



PIDs for Software

June 30, 2025

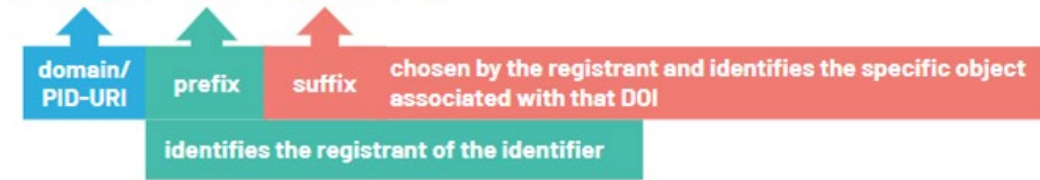
Current project team: Andreas Czerniak (UB Bielefeld), Barbara Fischer (DNB), Steffi Genderjahn (Helmholtz Association, Stephanie Hagemann-Wilholt (TIB), Antonia C. Schrader (Helmholtz Association), Paul Vierkant (DataCite), Frauke Ziedorn (TIB)

About Persistent Identifier (PIDs)

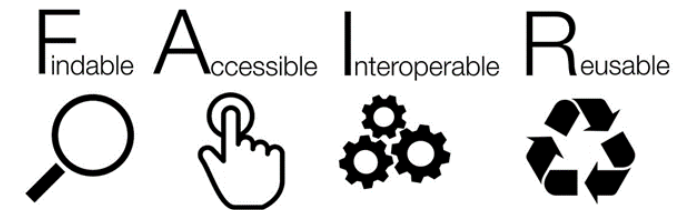


- **Unique, universal** alphanumeric **codes**
- **permanent** and **constant available** information about researchers, research institutions, funders, data, registrations, publications etc.
- **Linked to** descriptive information (**metadata**) about the resources.
- Enabling **FAIR research data management**

<https://doi.org/10.5061/dryad.708gr>



<https://doi.org/10.5281/zenodo.10665361>





The project

Funded by

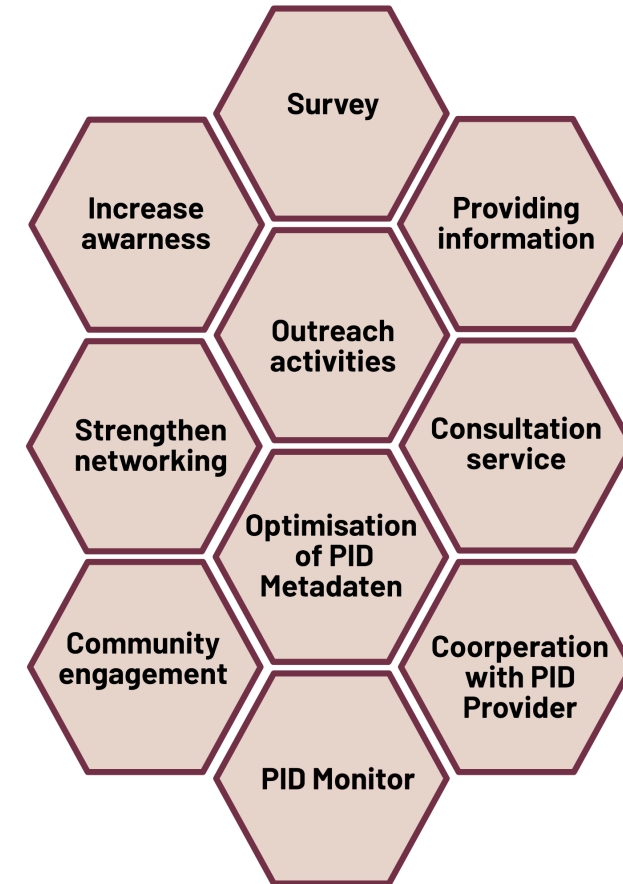


Deutsche
Forschungsgemeinschaft
German Research Foundation



Aims

- Establishing a network in science and culture
- **Promotion** and **standardization** of the use of persistent identifiers (PIDs)
- Emphasizing the importance of **PIDs as a tool** for uniquely identifying and linking digital objects in research and culture
- Support the **dissemination** and **linking** of PID systems and their **integration** into infrastructures
- Development of a **national PID roadmap**

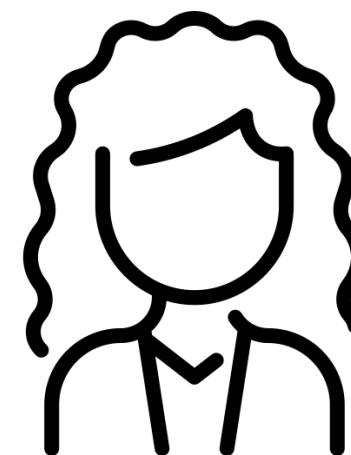


Ten use cases

Workshops focusing on application scenarios as well as opportunities and challenges in the use and integration of PIDs.

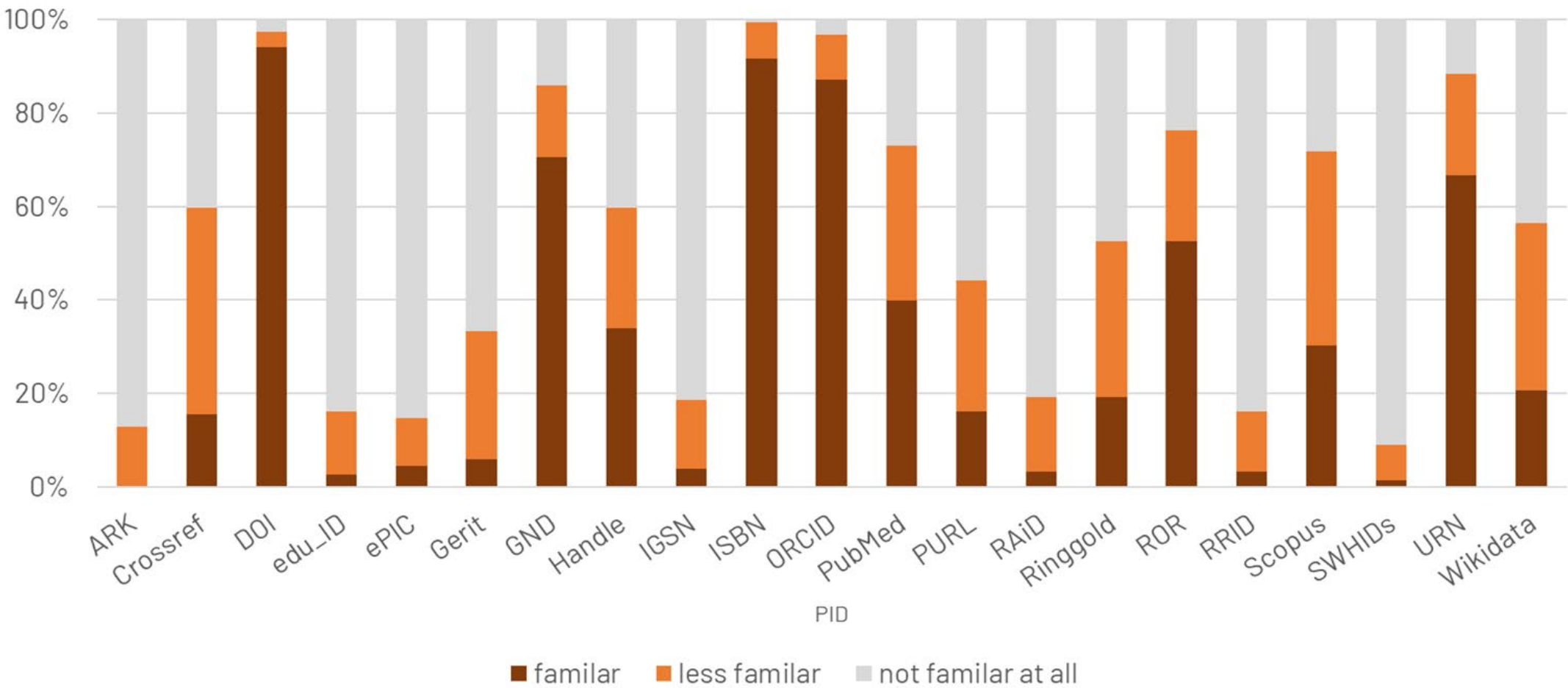


**PIDs for
organization &
projects**
15.09.2025
online





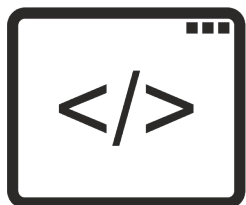
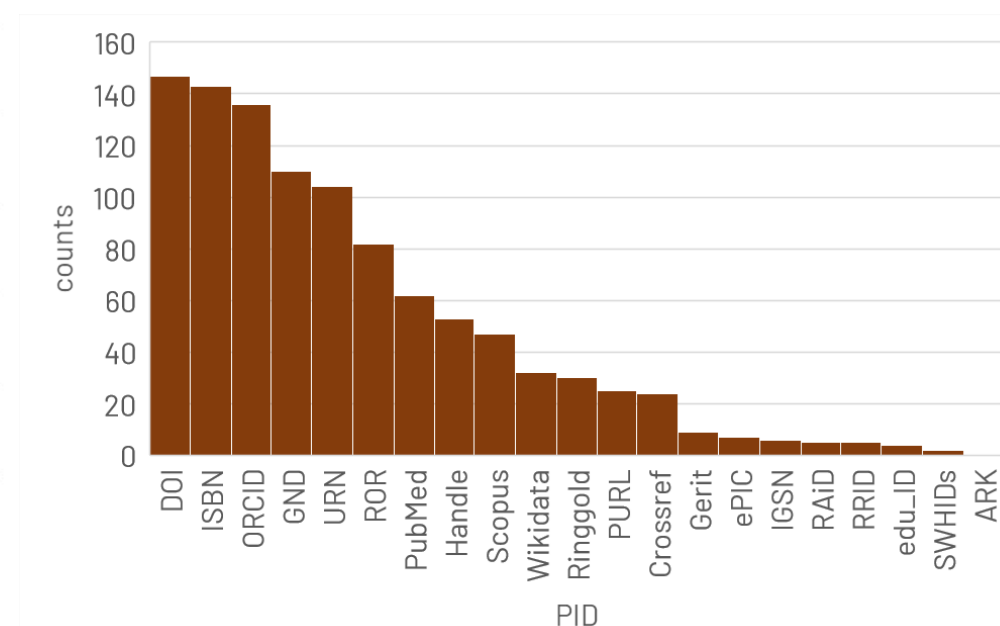
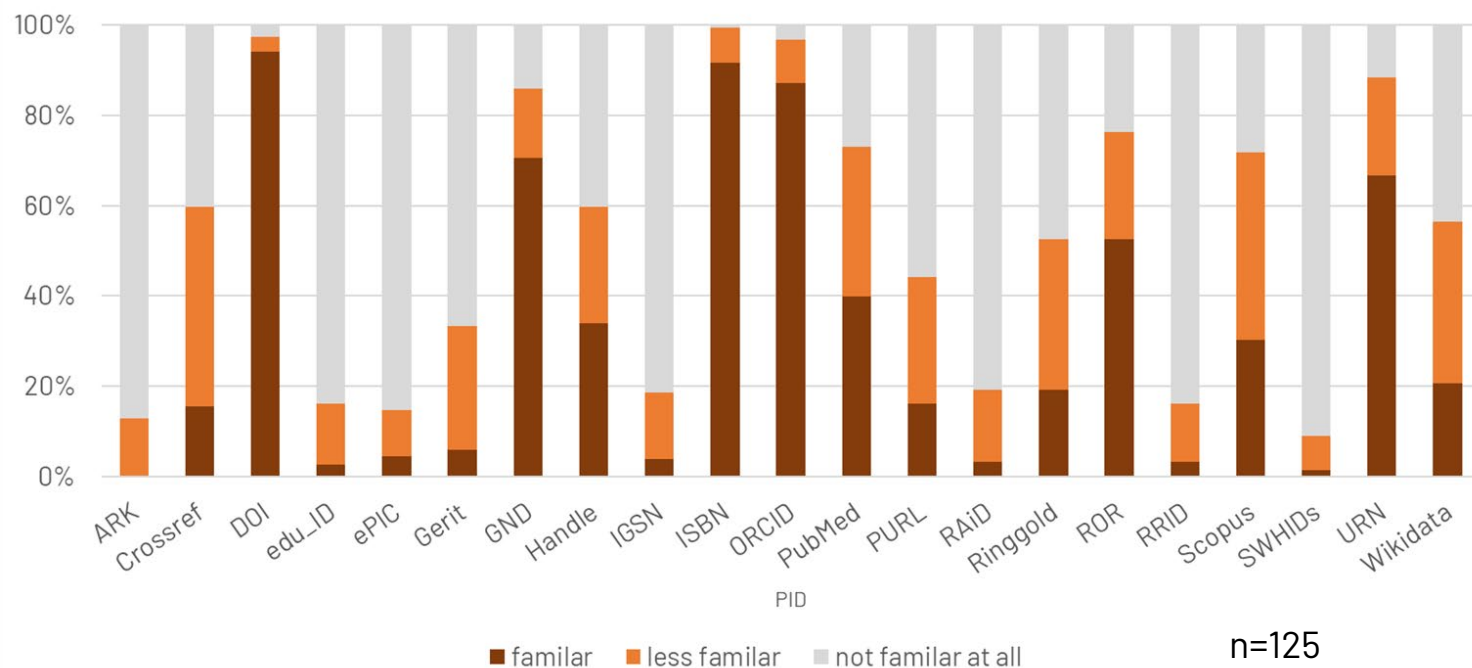
Survey results – Familiarity with PIDs



Survey period: March – May 2024
Target groups: Universities, universities of applied sciences, non-university and departmental research institutions
Sent to 500 organizations

n=125

Survey results – Familiarity with PIDs



ARK, DOI, Handle, SWHID, URN
For software



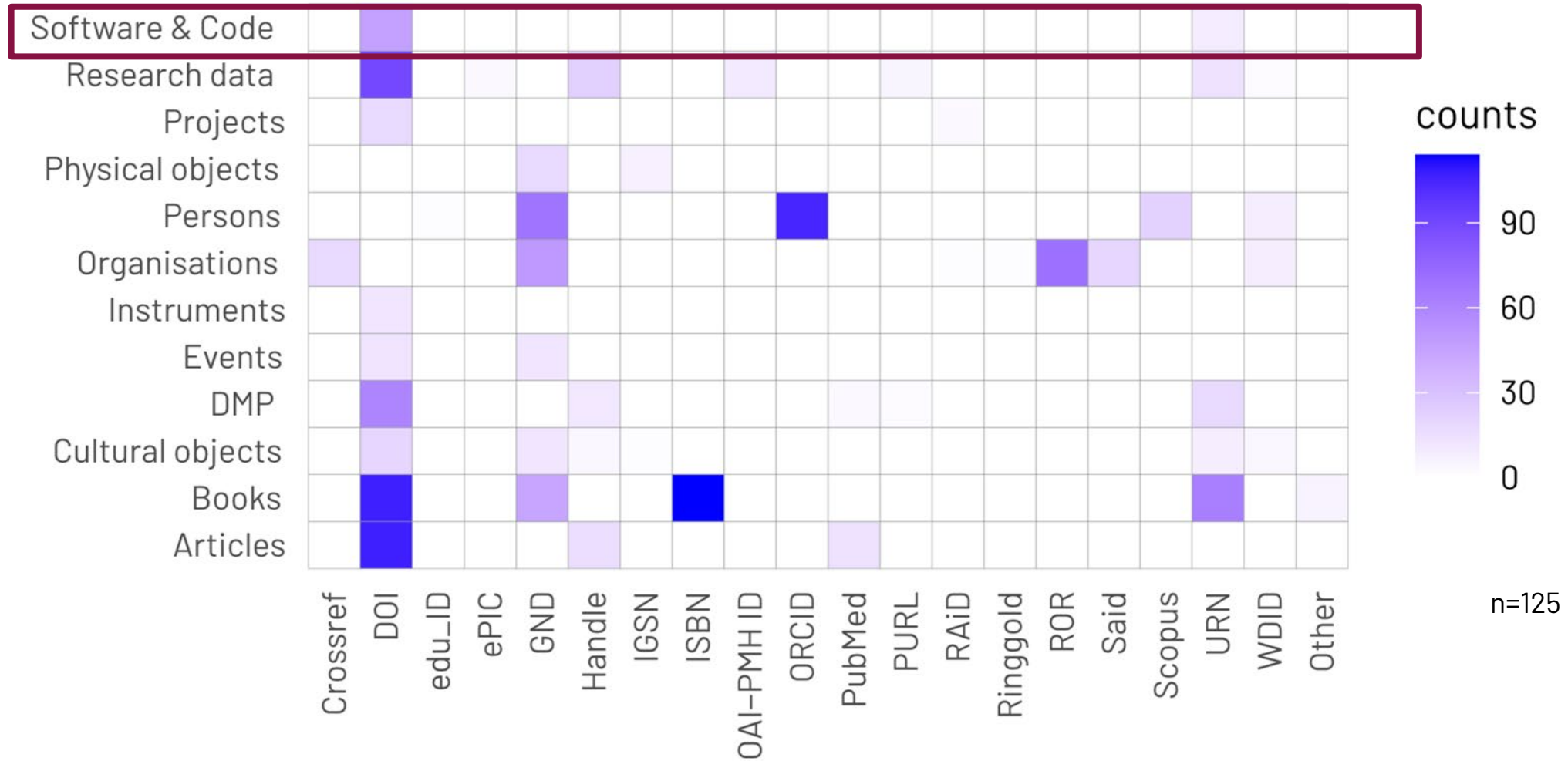
Best known: DOI, ISBN, ORCID



PIDs with a low level of awareness:
ARK, eduID, ePIC, IGSN, RAiD, RRID, SWHIDs



Survey results – Use of PIDs





Pre – Release of the PID Monitor

<https://pid-monitor.org/>

End of January

- Further development of the ORCID Monitor
- **Objective:** continuous monitoring of the dissemination of different types of PIDs in publication, information and research infrastructures
- **Data sources:** BASE search engine, the GND, DataCite, and ORCID
- Community feedback possible

Welcome to PID Monitor

The **PID Monitor** is intended to capture the use and distribution of persistent identifiers from different fields, provide analyses, such as ORCID iDs for people, DOIs for publications or research data. The database is currently being made from information from the search engine [BASE](#), the [GND](#), [DataCite](#) and [ORCID](#). The PID Monitor is being developed and operated by [Bielefeld University Library](#) as part of the DFG-funded project "[PID Network Deutschland](#)" from 2024 onwards.

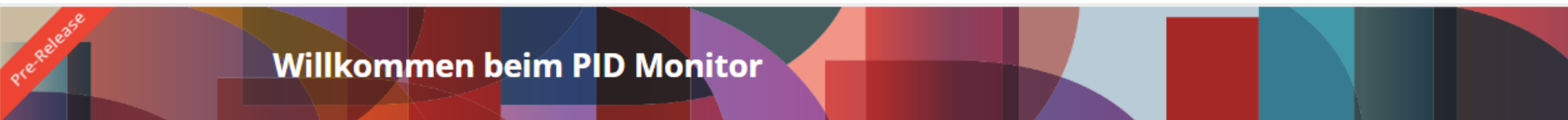
The PID monitor links the **PID type with the entity or the resource type** in order to derive a [PID class](#) from it, which is then assigned to the respective application division.

More about the [project](#) and persistent identifiers at <https://pid-network.de>.

Current development of research data sets in Germany

Research data sets in Germany (Provider: DataCite, PID type: DOI)





Sparten

- Datensätze >
- Instrumente >
- Kulturelle Objekte >
- Organisationen & Projekte >
- Personen >
- Physische Objekte >
- OA-Publikationsdienste & Forschungsinformationssysteme >
- Software >
- Textpublikationen >
- Veranstaltungen >

Datenquellen

- BASE >
- DataCite >
- DNB & GND >
- ORCID >



Der **PID Monitor** soll die Nutzung und Verbreitung von persistenten Identifikatoren unterschiedlicher Sparten erfassen, Analysen bereitstellen, wie zum Beispiel ORCID iDs bei Personen, DOIs für Publikationen oder Forschungsdaten. Die Datenbasis wird aktuell von Informationen der Suchmaschine [BASE](#), der [GND](#), [DataCite](#) und [ORCID](#) gebildet. Der PID Monitor wird von der [Universitätsbibliothek Bielefeld](#) im Rahmen des DFG-geförderten Projektes "[PID Network Deutschland](#)" ab 2024 entwickelt und betrieben.

Der PID-Monitor verknüpft den **PID-Typ mit der Entität bzw. dem Ressourcentyp**, um daraus eine [PID-Klasse](#) abzuleiten, welche anschließend den jeweiligen Anwendungssparten zugeordnet wird.

Mehr über das [Projekt](#) und persistente Identifikatoren unter <https://pid-network.de>.

Aktuelle Entwicklung von Forschungsdatensätzen in Deutschland

Forschungsdatensätze in Deutschland (Provider: DataCite, PID-Typ: DOI)

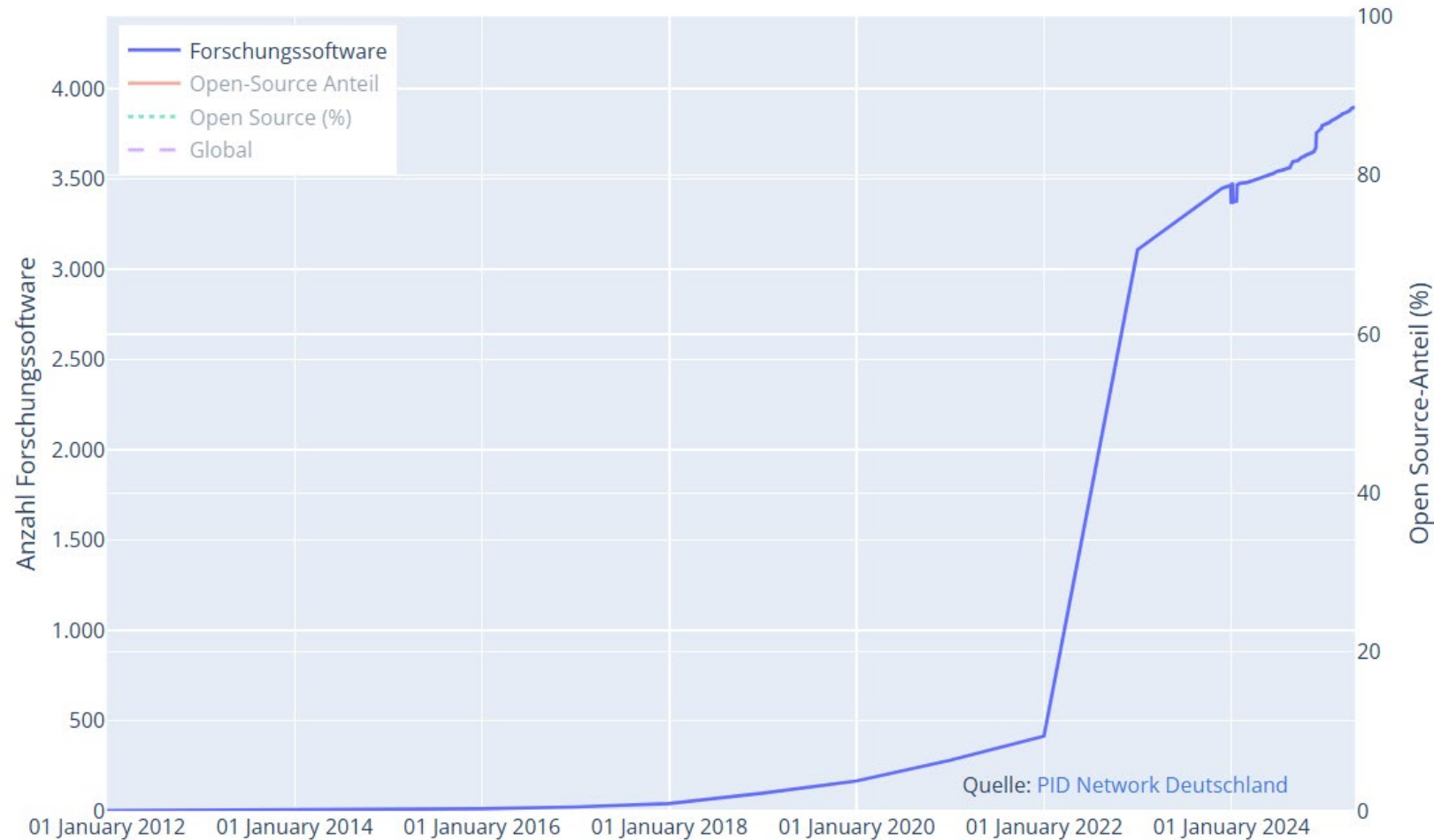


Forschungsdaten



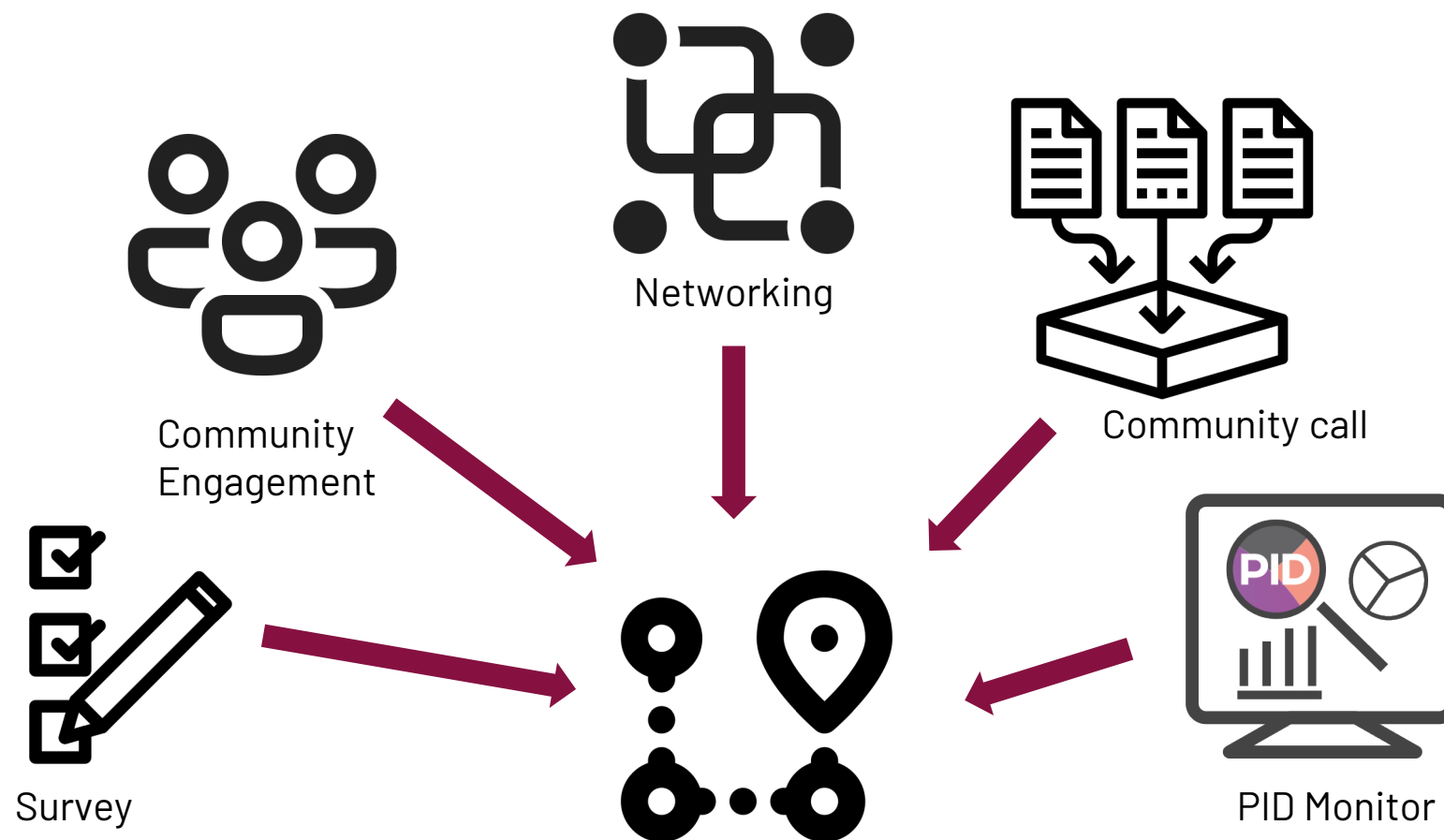


Development of research software (cumulative values)



This chart shows the extent of the use of DOIs for research software in Germany based on the public [DataCite API](https://datacite.org/docs/api)

What's next?

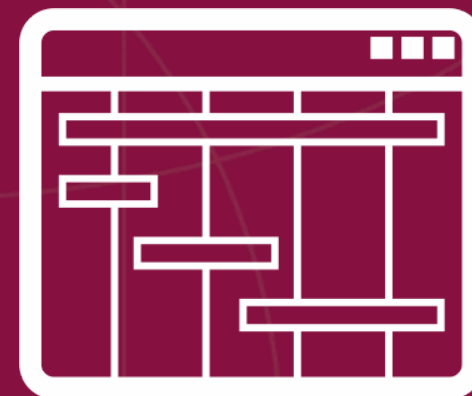


Development of a national
PID roadmap for Germany

Time	Title	Speaker
13:00	Welcome	Steffi Genderjahn Helmholtz Open Science Office
13:10	Research Software and PIDs for Discovery	Alexander Struck, Humboldt University of Berlin
13:25	Automating the creation of persistently identifiable software publications with HERMES	Stephan Druskat, German Aerospace Centre (DLR)
13:40	SoftWare Hash IDentifier (SWHID)	Morane Gruenpeter, Software Heritage
13:55	Interaktive Part	
14:20	Short break	
14:30	Software in The Integrated Authority File (GND)	Esther Scheven, German National Library (DNB)
14:45	Software publications from a DataCite perspective	Paul Vierkant, DateCite
From 15:00	Discussion	



Save the date
15.09.2025



Online Seminar
PIDs for Organisations and Projects

Thank you for your participation

Contact

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Mailinglist: [PID Dialog](#)

 openbiblio.social/@PIDNetworkDE

 linkedin.com/showcase/pid-network-de/

 pidnetworkde.bsky.social



DFG Grant number: [506475377](#)
Proposal <https://doi.org/10.48440/os.helmholtz.059>.

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