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ARGOS

FAIR Data Management and DMP publications





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CONTENTS



OA and FAIR data in DMPs

Why RDM & DMPs:
components and
misconceptions



The OpenAIRE service for writing and publishing DMPs

ARGOS features and
functionalities, data
model and architecture



Added value

Why choosing ARGOS



RDM & DMPs



RDM in relation to policies

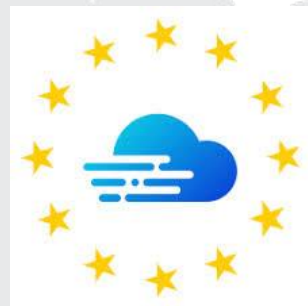
Funding Programmes conditions



2013: Open Data Pilot

2017: OA data by default (mandate)

Policy rules and recommendations



European Open Science Cloud

L 134/12

EN

Official Journal of the European Union

31.5.2018

RECOMMENDATIONS

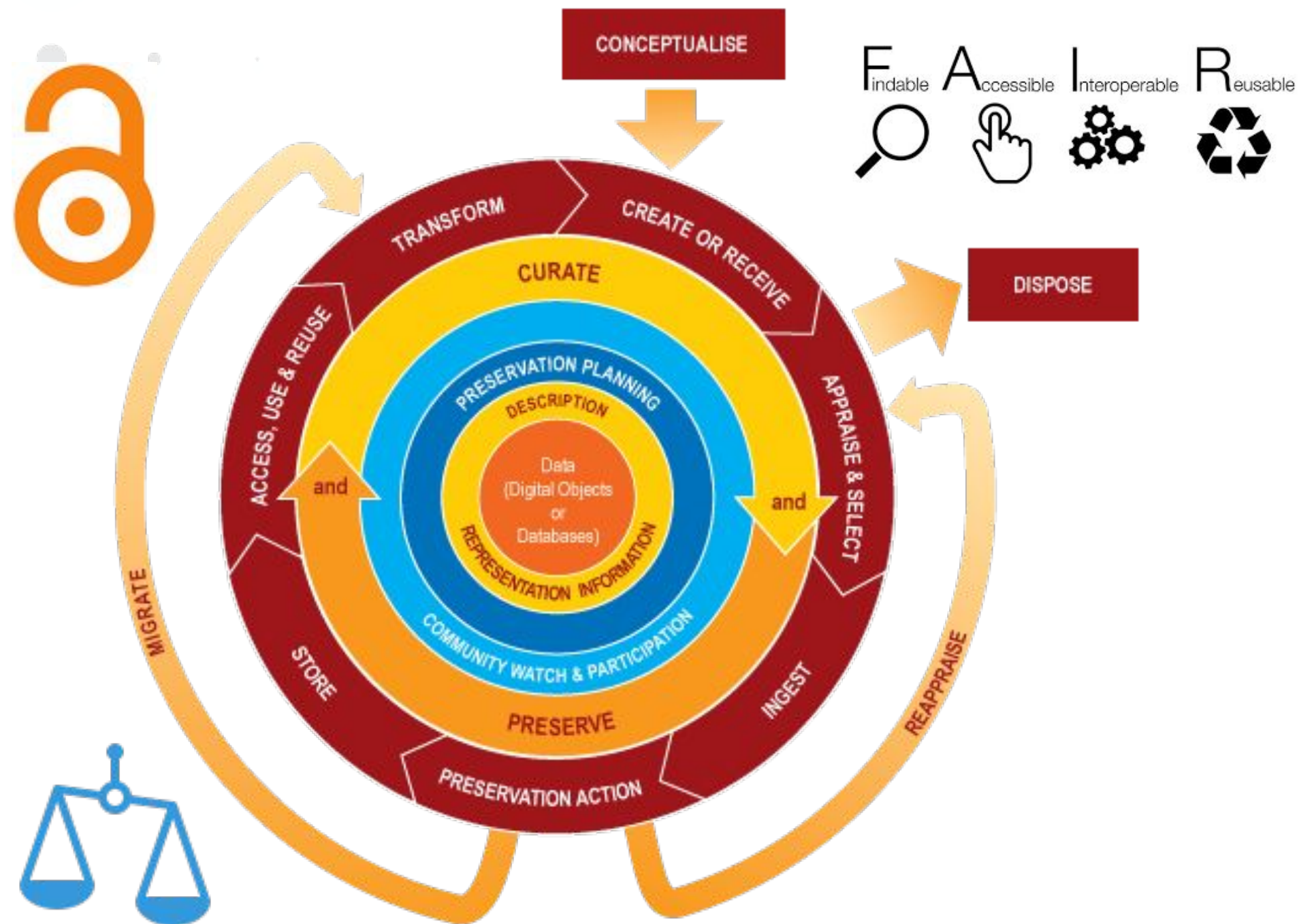
COMMISSION RECOMMENDATION (EU) 2018/790

of 25 April 2018

on access to and preservation of scientific information

RDM elements

- Data collection, data processing, data preservation
- Indicative processes: ingestion, aggregation, analysis, classification, metadata enrichment, organisation, validation, storing, etc.
- There might be re-processing of data (e.g. data migration)
- Data disposal
- Data sharing/ publication



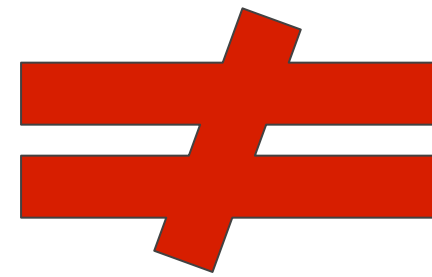
Data Management Plan (DMP)

- **A formal declaration on how an activity's datasets are to be handled throughout activity's lifetime and on what terms those datasets will survive the activity.**
 - The activity may be a project that may span several grants or a project that coincides a grant issued by a funder.
 - Datasets addressed by a DMP may be interim results, outputs or even inputs of the activity.
 - DMP addressed topics such as data description, data depositing and preservation, data identification, data licensing, data access etc

What is a DMP?

Deliverable and “living” document

- documents processes undertaken throughout data management lifecycle, including costs



What is not a DMP?

Research assessment method



What data does it cover?

- **Scientific data and metadata**

- ✓ Useful for verifying / validating conclusions

- ✓ That does not infringe copyright
- ✓ Non-personal and / or sensitive content

**Access
restrictions**

- **Other raw or structured data and metadata**

- ✓ Guidelines for data reproducibility
- ✓ Including an analysis tool / software

Restrictions in access are described in the Data Management Plan in advance

When is it delivered?

Proposal stage (not necessarily)

- What kind of data will the project create / collect?
 - Which standards will be used?
 - How will this data be shared / made available? If not, why not?
 - How will this data be curated and preserved?
-

Project stage

- first version of the DMP within the first semester
- revisions



Who needs DMPs?



Organisations

- To track R&D outputs and any incurring bindings to them
- To identify the consumed data implications
- To facilitate R&D via data discovery and sharing



Funders

- To track direct and indirect products and impact of funding
- To identify or refine strategies w.r.t. research and data production/sharing/reuse



Researchers

- To facilitate and even enforce data referencing



open science

Open Science

- To promote FAIRness
- To promote interdisciplinary research

Who is involved in DMPs

- **Funders (offices)**
 - Define rules for DMP
- **Organisations (policy offices)**
 - Define policies
- **Projects (managers)**
 - Apply project policy aligned to Organisational and Funding policies
- **Data Managers**
 - Manage the DMP
- **Researchers**
 - Describe datasets
 - Are attributed by datasets

H2020 FAIR DMP template 1/2

SUMMARY TABLE 1

FAIR Data Management at a glance: issues to cover in your Horizon 2020 DMP

This table provides a summary of the Data Management Plan (DMP) issues to be addressed, as outlined above.

DMP component	Issues to be addressed
1. Data summary	<ul style="list-style-type: none"> • State the purpose of the data collection/generation • Explain the relation to the objectives of the project • Specify the types and formats of data generated/collected • Specify if existing data is being re-used (if any) • Specify the origin of the data • State the expected size of the data (if known) • Outline the data utility: to whom will it be useful
2. FAIR Data 2.1. Making data findable, including provisions for metadata	<ul style="list-style-type: none"> • Outline the discoverability of data (metadata provision) • Outline the identifiability of data and refer to standard identification mechanism. Do you make use of persistent and unique identifiers such as Digital Object Identifiers? • Outline naming conventions used • Outline the approach towards search keyword • Outline the approach for clear versioning • Specify standards for metadata creation (if any). If there are no standards in your discipline describe what type of metadata will be created and how

H2020 FAIR DMP template 2/2

<p>2.2 Making data openly accessible</p>	<ul style="list-style-type: none"> Specify which data will be made openly available? If some data is kept closed provide rationale for doing so Specify how the data will be made available Specify what methods or software tools are needed to access the data? Is documentation about the software needed to access the data included? Is it possible to include the relevant software (e.g. in open source code)? Specify where the data and associated metadata, documentation and code are deposited Specify how access will be provided in case there are any restrictions
<p>2.3. Making data interoperable</p>	<ul style="list-style-type: none"> Assess the interoperability of your data. Specify what data and metadata vocabularies, standards or methodologies you will follow to facilitate interoperability. Specify whether you will be using standard vocabulary for all data types present in your data set, to allow inter-disciplinary interoperability? If not, will you provide mapping to more commonly used ontologies?
<p>2.4. Increase data re-use (through clarifying licences)</p>	<ul style="list-style-type: none"> Specify how the data will be licenced to permit the widest reuse possible Specify when the data will be made available for re-use. If applicable, specify why and for what period a data embargo is needed Specify whether the data produced and/or used in the project is useable by third parties, in particular after the end of the project? If the re-use of some data is restricted, explain why Describe data quality assurance processes Specify the length of time for which the data will remain re-usable
<p>3. Allocation of resources</p>	<ul style="list-style-type: none"> Estimate the costs for making your data FAIR. Describe how you intend to cover these costs Clearly identify responsibilities for data management in your project Describe costs and potential value of long term preservation
<p>4. Data security</p>	<ul style="list-style-type: none"> Address data recovery as well as secure storage and transfer of sensitive data
<p>5. Ethical aspects</p>	<ul style="list-style-type: none"> To be covered in the context of the ethics review, ethics section of DoA and ethics deliverables. Include references and related technical aspects if not covered by the former
<p>6. Other</p>	<ul style="list-style-type: none"> Refer to other national/funder/sectorial/departmental procedures for data management that you are using (if any)



Write and publish your DMIPs



ARGOS: A service for machine actionable data management planning

- **Jointly designed and developed by OpenAIRE and EUDAT**
- **Launched implementation in 2017.**
 - Currently at Release Candidate version with long testing history
 - Updates roll out on a monthly basis

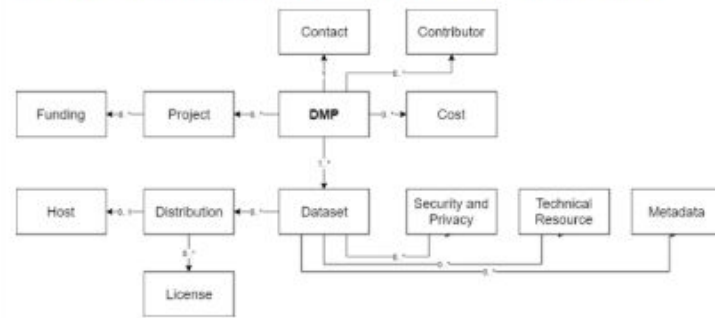
RDA DMP Common Standard for machine-actionable Data Management Plans

About this document

This is a metadata application profile to provide basic interoperability between systems producing or consuming machine-actionable data management plans (maDMPS). Further fields can be added in specific deployments, but they do not guarantee interoperability. DMP tools can use any other fields in their internal data models.

This application profile is intended to cover a wide range of use cases and does not set any business (e.g. funder specific) requirements. It represents information over the whole DMP lifecycle.

For more information see [examples](#), [FAQ](#) and [useful links to consultations, documents, tools, prototypes, etc.](#) developed by the working group.



DMP

Provides high level information about the DMP, e.g. its title, modification date, etc. It is the root of this application profile. The majority of its fields are mandatory.

Project

Describes the project associated with the DMP, if applicable. It can be used to describe any type of project: that is, not only funded projects, but also internal projects, PhD theses, etc.

Funding

For specifying details on funded projects, e.g. NSF or EC funded projects.

Contact

Specifies the party which can provide any information on the DMP. This is

Structure

- dmp
 - contact
 - contact_id
 - identifier
 - type
 - mbox
 - name
 - contributor
 - contributor_id
 - identifier
 - type
 - mbox
 - name
 - role
 - cost
 - currency_code
 - description
 - title
 - value
 - created
 - dataset
 - data_quality_assurance
 - dataset_id
 - identifier
 - type
 - description
 - distribution
 - access_url
 - available_until
 - byte_size
 - data_access
 - description
 - download_url
 - format
 - host
 - availability

RDA DMP Common Standard

Incorporates global standards



<https://bit.ly/2t5jr3e>



Concepts

- **Data Management Plan**
 - is a collection of dataset descriptions, associated with an activity (“project” or “grant”)
 - may be versioned
 - is exportable to various forms, (.pdf, .xml, .json)
- **Dataset description**
 - is the description of a dataset according to a set of rules that is the dataset profile (aka template)
- **Dataset profile (aka Template)**
 - is the set of rules that describe what dataset descriptions contain and how they are handled
 - contains attributes/fields, behavioral rules (e.g. toggling visibility of fields) and validation rules
 - are linked to DMPs for focusing users on specific formats of descriptions
- **Project & Grant**
 - logical entities that define the context where one or more data management plans may be formed in
- **Users**
 - associated to DMPs and other entities for authorization
 - may map to researchers

Secondary entities

- **Repository:** repositories where dataset resides on
- **Dataset:** external linked datasets (e.g. reused for dataset generation)
- **Registry:** catalogues listing the dataset
- **Service:** services manipulating the dataset under various protocols.
- **Researcher:** researchers associated with datasets
- **Funder:** is associated to a grant
- etc

A few key features

- Customisable **templates** for dataset descriptions
- Full DMP **workflow** support
- Support of **collaboration** on DMP authoring
- **Authentication** via a variety of providers
- **Integration** with several terms / vocabulary providers
- **Import / export** in human and machine-readable forms
- Accessible via any **web browser**
- **Free** and open source
- **DMP versioning**
- DMP and Dataset description **cloning**
- **DMP publication** mechanism (with PID issuing)
- **Search** features

More new features

- Support -> argos@openaire.eu
- JSON exports
- 10 more funders templates

A Data Management Plan consists of a set of questions that you should answer with a level of detail appropriate to the grant or with

Academy Of Finland

Dataset description template for Academy Of Finland projects

Netherlands Organisation For Scientific Research (NWO)

Dataset description template for Netherlands Organisation For Scientific Research (NWO)

The Research Council Of Norway

Dataset description template for The Research Council Of Norway

National Science Center Poland

Dataset description template for National Science Center Poland

Swedish Research Council

Dataset description template for Swedish Research Council

UK Research Innovation

Dataset Description Template *

Select a template to describe your Dataset Description(s). If you want to select multiple Dataset Description Templates use "New DMP (Expert)". You can also add new Dataset Descriptions at any time after the DMP creation.

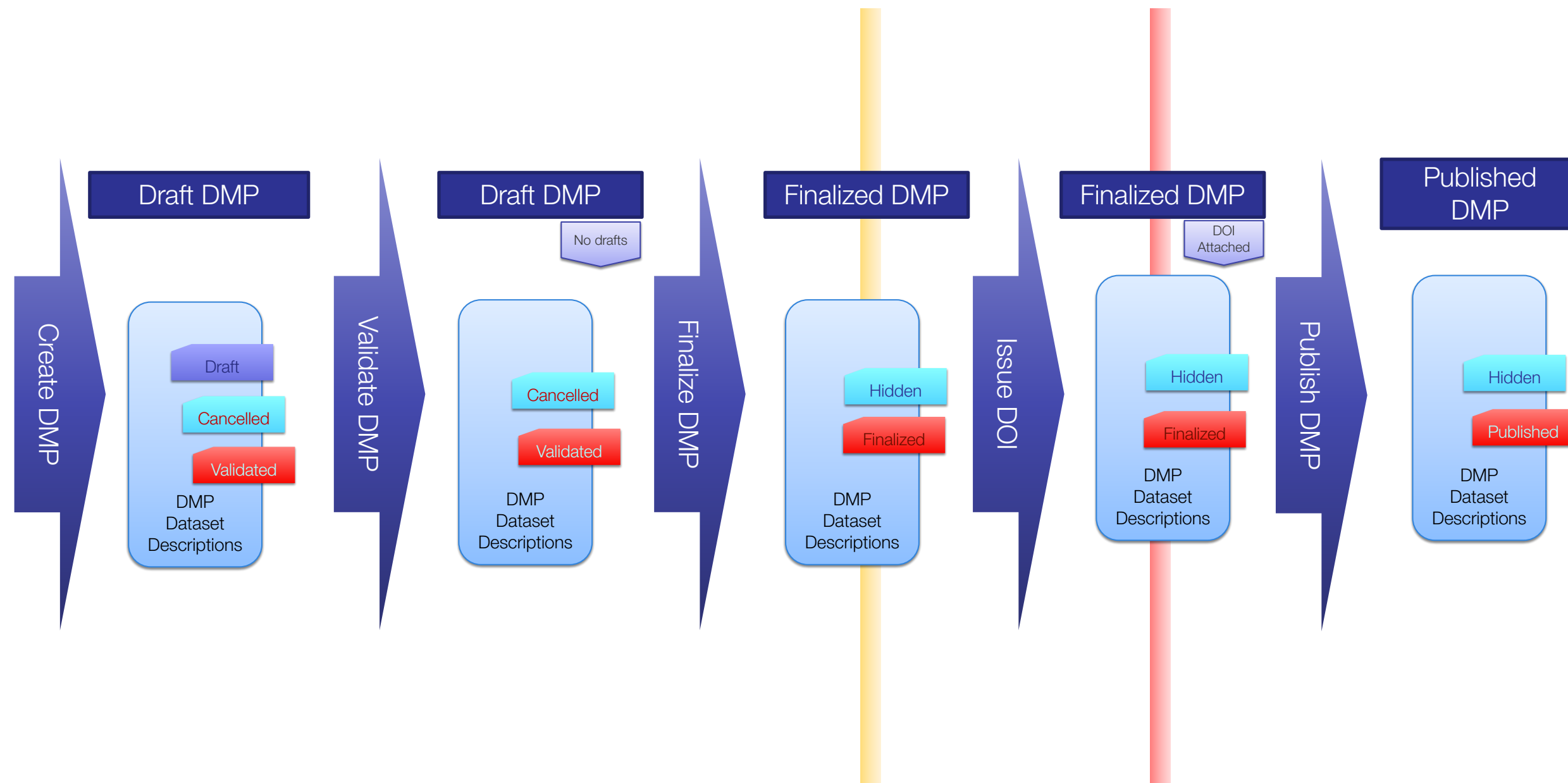
If you can't find a template or if you want to create a personalized template for your institution, research community or training needs, please contact us.

```
"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": [
    ],
```

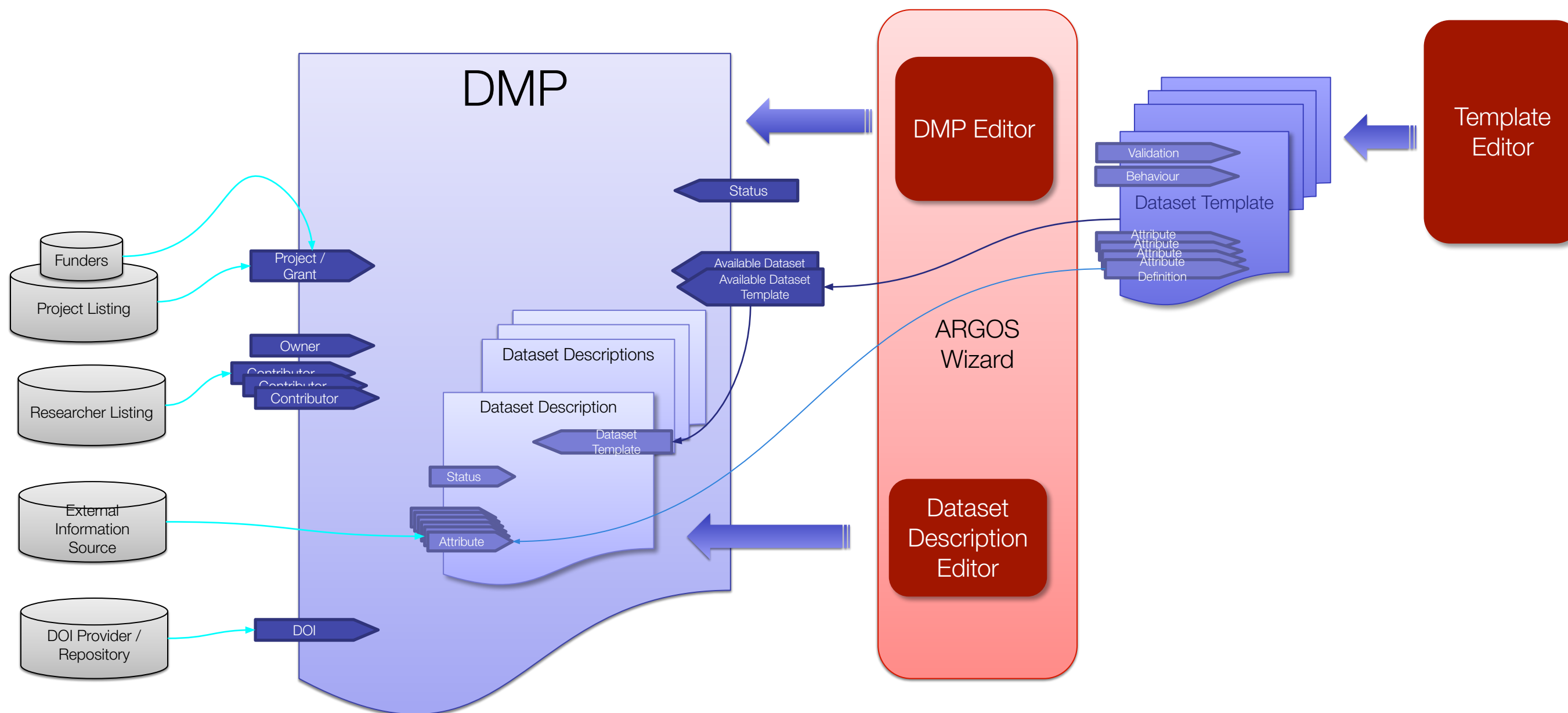
ARGOS Workflow and roles

- **Admins: Prepare & configure system**
 - select and configure information sources
 - define dataset profiles (templates)
- **DMP managers: launch DMPs**
 - select appropriate Dataset profiles
 - invite researchers/dataset managers
- **Researchers/Dataset managers**
 - describe datasets according to fixed (systemic) and custom (profile-defined) attributes
- **DMP Managers finalize DMPs**
 - close the editing process
 - publish the DMPs (url, pdf, xml etc)
- **System**
 - Presents the DMP

DMP Lifecycle in ARGOS



Data model overview



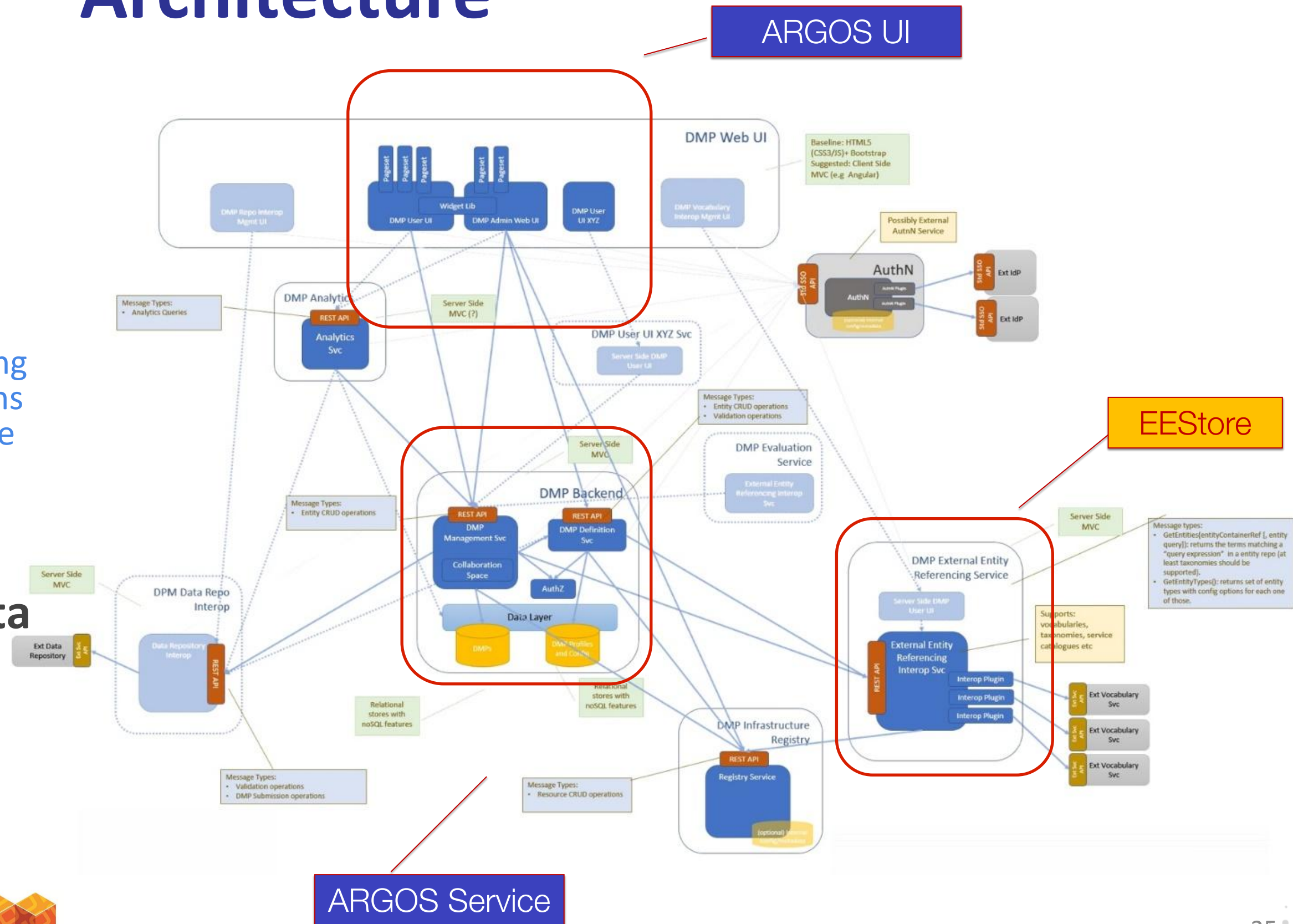
Architecture

• ARGOS Core

- DMP Service: Core tools for editing, management and administration of DMPs/Dataset descriptions.
- DMP UI: End-user UI for editing DMPs and Dataset descriptions
- DMP Admin UI: Administrative UI and dataset profile definition UI

• EEStore: bridge to various providers of data for the ARGOS

- Core bridge component
- Several adapters for external providers



Technology & License

- **Latest technology web application**
- **Frontend:**
 - Single Page Application (SPA)
 - Angular / Typescript
 - Material Design / Responsive
- **Backend:**
 - REST backend services
 - Java/Spring Stack
 - PostgreSQL RDBMS
- **License:**
 - Unrestricted Open Source: Apache 2

Is ARGOS a questionnaire engine ?

The reply is “**Definitely No**”: The dataset profile (questionnaire) engine is a key, powerful, element of ARGOS but it is only a small part of it. Yet , even its questionnaire engine, offers essential facilities for DMP handling.

- ARGOS **streamlines the handling of a DMP**, not generic questionnaires: From the initiation to publication time, the tools and the underlying data model facilitate navigation, discovery and reuse of dataset descriptive information.
- ARGOS service is designed to **handle workflows on actionable DMPs**, where the questionnaire is a small step of the process. Metadata and tools that allow validation of information provided and interacting with external Data-oriented services are fundamental objectives behind the design of the system.
- ARGOS **enables collaborative DMP composition** that will surpass the capabilities of any generic tooling .

Why ARGOS?

- Is backed by **strong collaboration** that activates on several areas of EU Open Science paradigm
 - OpenAIRE and EUDAT
 - Can be exploited under **different models** of service provisioning
 - Software as a service
 - Installation software
 - Closely follows **standards** and well-known specifications
 - RDA and several common IT standards
 - Common templates are provided
 - Has been implemented from scratch taking into account the **current trends** on Actionable DMPs, Open Science and experiences from existing tools
- ... and for several technical and functional reasons!

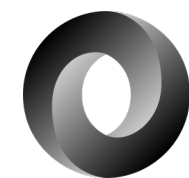
Interoperability in ARGOS



REST API for utilization of core components by external services



Custom REST protocol for external source integration



Machine readable DMP export

- proprietary format
- RDA JSON experimental support

Open architecture

- for integrating external information providers to the DMP entities
- EEstore abstracts over the behavior and performance of external providers
- M2M communication data repositories, registries and other dataset handling services (work in progress)
 - E.g. depositing and verification of dataset(s) and DMP(s)

Flexible dataset and DMP model that can power different interoperability cases

Machine actionability



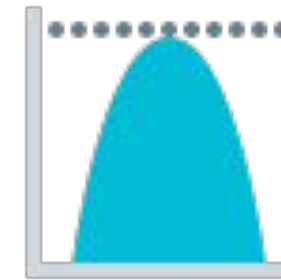
Delivery

- ✓ Integrate DMPs with the workflows of all stakeholders in the research data ecosystem
- ✓ Use PIDs and controlled vocabularies
- ✓ Follow a common data model for maDMPs (Machine Actionable Data Management Plans)
- ✓ Make DMPs available for human and machine consumption
- ✓ Make DMPs updatable, living, versioned documents
- ✓ Make DMPs publicly available



Validation

- ✓ Allow automated systems to act on behalf of stakeholders
- ✓ Support data management evaluation and monitoring



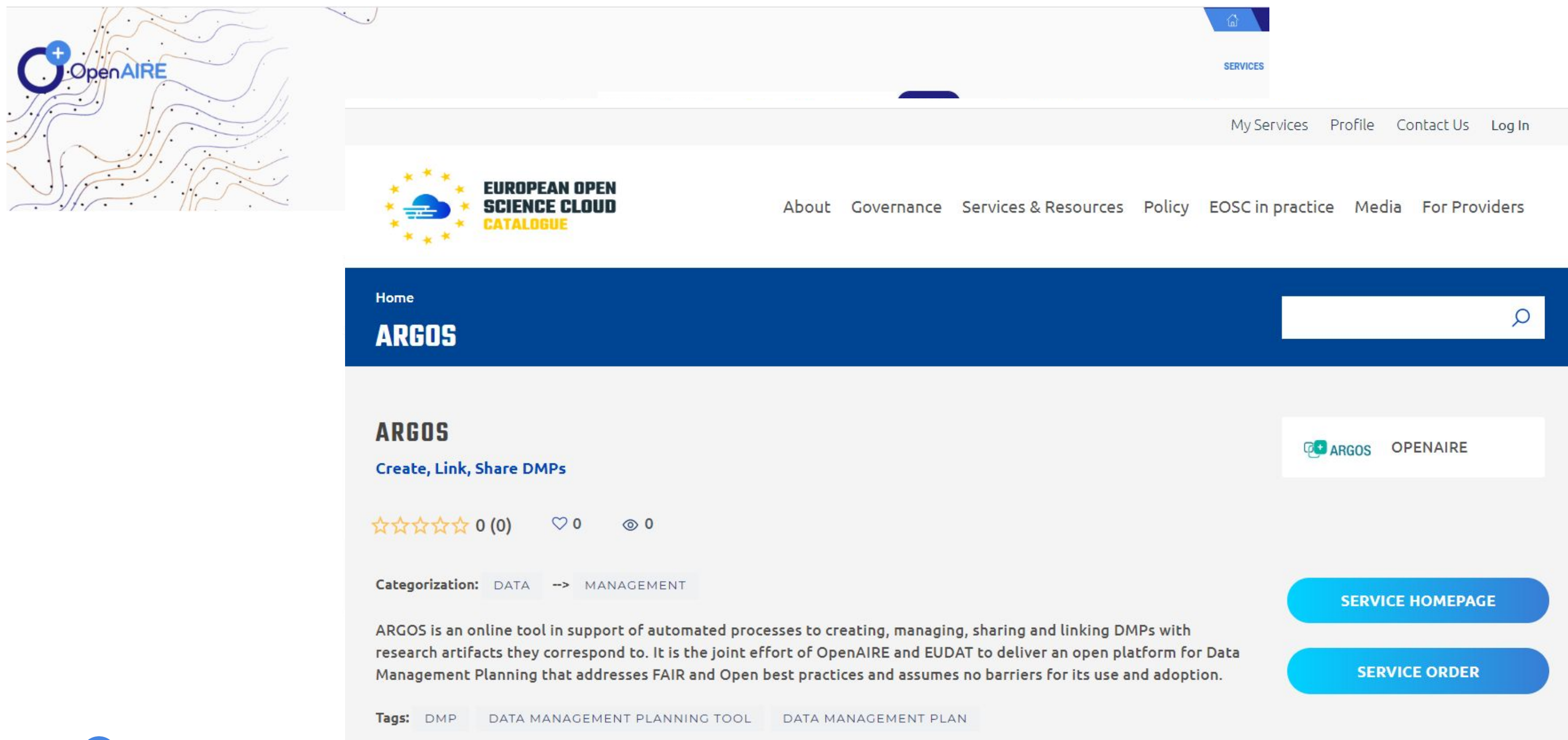
Value

- ✓ Make policies (also) for machines, not just for people
- ✓ Describe — for both machines and humans — the components of the data management ecosystem

Platform Walkthrough

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

Where to find ARGOS



The screenshot shows the OpenAIRE website interface. At the top left is the OpenAIRE logo. The top right contains a 'SERVICES' dropdown menu and navigation links: 'My Services', 'Profile', 'Contact Us', and 'Log In'. Below this is the 'EUROPEAN OPEN SCIENCE CLOUD CATALOGUE' logo and a navigation menu with links: 'About', 'Governance', 'Services & Resources', 'Policy', 'EOSC in practice', 'Media', and 'For Providers'. The main content area features a dark blue header with 'Home' and 'ARGOS' text, and a search bar. Below the header, the 'ARGOS' service is listed with the description 'Create, Link, Share DMPs'. It includes a star rating of 0 (0), 0 hearts, and 0 eyes. The 'Categorization' is shown as 'DATA --> MANAGEMENT'. A descriptive paragraph states: 'ARGOS is an online tool in support of automated processes to creating, managing, sharing and linking DMPs with research artifacts they correspond to. It is the joint effort of OpenAIRE and EUDAT to deliver an open platform for Data Management Planning that addresses FAIR and Open best practices and assumes no barriers for its use and adoption.' The 'Tags' are 'DMP', 'DATA MANAGEMENT PLANNING TOOL', and 'DATA MANAGEMENT PLAN'. On the right side, there are two blue buttons: 'SERVICE HOMEPAGE' and 'SERVICE ORDER'. At the bottom left, the OpenAIRE logo and the European Commission logo are displayed.

Homepage



HOME >

SEARCH...



Log in

GENERAL

Home

About

PUBLISHED

Published DMPs

Published Dataset Descriptions

Welcome to ARGOS

Create, Link, Share Data Management Plans



DMPs

1

[VIEW ALL](#)



Dataset Descr...

1

[VIEW ALL](#)



Grants

1



Related Organ...

2

[Glossary](#)

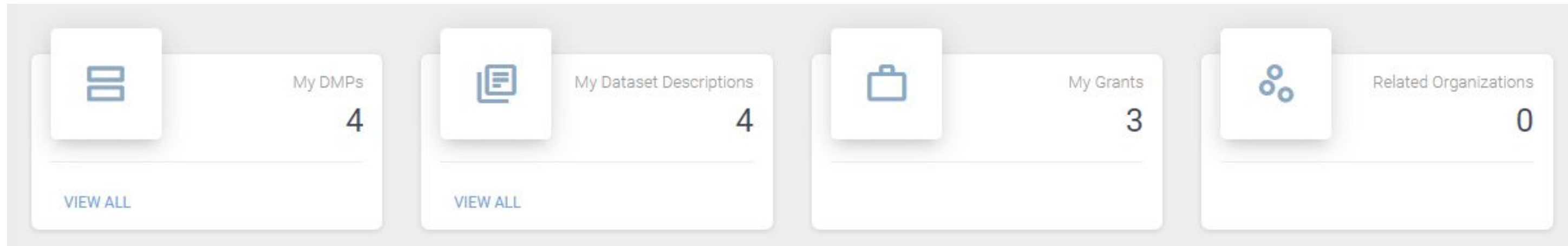
[FAQ](#)

[Contact Support](#)

[Terms Of Service](#)

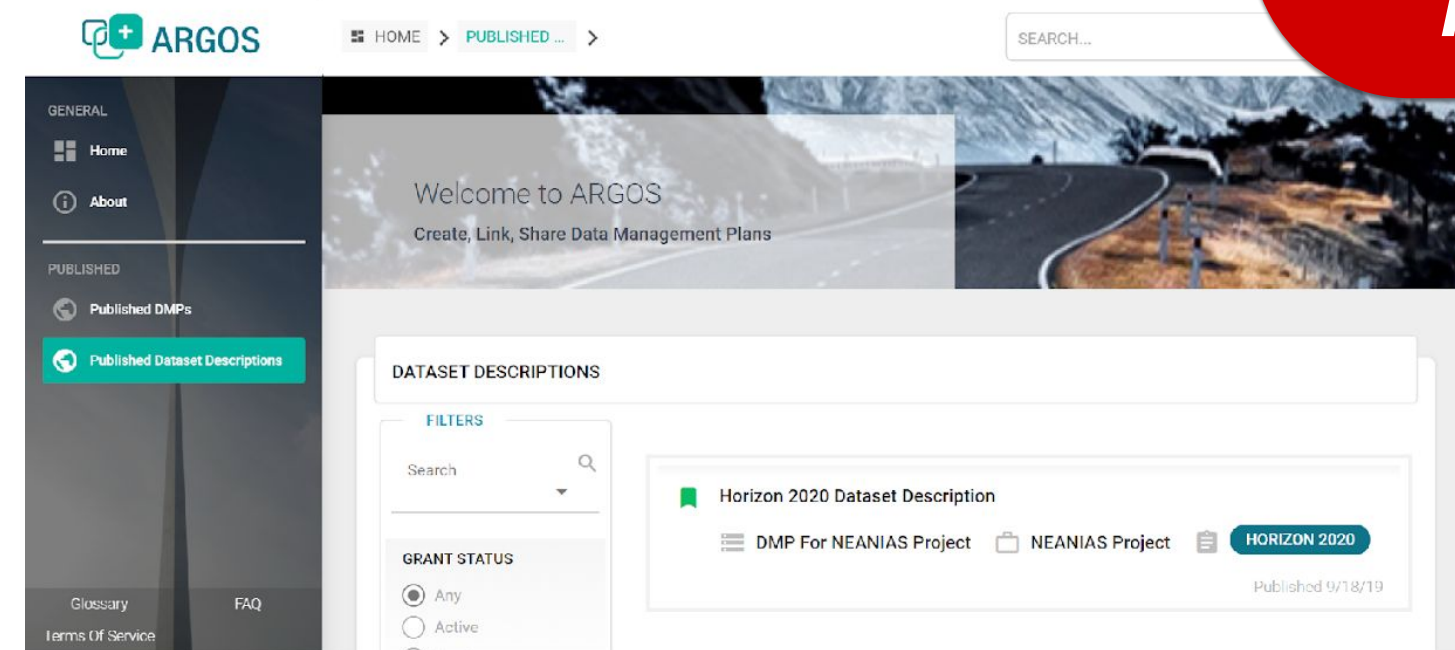
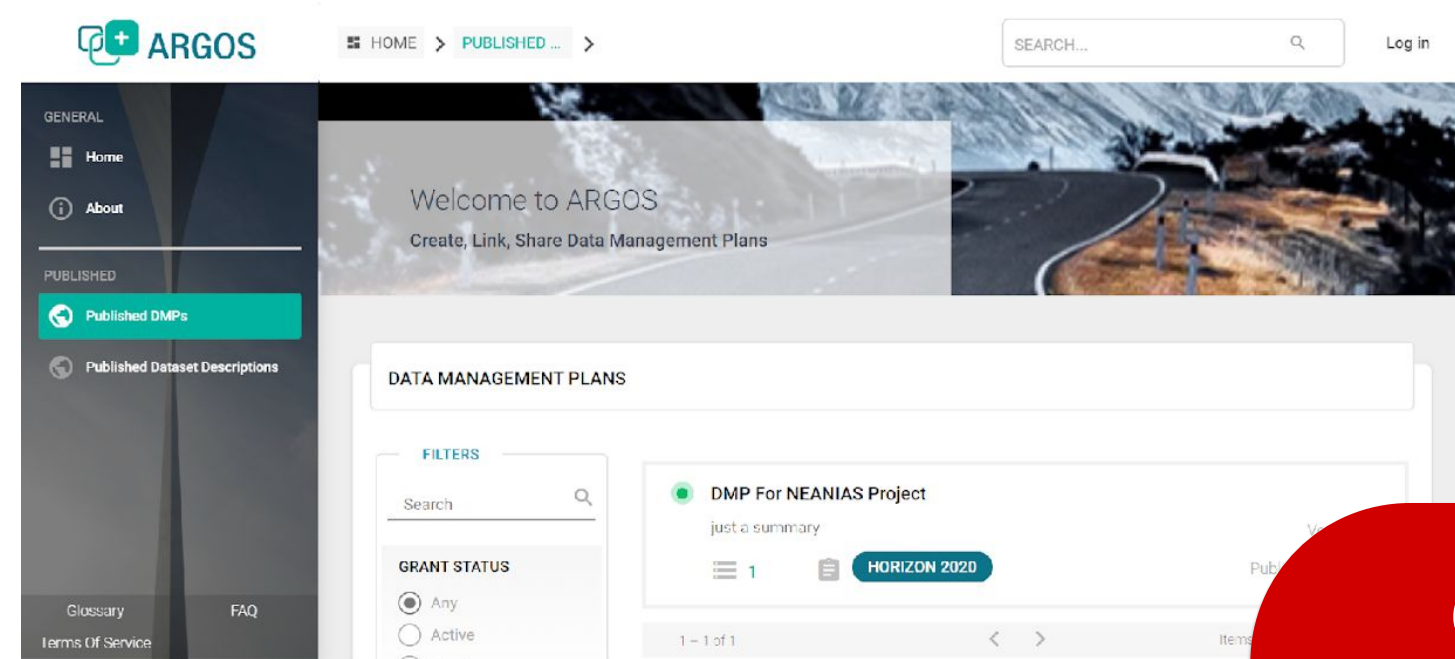
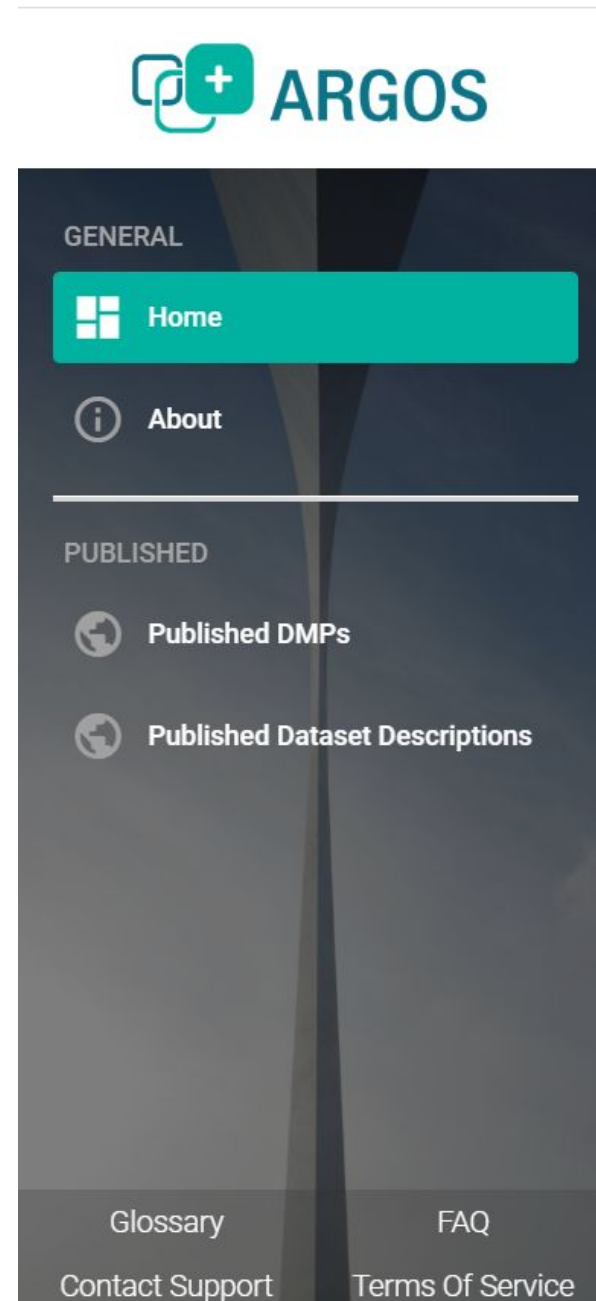
Features (without log in) - Stats

- # of DMPs, Dataset Descriptions, Grants and Organizations included in ARGOS.



Note! When logged in to ARGOS the numbers change to correspond to information provided by each user's activity.

Features (without log in) – openly available outputs



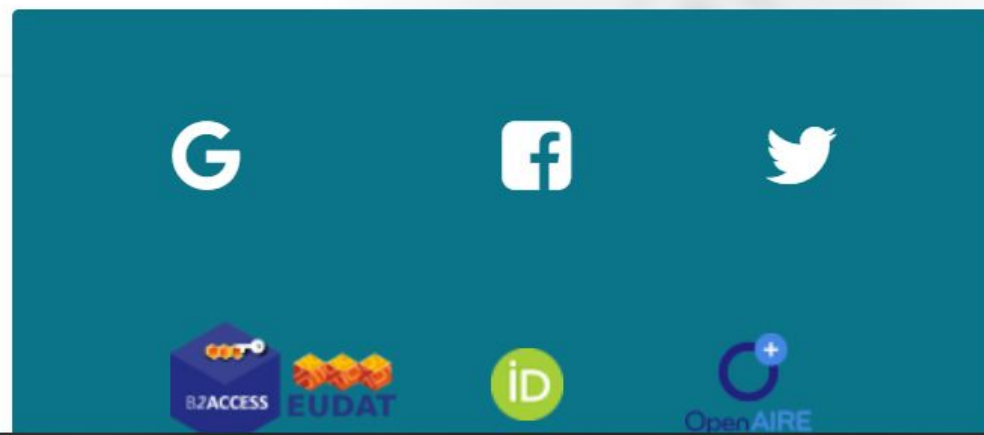
Check finalized and publicly open DMPs

Login

Log in



ARGOS



No user-account is required

Your dashboard - Recent Activity

LAST EDITED DATA MANAGEMENT PLAN [VIEW ALL](#)
The DMPs below are public under the ## license of

NAME	TEMPLATE	GRANT	ROLE	ORGANIZATION	STATUS	EDITED	
DMP For Grant A Demo Grant	--	A Demo Grant	Owner		Finalized	9/18/19	...
DMP For My Grant	--	My Grant	Owner		Finalized	9/18/19	...
DMP For Grant : NEANIAS Project	--	NEANIAS Project	Owner		Draft	9/18/19	...
DMP For NEANIAS Project	--	NEANIAS Project	Owner		Published	9/18/19	...

Name - the name of the DMP

Template - the DMP template used

Grant - the number of the grant funded the research under which the DMP is conducted

Role - your role in the different DMPs that you are involved in

Organization - the organization responsible for the DMP development and delivery

Status – the status of the DMP development (Draft, Finalized, Published)

Edited - date when the DMP was last edited

Two ways to create DMPs or Dataset Descriptions



- Provides an **easy** workflow
- Includes all **essential elements**
- Provides **guidance** through the required steps



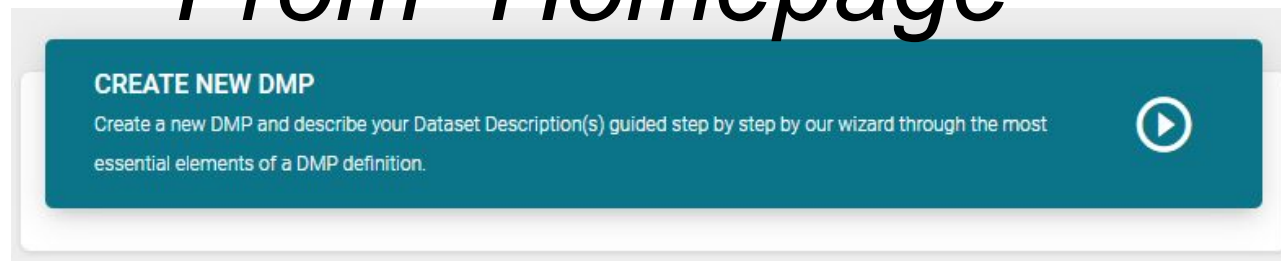
- Integrates **different** workflow
- Includes **more steps and elements**
- Useful to **cross-check things** before finalizing work

DMPs

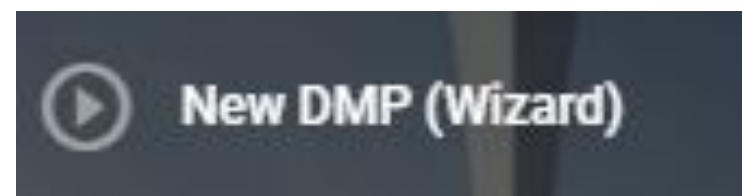
Create DMPs - DMP Wizard

- **DMP Wizard** is an easy way to start writing a DMP. Wizard provides an interface that goes through the essential elements of a DMP and guides the process of its creation step by step.

From “Homepage”



From “My DMPs”



DMP Wizard – 1/3

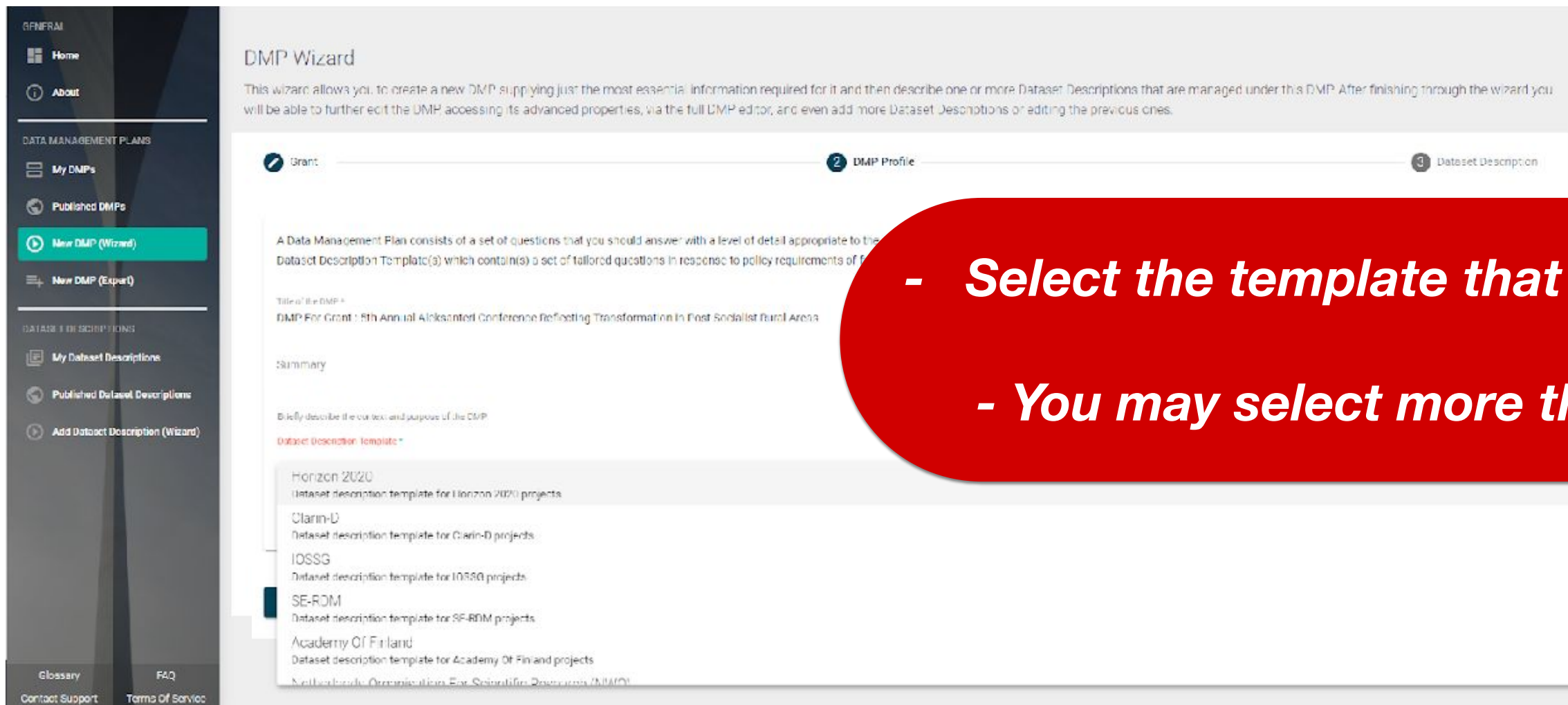
The screenshot displays the 'DMP Wizard' interface. On the left is a dark sidebar with navigation options: 'GENERAL' (Home, About), 'DATA MANAGEMENT PLANS' (My DMP's, Published DMP's, **New DMP (Wizard)**, New DMP (Export)), and 'DATASET DESCRIPTIONS' (My Dataset Descriptions, Published Dataset Descriptions, Add Dataset Descriptions (Wizard)). At the bottom of the sidebar are links for 'Glossary', 'FAQ', 'Contact Support', and 'Terms of Service'.

The main content area is titled 'DMP Wizard' and includes an introductory paragraph: 'This wizard allows you to create a new DMP supplying just the most essential information required for it and then describe one or more Dataset Descriptions that are managed under the DMP. After finishing through the wizard you will be able to further edit the DMP according to advanced properties, via the full DMP editor, and even add more Dataset Descriptions or editing the previous ones.'

The wizard is divided into three steps: 1. Draft (active), 2. DMP Profile, and 3. Dataset Descriptions. The 'Draft' step contains three sections:

- Funder Selection:** 'Find the funder that you wish to associate with the DMP that will be created and then select a grant that funder is linked with. If the funder is not listed, use "Add Funder"'. Below is a dropdown menu labeled 'Select the funder of the grant that the DMP is associated with' and a button 'Add Funder'.
- Grant Selection:** 'Find the grant that your DMP is associated with and link it to funder's information. If the grant is not listed or you are creating a DMP for a grant proposal or for other purposes, use "Add Grant"'. Below is a dropdown menu labeled 'Select the grant that the DMP is associated with' and a button 'Add Grant'.
- Project Selection:** 'Find the project that your DMP is associated with. If the project is not listed, use "Add Project"'. Below is a dropdown menu labeled 'Select the project that the DMP is associated with' and a button 'Add Project'.

DMP Wizard – 2/3



The screenshot shows the 'DMP Wizard' interface. The left sidebar contains navigation options: 'GENERAL' (Home, About), 'DATA MANAGEMENT PLANS' (My DMPs, Published DMPs, **New DMP (Wizard)**, New DMP (Expert)), and 'DATASET DESCRIPTIONS' (My Dataset Descriptions, Published Dataset Descriptions, Add Dataset Description (Wizard)). The main content area is titled 'DMP Wizard' and includes a progress bar with three steps: 1. Grant, 2. **DMP Profile**, and 3. Dataset Description. Below the progress bar, there is a text area for 'Title of the DMP' and a 'Summary' section. A dropdown menu for 'Dataset Description Template' is open, showing several options: 'Horizon 2020', 'Clarif-D', 'IOSSG', 'SE-ROD', 'Academy Of Finland', and 'National Institute Of Health Research (NIHR)'. A red callout box on the right contains the following text:

- **Select the template that your funder requires**
- **You may select more than one templates**

DMP Wizard – 3/3

The screenshot displays the 'DMP Wizard' interface at the 'Data Summary' step. On the left, a dark sidebar contains navigation links: 'Home', 'About', 'DATA MANAGEMENT PLANS' (with sub-links for 'My DMPs', 'Published DMPs', 'New DMP (Wizard)', and 'New DMP (Expert)'), 'DATASET DESCRIPTIONS' (with sub-links for 'My Dataset Descriptions', 'Published Dataset Descriptions', and 'Add Dataset Descriptions (Wizard)'), 'Glossary', 'FAQ', 'Contact Support', and 'Terms Of Service'. The main content area shows a progress bar with three steps: '1 Data Summary' (active), '2 FAIR DATA', and '3 DATA SECURITY'. Below the progress bar, a list of questions is visible, including '1.1 What is the purpose of your research activities?', '1.2 What types and forms of data will you use?', '1.3 Will you re-use any existing data?', '1.4 What is the origin of your data?', '1.5 What is the expected volume of data?', and '1.6 To whom might it be shared?'. The '2 FAIR DATA' section contains questions 2.1 through 2.9, such as '2.1.1 Will you use metadata to describe your data?' and '2.1.3 Will your metadata use standardized vocabularies?'. The '3 DATA SECURITY' section contains question 3.1: '3.1 What do you plan to do with research data of limited use?'. A 'Contents' sidebar on the right lists sections: '1.0 Introduction (Skip this step)', '2.0 FAIR Data', '3.0 Data Security', and '4.0 Other'. The bottom of the screen features a 'Back' button and 'Save' and 'Save and Finish' buttons.

Save your DMP

The screenshot shows the ARGOS web application interface. The left sidebar contains navigation menus for GENERAL (Home, About), DATA MANAGEMENT PLANS (My DMPs, Published DMPs, New DMP (Wizard), New DMP (Expert)), DATASET DESCRIPTIONS (My Dataset Descriptions, Published Dataset Descriptions, Add Dataset Description (Wizard)), and footer links (Glossary, FAQ, Contact Support, Terms Of Service). The main content area displays a form for creating a 'Horizon 2020 Dataset Description'. A modal dialog is open in the center, asking 'Would you like to add another Dataset Description?' with 'No' and 'Yes' buttons. The form includes sections for 'Data Summary', 'FAIR Data', 'Data Security', and 'Other'. The 'Other' section contains question 4.1: 'Do you make use of other procedures for data management?' with radio buttons for 'Yes' and 'No', and a 'Please Specify' text area with a placeholder 'Provide additional information or justification about your selection'. A 'Contents' table of contents is visible on the right side of the form.

Dataset Description Title *
Horizon 2020 Dataset Description
(Suggested Default Name)

Would you like to add another Dataset Description? X

No Yes

4 OTHER

4.1 Do you make use of other procedures for data management?

Yes No

Please Specify

Provide additional information or justification about your selection

Contents

- 1.5 What is the expected size of the data?
- 1.6 To whom might it be useful (data utility)?
- FAIR Data
- 2 FAIR Data
- 2.1 Making data findable, including provisions for metadata
 - 2.1.1 Will you use metadata to describe the data?
 - 2.1.3 Will your metadata use standardised vocabularies?
 - 2.1.7 Will you use naming conventions for your data?
 - 2.1.9 Will you provide clear version numbers for your data?
 - 2.1.10 Will you provide persistent identifiers for your data?
 - 2.1.12 Will you provide searchable metadata for your data?
 - 2.1.15 Will you use standardised formats for some or all of your data?
 - 2.1.19 Are the file formats you will use open?
 - 2.1.22 Do supported open-source tools exist for conversion of metadata?

Save and finalize your DMP

The screenshot displays the OpenAIRE DMP interface for a dataset titled "DMP FOR GRANT : AN EDIBLE AND BIODEGRADABLE, ZERO SUGAR STRAW TO ACCOMPANY COLD DRINKS OR COCKTAILS, PREVENTING PLASTIC RESIDUES." The interface includes a breadcrumb trail (HOME > MY DMPs > DMP For Gra...), a search bar, and a list of DMPs. The selected DMP has buttons for "Export", "Publish", and "Get DOI". A modal dialog box is open, asking "Would you like to create digital object identifier (DOI) for the DMP?" with "Cancel" and "Yes" options. The "Horizon 2020 Dataset Description" section is visible at the bottom of the DMP card.

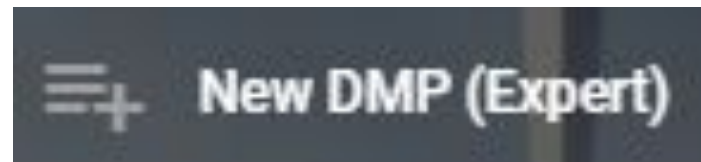
Finalize saved DMPs

The screenshot displays the OpenAIRE DMP interface for a project titled "DMP FOR GRANT : A NEW TOOL FOR CREATING REAL-TIME MUSIC WITHIN COMPUTER GAMES". At the top right, there are three buttons: "Edit", "Export", and "Finalize". The "Finalize" button is highlighted with a red rectangular box. Below the title, the project name is repeated. A summary of the project is shown in a card on the right, with a "Show more" link at the bottom. On the left, there are statistics for "Owner" (1 Dataset Descriptions, 1 Templates, 0 Researchers) and "1 Collaborators". A "DRAFT: Horizon 2020 Dataset Description" card is also visible, featuring a "HORIZON 2020" button.

Create DMPs - DMP Expert

- **DMP Expert** provides additional metadata to the DMP.

From “Homepage”



From “My DMPs”



DMP Expert

The screenshot displays the ARGOS web interface for creating a new data management plan. The top navigation bar includes the ARGOS logo and a breadcrumb trail: HOME > MY DMPs > CREATE NEW DMP >. A search bar is located in the top right corner. The left sidebar contains a menu with sections: GENERAL (Home, About), DATA MANAGEMENT PLANS (My DMPs, Published DMPs, New DMP (Wizard), New DMP (Expert)), and DATASET DESCRIPTIONS (My Dataset Descriptions, Published Dataset Descriptions, Add Dataset Description (Wizard)). At the bottom of the sidebar are links for Glossary, FAQ, Contact Support, and Terms Of Service.

The main content area is titled 'NEW DATA MANAGEMENT PLAN' and features a breadcrumb trail: HOME > MY DMPs > CREATE NE... >. Below the title is a search bar. The form is divided into two tabs: 'GENERAL' and 'GRANT'. The 'GRANT' tab is active and contains the following fields:

- Related:** Funder * (dropdown menu) with a '+ Add Funder' button.
- Organization:** List of values provided by external source(s)
- Address:** (empty text field)
- Research:** Grant (dropdown menu) with a '+ Add Grant' button.
- DMP:** Project (dropdown menu) with a '+ Add Project' button.

At the bottom right of the form are two buttons: 'CANCEL' and 'SAVE'.

Save your DMP

NEW DATA MANAGEMENT PLAN

GENERAL GRANT

Do you want to update your Description menu.

TITLE

GENERAL GRANT DATASET DESCRIPTIONS PEOPLE

Collaborators + Invite Contributors

NAME	EMAIL	PERMISSIONS
Elli Papadopoulou	elli.libd@gmail.com	Owner

CANCEL **SAVE CHANGES** FINALIZE

TITLE

GENERAL GRANT DATASET DESCRIPTIONS PEOPLE

Title* title

Description

Related Dataset Description Templates *

Horizon 2020

Updated Successfully

TITLE

GENERAL GRANT DATA PEOPLE

Title* title

Description

Related Dataset Description Templates *

Horizon 2020

Organizations

- New Version
- All DMP Versions
- Clone
- Delete

- PDF
- Document
- XML
- JSON

Version 0

Versioning is automated.

Finalize this item?

DMP title

Dataset Descriptions

No Dataset Descriptions for this DMP so far

You need to have at least one Dataset Description Finalized

Submit Cancel

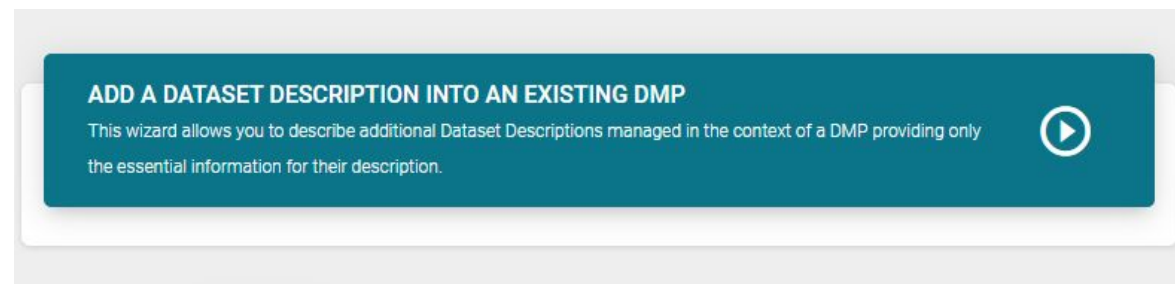
CANCEL SAVE CHANGES **FINALIZE**

Dataset Descriptions

Describe your datasets - Wizard

- **Dataset Description Wizard** is an easy way to add new dataset descriptions to pre-existing DMPs.

From “Homepage”



Describe NEW datasets with Wizard

GENERAL

- Home
- About

DATA MANAGEMENT PLANS

- My DMPs
- Published DMPs
- New DMP (Wizard)
- New DMP (Expert)

DATASET DESCRIPTIONS

- My Dataset Descriptions
- Published Dataset Descriptions

Dataset Description Wizard

This wizard simplifies the process of adding new Dataset Descriptions into existing DMPs, guiding you through and requesting only the most essential pieces of information for completing the task. Full access to the attributes of a Dataset Description can be obtained afterwards via the Dataset Description access menus of the System.

Dataset Description Title*
Horizon 2020 Dataset Description
(Suggested Dataset Name)

1 Data Summary

1 DATA SUMMARY

ANSWER THE FOLLOWING QUESTIONS TO PROVIDE A SUMMARY OF THE TYPES AND CHARACTERISTICS OF DATA COLLECTED, GENERATED, SHARED AND RE-USED DURING YOUR RESEARCH ACTIVITIES. HIGHLIGHT WHY IT IS OF RELEVANCE TO THE PROJECT AND USEFUL TO OTHER RESEARCHERS.

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

1.2 What types and formats of data will the project generate/collect?

1.3 Will you re-use any existing data and how?

1.4 What is the origin of the data?

Contents

Data Summary

- 1 Data Summary
 - 1.1 What is the purpose of the data collection/generation and its relation to the objectives of the project?
 - 1.2 What types and formats of data will the project generate/collect?
 - 1.3 Will you re-use any existing data and how?
 - 1.4 What is the origin of the data?
 - 1.5 What is the expected size of the data?
 - 1.6 To whom might it be useful (data utility)?

FAIR Data

- 2 FAIR Data
 - 2.1 Making data findable, including provisions for metadata
 - 2.1.1 Will you use metadata to describe the data?
 - 2.1.3 Will your metadata use standardised vocabularies?
 - 2.1.7 Will you use naming conventions for your data?
 - 2.1.9 Will you provide clear version numbers for your data?
 - 2.1.10 Will you provide persistent identifiers for your data?
 - 2.1.12 Will you provide searchable metadata for your data?
 - 2.1.15 Will you use standardised formats for some or all of your data?
 - 2.1.19 Are the file formats you will use open?
 - 2.1.22 Do supported open-source tools exist for accessing the data?
 - 2.1.25 Will you provide metadata describing the quality of the data?
 - 2.2 Making data openly accessible

Describe your datasets - Dataset Description Expert

- **Dataset Description Expert** provides additional metadata to the dataset description.

From “My Dataset Descriptions”

+ NEW DATASET DESCRIPTION

Describe NEW datasets with Experts

The image displays the OpenAIRE dataset description interface. On the left is a dark sidebar with navigation options: 'DATA MANAGEMENT PLANS' (My DMPs, Published DMPs, New DMP (Wizard), New DMP (Expert)), 'DATASET DESCRIPTIONS' (My Dataset Descriptions, Published Dataset Descriptions, Add Dataset Description (Wizard)), and utility links (Glossary, FAQ, Contact, Terms Of Service, Support, Service).

The main area is titled 'NEW DATASET DESCRIPTION' and contains a form with tabs for 'DATASET DESCRIPTION DETAILS', 'EXTERNAL REFERENCES', and 'DESCRIPTION'. The 'DATASET DESCRIPTION DETAILS' tab is active, showing a list of existing DMPs and input fields for 'Uri' and 'Description'.

Overlaid on the right is a preview window showing the 'NEW DATASET DESCRIPTION' form with a 'Create New' button. Below the form is a 'Contents' table of contents:

Contents	
Data Summary	
1	Data Summary
1.1	What is the purpose of the data collection/generation and its relation to the objectives of the project?
1.2	What types and formats of data will the project generate/collect?
1.3	Will you re-use any existing data and how?
1.4	What is the origin of the data?
1.5	What is the expected size of the data?
1.6	To whom might it be useful ('data utility')?

Below the table of contents is a vertical list of sections: 1 Data Summary, 2 FAIR Data, 3 Data Security, and 4 Other.

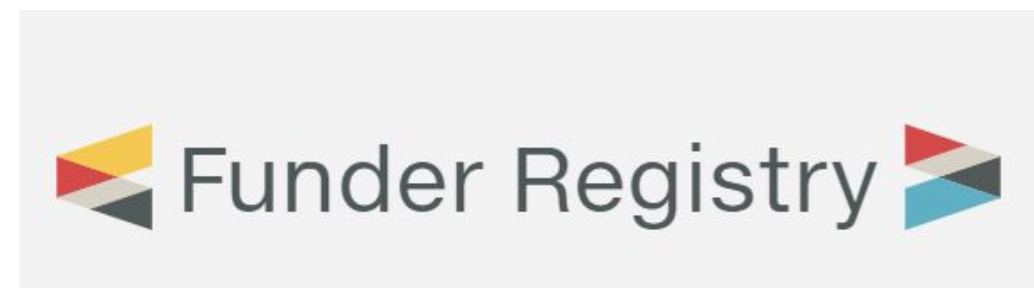
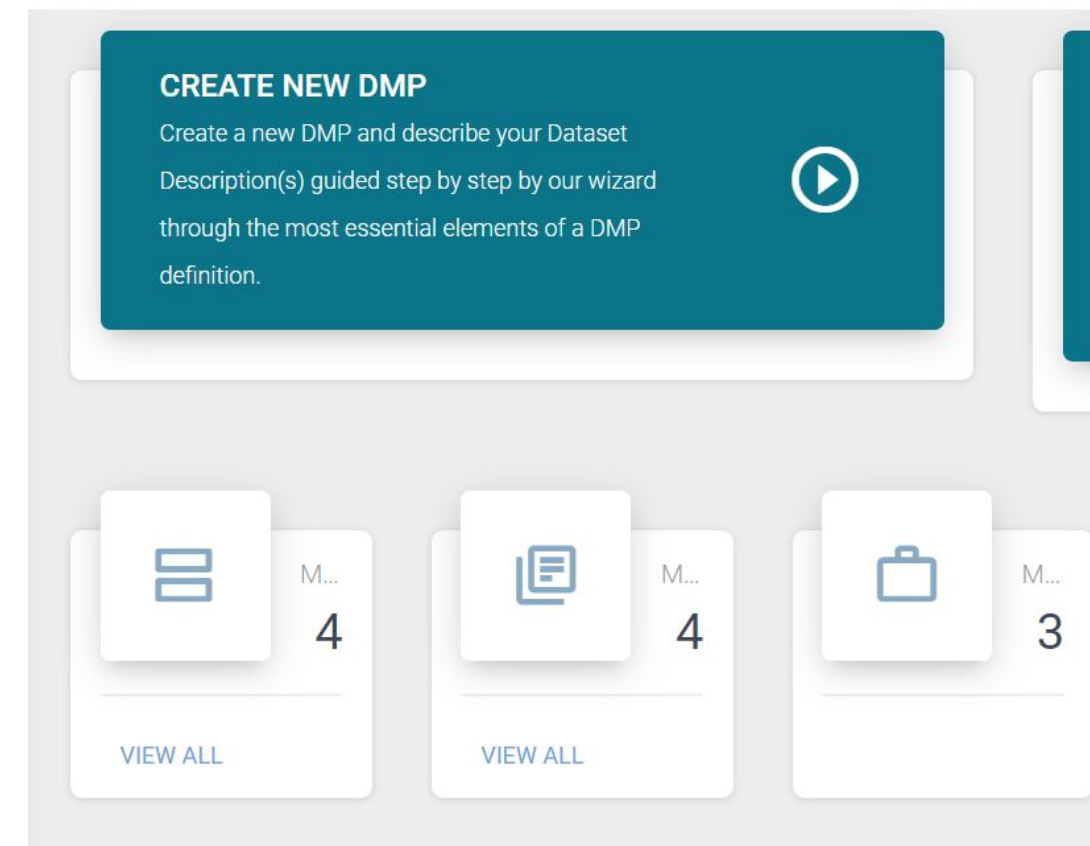
Next Steps

Next Steps

- Icons of the main page to become smaller & embedded to each other

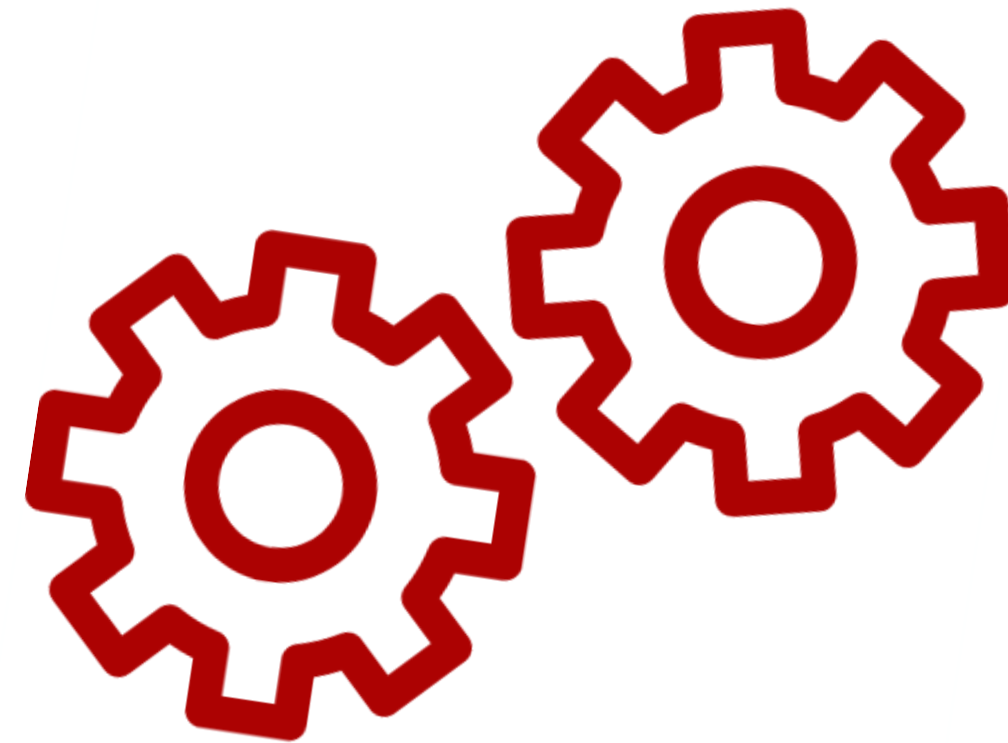
- Integrate FundRef by Crossref

- Integrate with



Next Steps – continuous processes

- **Enrich ARGOS with more funders' templates**
- **Enrich resources inferred through the EEStore**
- **Usability tests and community feedback**
- **Debugging**



GitLab tickets

The screenshot shows the GitLab interface for the project 'OpenAIRE-EUDAT-DMP-service-pilot'. The left sidebar contains navigation options: Project, Repository, Issues (95), List, Boards, Labels, Milestones, Merge Requests (0), CI / CD, and Wiki. The main content area displays the 'Issues' page with the following details:

- Project: dmp > OpenAIRE-EUDAT-DMP-service-pilot > Issues
- Issue counts: Open 95, Closed 126, All 221
- Search bar: Search or filter results... (Recent searches dropdown)
- Sort: Created date (dropdown)
- Issue list:

Issue Title	Issue ID	Opened	By	Updated	Comments
Integrate Zenodo versioning mechanism	#221	3 days ago	Diamantis Tziotzios	3 days ago	0
Zenodo Account for production	#220	3 days ago	Diamantis Tziotzios	3 days ago	0
Matching Dataset Description templates to RDA DMP Common standard	#219	3 weeks ago	Elli Papadopoulou	1 week ago	1
Funders - sources harvested	#218	3 weeks ago	Elli Papadopoulou	3 weeks ago	1
License information in GitLab	#217	3 weeks ago	Elli Papadopoulou	3 weeks ago	0

<https://gitlab.eudat.eu/dmp/OpenAIRE-EUDAT-DMP-service-pilot/issues>



Feedback

Usability assessment – Users feedback

Usability assessment - ARGOS

Questions Responses 1

ARGOS

ARGOS - User evaluation questionnaire

Hello!

We are looking to gather some feedback about ARGOS (<https://argos.openaire.eu/>) before it goes into production in January 2020.

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

- contributes to the OpenAIRE Research Graph (ongoing linkage of DMPs to the research outputs and entities)

Help us become better! Influence the development of ARGOS

<https://bit.ly/2tendao>

Useful Resources

Blogpost:

<https://www.openaire.eu/blogs/argos-the-newest-openaire-service-to-create-link-and-share-dmps-oaweek>

Service Guide: <https://www.openaire.eu/argos-guide>

Trello Board: <https://trello.com/b/x49lylnk/argos>

Thank you!

Name

email

