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argos

plan and follow your data

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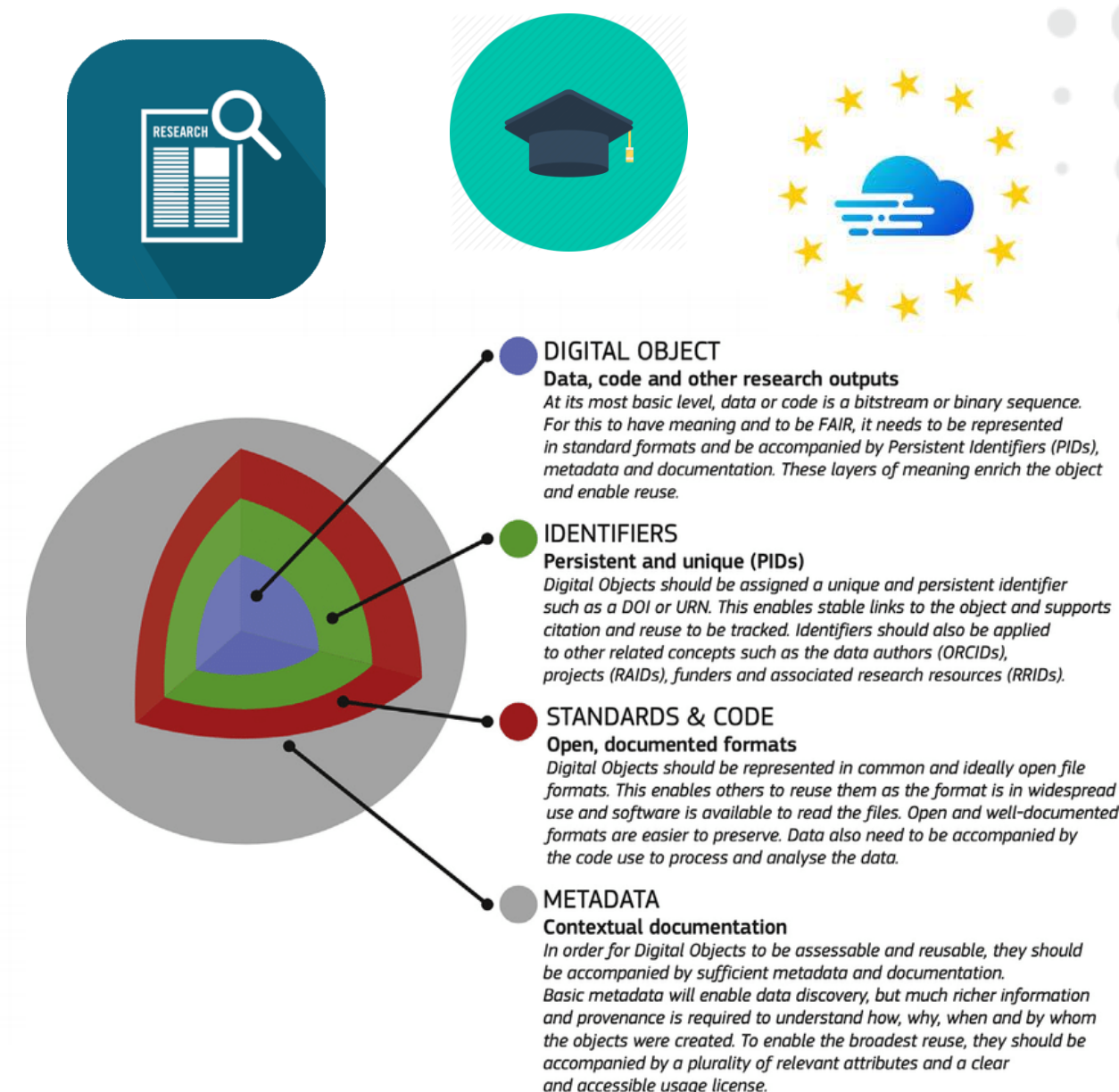


DMPs introduction
Argos service & key features
Enhancements
Argos for stakeholders
Next steps

Data Management Plans

The need

Aim	Who?	How?
Repeatability	same group	same evaluation
Replicability	different group	same evaluation
Reproducibility	different group	different evaluation



Ronald F. Boisvert. Incentivizing reproducibility. *Commun. ACM*, Vol. 59(10), pp. 5, 2016.

Plan for RDM - DMPs

*Plan data management of research activities
following research data lifecycle steps*

Title: H2020 NEANIAS WP4 Space Astrophysics Datasets

Template: Horizon 2020

External References

Data Repositories

GAIA Catalogues, VIALACTEA Knowledge Base, SKA Science Data Challenges

External Datasets

Galactic Legacy Infrared Mid-Plane Survey Extraordinaire, 24 and 70 Micron Survey of the Inner Galactic Disk with MIPS, MIPS GAL Catalog, Co-Ordinated Radio 'N' Infrared Survey for High-mass star formation, Wide-field Infrared Survey Explorer, SKA Science Data Challenge #1, Canadian Galactic Plane Survey, BGPS Catalog, Southern Galactic Plane Survey, WISE Catalog, H2O southern Galactic Plane Survey, Three-mm Ultimate Mopra Milky Way Survey, GAIA Archive, VLA Sky Survey, ATLASGAL Catalog, The VLA Galactic Plane Survey, The Galactic Census of High and Medium-mass Protostars, James Clerk Maxwell Telescope, Herschel infrared Galactic Plane Survey, The Multi-Array Galactic Plane Imaging Survey, Millimetre Astronomy Legacy Team 90GHz

Registries

VLKB Registries, GAIA Registries

Services

GAIA Services, VLKB Services

The H2020 NEANIAS Project aims to design, deliver, and integrate into the European Open Science Cloud innovative thematic services, derived from state-of-the-art research assets and practices in three major sectors: underwater research, atmospheric research and space research. In particular the Work Package 4 is focused on the thematic services related to the Space environment. The Space environment comprises astrophysicists and planetary scientists that will handle data within three services: S1 - FAIR Data Management and visualization for complex data and metadata service; S2- Map making and mosaicking for multidimensional images service; S3 - Structure detection on large map images with machine learning techniques service. This document describes datasets employed from astrophysics surveys mainly covering the Galactic Plane. Data holdings come partly from the Vialactea Knowledge Base (VLKB) hosted at the Italian center for Astronomical Archives (IA2, hosted at INAF - Astronomical Observatory of Trieste) and partly from new data resources such as the GAIA Archive and SKA Data Challenges.

Dataset Description

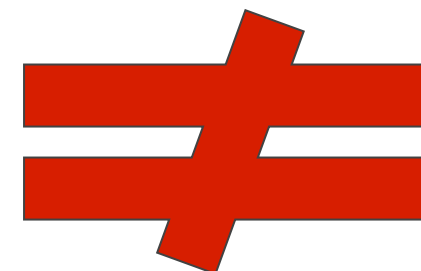
1 Data Summary

1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?

The H2020 NEANIAS Project aims to design, deliver, and integrate into the European Open Science Cloud innovative thematic services, derived from state-of-the-art research assets and practices

Deliverable and “living” document

- documents processes undertaken throughout data management lifecycle, including costs



Research assessment method



DMPs value

- To understand how to **re-use and exploit data**
- To **increase quality** of research and therefore own prestige
- To ensure that research outputs, including data in particular, are **findable by everyone**, available to people, etc.
- To **understand strengths and weaknesses** (e.g. what discipline/ unit produces more results? Are data described based on the DMP requirements? etc)
- To ensure **research integrity and excellence** of researchers

About argos - what



Plan and follow your data

Create machine actionable DMPs.
Configure to best fit your discipline.
Link to EOSC components out of the box.
Share easily in your repository.

Bring your Data Management Plans closer to where
data are generated, analysed and stored.

Start your DMP

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

A collaborative online tool that helps
researchers plan their Research Data
Management (RDM) activities according
to funders' or institutions' Open Access &
FAIR data requirements.

- > *Plan & Implement interdisciplinary
and multi-disciplinary RDM activities*
- > *Free to use for researchers*
- > *Available in EOSC*



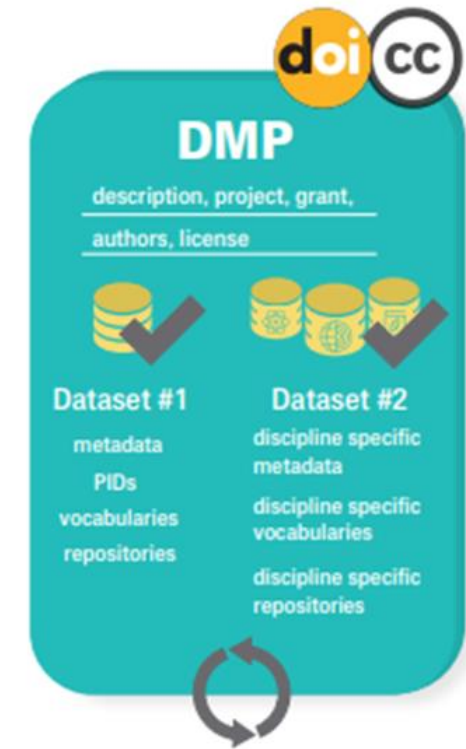
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**EUROPEAN OPEN
SCIENCE CLOUD**

Argos Lifecycle

- Full DMP publication
- Two editors to create DMPs
 - Full editor
 - Dataset wizard
- First validation
- Finalization
- ma-DMP outputs

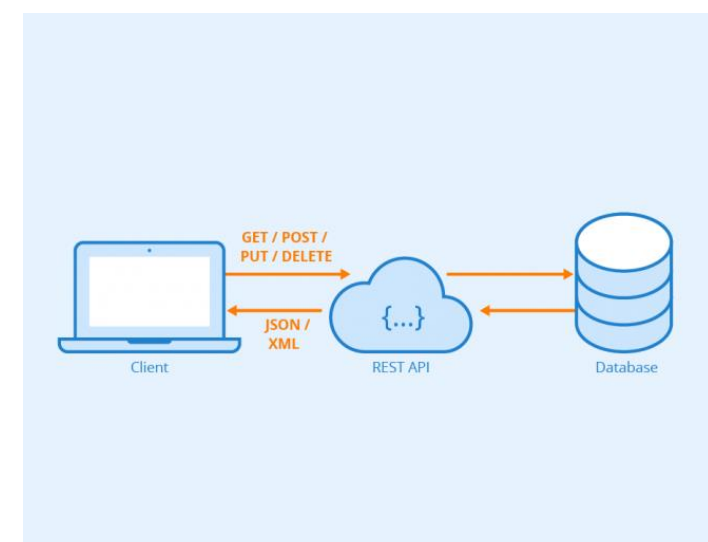
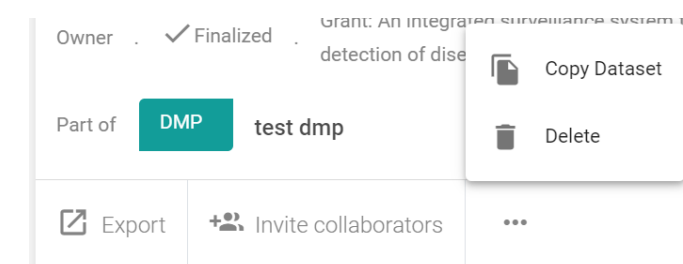
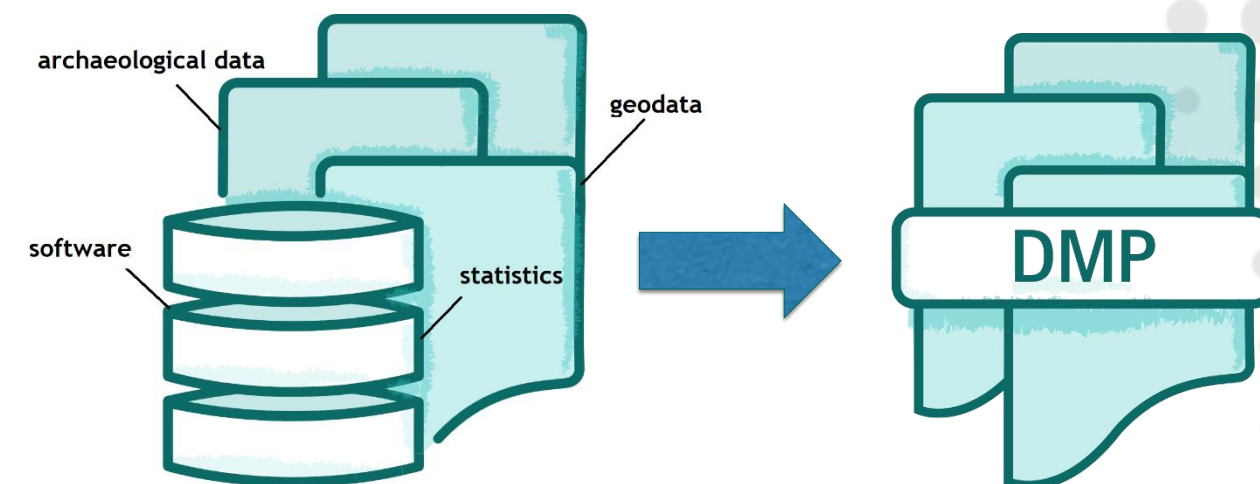


- Rich documents
- Discoverable through OpenAIRE
- Versioned (provenance)
- Interoperable: PIDs (ORCIDs & DOIs)
- Reusable: Licenses
- Preserved in Zenodo

Using argos – how

Key features 1/2

- **Differentiates DMPs from Datasets**
-> DMPs can have more than one descriptions of Dataset
- **A DMP can contain more than one RDM templates**
- **Easy selection of OpenAIRE and EOSC resources**



Select one or more templates for your DMP

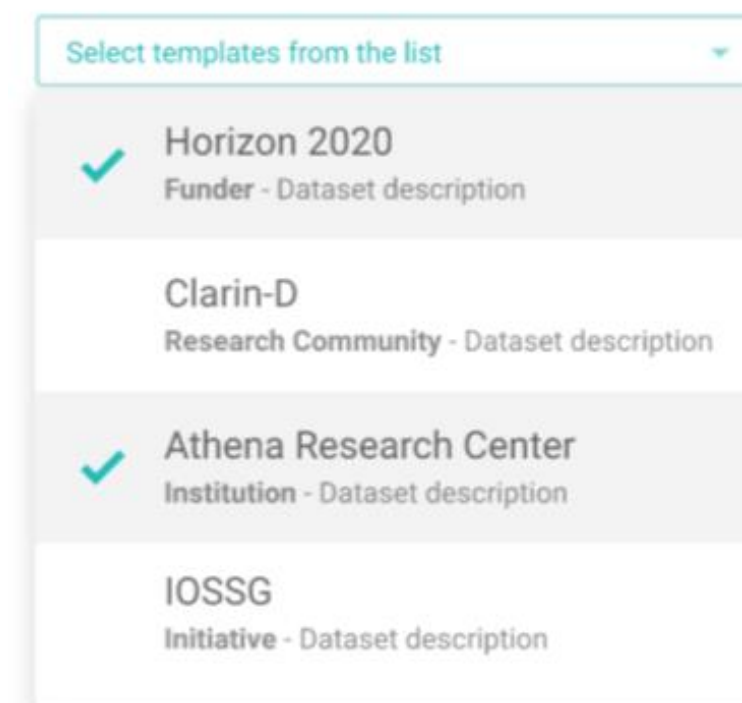
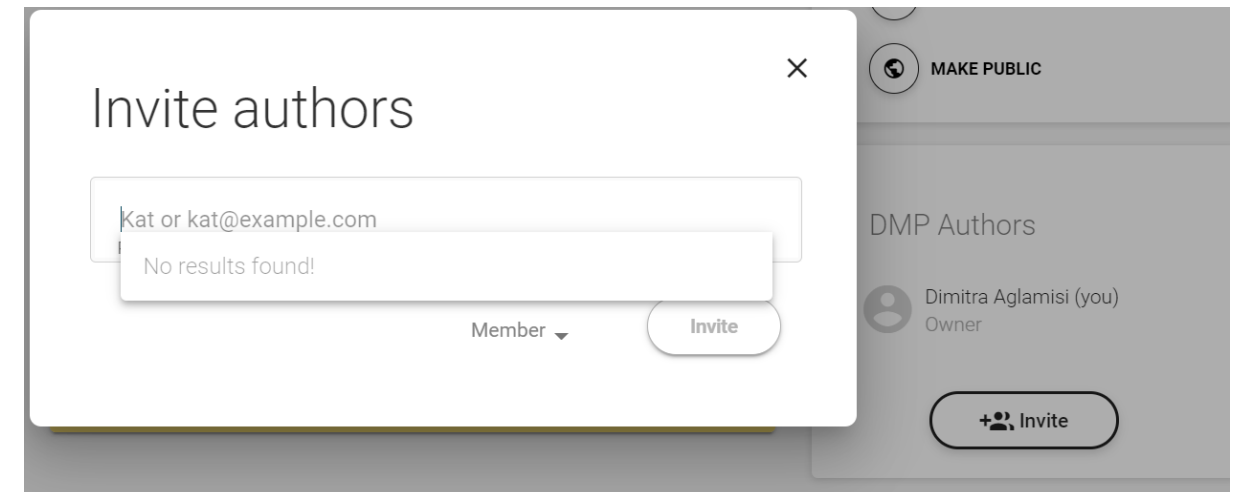


Figure: REST API - Author: Seobility - License: CC BY-SA 4.0

Key features 2/2

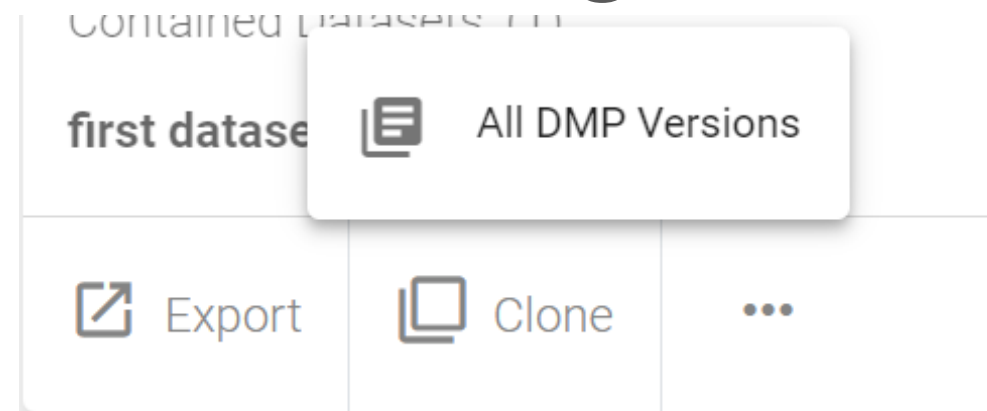
- Supports collaborative writing



- Supports exports in JSON format

-> interoperability

- Provides  and versioning of DMPs



```
"dmp": {
  "contact": {
    "mbox": "elli.libd@gmail.com",
    "name": "Elli Papadopoulou",
    "contact_id": {
      "identifier": "a7c440e8-4e29-4d84-812a-1b2d5cb605f5",
      "type": "other"
    }
  },
  "created": "18-09-2019",
  "dataset": [
    {
      "data_quality_assurance": [
      ],
      "dataset_id": {
        "identifier": "56ac2eba-ea09-49cf-bba3-87fe48a10827",
        "type": "other"
      },
      "issued": "9/18/19",
      "keyword": [
      ],
      "language": "en",
      "metadata": [
      ],
      "personal_data": "unknown",
      "security_and_privacy": [
      ],
      "sensitive_data": "unknown",
      "technical_resource": [
      ],
      "title": "Horizon 2020 Dataset Description"
    }
  ]
}
```

argos in OpenAIRE - why

Enhancements



EXPLORE

MONITOR

DEVELOP



Open Science Primers: getting you started on good practices



Open Access Basics

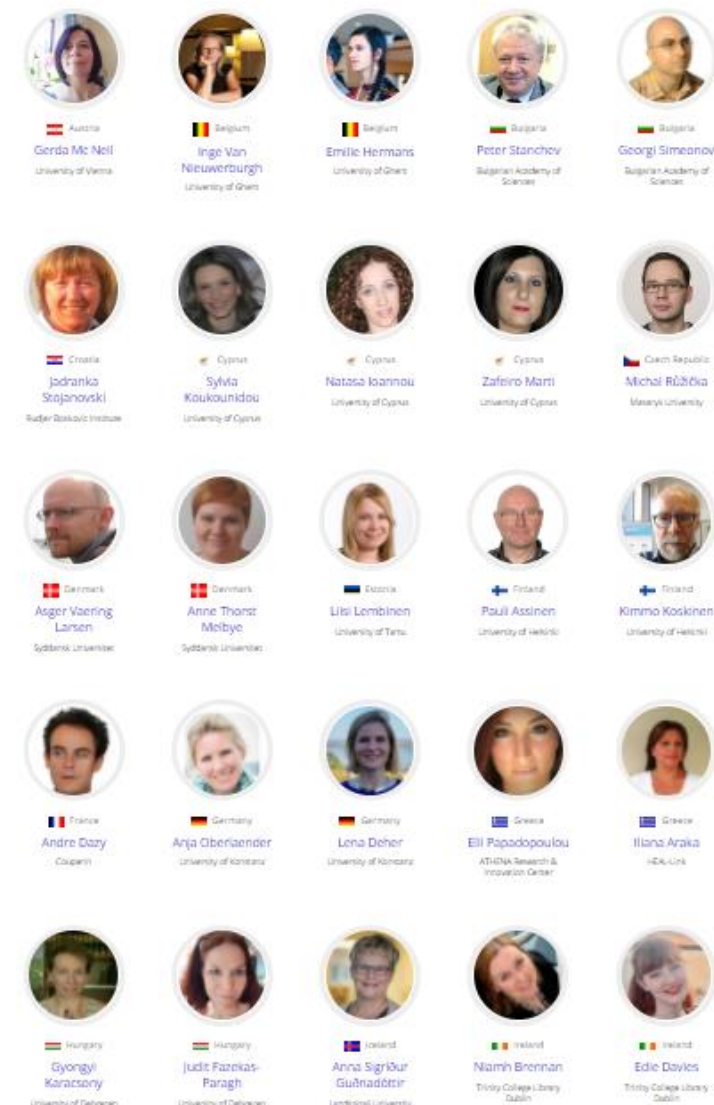
An Open Access primer to get you started



An RDM Handbook

A primer on managing your research data

ALL A B C D E F G H I J K L M N O P Q R S T U

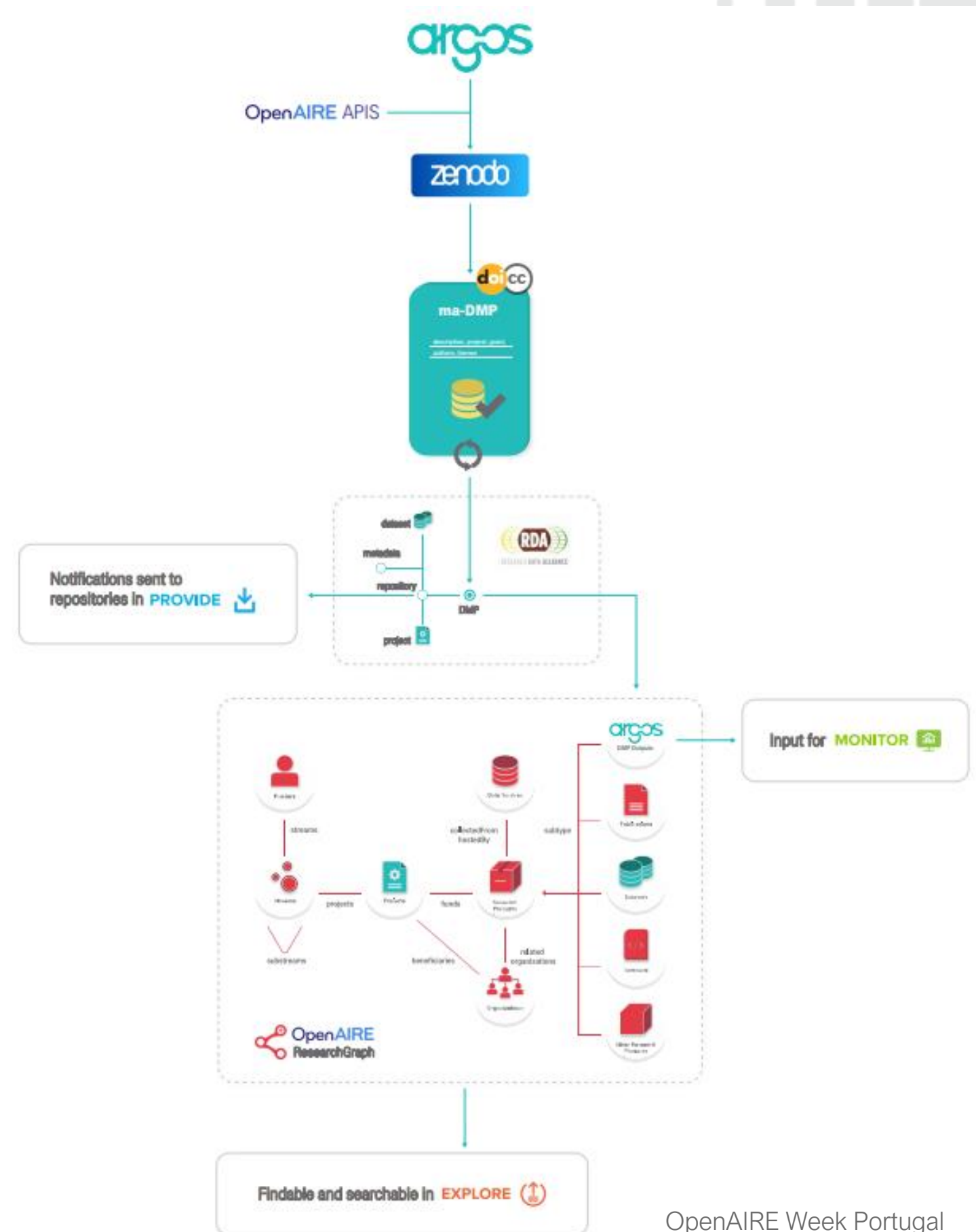


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A linked ecosystem

- Exploit OpenAIRE and EOSC APIs in templates
- Publish in Zenodo
- Notify repository managers
- Provide usage statistics
 - Define indicators
- Create links between outputs and entities
- Search for DMPs
- Add DMPs under the project's page



argos for funders

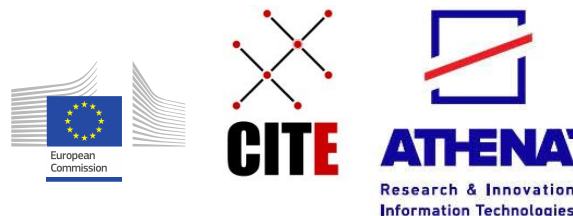
Funders

Online

- Enrich the templates collection
- Translate the tool in native language
- Customize Open and FAIR guides
- Link with Funder Monitoring Dashboard

Add-hoc

- Integrate own services (e.g. researchers' registry)
- Configure own APIs
- Link with national Open Science graphs



CHIST-ERA example

The screenshot shows the 'Editing DMP' interface with a modal window titled 'Template - CHIST-ERA'. The modal contains three sections for metadata standards: 2.1.2 (Indicate which metadata standards will be used), 2.1.3 (Indicate how the data will be organised during the project), and 2.1.4 (Consider what other documentation is needed to enable re-use). A dropdown menu is open, showing options like 'Academy Of Finland', 'ARIADNEPlus Horizon2020', 'CHIST-ERA', and 'Clarin-D'. The 'CHIST-ERA' option is highlighted. The background shows the '4.1 Dataset info*' section with a 'Select a template to describe your dataset' dropdown.

Editing DMP

Guide steps

1. Main info (1)
2. Funding info (2)
3. License info
4. Dataset info (1)

Datasets are documented following pre-defined templates.

4.1 Dataset info*

Select a template to describe your datasets.

Type more letters of the name so its more accurate

Select a template to describe your dataset

- Academy Of Finland
- ARIADNEPlus Horizon2020
This is the Argos instance of the ARIADNEPlus template
- CHIST-ERA
This is a DMP template created based on the CHIST-ERA template
- Clarin-D
- Dataset Name - Aristotelis temp
Dataset Name - Aristotelis temp - descr
- External Sources Test

2.1.2 Indicate which metadata standards will be used

Use Community Metadata Standards Where These Are In Place.

List of values provided by external source(s)

Couldn't find it? Insert it manually

2.1.3 Indicate how the data will be organised during the project

Naming Conventions Should Be Clearly Described In Order To Make Data Understandable By Other Researchers That May Reuse Them After The Project Ends. Mentioning For Example Conventions, Version Control, And Folder Structures. Consistent, Well-Ordered Research Data Will Be Easier To Find, Understand, And Re-Use.

Check Out Some Examples Of File Naming Best Practices: <http://Tiny.cc/Op8lcz>

2.1.4 Consider what other documentation is needed to enable re-use

This May Include Information On The Methodology Used To Collect The Data, Analytical And Procedural Information, Definitions Of Variables, Units Of

Previous Save & Add Dataset

0 of 3

- Policy support
 - RDM: Argos for DMPs
- Training
- Funder Monitoring Dashboard
- Minimal configuration of Argos
 - Online: CHIST-ERA template
 - Pilot on monitoring DMPs - indicators

argos for
research communities

Research institutions & communities

Build tailored templates

- **Enrich** the templates collection (e.g. H2020, H2020 for archaeology, Science Europe, Academy of Finland, FWF - Austrian Science Fund, etc)
- **Customize** Open and FAIR guides for your discipline
- **Configure** own APIs
- **Integrate** own services
- **Link** with Research Community Dashboards

Example in archaeology:



<https://www.openaire.eu/blogs/dmps-for-research-communities-argos-for-ariadneplus>

ARIADNE Plus - Areas of work

Landscape

- a. DMP tools capabilities**
- b. existing DMP templates for archaeology**
 - commonalities and differences (scope, target audience, organization)
 - technical information (software, model)
- FAIR principles and global standards

Templates

- a. Guidance (navigation, literacy)**
 - OpenAIRE Task Forces outputs
- b. ARIADNEPlus H2020 template**
 - Template available from Argos (APIs, RDA)

Global standards

- a. Compliance with RDA through Argos template**
- b. Import mechanism of ARIADNEPlus**

argos for researchers

Researchers

Get started with planning RDM activities

- Guide through Open and FAIR RDM and familiarize with the DMP process
- Choose templates according to funders', institutions' or research community requirements and needs
- Describe different types of datasets produced and / or re-used
- Share DMPs with colleagues to manage workload
- Create new DMP versions to continue work on major advancements and keep track throughout time
- Publish DMPs directly in Zenodo



Research & Academia

Editing Dataset
Dataset a-4oct

×

argos

Start new DMP

FAQ

EN

English

Greek

Spanish

German

Turkish

Slovak

Serbian

Portuguese

Home

My DMPs

My Datasets

Public DMPs

Public Dataset Desc.

DMP Templates

Dataset Templates

A DMP in Argos consists of key information about research, such as purpose, objectives and researchers involved, but also about documentation of research datasets, namely **Datasets**, that highlight the steps followed and the means used across data management activities.

Add Dataset



Latest Activity

All (5) | Drafts (5) | DMPs (5) | Datasets (5)

1.3 What formats of data will the project generate/collect?

Personal Usage

50 DMPs

38 Datasets

35 Grants

0 Related Organisations

27 of 29

93%

Argos customization in Portuguese

×

argos

Iniciar novo PGD

FAQ

PT

Home

Os meus PGDs

Os meus Datasets

PGDs públicos

Descrições dos Datasets públicos

Modelos de PGD

Modelos de Dataset

Utilizadores

Editor de idioma

Editor do Guia do Utilizador

Sobre

Condições do Serviço

Classificação

<

Voltar

PGD

DMP for FCT project

Proprietário

Versão 0

Editado : 24 fevereiro 2021

✎

📄

🗑

Grant

A TERRITORIALIDADE COMO FONTE DE IDENTIDADE DE SOCIEDADES COEVAS
DISTINTAS (CAÇADORES-RECOLECTORES E METALURGISTAS) DA REGIÃO CENTRO-
OESTE DE ANGOLA

Investigadores

🆔

 Paula Moura (orcid:0000-0002-0573-4308),

🆔

 Pedro Príncipe (orcid:0000-0002-8588-4196)

Descrição

—

Datasets usados

Dataset Minho 1

🔗

+ Adicionar Dataset

✓

CONCLUIR

📄

EXPORTAR

➕

INICIAR NOVA VERSÃO

Autores do PGD

👤

 Elli Papadopoulou (Você)
Proprietário

+👤 Convidar

Guardar e Adicionar Novo

... não sugerem

... e Vídeo: - E/Ou
Por Exemplo,
Utilizado.

... Como É Que A

OpenAIRE

European Commission

CITE

ATHENA

Research & Innovation
Information Technologies

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With thanks to



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UNIVERSITY OF BELGRADE - SERBIA

Nadica Miljković, Milica Ševkušić, Ljiljana Lazarević, Biljana Kosanović, Vladimir Otašević, Obrad Vučkovic



FCT-FCCN, UNIVERSITY OF MINHO

Filipa Pereira, Carla Patinha, André Vieira, Paula Moura, Pedro Principe

Next steps

Latest achievements

RDA Hackathon

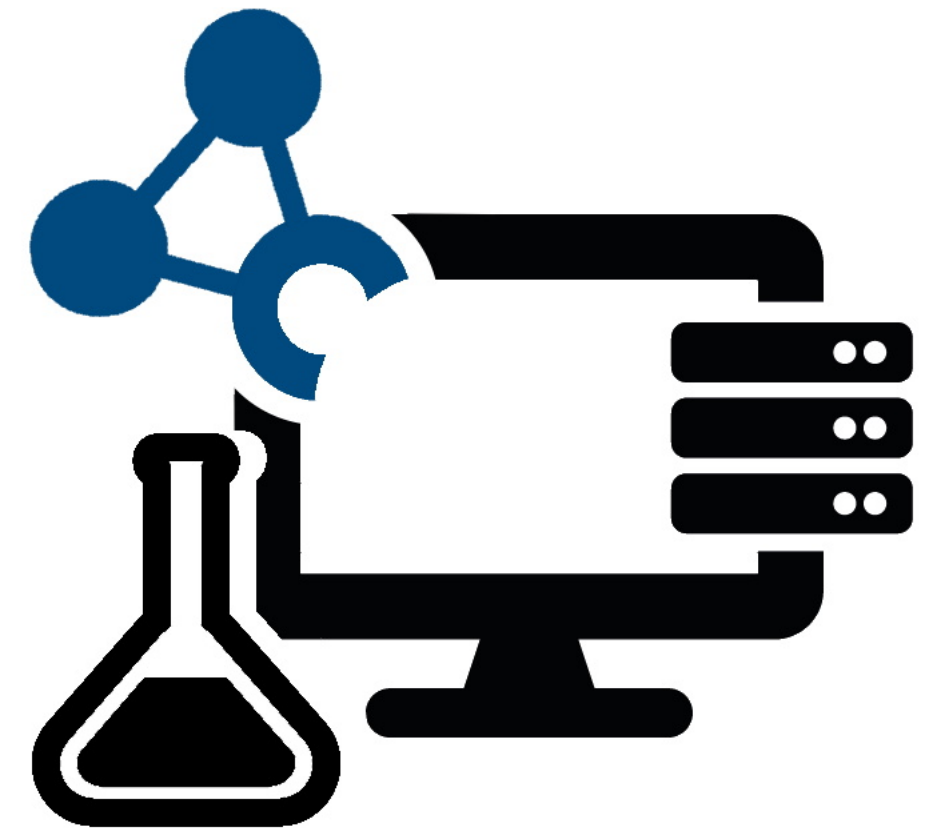


ISWC - DaMaLOS



First virtual workshop on Research data*
management for Linked Open Science -
DaMaLOS 2020

* and associated research objects (e.g., software, workflows, knowledge graphs)



Coming in March!

- Admin interface

- Manage users
- Create model templates
- Configure APIs
- Control RDA compliance

New Dataset Template

✓ General Info 2 Dataset Template Pages & Content 3 Preview & Finalize

Guide steps

1. Main info  

+ Create new subpage

+ Create new page

1. Main info Page ID: e364feff-d

Description for that page lorem Ipsum lorem Ipsum lorem Ipsum lorem Ipsum lorem Ipsum

1.1 Untitled field Field ID: c034f

Input ID: c034ff8f-6e9a-9647-a3f7-902ae2a75d2b

Boolean Decision ▼ RDA Common Standards ▼

Preview

☒ Yes ☐ No

Text Area

Free Text

Boolean Decision

Radio Box

Select

Checkbox

Date Picker

Currency

APIs ▲

- Registries
- Services
- Researchers
- Organizations
- External Datasets
- Data Repositories
- Other

Argos Entities ▲

- Internal DMPs
- Tags
- Dataset Identifier
- Validator

Useful Resources

What's New: <https://www.openaire.eu/openaire-welcomes-argos-new-version>

User Guide: <https://argos.openaire.eu/user-guide>

Factsheet: <https://argos.openaire.eu/splash/assets/media-kit/Factsheet.pdf>

FAQs: <https://argos.openaire.eu/splash/about/faqs.html>

Contact us: argos@openaire.eu

Your opinion matters



Argos usability questionnaire

Hello,

We have just launched a newer version of Argos (<https://argos.openaire.eu/>) and we are looking to gather some feedback from you!

Argos provides a dynamic environment for collaborative writing of Data Management Plans (DMPs) that:

<https://docs.google.com/forms/d/12RSCrUjdSDp2LZLpjDKOi44cN1fLDD2q1-F66SqZlis/edit>

Help us become better;
Send us your feedback!

Obrigada!

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Georgios Kakaletris

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🐦 [@elli_lib](https://twitter.com/elli_lib)

