal and shared with any journals that require them later on.



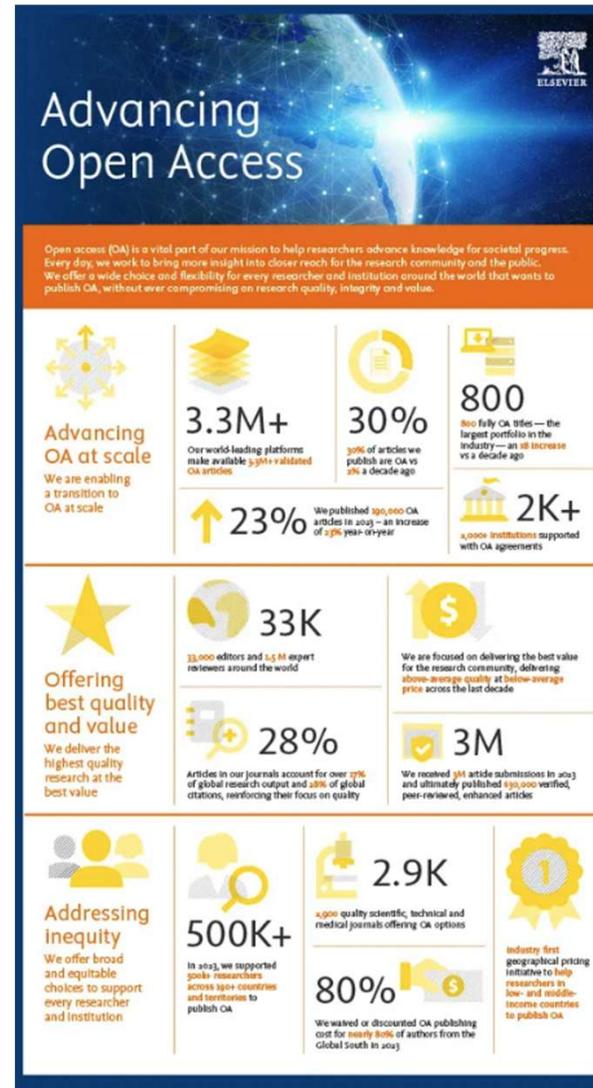
## PUBLISHED

Reviewer comments and/or names are published with the article or preprint.



## POST-PUBLICATION

After a manuscript is posted the community reviews the research in an open forum. Reviewer names are usually published with their comments.



**Advancing Open Access**

Open access (OA) is a vital part of our mission to help researchers advance knowledge for societal progress. Every day, we work to bring more insight into diverse research for the research community and the public. We offer a wide choice and flexibility for every researcher and institution around the world that wants to publish OA, without ever compromising on research quality, integrity and value.

 <p><b>Advancing OA at scale</b></p> <p>We are enabling a transition to OA at scale</p>	 <p><b>3.3M+</b></p> <p>Our world-leading platforms make available 3.3M+ validated OA articles</p>	 <p><b>30%</b></p> <p>30% of articles we publish are OA vs 5% a decade ago</p>	 <p><b>800</b></p> <p>800 fully OA titles — the largest portfolio in the industry — an 18 increase vs a decade ago</p>
	 <p><b>23%</b></p> <p>We published 190,000 OA articles in 2023 — an increase of 23% year-on-year</p>		 <p><b>2K+</b></p> <p>2,000+ institutions supported with OA agreements</p>
 <p><b>Offering best quality and value</b></p> <p>We deliver the highest quality research at the best value</p>	 <p><b>33K</b></p> <p>33,000 editors and 1.5M expert reviewers around the world</p>	 <p><b>28%</b></p> <p>Articles in our journals account for over 28% of global research output and 28% of global citations, reinforcing their focus on quality</p>	 <p><b>\$</b></p> <p>We are focused on delivering the best value for the research community, delivering above-average quality at below-average price across the last decade</p>
	 <p><b>500K+</b></p> <p>In 2023, we supported 500K+ researchers across 190+ countries and territories to publish OA</p>	 <p><b>2.9K</b></p> <p>2,900 quality scientific, technical and medical journals offering OA options</p>	 <p><b>3M</b></p> <p>We received 3M article submissions in 2023 and ultimately published 450,000 verified, peer-reviewed, enhanced articles</p>
 <p><b>Addressing inequality</b></p> <p>We offer broad and equitable choices to support every researcher and institution</p>		 <p><b>80%</b></p> <p>We waived or discounted OA publishing cost for nearly 80% of authors from the Global South in 2023</p>	 <p><b>1</b></p> <p>Industry first geographical pricing initiative to help researchers in low- and middle-income countries to publish OA</p>



## EXERCISES

- 1. Find three definitions of open access**
- 2. Find at least two Bulgarian documents where open access is discussed**
- 3. What is Diamond Open Access**
- 4. Find an open access journal where your research work can be published**





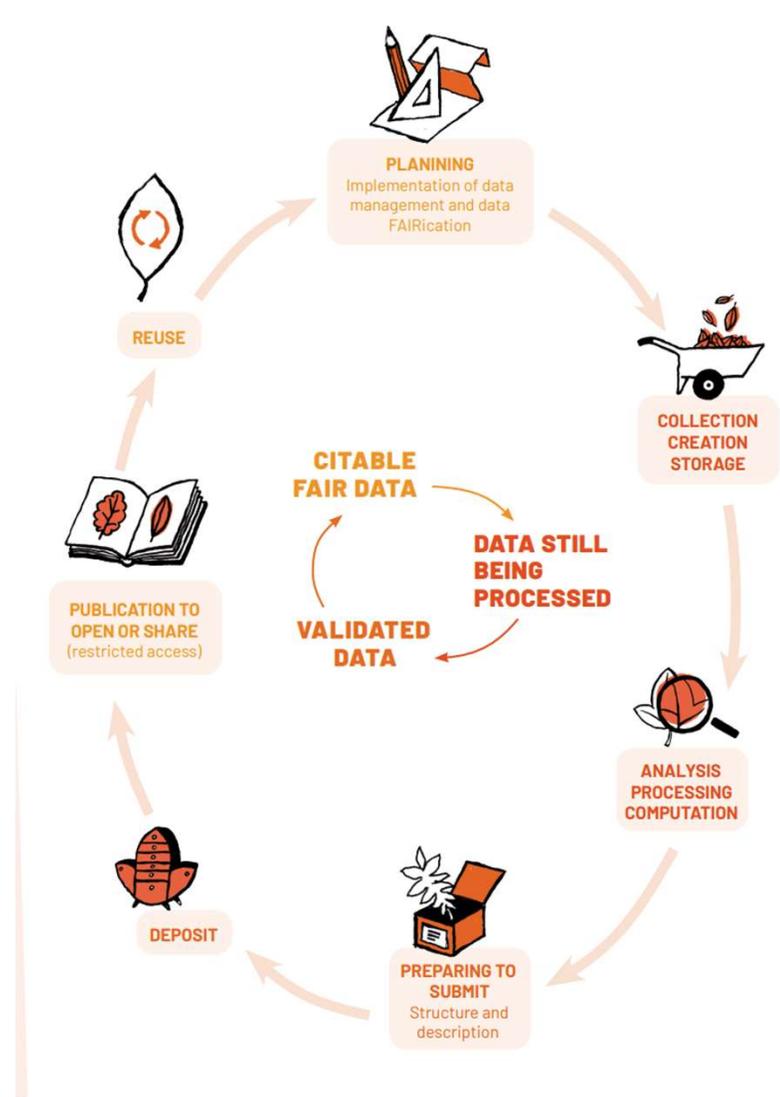
# EU funding programmes

2021-2027 multiannual financial framework

- Heading 1: Single Market, Innovation and Digital
- Heading 2: Cohesion and Values
- Heading 3: Natural Resources & Environment
- Heading 4: Migration & Border Management
- Heading 5: Security & Defence
- Heading 6: Neighbourhood & the World



# DATA MANAGEMENT



# REPOSITORIES

## The stages of depositing and disseminating

1. You defend your thesis.



2. You make all requested corrections and have your thesis approved.



DISSEMINATION IN OPEN ACCESS



CONFIDENTIAL THESIS



DISSEMINATION RESTRICTED TO THE UNIVERSITY COMMUNITY

3. You submit the final version of your thesis and sign the dissemination contract.

4. The university library takes care of processing and disseminating your thesis. You can also deposit your thesis yourself in an open archive.





# Bulgarian Open Access Repositories

Open Access Bulgarian Repositories 2024	Software	Link
New Bulgarian University Repository	EPrints 3.4.3	<a href="http://eprints.nbu.bg">http://eprints.nbu.bg</a>
BulDML at IMI-BAS	DSpace 7.3	<a href="http://sci-gems.math.bas.bg">http://sci-gems.math.bas.bg</a>
Digital repository of Sofia University	DSpace 1.8.2	<a href="https://research.uni-sofia.bg">https://research.uni-sofia.bg</a>
D.A.Tsenov Academy of Economics - Digital Library	DSpace 6.3	<a href="http://dlib.uni-svishtov.bg">http://dlib.uni-svishtov.bg</a>
Academic Research Repository at the Burgas Free University	Dspace 1.8.1	<a href="http://research.bfu.bg:8080/js-pui/">http://research.bfu.bg:8080/js-pui/</a>
Central Medical Library - MU, Sofia	DSpace 7.4	<a href="http://cml4.mu-sofia.bg:4000/home">http://cml4.mu-sofia.bg:4000/home</a>
Medical Academic Repository - Medical University - Varna Prof. Dr. Paraskev Stoyanov	Dspace 6.2	<a href="https://repository.mu-varna.bg/">https://repository.mu-varna.bg/</a>
BGOpenAIRE at IMI-BAS	DSpace 7.3	<a href="http://www.bg-openaire.eu">http://www.bg-openaire.eu</a>
Bulgarian Portal for open science (BPOS)	Elasticsearch	<a href="https://bpos.bg/">https://bpos.bg/</a>
Technical University of Sofia (E-Publications)	Technical University	<a href="https://e-university.tu-sofia.bg/e-publ/search.php">https://e-university.tu-sofia.bg/e-publ/search.php</a>
Digital Library SU 'St.Kliment Ohridski' <i><a href="https://sudigital.org/en">https://sudigital.org/en</a> Manuscripts, Archives, Books, Periodicals, Maps, Pictures</i>	CDS Invenio v0.99.1	<a href="https://sudigital.org/lib/">https://sudigital.org/lib/</a>
NALIS Repository - The founders of the National Academic Library and Information System Foundation (NALIS Foundation) are the Central Library of BAS (CL-BAS), the Sofia University "St. Kliment Ohridski" (SU) and the American University in Bulgaria (AUBG).	DSpace 6.2	<a href="http://digilib.nalis.bg/xmlui/">http://digilib.nalis.bg/xmlui/</a>
Repository of the University of Chemical Technology and Metallurgy	DSpace 7.6	<a href="https://rlib.uctm.edu/home">https://rlib.uctm.edu/home</a>
CL-BAS Repository	DSpace 6.2	<a href="http://dspace.cl.bas.bg/xmlui/">http://dspace.cl.bas.bg/xmlui/</a>

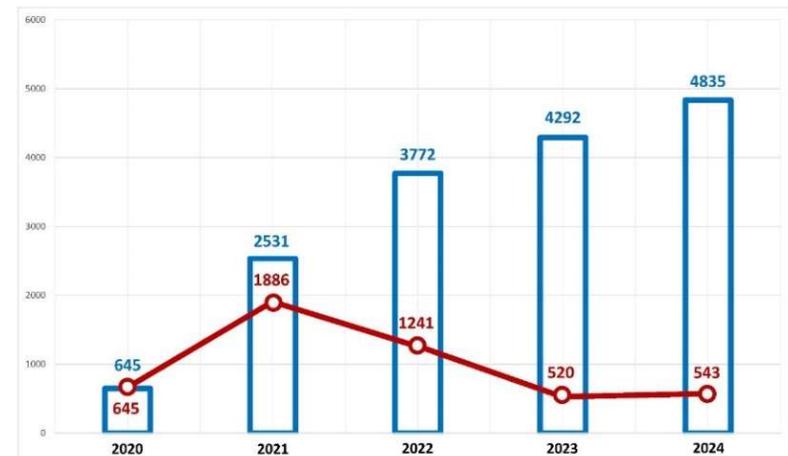




REINFORCING

# The Bulgarian Portal For Open Science

Bulgarian portal for open science (<https://bpos.bg/>). The National repository is multidisciplinary and welcomes doctoral dissertations and peer reviewed manuscripts or published versions of scientific publications, created by researchers. The items need to be described by a mandatory set of metadata: author/s, title, publication date, resource type (e.g., journal article, part of a book, conference paper, report, etc.), resource identifier (e.g., DOI, Handle), access rights (open, metadata only, restricted, embargoed access).



Registered individual users by year (2020 – 2024).

The number of new users for the year (the line) and total number of users for the year (bar chart).



# SEARCH IN PUBLICATIONS

ADVANCED SEARCH

Search by author, title, keywords...

**Q SEARCH**

Search guidelines

## CONTENT PROVIDER

„St. Cyril and St. Methodius“ Uni... (10 936)  
 Medical University Varna (7 636)  
 National Centre for Information a... (6 986)  
 South-West University „Neofit Rils... (4 610)

## PUBLICATION YEAR

2024 (1 615)  
 2023 (5 577)  
 2022 (7 108)  
 2021 (7 487)

## RESOURCE TYPE

Journal article (28 724)  
 Publication (15 792)  
 Research article (8 553)  
 Doctoral thesis (7 013)





## Bulgarian Digital Mathematics Library (BulDML) at IMI-BAS

Search in content

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Welcome to BulDML, our Digital Open Access Repository at Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (IMI-BAS)!

The initial version of BulDML was created and maintained in the period 2009 - 2020 within the projects: *European Digital Mathematical Library* (EuDML), *Open Access Infrastructure for Research in Europe* (OpenAIRE), *2<sup>nd</sup> Generation Open Access Infrastructure for Research in Europe* (OpenAIRE+), *Open Access Infrastructure for Research in Europe towards 2020* (OpenAIRE2020), *OpenAIRE Advancing Open Scholarship* (OpenAIRE-Advance).

#### IMI-BAS Collections

1. Periodicals
2. Conference Proceedings
3. Dissertations
4. Books
5. Scientific reports (Preprints)
6. OA Papers

#### Key editions in BulDML

1. Serdica Mathematical Journal
2. Serdica Journal of Computing
3. Mathematica Balkanica
4. Pliska Studia Mathematica
5. Bulletin de l'Institut de Mathématiques 1953-1974
6. Fractional Calculus and Applied Analysis, etc.

#### Journals sites external links

1. Serdica Mathematical Journal
2. Serdica Journal of Computing
3. Mathematica Balkanica
4. Pliska Studia Mathematica
5. Bulletin de l'Institut de Mathématiques 1953-1974 (in Bulgarian: Известия на Математическия институт)
6. Fractional Calculus and Applied Analysis
7. Cultural and Historical Heritage: Preservation, Representation, Digitalization (KIN Journal), etc.

**EuDML: The European Digital Mathematics Library**



# OPEN ACCESS ORGANIZATION

 <b>SPARC*</b> Scholarly Publishing and ...	 <b>CASPA</b> Open Access Scholarly P...	 <b>PLOS</b> PLOS
 <b>COPE</b> Committee on Publicatio...	 <b>ACRL</b> Association of College an...	 <b>ALA</b> American Library Associa...
 <b>AALL</b> American Association of ...	 <b>CC</b> Creative Commons	 <b>OXFORD</b> Oxford University Press
 <b>Open Knowledge Founda...</b>	 <b>Jisc</b> Jisc	 <b>Taylor &amp; Francis</b>
 <b>SPRINGER NATURE</b> Springer Nature	 <b>Wiley</b>	 <b>S Sage</b> Sage
 <b>BRIN</b> National Research and In...	 <b>Crossref</b> Crossref	 <b>frontiers</b> Frontiers Media
 <b>ELSEVIER</b> Elsevier	 <b>CAMBRIDGE UNIVERSITY PRESS</b> Cambridge University Pre...	 <b>nature portfolio</b> Nature Portfolio
 <b>BMJ Group</b> BMJ	 <b>OpenAIRE</b> OpenAIRE	 <b>OpenBook Collective</b> Open Book Collective
 <b>erc</b> European Research Coun...	 <b>Open Book Publishers</b>	 <b>MDPI</b> MDPI

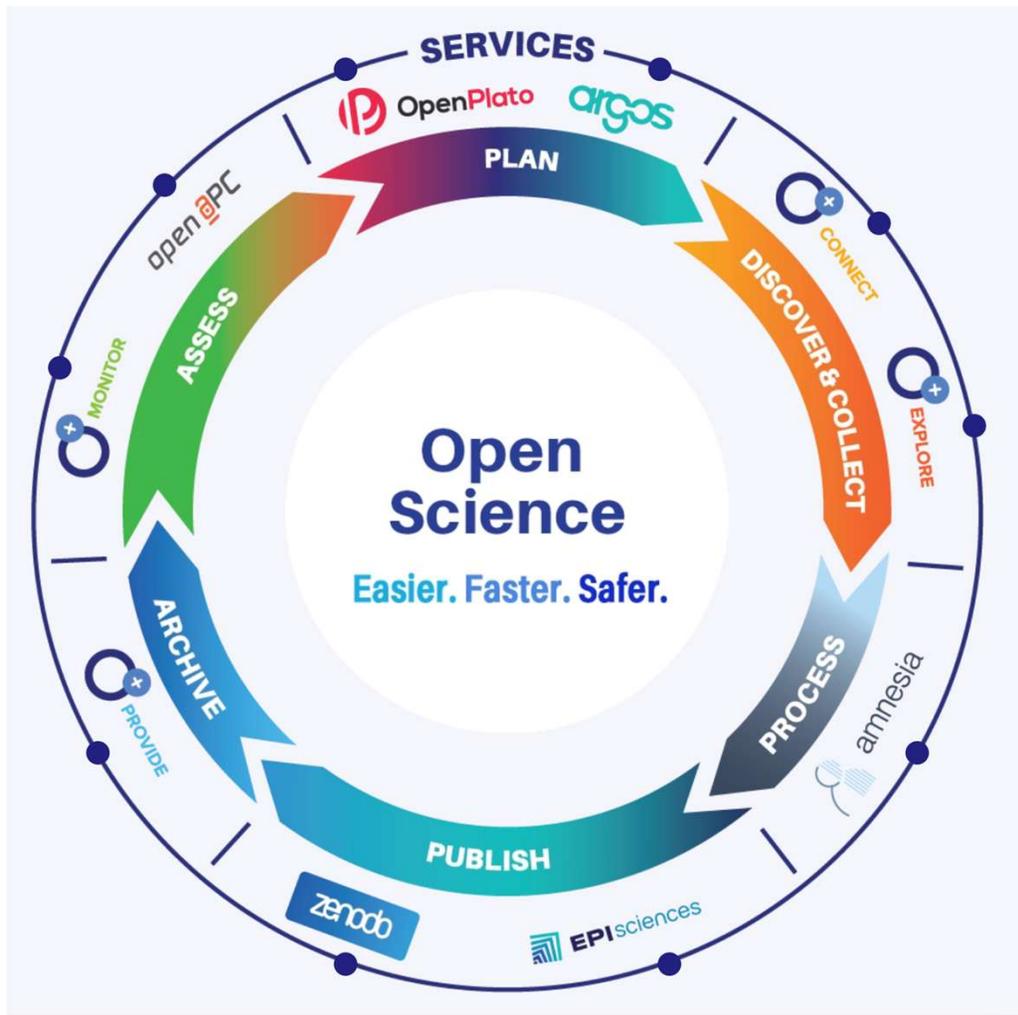




## EOSC

- The vision for EOSC is to put in place a system in Europe to find and access data and services for research and innovation. This is to help researchers store, share, process, analyse and reuse FAIR research outputs within and across disciplines and borders.
- The deployment of a network between data repositories and services will be instrumental for Open Science to progress in Europe. For this, the EOSC Federation of nodes is being created.
- The ongoing build-up phase is the first phase of development of an operational EOSC Federation.





## EXERCISES

1. Describe in one paragraph two open access organizations
2. Find the number of open access journals published in Bulgaria
3. Find the number of open access books in Bulgarian language <https://www.doabooks.org/>
4. Where do you think you have to publish your work?



# WHICH SERVICE IS RIGHT FOR YOU?

		
<p>Open Science Observatory</p> <p><b>Understanding the European Open Science landscape</b></p> <p>The Open Science Observatory is a portal that facilitates access to the Open Science indicators for policy makers, funders, organisations, by combining and visualising information from all over Europe.</p>	<p>OpenAIRE CONNECT</p> <p><b>Custom, on-demand, scientific gateways</b></p> <p>The CONNECT Dashboard is a platform as a service that enables institutions, universities, or lead teams on a scientific domain, to easily create, configure and manage, their own customised web portal that collects and shares research outcomes of their interest to their audiences. The gateways could be public or set in a private mode.</p>	<p>OpenAIRE Graph</p> <p><b>An intelligent gateway to scholarly communication</b></p> <p>The OpenAIRE Graph is a collection of interlinked research objects that aggregates metadata records from more than 70K scholarly communication sources from all over the world for researchers, service providers, research managers and policy makers, by following a participatory approach.</p>



# WHICH SERVICE IS RIGHT FOR YOU?



## OpenAIRE MONITOR

### Personalised research monitoring

OpenAIRE MONITOR is a service that produces well-documented, timely and accurate monitoring indicators of research activities for funders, research initiatives and organisations, by creating personalised and on-demand online configurable dashboards



## OpenAIRE Metadata Validator

### Check repository compliance with OpenAIRE

The OpenAIRE Metadata Validator is a service that checks a repository's compliance with OpenAIRE, for repository managers, by validating it against the OpenAIRE guidelines.



## OpenAIRE UsageCounts

### Measure. Track Open Access repositories usage

UsageCounts is an OpenAIRE service for content providers, research funders and policy makers, that collects and visualises usage activity of Open Access Repositories by using automated and standardised scientific methods.



# WHICH SERVICE IS RIGHT FOR YOU?



OpenAPC

## Open Access Cost Transparency

OpenAPC is an infrastructure that collects cost information on Open Access publishing for research academic institutions by providing in-depth analysis on cost trends across publishers, e-journals and books or monographs.



OpenCitations

## OpenCitations for Open Science

OpenCitations is an independent not-for-profit infrastructure organization for open scholarship that provides open bibliographic and citation data for the scholarly community by using Semantic Web technologies.



## EXERCISES

1. Identify three Open Access events in Bulgaria
2. Find which open access service is right for you
3. Describe in one paragraph 2 open access organization activities





# OPEN SCIENCE



## The world needs open science *now. Why?*

Open science can accelerate our ability to help solve the complex challenges of our interconnected world. We need it because:



**Global challenges such as poverty, armed conflict, the climate crisis, environmental degradation and health and humanitarian crises are urgent**—and science, technology and innovation can better respond to them if they collect and apply ideas from diverse contributors and knowledge systems.



**Open science has the potential to accelerate the achievement of the Sustainable Development Goals** by reducing or ending inequalities in access to science, technology, innovation and their applications.



**Research practices that are more transparent, collaborative and inclusive** are subject to more effective peer review, increased scrutiny and critique which in turn increases the verifiability and reproducibility of the science produced. This ultimately leads to better science, more trust in science and more relevant and positive impacts of science on society.





# OPEN SCIENCE



The practice of  
open science  
aims to:



Make knowledge from all scientific disciplines and aspects of scholarly practices—including basic and applied sciences, natural and social sciences and humanities—available and accessible to everyone in multiple languages



Open the processes and products of knowledge creation to people outside of the traditional research community

**OPEN  
SCIENCE**



Encourage collaboration and information-sharing to benefit science and society





# OPEN SCIENCE

## Six guiding principles

An agreed set of principles helps Member States uphold these values and make open science a reality.



**1. Transparency, scrutiny, critique and reproducibility**—to reinforce the rigor of scientific results, enhance the positive impact of science on society and increase society's ability to solve complex interconnected problems.

**2. Equality of opportunities**—to ensure that all scientists and those with an interest in science have equal opportunity to access, contribute to and benefit from science, regardless of origin or circumstance.



**3. Responsibility, respect and accountability**—to be responsible for and aware of public accountability, potential conflicts of interest, intellectual integrity and the possible social or ecological consequences of research activities.

**4. Collaboration, participation and inclusion**—to ensure that scientific collaborations transcend the boundaries of geography, language and resources, and include knowledge from marginalized communities to solve problems of great social importance.



**5. Flexibility**—to acknowledge that there is no one-size-fits-all way to practice open science and to encourage different pathways to practicing it while upholding the core values.

**6. Sustainability**—to be as efficient and impactful as possible by building on long-term practices, services, infrastructures and funding models to ensure participation of scientists from less-privileged countries or institutions.



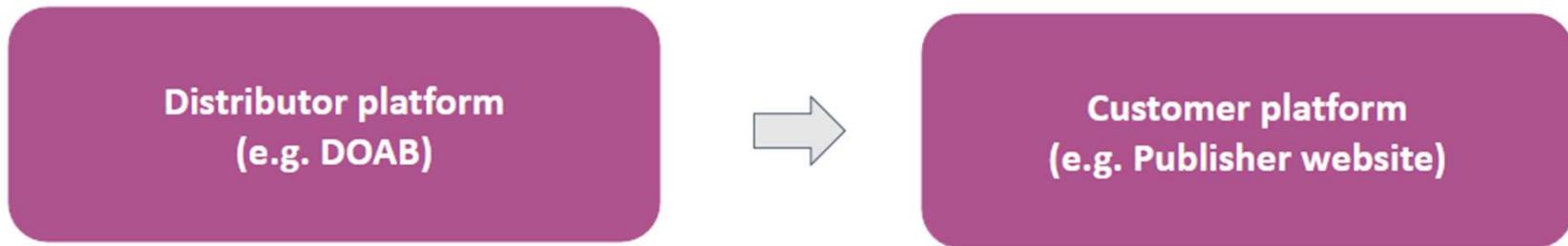
# OPERAS Metrics Service: data workflow



1. Data collection based on DOIs
  - a. Distributor -> Customer
  - b. Customer's own website
2. Data processing and normalization

3. Data enrichment
4. Data storage
5. Data display on customer's website

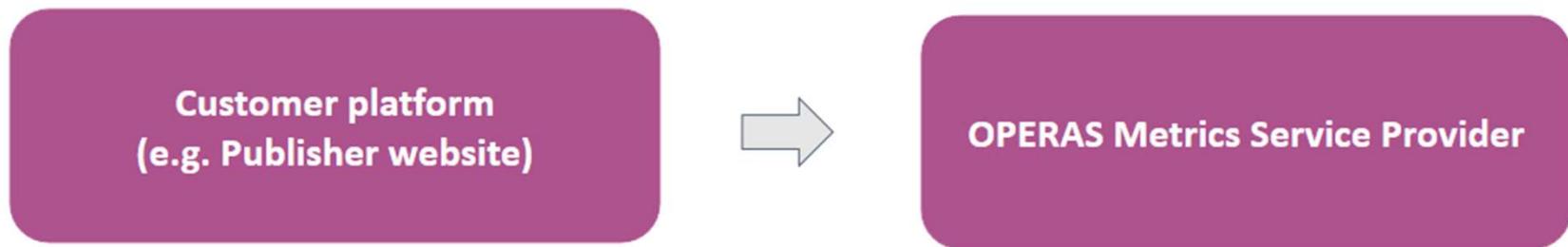
# OPERAS Metrics Service: step 1 - GET the data



<p><b>Supported platforms</b></p> <p>Google Books Open Book Publishers World reader Open Edition OAPEN JSTOR The Classics Library IRUS-UK</p>	<p>SUB Göttingen EKT (Greece) Ubiquity Press Figshare UPLOpen Crossref (Cited by) Unglue.it OpenAIRE</p>	<p><b>Components</b></p> <ul style="list-style-type: none"> <li>● <b>Drivers:</b> are collecting data             <ul style="list-style-type: none"> <li>○ Using APIs of the distributor platforms</li> <li>○ Manually through CSV upload</li> <li>○ Locally (Access Logs Driver, Matomo)</li> </ul> </li> <li>● <b>Plugins:</b> are processing and normalizing data</li> <li>● <b>Database</b> is storing the customer-related data</li> <li>● Pushing data to the central Metrics Database</li> </ul>
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# OPERAS Metrics Service: step 2 - WRITE the data

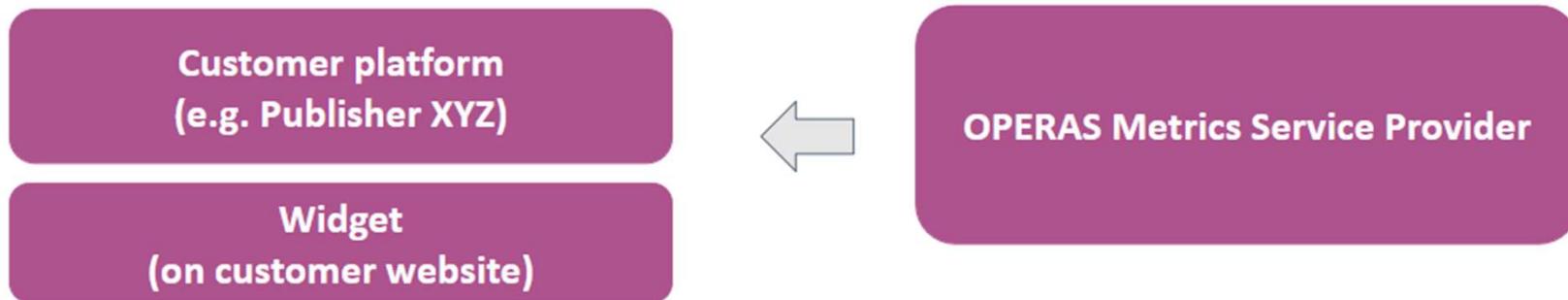


## Identifier Translation Service:

- Maps works (publications) to URIs, e.g. “That Greece Might Still Be Free” by William St Clair :
  - info:doi:10.11647/obp.0001
  - Urn:isbn:9781906924010
  - https://www.openbookpublishers.com/product/3
- Allows converting from one identifier to another.

- Storing the data in the central Operas Metrics Database.
- Enriching it with the alternative metrics (altmetrics):
  - Crossref Relationships API combining results from:
    - Hypothes.is
    - Wordpress
    - Wikipedia

# OPERAS Metrics Service: step 3 - READ the data



<ul style="list-style-type: none"><li>● <b>Core Metrics (measures)</b><ul style="list-style-type: none"><li>○ Views and Reads</li><li>○ Sessions</li><li>○ Downloads</li><li>○ Citations</li><li>○ Shares</li><li>○ Users (World Reader)</li></ul></li></ul>	<ul style="list-style-type: none"><li>● <b>Altmetrics (measures)</b><ul style="list-style-type: none"><li>○ Annotations (on Hypothes.is)</li><li>○ References (on Wikipedia or Wordpress blogs)</li></ul></li></ul>	<ul style="list-style-type: none"><li>● Sending data to the user interface</li><li>● Displaying data in a Widget</li><li>● Step 3 is also a minimal customer infrastructure with "READ" rights only.</li></ul>
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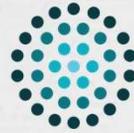




# AI

- [ChatGPT](#), Get answers. Find inspiration. Be more productive.
- [Claude AI](#), Exceptional Creativity
- [Gemini](#), User-Friendly Interface
- [DocsBot](#), Customizable Chatbot Creation
- [Microsoft Copilot](#), Real-Time Information Access
- [Meta AI](#), Image Generation
- [Perplexity](#), Multimodal Search & Generation
- [Pi AI](#), Engaging Conversational Style





**REINFORCING**

**THANK YOU**

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[www.reinforcing.eu](http://www.reinforcing.eu)

