

## OpenAIRE

Open Scholarly Communication e-Infrastructure

(P) OpenPlato

PLAN

Open Science

Easier. Faster. Safer.

PUBLISH

anot

EPIsciences

# **Open Science**



OpenAIRE

### Gültekin Gürdal Library Director





Gultekin Gurdal Izmir Institute of Technology Library Director

E-posta: gultekingurdal@iyte.edu.tr Tel: +90 232 7506331 http://web.iyte.edu.tr/~gultekingurdal/

ORCID ID: http://orcid.org/0000-0001-7259-8134

Working as the library director at IZTECH for 17 years.

Bachelor's Degree from Hacettepe University, Library Science Program (currently the Information Management Program), and a Master's Degree from Kocaeli University, Business Administration.

Pariticipated in OpenAIREPlus, OpenAIRE2020, and OpenAIRE Advance projects.

Working as an OpenAIRE Turkey NOAD since 2011 by actively engaging with the rest of the project team.

A board member of OpenAIRE.

A founder partner of Research Ecosystems, an R&D Company established within IZTECH Technopark in 2021.



# SET FREE.

## 1 – Open Science



## **Open Science**

"Open science is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process"

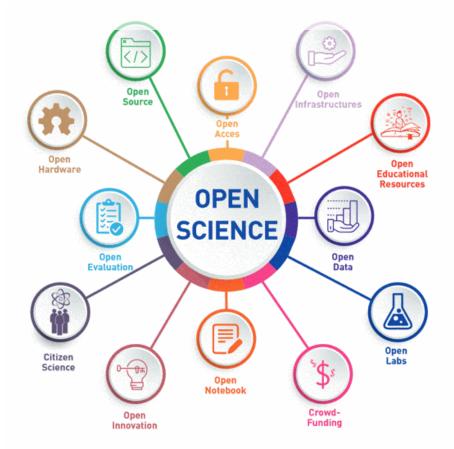
- Beyond Open Access to Publications
- Collaboration & Interdisciplinarity

**OpenAIRE** 

 New functional and organisational schemes

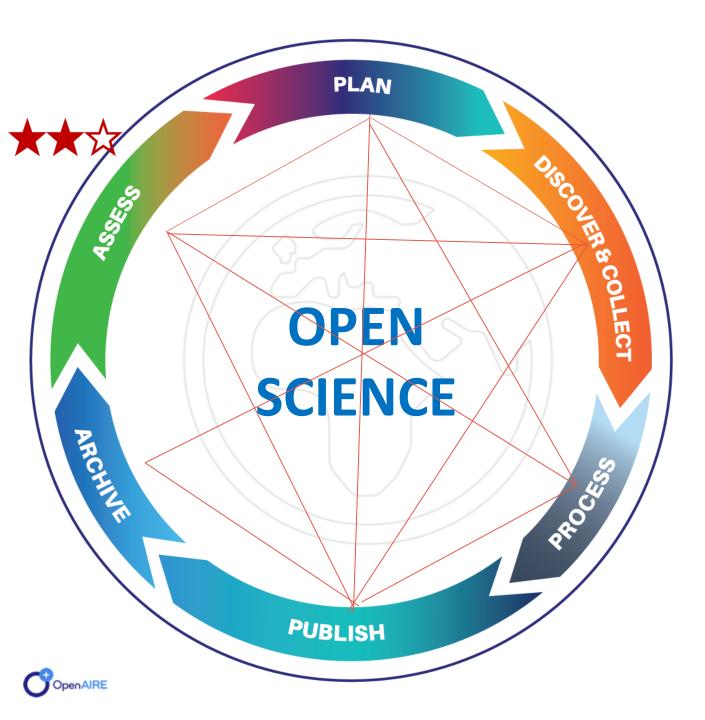


https://www.unesco.org/en/natural-sciences/open-science



Components of Open Science

**European Commission** 



# New ways of performing science

- Everything is digital
- Everything is **big**
- Everything is connected

Research life cycle is interconnected, and openness has a positive affect in every stage From a closed & traditional Scholarly Communication To an Open Scholarly Communication ecosystem that lowers barriers in research, increases dissemination of knowledge and discovery from researchers and society, makes research accessible on the web with no obstacles.

OWNERSHIP – WHO OWNS AND CONTROLS THE PROCESSES TRANSITION TO AN OPEN ECOSYSTEM OF THE OWNS AND CONTROLS THE PROCESSES COST – OPEN SCIENCE IS NOT FREE



# **SETFREE.**

2 – Open Science in Europe In Practice. Through OpenAIRE



## **Open Science in the EU and OpenAIRE**



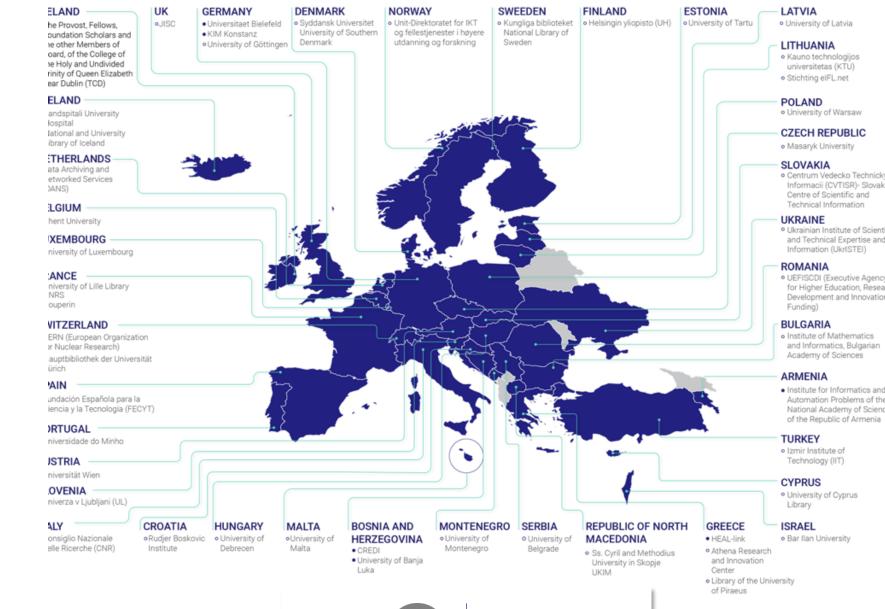
### **WHO IS OPENAIRE**

A European infrastructure on open scholarly communication since 2009

**Mission:** Shift scholarly communication towards openness and transparency and facilitate innovative ways to communicate and monitor research.

#### **Non-profit organization**

- Established Oct 2018
- Headquarter Greece, virtual office
- 50 members
- From 34 countries







**OpenAIRE** projects

Events (2011 – 2021)

Participated in 123 events (26 of which were international

100 presentations were made

15 webinars were organized

12 Workshop / Conference /

Symposium / Seminar

• OpenAIRE Plus (2011-2014)

• OpenAIRE2020 (2015-2018)

#### **Executive Board**

The Executive Board is composed of eight experts in Open Science. Its role is to steer, evaluate and advance the implementation of the strategic directions of the OpenAIRE e-Infrastructure.

#### The chair of the Executive Board and General Assembly is Inge Van Nieuwerburgh.



Inge Van Nieuwerburgh

expert, Ghent

Anna Lundén

Head of Division, National Library of Sweden



Eloy

Director of the

University of

Minho

Libraries

Rodrigues



Birgit Schmidt

Knowledge Commons Unit Head, Göttingen State and University Library



Dazy

Coordinator of the department services and forecasting studies at Couperin

#### **Open Science** • OpenAIRE Advance (2018-2021) University of

Liz Bal

services, Jisc







Management, Computer Science, Masaryk University

André

events)

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#### https://www.openaire.eu/organisation

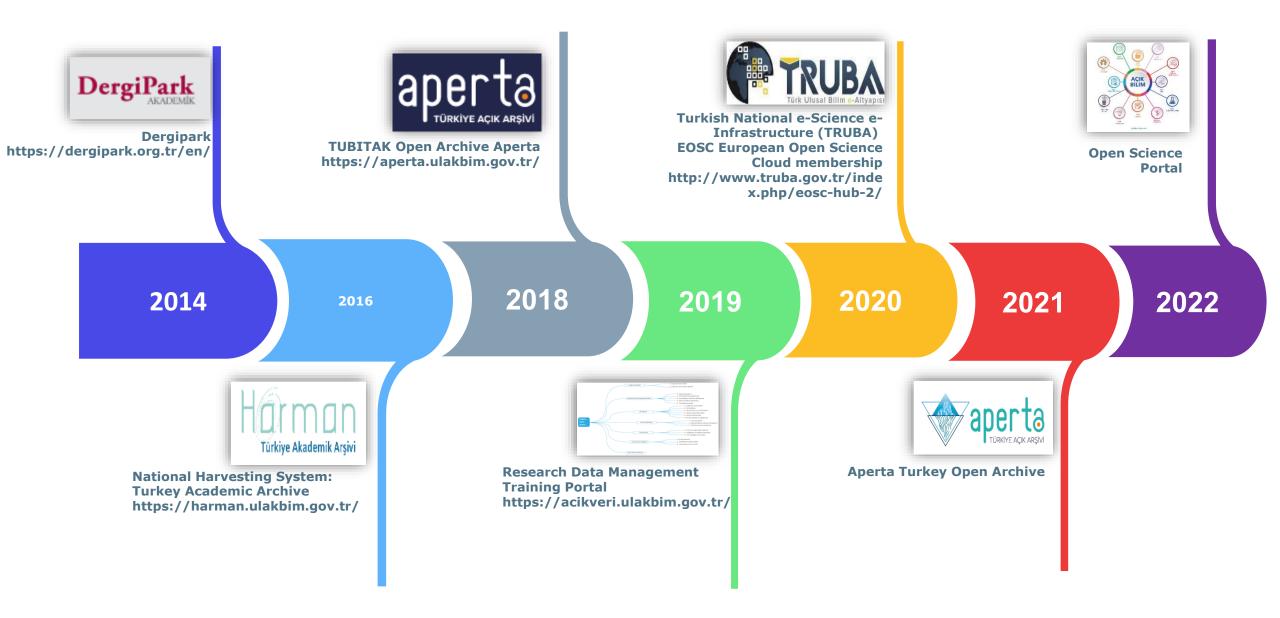


Gultekin Gurdal

Library Director, Izmir Institute of Technology

Director of open research

#### The Scientific and Technological Research Council of Turkey Infrastructures for Open Science

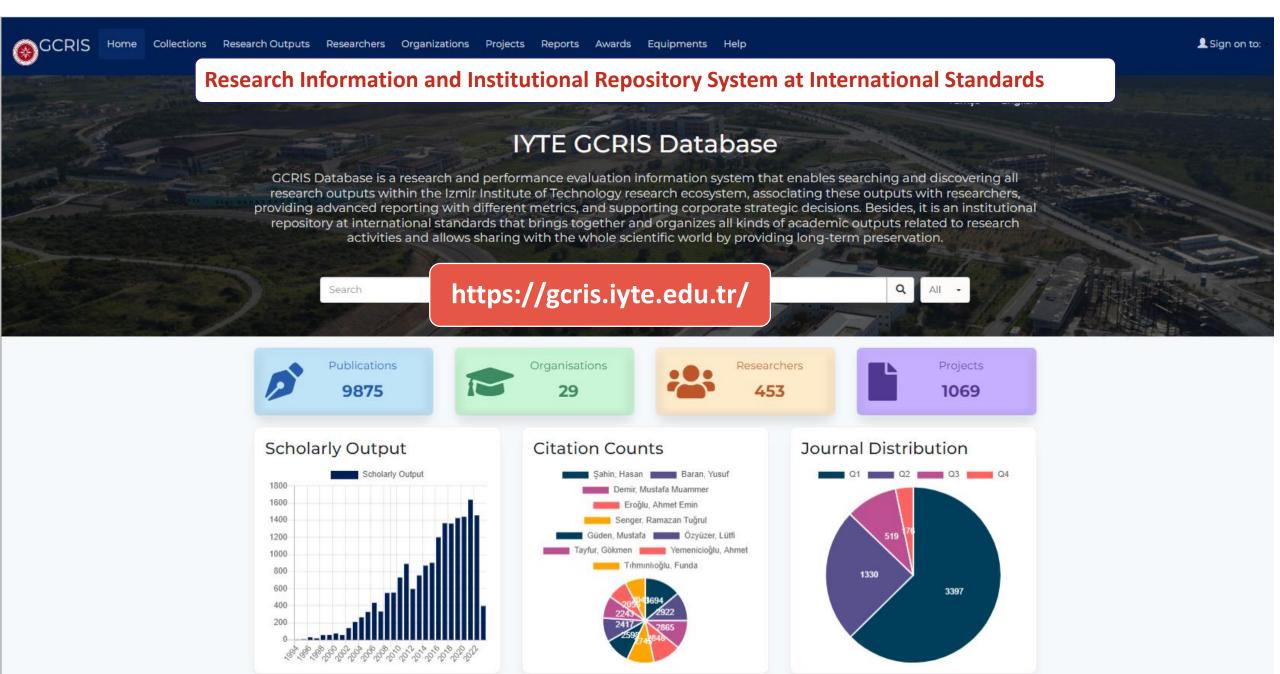


#### OpenAIRE EXPLORE

Search Deposit Link Data sources

Filters Clear Type (1) Journal Archive (2 Compatibility Le		Seal	rch Deposit Link Data sources Advanced search Search Deposit Link Data sc		Sign in	
<ul> <li>collected from a oc</li> <li>Not yet registered</li> </ul> Collected from ( <ul> <li>TÜBİTAK ULAKBİN</li> <li>DOAJ-Articles (2)</li> </ul>	Filters a		Type Scholary works All Content Search for Research pr	Advanced search	Juni	
Thematic (1)	Funder (1) C Type	RESEAF ters Clear All be (1) Clear Repository (180)	OpenAIRE EXPLORE		E Link Data sources Advanced search cholary works earch by name, description, subj	
	Funding Strea       Lang         tubitak 1001 - #       e         tubitak 1002 - F       e         tubitak Uluslare       tr	<b>iguage (9)</b> en (51) r (51) Furkish (42)	Filters Clear All Type (1) CRIS System (3)	3 Data Sources, Page 1 of 1		
	tubitak 3001 - E tubitak TARP (C E	ur (39) English (26) eng (4) all >	Compatibility Level (1) Clear OpenAIRE CRIS v1.1 (3) Country (1) Clear	Institutional CRIS		
		npatibility Level (7) DpenAIRE 3.0 (OA, funding) (81) DpenAIRE Basic (DRIVER OA) (45) Not yet registered (42) DpenAIRE PubRepos v4.0 (6)	<ul> <li>TR (3)</li> <li>Collected from (1)</li> <li>Directory of Research Infor (3)</li> <li>Thematic (1)</li> </ul>	Institute of Technology research ecosystem,	e evaluation information system that enables searching and dia associating these outputs with researchers, providing advance	ed reporting with different metrics, and
	$\sum_{k=1}^{n-k-1}\sum_{k=1}^{n-k-1}$		No (3)	supporting corporate strategic decisions. Be	sides, it is an institutional repository at international standards i	that brings together and organizes all kinds of

#### **IZTECH - GCRIS**



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	Please use th	is identifier to cite or link to this item: https://hdl.handle.net/11147/10764		
	Title:	Experimental data showing the thermal behavior of a flat roof with phase change material	SCOPUS <sup>IM</sup>	
	Authors:	Tokuç, Ayça	Citations	
	Authors.	Başaran, Tahsin	2	
		Yesügey, Sadık Cengiz	checked on May 6, 2023	
		Dokuz Eylül Üniversitesi		
		Izmir Institute of Technology		
		Dokuz Eylül Üniversitesi	WEB OF SCIENCE™ Citations	
	Keywords:	Latent energy storage		
	<u> </u>	Phase change material	2	
		Roof	checked on May 6, 2023	
		Thermal behavior		
		Thermal energy storage		
			Page view(s)	
	Issue Date:	Dec-2015	101,292 checked on May 8,2023	
	Publisher:	Elsevier	checked on May 6, 2025	s
	Source:	Tokuç, A., Başaran, T., and Yesügey, S.C. (2015). Experimental data showing the thermal behavior of a flat roof with phase change material. Data in Brief, 5, 476-480. doi:10.1016/j.dib.2015.09.019	Download(s)	≡
	Abstract:	The selection and configuration of building materials for optimal energy efficiency in a building require some assumptions and models for the thermal behavior of the utilized materials. Although the models for many materials can be considered acceptable for simulation and calculation purposes, the work for modeling the real time behavior of phase change materials is still under	<b>183,802 i</b> checked on May 8, 2023	
		development. The data given in this article shows the thermal behavior of a flat roof element with a phase change material (PCM) layer. The temperature and energy given to and taken from the building element are reported. In addition the solid-liquid behavior of the PCM is tracked through images. The resulting thermal behavior of the phase change material is discussed and simulated in	Google Scholar <sup>IM</sup> Check	
		[1] A. Tokuç, T. Başaran, S.C. Yesügey, An experimental and numerical investigation on the use of phase change materials in building elements: the case of a flat roof in Istanbul, Build. Energy, vol. 102, 2015, pp. 91-104.	Citation Count	
	URI:	https://hdl.handle.net/11147/10764 https://doi.org/10.1016/j.dib.2015.09.019	2 (j	
	Appears in	Architecture / Mimarlık		
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		Scopus İndeksli Yayınlar Koleksiyonu / Scopus Indexed Publications Collection		
		Veri Setleri / Datasets	Citation Count	
View PDF EN		WoS İndeksli Yayınlar Koleksiyonu / WoS Indexed Publications Collection	Citation Count	
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## **Beyond IR's IZTECH - GCRIS**



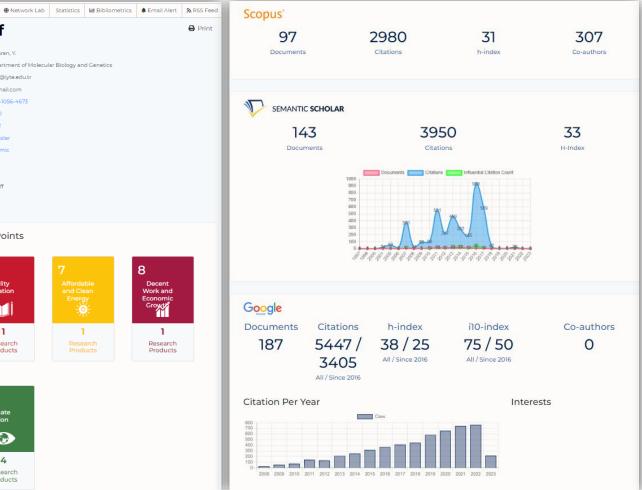
Baran, Yusuf						
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Other Emails	ybaran@gmail.com					
ORCID	0000-0002-1056-4673					
Scopus Author ID	9636164400					
WoS Researcher ID	F-8535-2012					
Google Scholar	Google Scholar					
YÖK Academic	YÖK Academic					
Website	Web Site					
Documents	cv					
Status	Current Staff					

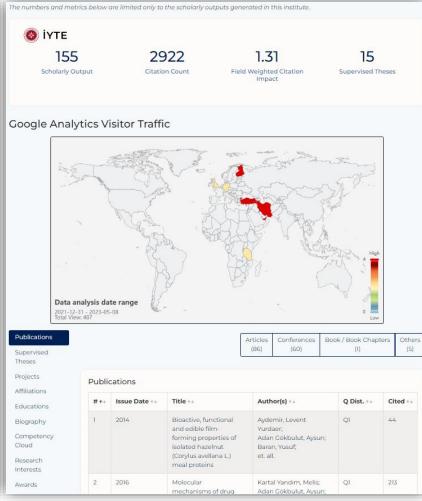
Print

#### **Bibliometrics**

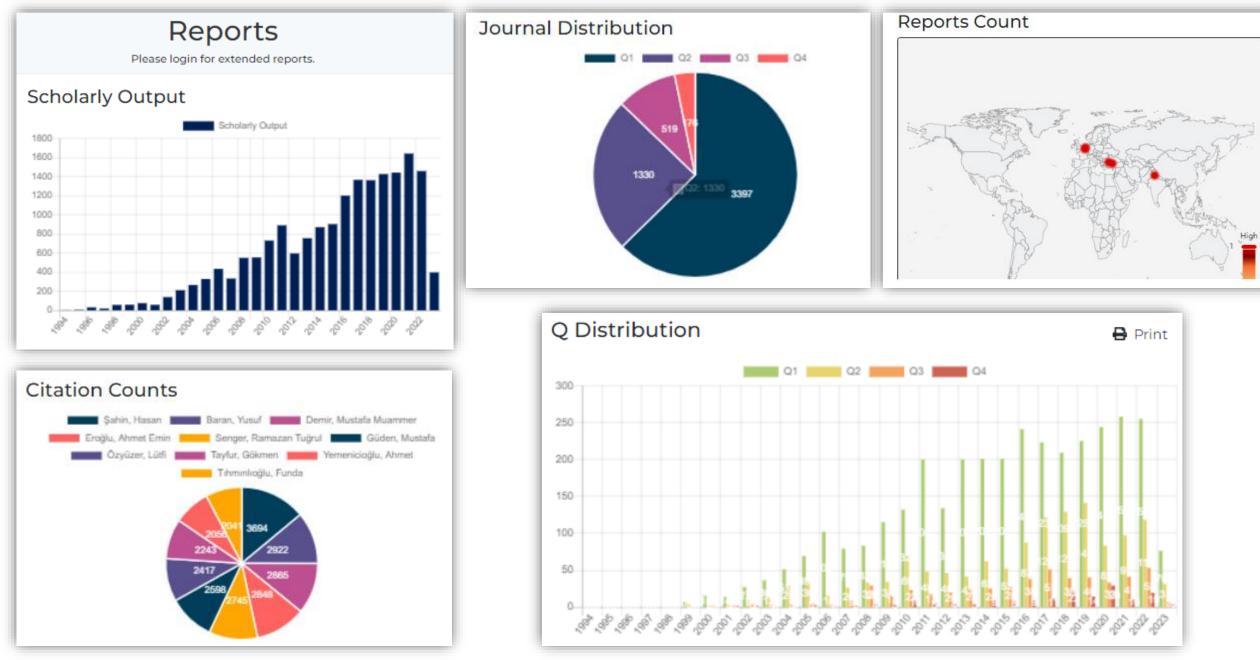
Sustainable Development Goals Report Points







## **IZTECH - GCRIS: Organizational Unit Report**



### **IZTECH - GCRIS: Advance Reporting Dashboard**

Quick Reports	Parameter:					
	Articles					x   ~
Organization	Organizations:					
Dashboard Reports Charts	03. Faculty of Engineering × 04. Faculty of Science × 02. Faculty of Architect	ure <b>x</b>				x   ~
December						
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İstatistikler		Refrest	h			
Açık Erişim Yayın Sayısı 7636			#	Organizations	Parameter	Total Count
	Articles		1	03. Faculty of Engineering	Articles	1335.00
PubMed Bibliyografik Yayın Sayısı 1041						
PubMed Tam Metin Yayın Sayısı 687	250		2	04. Faculty of Science	Articles	1345.00
Scopus Bibliyografik Yayın Sayısı 5268	200		3	02. Faculty of Architecture	Articles	216.00
Scopus Tam Metin Yayın Sayısı 4277	150					
TRdizin Bibliyografik Yayın Sayısı 323	100					
TRdizin Tam Metin Yayın Sayısı 275	50					
WoS Bibliyografik Yayın Sayısı 5482	0 2016 2017 2018 2019 2020 2021	2022				
WoS Tam Metin Yayın Sayısı 4010	<ul> <li>03. Faculty of Engineering</li> <li>04. Faculty of Science</li> <li>02. Faculty of Architecture</li> </ul>					

# SET FREE.

3 – Services For <u>all</u> R&I actors







## INTEROPERABILITY IS KEY: GUIDELINES FOR CONTENT PROVIDERS



#### Part of EOSC RoP for Content Providers (EIF). Global adoption.

Draft OpenAIRE Guidelines for Software Repository Managers Draft OpenAIRE Guidelines for Other Research Products	Ľ.	
https;//guidelines.openaire.eu		OpenAIRE Guidelines for USAGE statistics

## **OPENAIRE SERVICES IN A NUTSHELL**





#### **Planning & Tracking**

Reproduciblity and transparency require tracking of all outcomes of science and related "context"



#### **Publishing & Discovery**

Discovery of **reproducibe** science outcomes must find new ways, driven by "scientific intentions" that go beyond the "find articles related to a research topic"



Monitoring quality, impact, and **"open scienceness"** of science should be a transparent, reproducible process for all, inclusive of research "context"





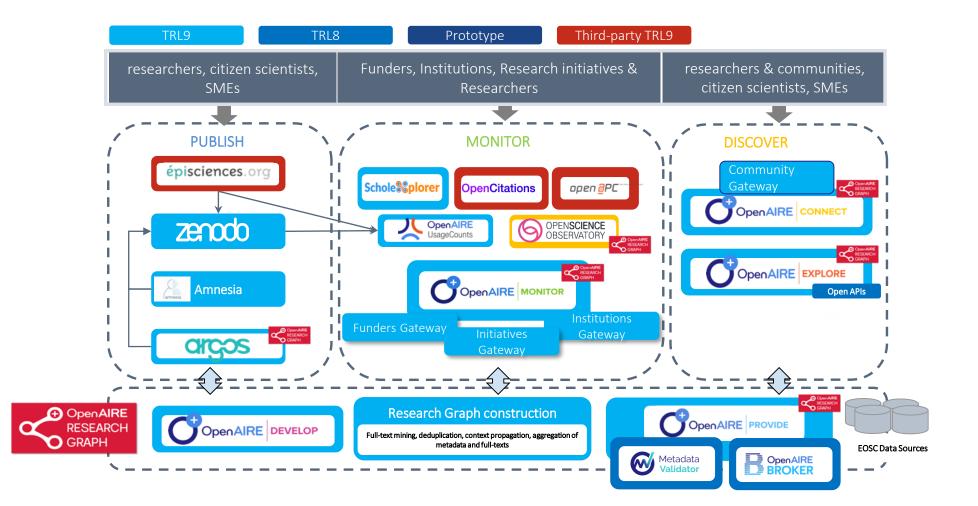
## **OpenAIRE Services for RPOs**

Access to knowledge is fundamental for all, to drive change and create opportunities. Open Science paves the way.

We design, build, set up, run and maintain the OpenAIRE services for you.

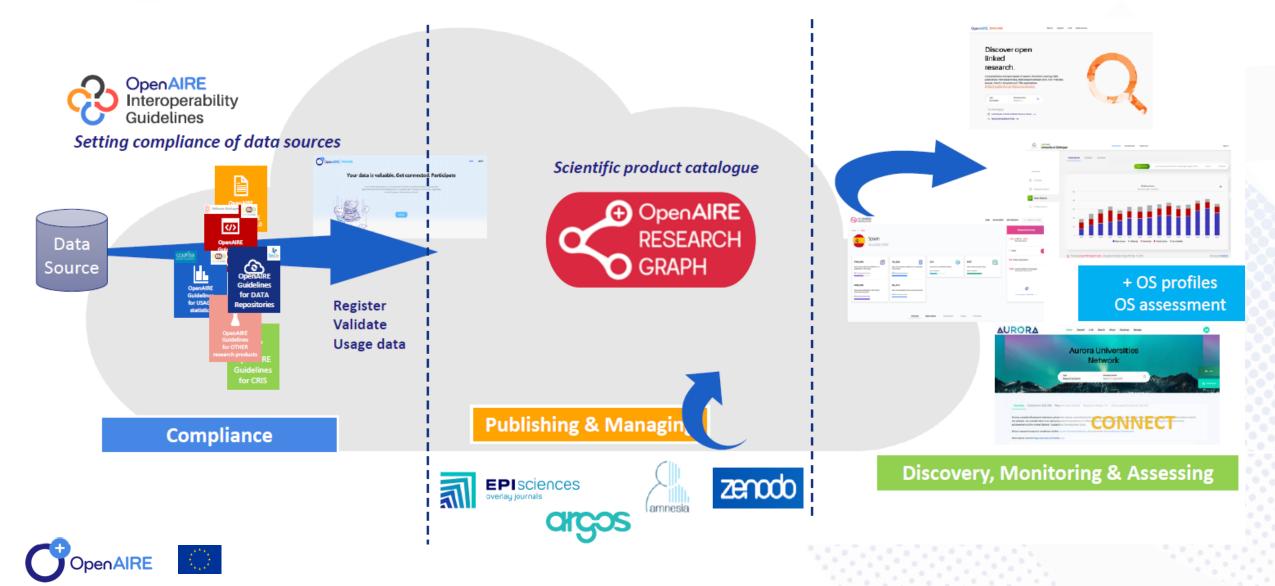


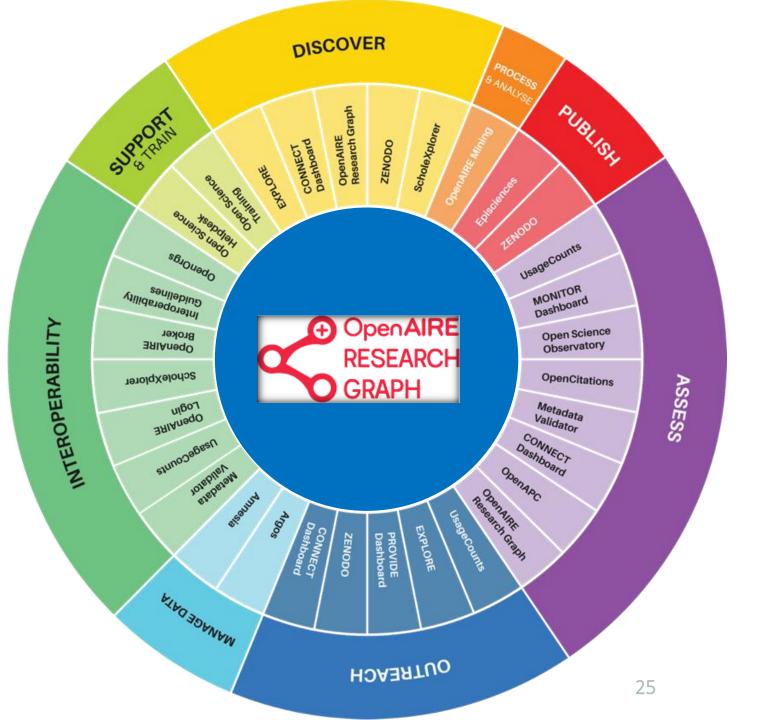
## **OPENAIRE SERVICES –** ALL INTERCONNECTED





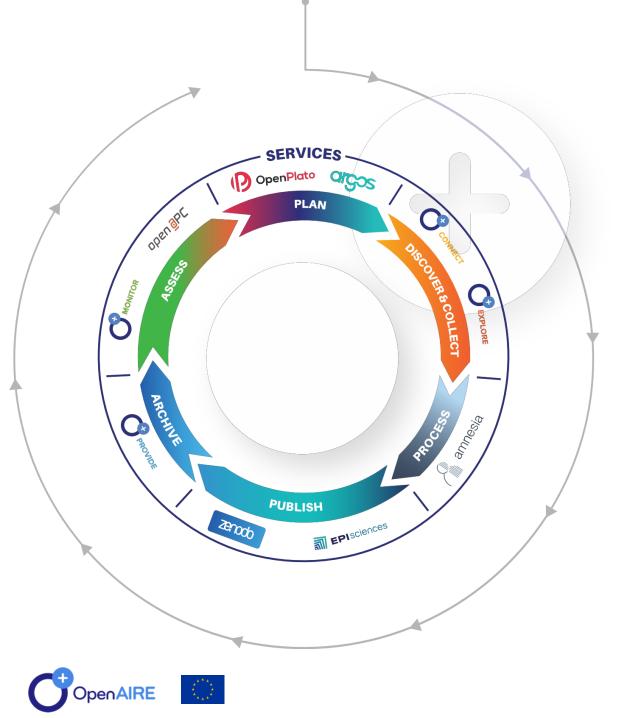
## SERVICES: FROM PUBLISHING TO ASSESSMENT COSC PART OF THE EUROPEAN OPEN SCIENCE CLOUD (EOSC)



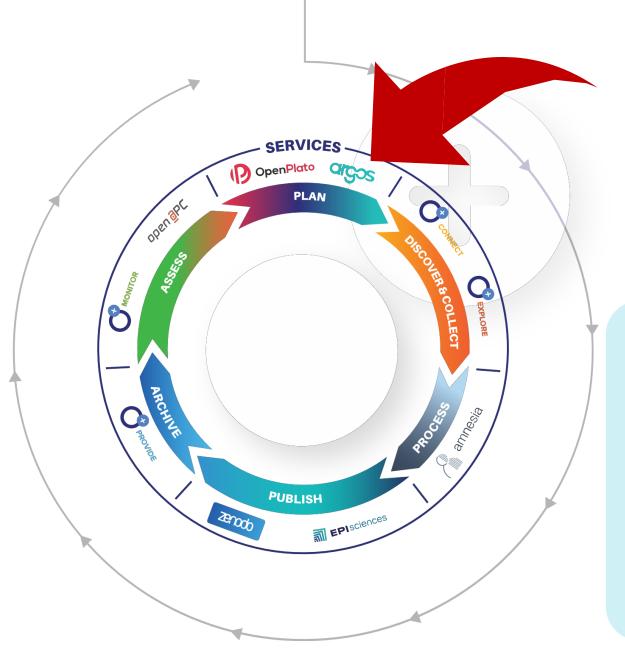


## **OpenAIRE**

A range of Services covering all research life cycle



## OPENAIRE SERVICES FOR RPOs IN THE RESEARCH LIFECYCLE





## **Data Management Plans tool**

FAIR

Complies with funders requirements

Easy and flexible via co-editing

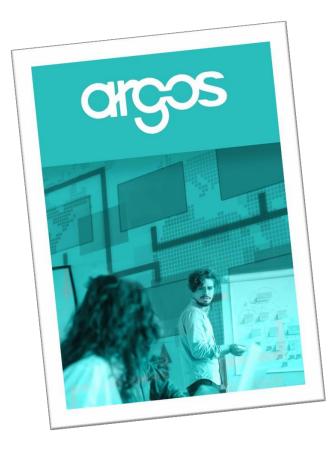
Machine and human readable & shareable outcomes

Available in 8 languages

Can be used as a **cloud** service

Can be deployed locally or setup on demand

## Planning: Step up with data Create the Data Management Plan



- A way to support and track Open Science from the onset
- mandatory by research funders.
- Emerging as an integral part of the research ecosystem
- with lots of automations to make it easy for everyone to use.

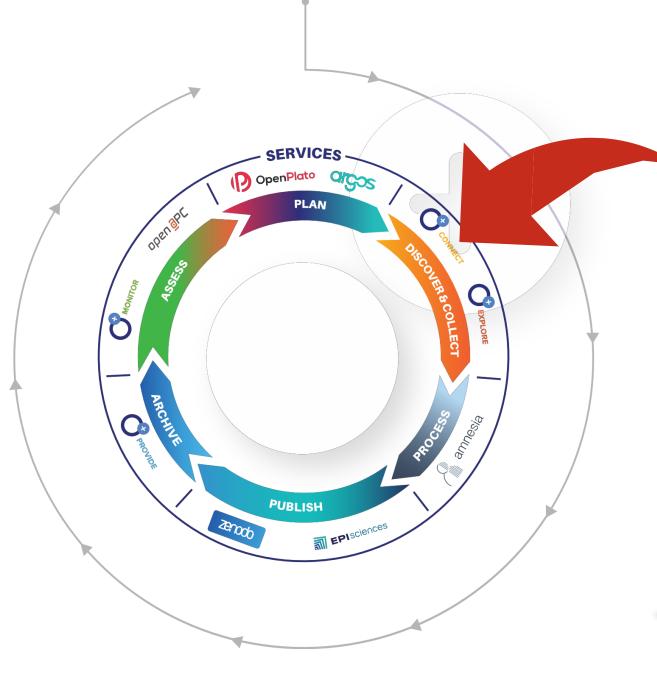
Use directly via Argos website argos.openaire.eu

Implement a local installation of Argos in your organisation (local premises)

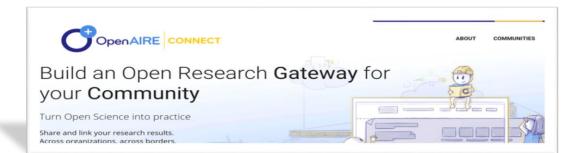
Request a white labelledinstallation of Argos,including personalised supportand training.

3





# UNLOCK THE POTENTIAL FOR COLLABORATION – INTERNAL & EXTERNAL



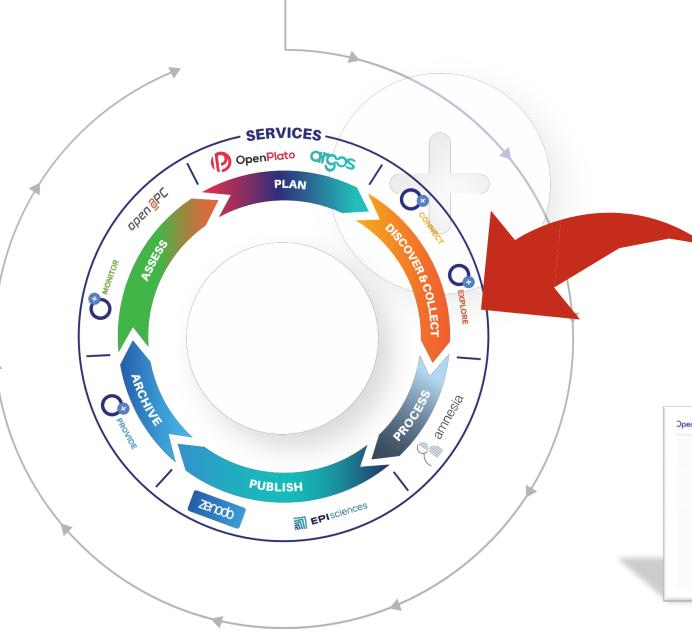


OpenAIRE Research Community Dashboard: Enabling Open Science publishing for research communities, initiatives and infrastructures

# Enhancing discovery with a customised search engine

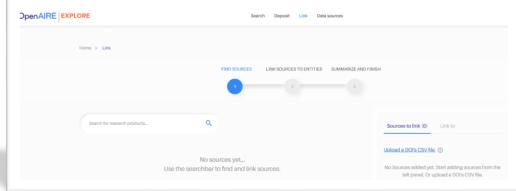
Create a **targeted gateway**, configurable to specific content based on

- repositories/journals of choice
- funding data
- enabled by automate selection process
- A secure place for communities to publish their results, in a guided manner, following OS practices
- Useful for **University Alliances**, to showcase their content under one branding
- Set up in less than one month



## **OpenAIRE EXPLORE**

#### OpenAIRE search portal for Open Access scholarly works globally



## **OpenAIRE EXPLORE**

## Make the links! Contextualise your data

#### OpenAIRE search portal

- Accessible via OpenAIRE APIs
   >50 Million requests
- SDGs and Field of Science filtering
- Open and free for everyone

https://explore.openaire.eu

Collection of >1 Billion open citation links

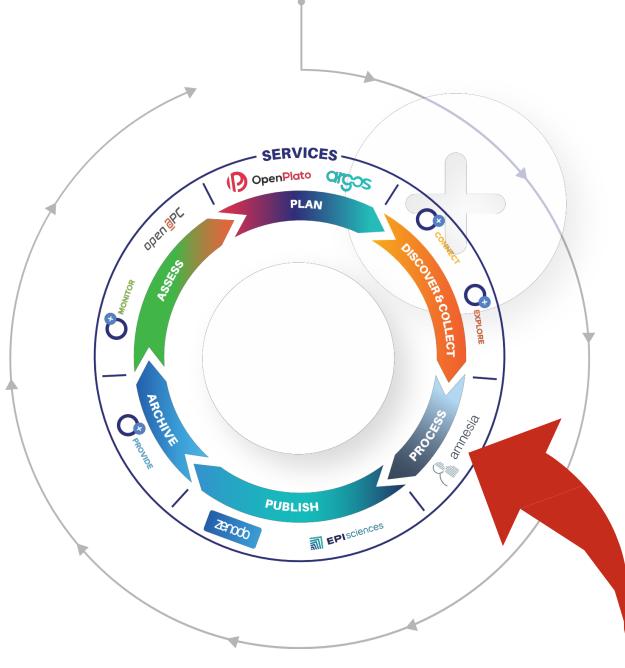
>29 Million API requests

- Derived from open references within Crossref
- Citations hosted as Linked Open Data
- Citations accessible via a flexible API using DOIs

https://opencitations.net/



EXP





## MANAGE SENSITIVE DATA

#### Performs data anonymization

- Not pseudo-anonymization (According to GDPR)
- Personal data become statistical data

#### Is a stand - alone application

• Available as web service for training/demo purposes only

This service is offered by Athena Research Center, Greece

https://amnesia.openaire.eu/



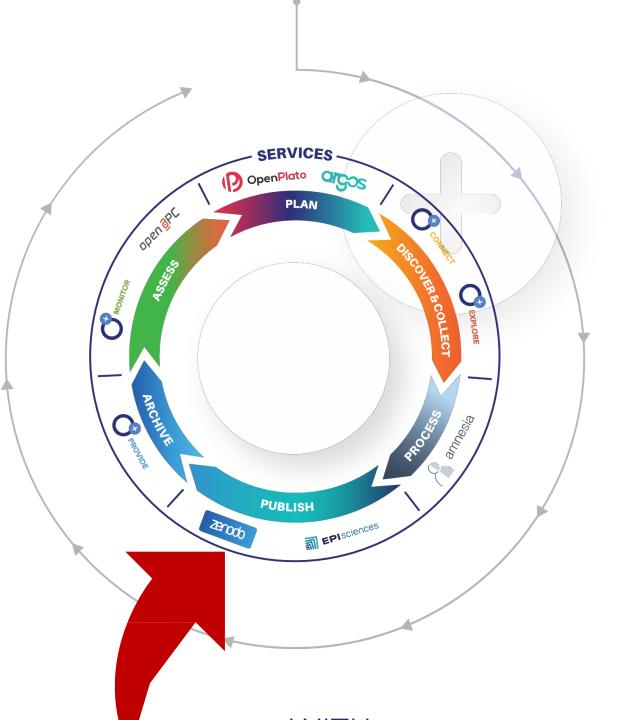
## Anonymise datasets

Ensure whatever your researchers publish abides to the rules about sensitive data, personal data, and GDPR guidelines, might prevent their process and analysis.

State of the art anonymization algorithms, with **statistical guarantees** that the output **cannot** be **linked** to the original data!

Packaged to be embedded in **workflows:** before publishing (last step before submitting to repository) or before sharing proprietary data.





## PUBLISH IN A TRUSTED ENVIRONMENT

Happy Birthday Zenodo!

#### Celebrating our 10th Anniversary

This service is offered by CERN, Switzerland

## **Publishing** ... Not only manuscripts!



- A user-friendly way to share research objects in just a few clicks
- Get a **DOI** for **citations**
- Indexed at real time be OpenAIRE
- Direct links to Github to archive snapshots of code and assign DOI
- Institutional communities (also linked to Connect)

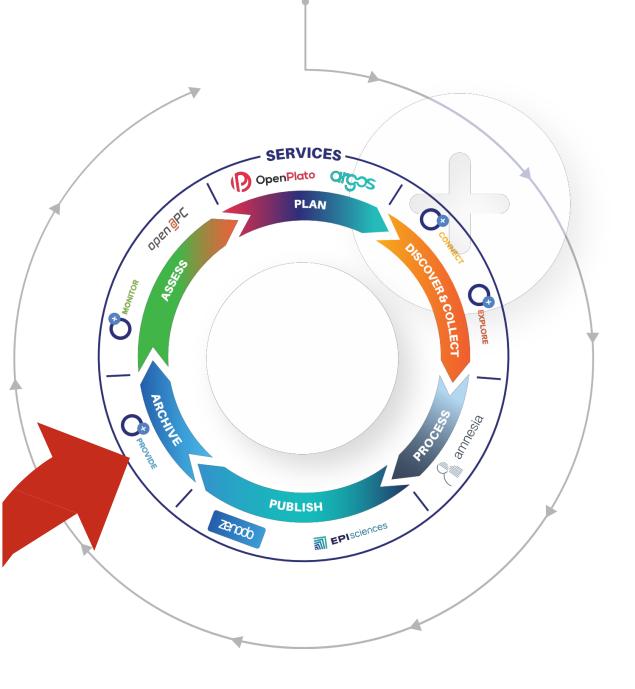
Upload

Visit: <u>https://zenodo.org/</u> Upload up to 50GB for each dataset All file formats accepted

#### Describe

Provide rich but flexible metadata Based on DataCite schema Reserve DOI before publishing Publish

Get a citable DOI Many export formats





EXPOSE INSTITUTIONAL CONTENT TO EOSC AND THE WORLD IN A ONE-STOP-SHOP PLACE

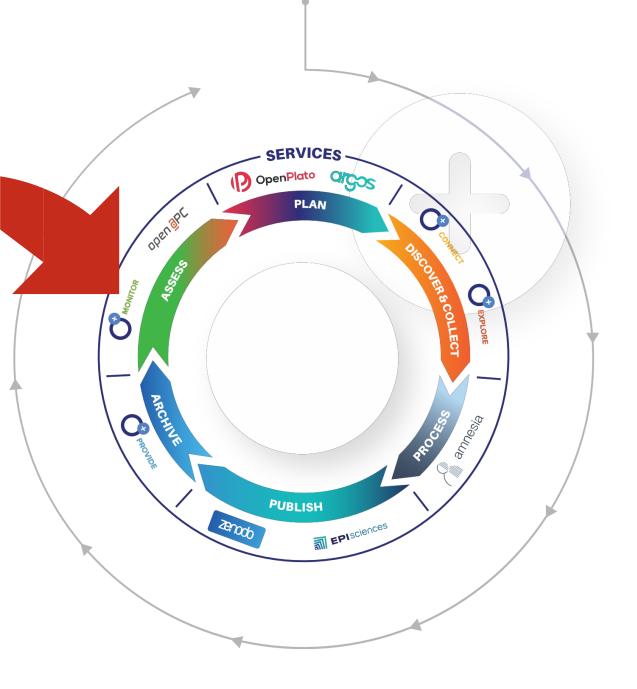
#### More than Archive



- Make your repository accessible using Open, FAIR, and standard (meta)data
- Connect the research content to the OpenAIRE Graph and EOSC
- Get notifications on metadata updates
- Reveal hidden value of your research through OpenAIRE Services









## ASSESS RESEARCH OUTPUTS AND OPEN SCIENCE POLICIES

Monitor research activities, outputs, collaborations, costs and impact

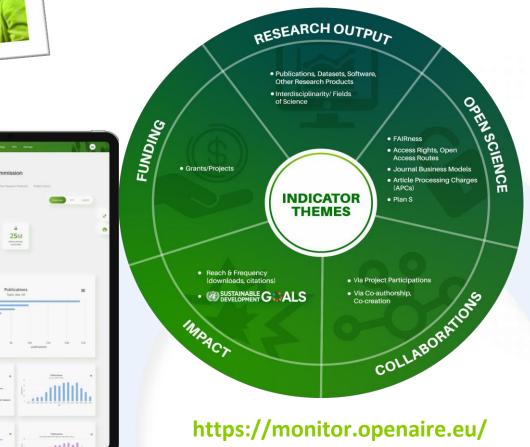
A customizable MONITOR dashboard, with numerous visualisations, by field of interest, research activity, etc. on your data, using research indicators

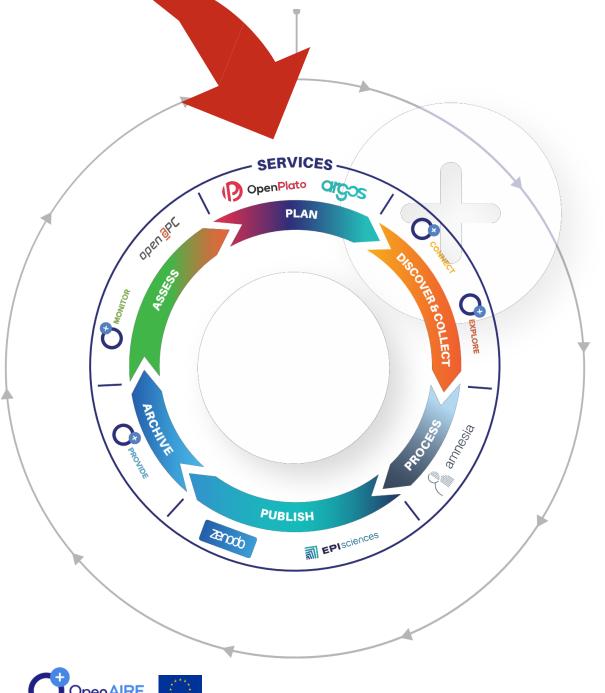
- Public indicators for external stakeholders – *Showcasing*
- Restricted indicators for teammembers – Internal Monitoring
- Private indicators for "work in progress" *Reviewing*





- Linked to funding data, classifications (FOS, SDGs), FAIR metrics, etc.
- Supported by AI analysis to get more insights.







### BUILD CAPACITIES VIA SKILLS

# Open Science e-learning for the community

### Train in Open Science Upskill your students and staff

- Guides, factsheet, tutorials, podcasts
- Helpdesk to respond to targeted questions
- OpenAIRE bootcamps: Train your staff with the experts
- OpenPlato Moodle platform: hosts community
- <u>co-created</u> and <u>authorised</u> open courses





## About costs

- OpenAIRE services are provided for free by EU funding from OpenAIRE Nexus H2020 project until end of 2023
- Subscription fees will apply from 2024 (nonprofit pricing, subsidized by EU funding)
- OpenAIRE AMKE is currently expanding its membership base and invites RPOs to join and get the benefits of discounts as part of a codesign & co-development plan.

Contact us via https://www.openaire.eu/helpdesk







#### OPEN SCIENCE IN HORIZON EUROPE

- S REQUIREMENTS IN PRACTICE
- COMPLIANCE TIPS
- 🔮 TOOLS TO SUPPORT

03 July 2023, 12:00 CEST

#### **REGISTER NOW**



#### https://bit.ly/3Tku5up







More information - <a href="https://www.opensciencefair.eu/">https://www.opensciencefair.eu/</a>

OPEN SCIENCE FAIR 25-27 September 2023 Madrid, Spain





Detailed Information: https://libguides.iyte.edu.tr/iatulfall2023

4-7 September 2023 Izmir, Türkiye





## **Open Science**



penAIRE

Gültekin Gürdal Library Director

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