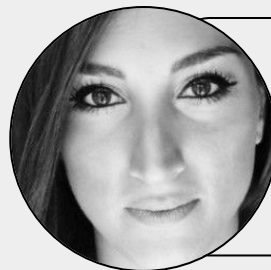


Steps towards  
FAIRness,  
interconnectivity and  
machine actionability  
across all research  
phases



**Elli Papadopoulou**

Athena Research Centre  
OSTrails deputy coordinator

*Steps towards FAIRness, interconnectivity and  
machine actionability across all research phases*

# Outline

- Overview of the OSTRails project
- Draft IFs for SKGs, DMPs and FAIR & proposed extensions
- Reference Implementations by pilots
- Next Steps: towards “Commons”



# Definition

In OSTRails: an SKG is defined as any database/repository with information pertaining to research products, process and actors & agents which is able to present a graph type view on this information via a suitable API.

# Today's limitations

## DMPs

- No evidence of better RDM or FAIRer results
- DMPs not published or FAIRified
- Uncertainty of the process
- DDPs pending adoption



## maDMPs

Describes DMP entities and their links with outside sources

## SKGs

- Mostly for bibliometrics & discovery
- Isolated
- Quality issues
- Depth of knowledge in communities



## maDOs

Describes elements of digital objects and links with other resources (qualified references)

## FAIR

- Policy vs Implementation
- Inconsistent results between tools
- No FAIR assessment schema
- FAIR vs Data Quality

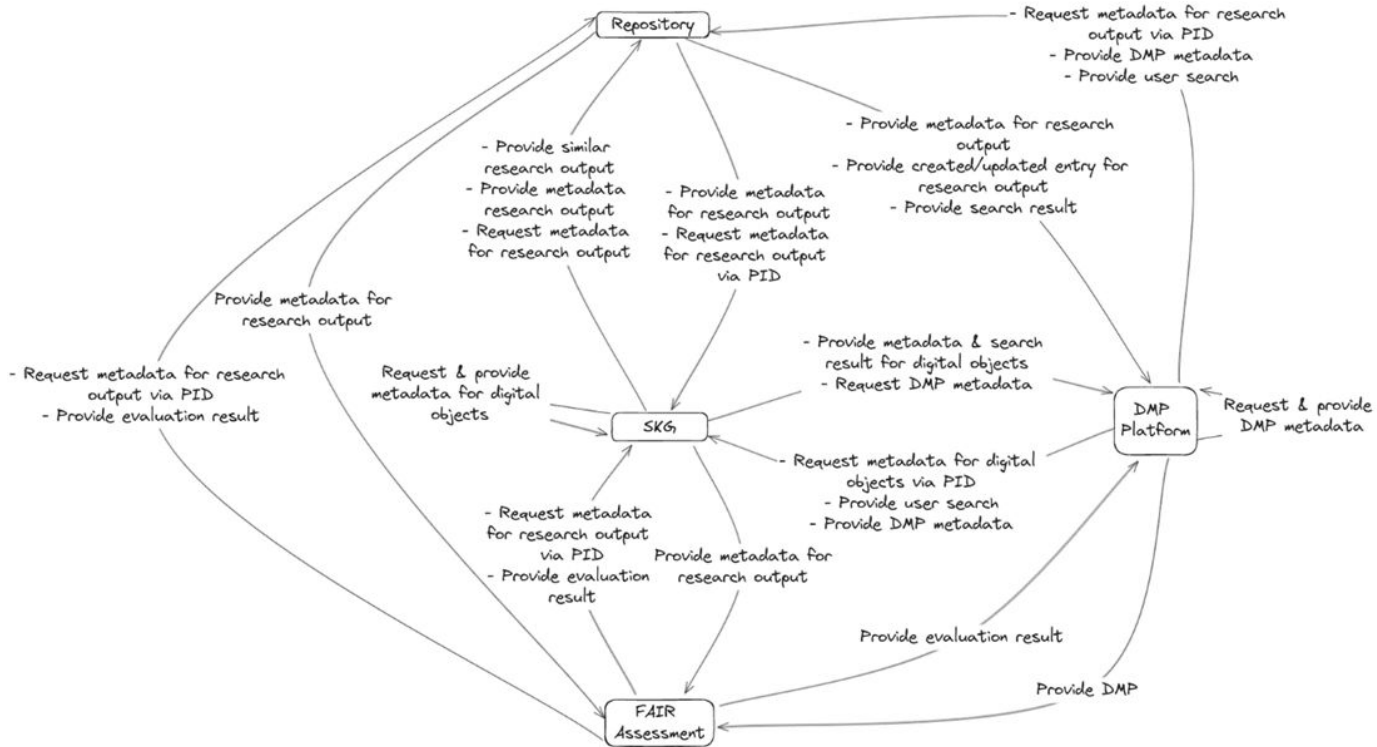


## maFAIRTests

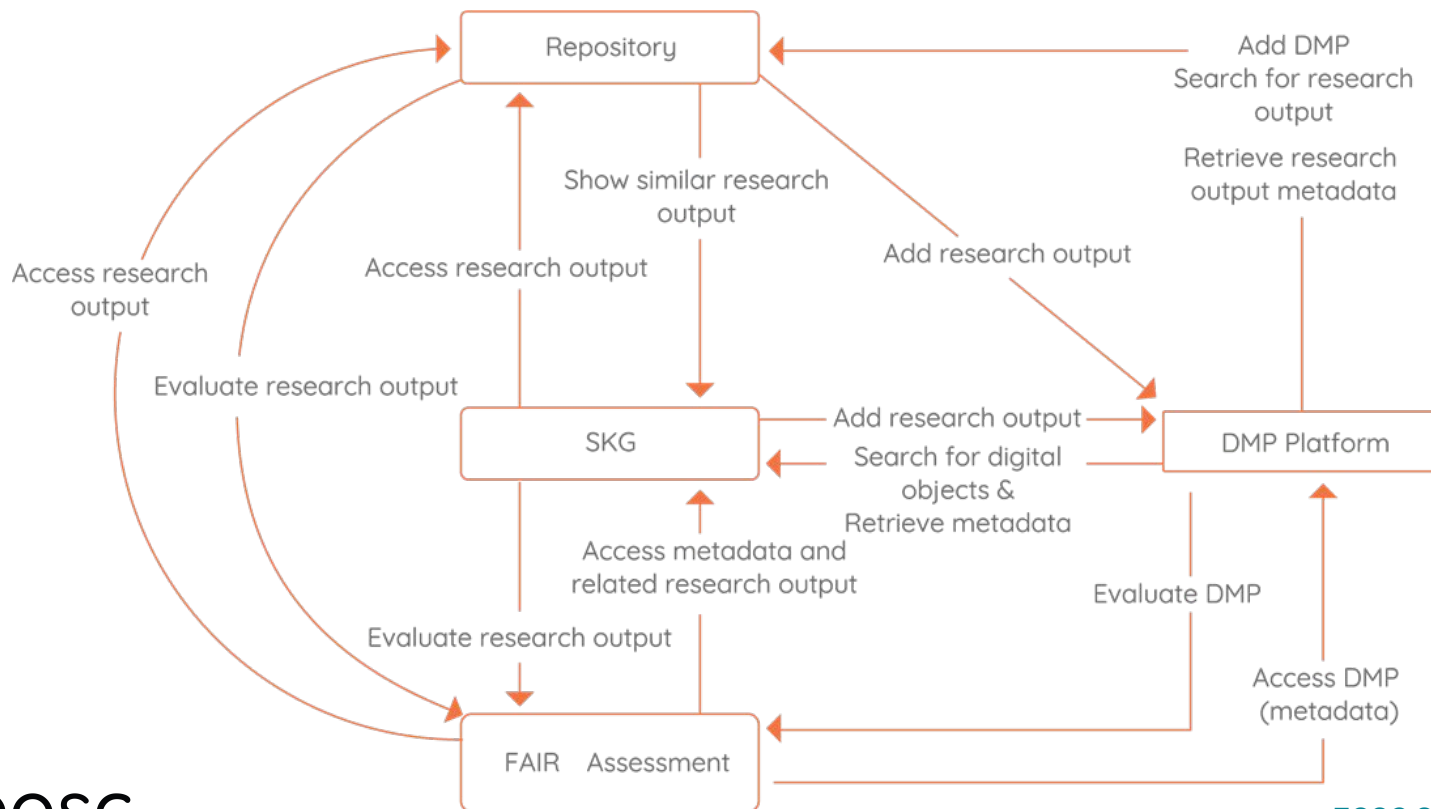
Describes community FAIR rules for each element in DOs to assess its overall FAIRness

# Pathways

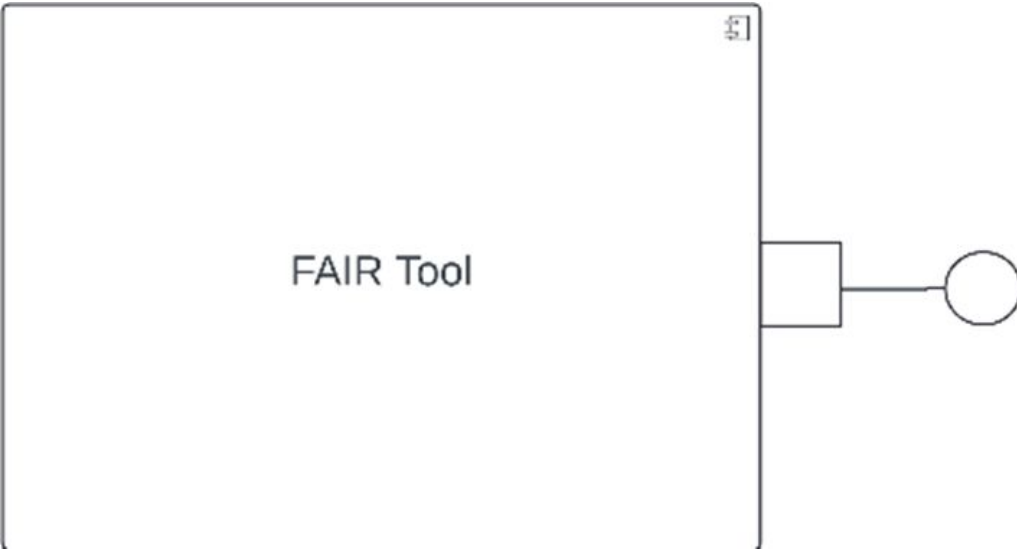
## Tools Actions



# Plan-Track-Assess Framework



# Draft Interoperability Frameworks



**Provided Interfaces:**  
Expose Test Execution  
Expose Test Metadata  
Expose Metrics involved in FAIR Assessment

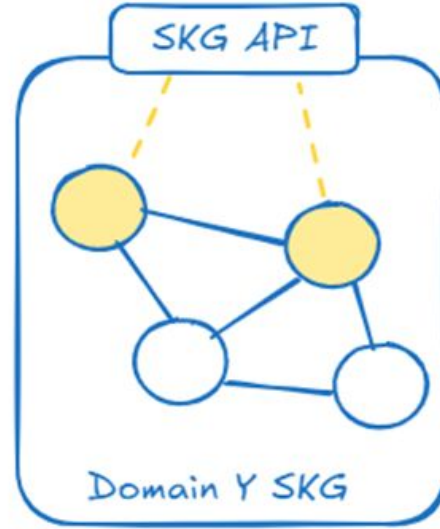
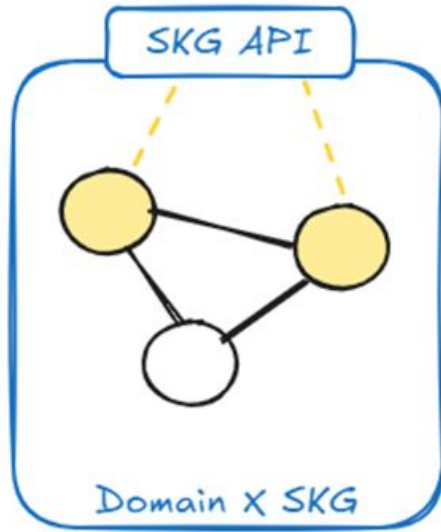
# Pilots - Reference Implementations

- Expose data according to SKG-IF
- Enhance SKG-IF with new entities and semantics, incl. qualified references
- Quality of data: resource\_types & annotations
- Rich metadata





# OTrails Commons





Walking the pathways together

