PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

11–13 June, Prague, Czechia

CC BY

NRENs and PIDs: the role of research support organisations in the PID landscape

Giacomo Cannizzaro
SURF

Natascha van Lieshout
SURF

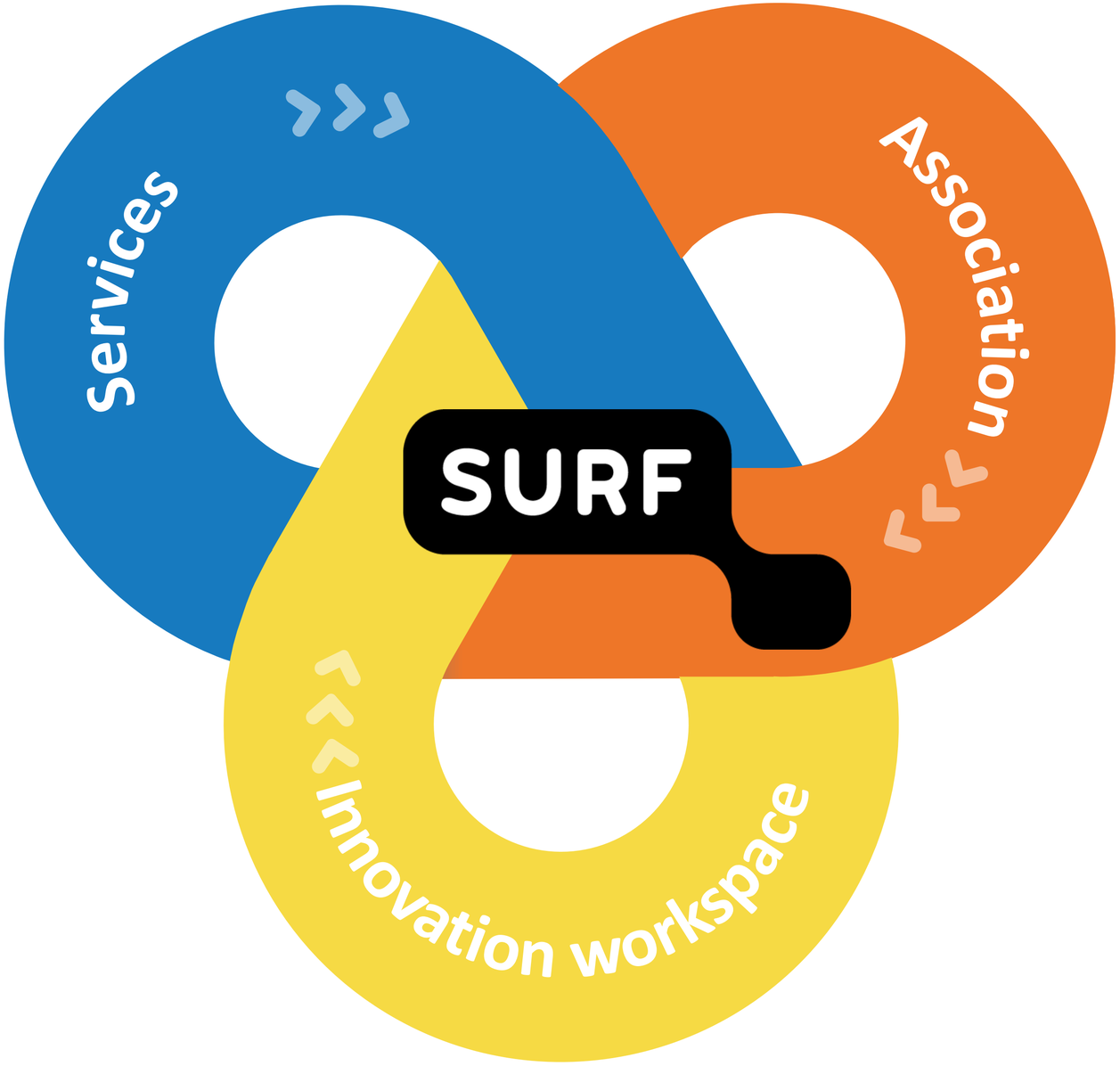
Co-funded by the European Union

MINISTRY OF EDUCATION, YOUTH AND SPORTS

NTK
50°6'14.083"N, 14°23'26.365"E
Národní technická knihovna
National Library of Technology

NCRIS
National Research Infrastructure for Australia
An Australian Government Initiativ

ARDC
Australian Research Data Commons



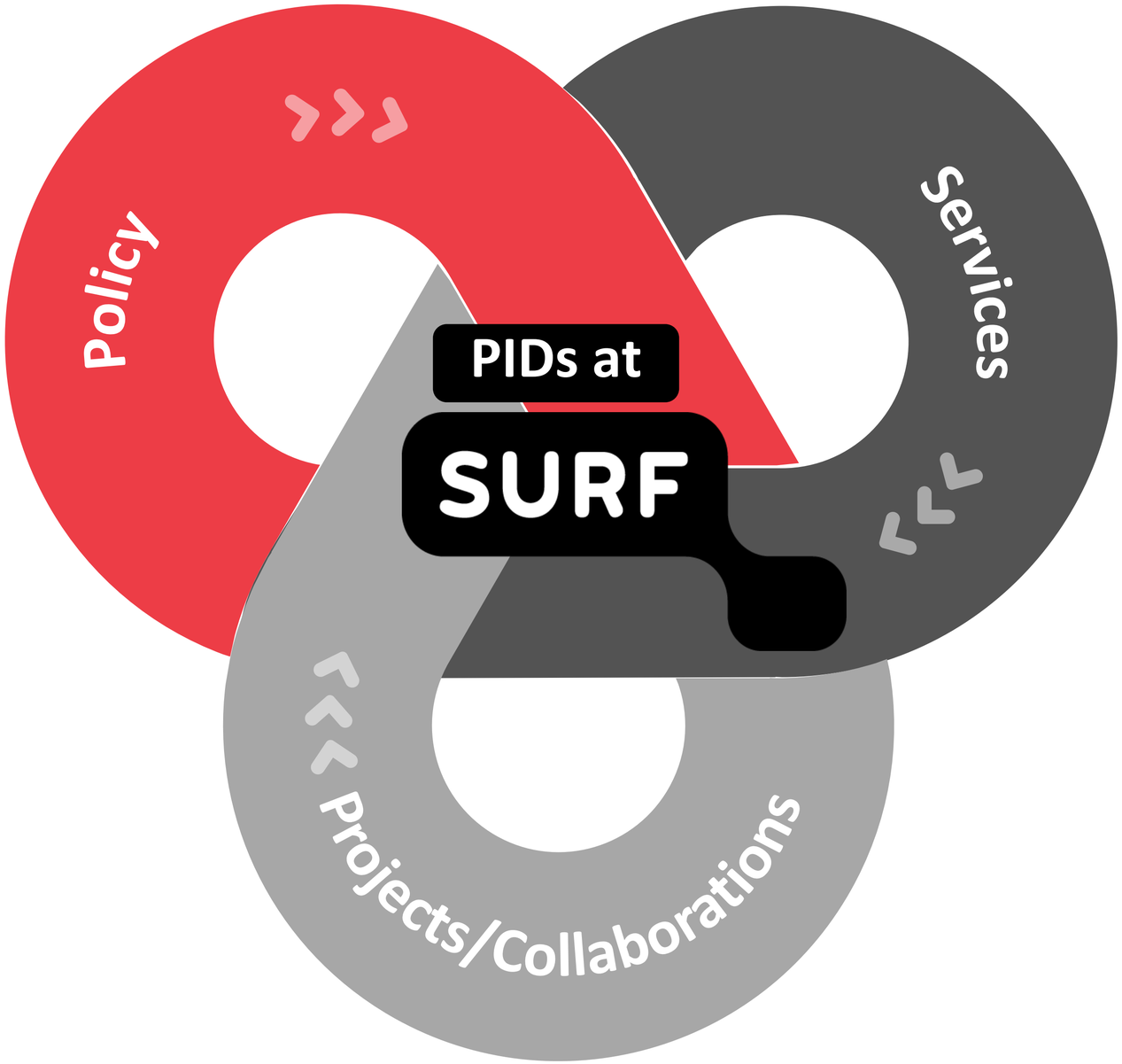
Mission

SURF makes reliable and innovative IT facilities possible, with which Dutch education and research can excel.

Vision

SURF stimulates the formation of ecosystems in which members and their stakeholders collaborate, innovate and share knowledge on the basis of shared values and agreements.

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024



PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Services

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

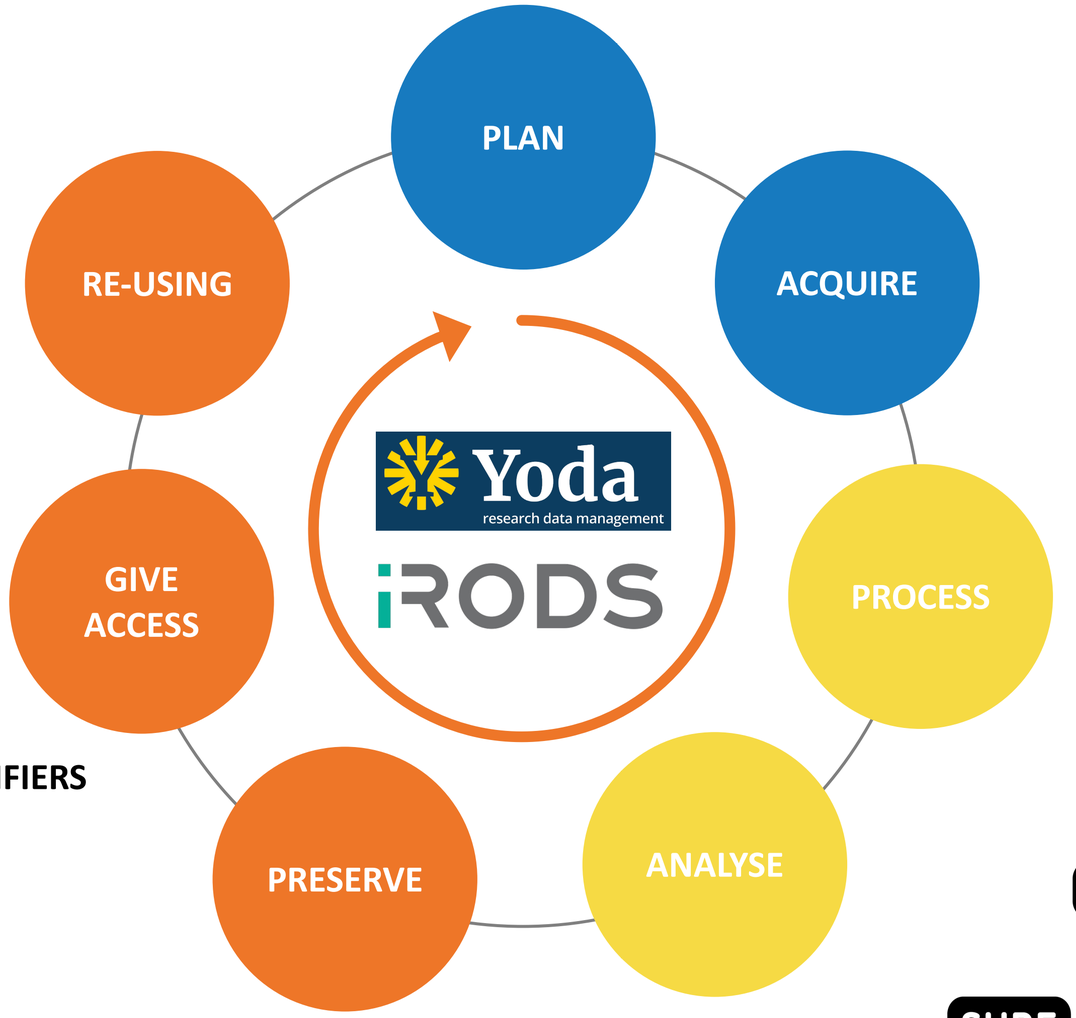
SURF SHAREKIT

SURF DRIVE

SURF REPOSITORY

SURF PERSISTENT IDENTIFIERS

SURF DATA ARCHIVE



SNELLIUS

SURF OBJECT STORE

SURF RESEARCH DRIVE

Handle service

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Basic info

Name: SURF Persistent Identifiers

Technology: handle

Consortium: eScience Persistent Identifier Consortium (ePIC)

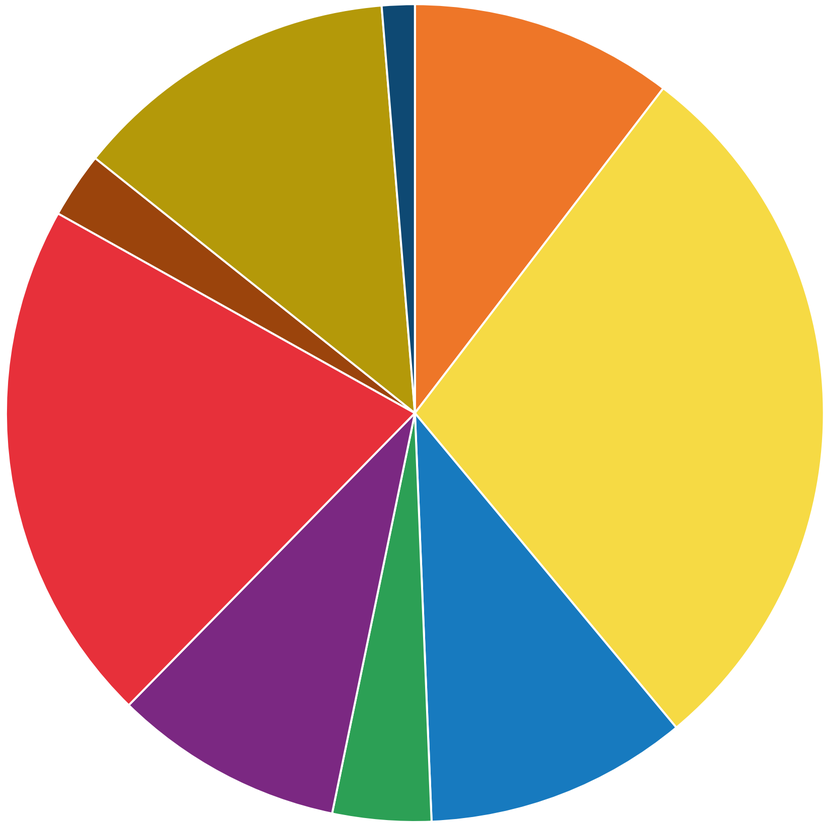
Established: 2009

Services: prefixes, PID hosting & consultation

Prefixes: 84

PIDs: +268 million

Handle service user base



Handle service user base

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Museums/Archives

Integrated with collection management software. Very low technical skills.

National Institutes

Institutions like the Meertens Institute (does research and documentation of Dutch language and culture) maintain many (digital) resources.

Infrastructure

BBMRI-ERIC is a European research infrastructure for biobanking. They maintain a sample and data locator with PIDs.

Handle example user: Rijksmuseum

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

http://hdl.handle.net/10934/RM0001.COLLECT.5216

Documentation

- De Nachtwacht, Jonathan Bikker
- Een schrijver ziet meer : Nederlandse auteurs en het Rijksmuseum, Greetje Heemskerk, Kader Abdolah, p. 66-69
- The Golden Age reloaded : die Faszination niederländischer Malerei des 17. Jahrhunderts : Sammlungen der Villa Vauban und des Rijksmuseums Amsterdam, afb. p. 60
- Rembrandt : the painter thinking, Ernst van de Wetering, p. 141, 260, fig. 121, 238
- Rembrandt in perspectief : de veranderende visie op de meester en zijn werk, p. 22, 25, 180, afb. 1.6, 1.9, 6.6
- Hollanders van de Gouden Eeuw, p. 68-69, afb. 58
- The nightwatch, Jonathan Bikker
- De Gouden Eeuw : proeftuin van onze wereld, p. 146-147, afb. 2
- Kiefer, Rembrandt, Kiefer, Anselm Kiefer
- Ontmoet Rembrandt : leven en werk van de meesterschilder, p. 62, afb. 52
- Rembrandt : the painter at work, Ernst van de Wetering, p. 179, afb. 245, 196-203, 257
- Rembrandt : pintor de historias, Teresa Posada Kubissa, Alejandro Vergara, Mariët Westermann, p. 39, afb. 16
- The visible world : Samuel van Hoogstraten's art theory and the legitimation of painting in the Dutch Golden Age, Beverley Jackson, Lynne Richards, Thijs Weststeijn, p. 227, afb. 92
- De oude Meesters van de stad Amsterdam : schilderijen tot 1800, p. 242
- Hollanders in beeld : portretten uit de Gouden Eeuw, p. 32, 33, afb. 22
- Dutch portraits : the age of Rembrandt and Frans Hals, p. 31 + afb. 22
- Het Rembrandt boek [: 1 2006], Gary Schwartz, p. 172, 175

Handle service recent successes

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

”Versnellen 2023” program by NDE

Widespread adoption in the heritage space

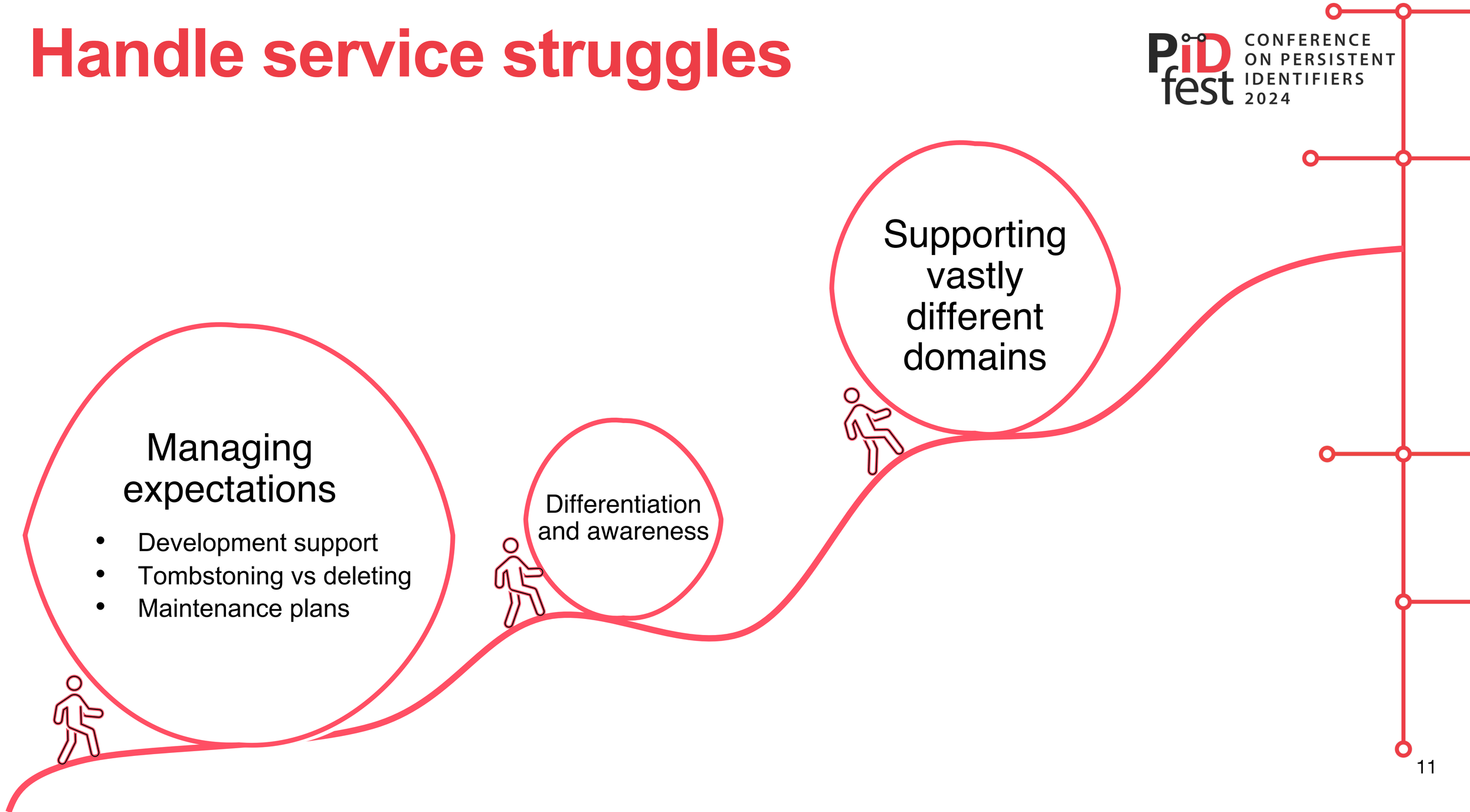
Ability to modify existing handles (but not mint new ones) post contract

Conjointly developing and deploying metadata schemas

Pilot with ZonMw on grant-based PID

Handle service struggles

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

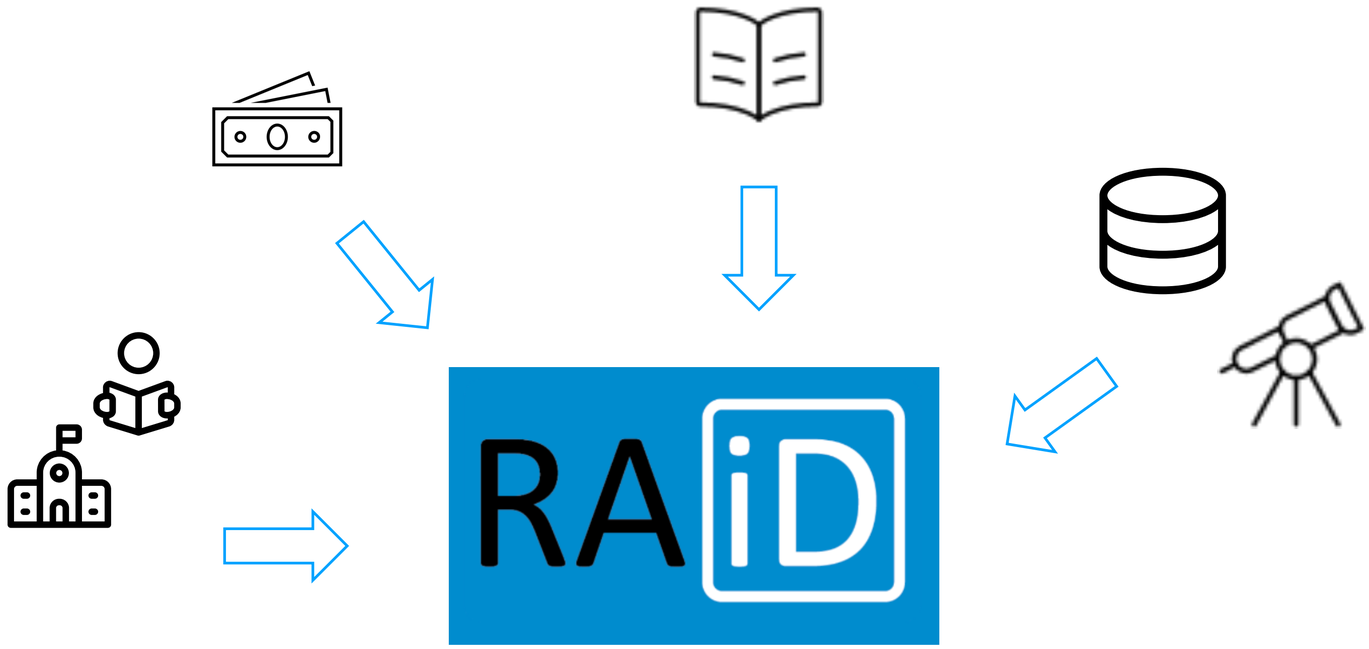


RAiD service

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

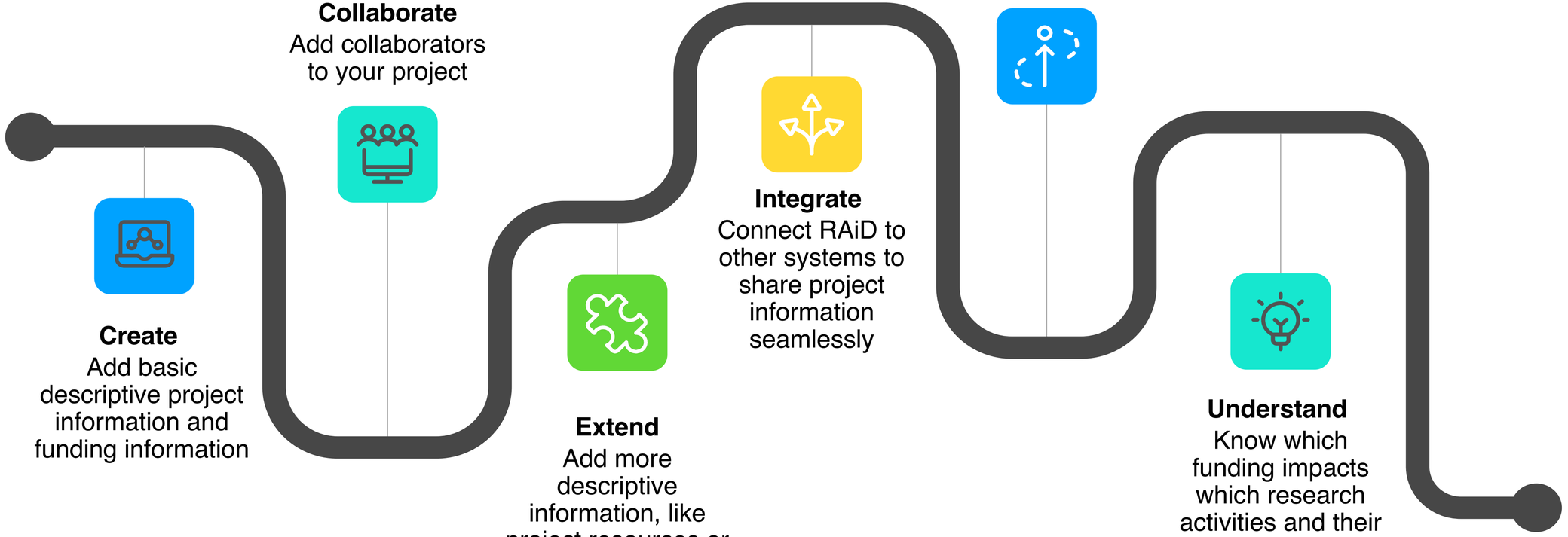
RAiD provides persistent, unique and resolvable information for research projects.

maintaining consistent and up-to-date information on projects throughout the research lifecycle.



https://linktr.ee/RAiDSURF

RAiD journey



Create
Add basic descriptive project information and funding information

Collaborate
Add collaborators to your project

Extend
Add more descriptive information, like project resources or outputs

Integrate
Connect RAiD to other systems to share project information seamlessly

Report
Report project outputs to funders; disseminate work

Understand
Know which funding impacts which research activities and their outputs

RAiD service pilots

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

- Funders
- Biodiversity Museum
- Universities of applied science
- SURF (grants, integration)

RAiD service successes

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Broad interest

EOSC - FC4E

National strategy (NWO)

Collaboration with DOI
https://doi.org/10.5438/tk44-dq06

RAiD service struggles

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Variety of use cases implies difficult structuring

Flexibility vs standardisation

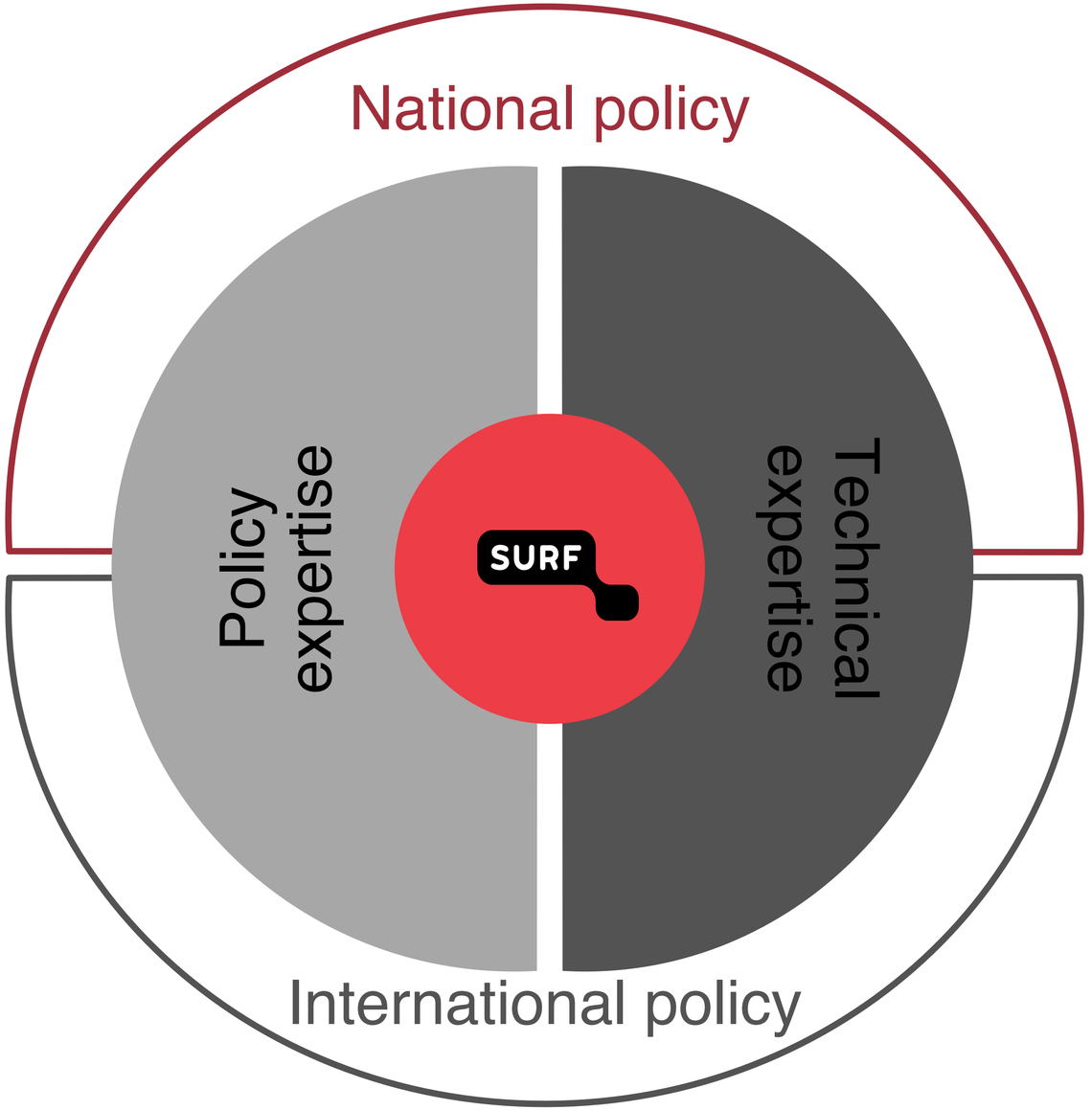
Ownership is difficult to define (who ‘owns’ a project?), to track and to maintain (e.g., PI changes institution)

Policy difficult to establish, new player in the field and many aspects that are not common in other PIDs

(definitions, roles, responsibilities, quality etc.)

Policy

SURF as a policy maker



National Policies

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

- NWO Persistent Identifier Strategy (2021)
  - Report by the Dutch Research Council (NWO) on integrating PIDs into it's information architecture to improve it's capacity for analysing the impact of research funding for long-term improvements in analytical resources with reduced administrative overhead as well as enabling feedback loop from which to improve on earlier funding decisions.
  - https://doi.org/10.5281/zenodo.4674513
- National Roadmap for Persistent Identifiers (ongoing)
  - Initiated and coordinated by SURF, this roadmap is intended to provide an initial exploration of use cases, relevant PIDs and recommendations for the wider and more effective use of PIDs. It is intended to strengthen the coherence of stakeholder developments and to increase impact through PIDs.
  - https://doi.org/10.5281/zenodo.7660190

Projects & Collaborations

ORCID-NL consortium

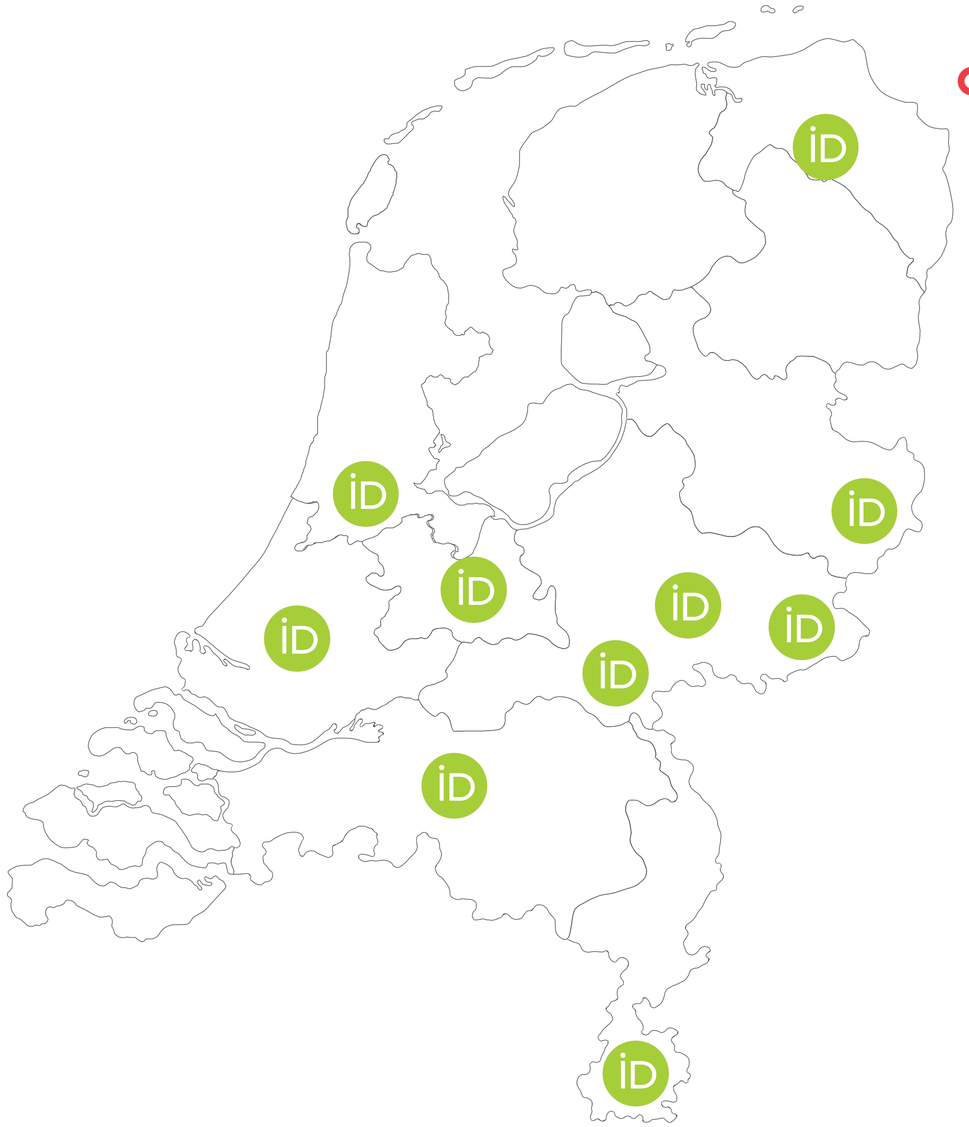
PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Basic stats:

- 19 consortium members
- Most members use PURE as CRIS
- 18,910 connected IDs
- 15,130 records updated

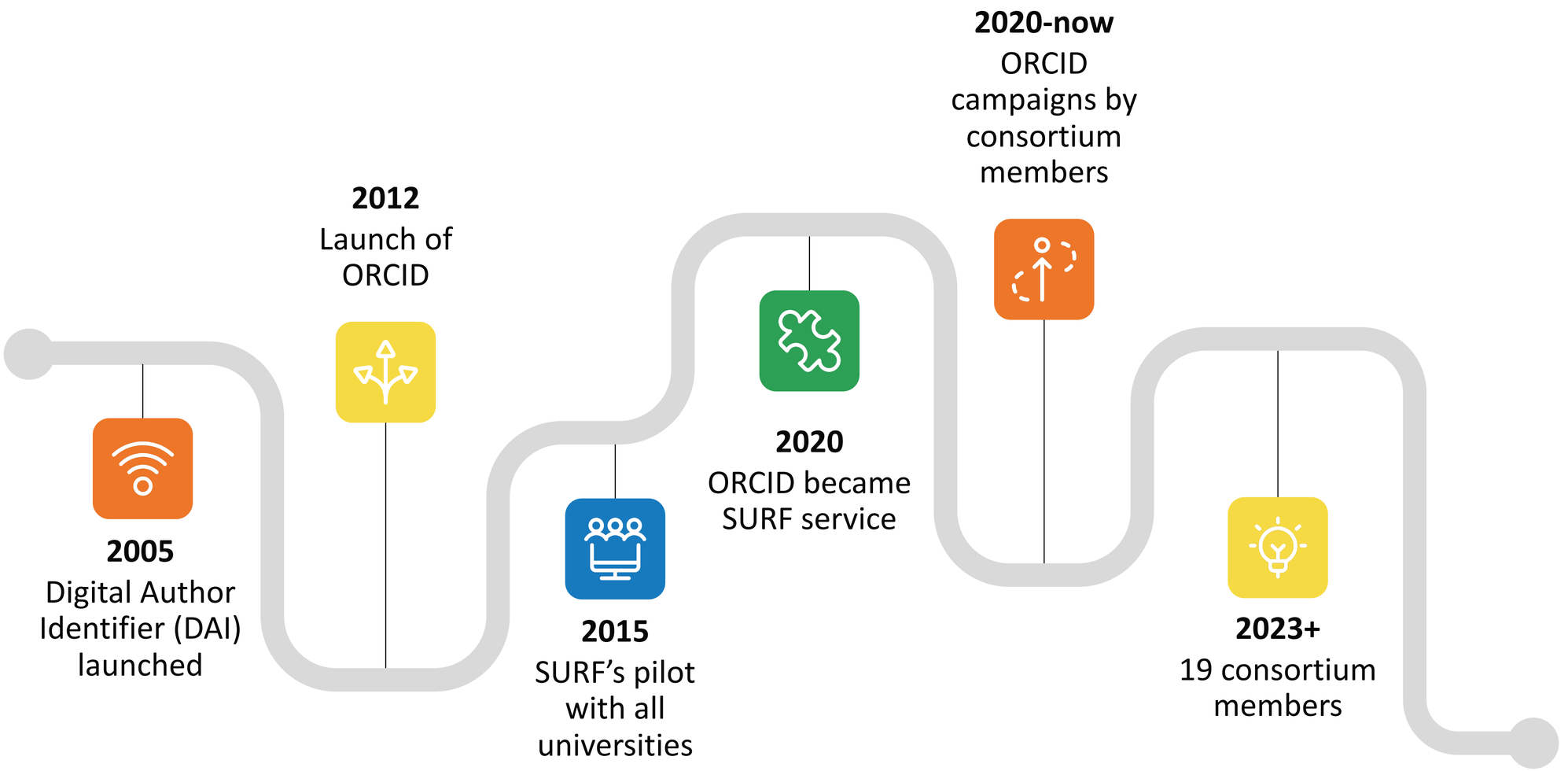
SURF's role as consortia lead:

- Yearly meetings twice a year
- Provide central community support to members
- Link between ORCID and members
- Participate in global consortia leads community



ORCID-NL: From pilots to consortium

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024



Collaboration: PID Guide

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

- Initiative to help Dutch heritage institutions adopt PIDs for their collections
- Consists of a quiz-like guide and corresponding support and introductory documentation
- Produced by the Dutch National Archive in collaboration with the Digital Heritage Network
- SURF consulted as handle PID expert

https://www.pidwijzer.nl/en

nationaal archief

netwerk digitaal erfgoed

European Engagements

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Knowledge Exchange

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

"A European partnership to improve services for higher education and research"

- Organisations: CSC, cnrs, DeiC, DFG, Jisc, SURF
- Focuses: Open Science and Open Access

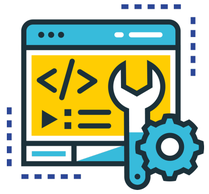
Highlighted output:

Study commissioned to investigate the "Risks and trust in pursuit of a well functioning PID infrastructure for research".

- It examines the PID landscape, looks at what can go wrong with an unreliable PID service, provides recommendations for stakeholder groups and 7 complementary case studies.
- https://doi.org/10.5281/zenodo.7258286

FAIRCORE4EOSC

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024



Compliance Assessment Toolkit (CAT)

Tool to assess and query compliance to EOSC PID policy, TRUST, FAIR, reproducibility GDPR & licenses.

Research Activity Identifier (RAiD)

PIDs for research projects, which will allow users and services to manage information about project-related participants, services, and outcomes.

Metadata Schema & Crosswalk Registry (MSCR)

Registry to create, register and version schemas and crosswalks with PIDs that can be searched, browsed and downloaded without restrictions.

Data Type Registry (DTR)

Registry and validation of PID metadata elements as data types including provenance information and human readable description.

PID Graph

Datacite DOIs and metadata dumped into a graph with integrated statistics.

PID Meta Resolver (PIDMR)

A generalized resolver for mapping items into records and presenting metadata.

Research Software APIs and Connectors (RSAC)

Interconnects research output infrastructures with the Software Heritage universal source code archive.

Research Discovery Graph (RDGraph)

A graph of EOSC catalogue content with advanced discovery tools including natural language processing.

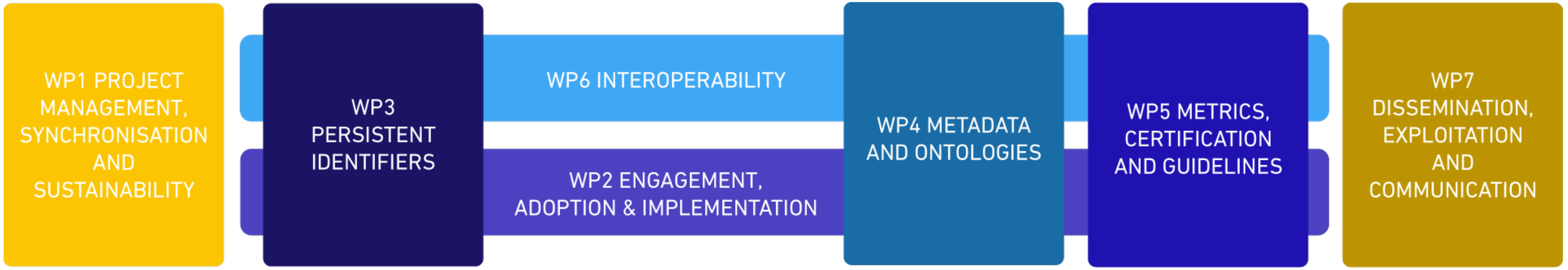
Software Heritage Mirror (SWHM)

A copy of the Software Heritage universal source code archive to prevent information loss.

FAIR-IMPACT

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

Work plan:



WP3 Key tasks

- Setting up a coordination mechanism for PID service providers and EOSC
- Create a shared long-term vision for PID usage in EOSC
- Using selected use cases create a blueprint for PID practices in FAIR data management and adapt to other communities
- Create user guidelines on EOSC PID implementation and adoption of EOSC PID policy
- Offer a implementation programme to provide support selected applicants with drafting better PID policies, strategies and guidelines

WP3 Main Objective

To enable and support a sustainable implementation of PIDs in an EOSC context by working together with PID service providers and infrastructures to meet user needs, align with EOSC PID Policy and to maximise the uptake of good PID practices.

EOSC-A Opportunity Area: PIDs

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

- Initiated as part of EOSC Winter School 2024
- Meant to increase collaboration between EOSC projects
- One of six identified oppurtunity areas was PIDs
- Produced a report with a series of reccomendations

EUDAT & DICE project

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

EUDAT

Type: infrastructure

Status: ongoing

Vision:

Data shared and preserved across borders and disciplines.

B2HANDLE

Type: service

Status: ongoing

Features:

- Globally resolvable identifiers via the Global Handle Network (DONA)
- Communities and organisations can obtain Handle Prefixes (ePIC, 21.) for their own use
- PIDs can be hosted at EUDAT service providers
- B2HANDLE operates as a federation of EUDAT service providers based on policies
- PIDs are mirrored across multiple providers for high resolution and high availability
- Handle records can be customised to community and organisational needs (for example include checksums and timestamps to ensure authenticity of the data objects)
- Support for reverse look-ups of Handle records
- REST API for easy registration and minting of PIDs

DICE

Data Infrastructure Capacity for EOSC

Type: project

Status: complete

Objectives:

- Provide via the EOSC Portal state-of-the-art data services and significant capacity
- Integration of DICE offered data services with community platforms

FAIRsFAIR, EOSChub, & EOSCfuture

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

FAIRSFAIR Fostering Fair Data Practices in Europe

Supply practical solutions for the use of the FAIR data principles throughout the research data life cycle.

EOSC-hub

A single contact point for European researchers to discover, access, use resources for data-driven research.

EOSC Future

Building on the existing baseline for the EOSC to deliver a platform with a durable components, designed for the long haul.

The future of PIDs at SURF (& NRENS)

PiD fest CONFERENCE ON PERSISTENT IDENTIFIERS 2024

- Expanding PIDs across more experience levels, more domains and more entity types
- Increase initial support (“the first step is the hardest”)
- Integrating and aligning further within the organization (“eat your own dog food”)
- Organize and align nationally as well as supranationally
- Normalize adoption with rewards and policy