

An update from the Commission for Research Information in Germany-KFiD

The *FIS-Landkarte* portal and version 2 of the KDSF standard

euroCRIS Membership Meeting 2025 – Leuven, Belgium – May 13-15, 2025

Agenda

- Background: The German science system
- The Commission for Research Information in Germany (KFI)
- The KDSF standard and its re-design (version 2.0)
- The *FIS-Landkarte* portal: mapping the research information management structure and dynamics in Germany

Governance in the German science system

- Decentralized governance of the university sector
 - 16 *Länder* → 16 Higher Education Acts
 - 88 public universities, 101 public universities of applied sciences
- Non-university research organizations jointly funded by the Federal Government and the *Länder* (84 Max-Planck institutes, > 70 Fraunhofer institutes, 18 Helmholtz research centres, 96 Leibniz institutes)
 - Different requirements and needs for reporting towards governments and funding bodies, different target agreements, evaluation and controlling procedures → different needs for CRIS
 - No overarching evaluation scheme or reporting of research information

Governance in the German science system

- German Science and Humanities Council (WR)
 - Science policy advisory board to the federal and *Länder* governments
 - Focus: content and structural development of science, research and higher education
 - Board: Scientific Commission and Administrative Commission; decisions to be taken in plenary assembly and published in the form of recommendations after intensive consultations (in working groups, committees and commissions)
 - Instrument of cooperative federalism: between science and politics and between the federal government and the states

The KDSF standard and the KFiD

- 2016: German Council of Science and Humanities recommends the implementation of the newly developed KDSF (1.0), a voluntary reporting standard that specifies
 - what research information should be exchanged between those who own the information (i.e. research-performing organisations) and those that request research information (i.e. and funding organisations, statistical offices, ranking organisations, evaluation agencies etc.) and
 - how these (aggregate) data and indicators are being defined.
- Lack of a basic data model, i. e. a model specifying what and how research information should be collected and processed in institutional CRIS systems

The KDSF standard and the KFiD

- 2016 – 2019: implementation / pilot phase for the KDSF standard
 - euroCRIS Strategic membership meeting, Nov 2019, Münster
- 2020: evaluation of the KDSF (1.X) by the German Council of Science and Humanities
 - Recommends the professionalization of RIM throughout the German science system
 - Recommends the KDSF as a tool to support RIM
 - Recommends the establishment of the Commission for Research Information in Germany (KFiD)

- Founded in 2021
- Responsible for developing and establishing the **KDSF standard** for research information in Germany
- Supporting the professionalization of research information management in Germany



1. Re-designing the KDSF (2022 – 2024) → *KDSF 2.0*

- a model of research information entities (basic data) and specifies how these entities and their attributes are defined and linked and
- suggestions for KDSF-compatible information queries (i.e. the KDSF reference queries)
- mappings between the KDSF and different use cases / classifications (e.g. reporting for official statistics)

2. Strengthening the use of PIDs, data services, mappings

3. Monitoring the CRIS landscape in Germany: the *FIS-Landkarte* portal

KDSF 2.0*



▼ Förderung

▼ Identifikator (Förderung)

▼ Identifikator

▼ Typ des Identifikators

▼ Förderkennzeichen

▼ Art der Förderung

▼ Fördersumme

▼ Einnahmen/Erträge nach Jahr

▼ Einnahme/Ertrag

▼ Jahr

▼ Förderorganisation

▼ Gefördertes Projekt

▼ Geförderte Publikation(en)

* <https://kerndatensatz-forschung.de/> (in German)

KDSF 2.0 and beyond

Strengthening the use of PIDs

■ KDSF 2.0 recommends the use of PIDs

▼ Projekt

^ Identifikator (Projekt)

KDSF-ID: KDSF-B-2-1

Erfassungshinweis ▼

Entitätstyp: Mehrwertiges Attribut

^ Identifikator

KDSF-ID: KDSF-B-2-1-A

Entitätstyp: Text

^ Typ des Identifikators

KDSF-ID: KDSF-B-2-1-B

Entitätstyp: Auswahl aus Liste ^

Liste komplett anzeigen 🔍

Liste Kurzform anzeigen ^

- Interner Identifier
- DFG-Projektnummer
- DFG-Geschäftszeichen
- Research Activity Identifier (RAID)
- Sonstiges

▼ Publikation

▼ Identifikator (Publikation)

▼ Identifikator

^ Typ des Identifikators

KDSF-ID: KDSF-B-8-1-B

Entitätstyp: Auswahl aus Liste ^

Liste komplett anzeigen 🔍

Liste Kurzform anzeigen ^

- Digital Object Identifier (DOI)
- Uniform Resource Name (URN)
- Uniform Resource Locator (URL)
- Uniform Resource Identifier (URI)
- International Standard Book Number (ISBN)
- International Standard Serial Number (ISSN)
- International Standard Music Number (ISMN)
- DNB-ID
- PubMed-ID
- PubMed Central-ID
- Scopus-EID
- CrossRef-ID
- Web of Science-ID
- OpenAlex-ID
- Sonstiges

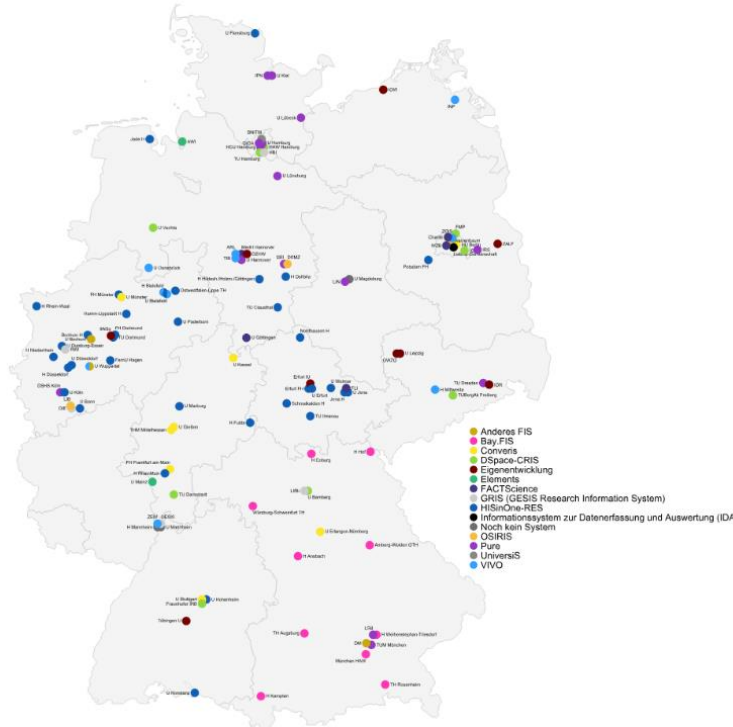
KDSF 2.0 and beyond

Mappings and data services

- **The data model of the KDSF 2.0 will be formalised and mapped with the (newly refactored) CERIF standards**
- **KDSF 2.0 will include data services**
 - **ORAP (Open Registry for Awards and Prizes / Offenes Register für Auszeichnungen)**
 - Curated list of prizes and awards with relevant metadata (IDs, awarding organization, award type, research field, amount of funding/prize money, restrictions etc.)
 - (Planned) features:
 - Building up a community: new records, updating existing records
 - Landing page with metadata for each record (“Sofja Kovalevskaja-Preis”) with a permanent URL
 - Export of prize/award lists
 - Registry search and filter options
 - API for CRIS integration

FIS-Landkarte portal*

Monitoring



- **FIS-Landkarte as a new information service and networking platform provided by KFiD and partners**
 - Users can set up their own account and register their institutional CRIS
- **What kind of systems are registered?**
 - Institutional database and information systems at the level of whole organizations
 - Systems allowing structured collection, processing, analysis and presentation of research information

https://kfid-online.de/fis_landkarte_visual/index.php

(in German)

FIS-Landkarte portal

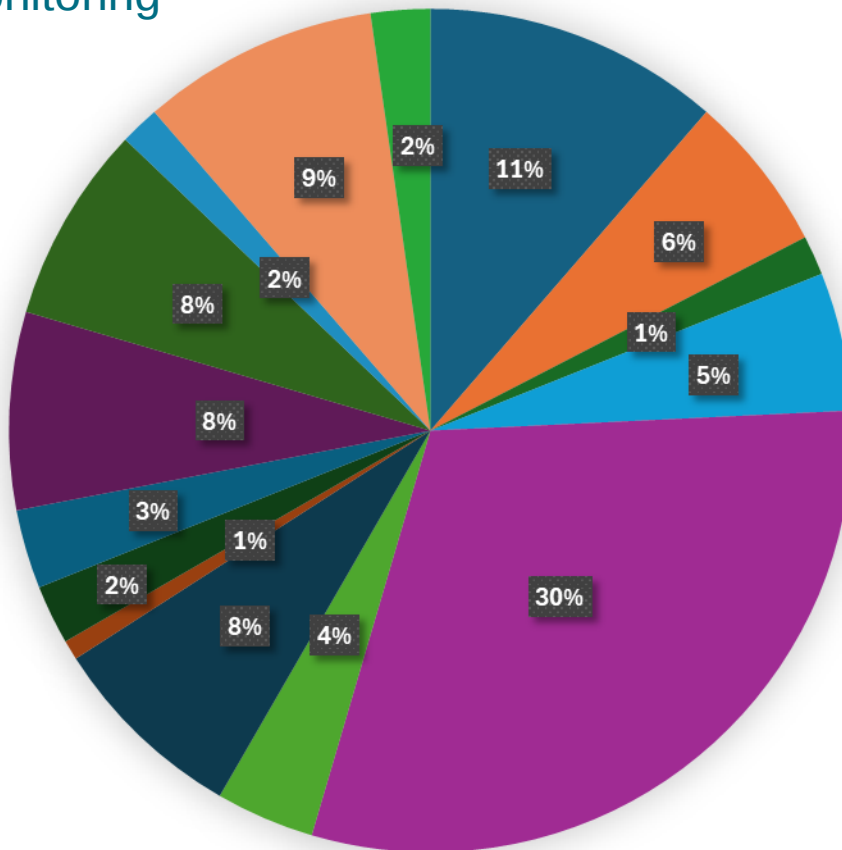
Monitoring

- Who uses which type of system for which purpose?
- Who are the early and late adopters?
- Which systems are used the most?
- Market dynamics: Share of commercial and open source systems
- Organizational/geographical patterns in CRIS use
- What kind of information is registered in CRIS?
- How well can systems account for the KDSF standard in their data models?

FIS-Landkarte portal

Monitoring

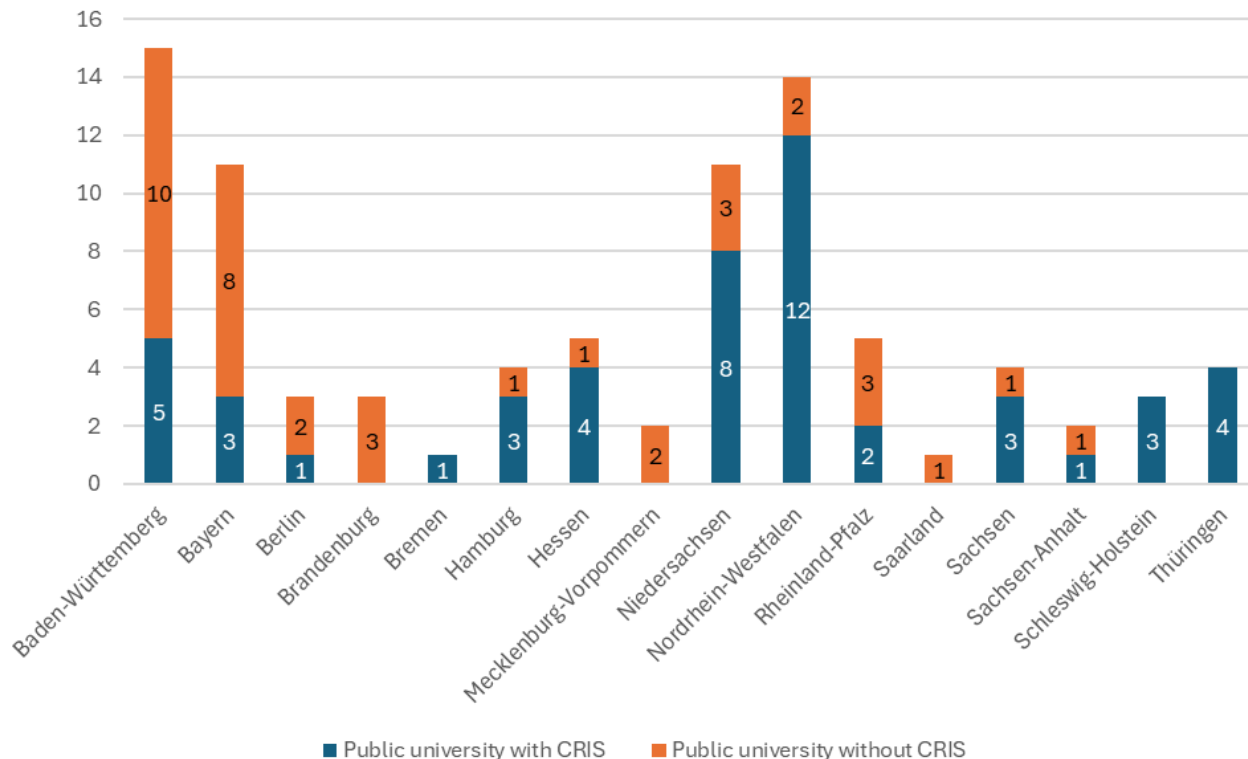
Number of
registered
entries (n = 132)



- Pure
- Converis
- Elements
- FACTScience
- HISinOne-RES
- GRIS (GESIS Research Information System)
- Bay.FIS
- IDA
- OSIRIS
- UniversiS
- DSpace-CRIS
- VIVO
- Other software
- In-house software
- No system yet

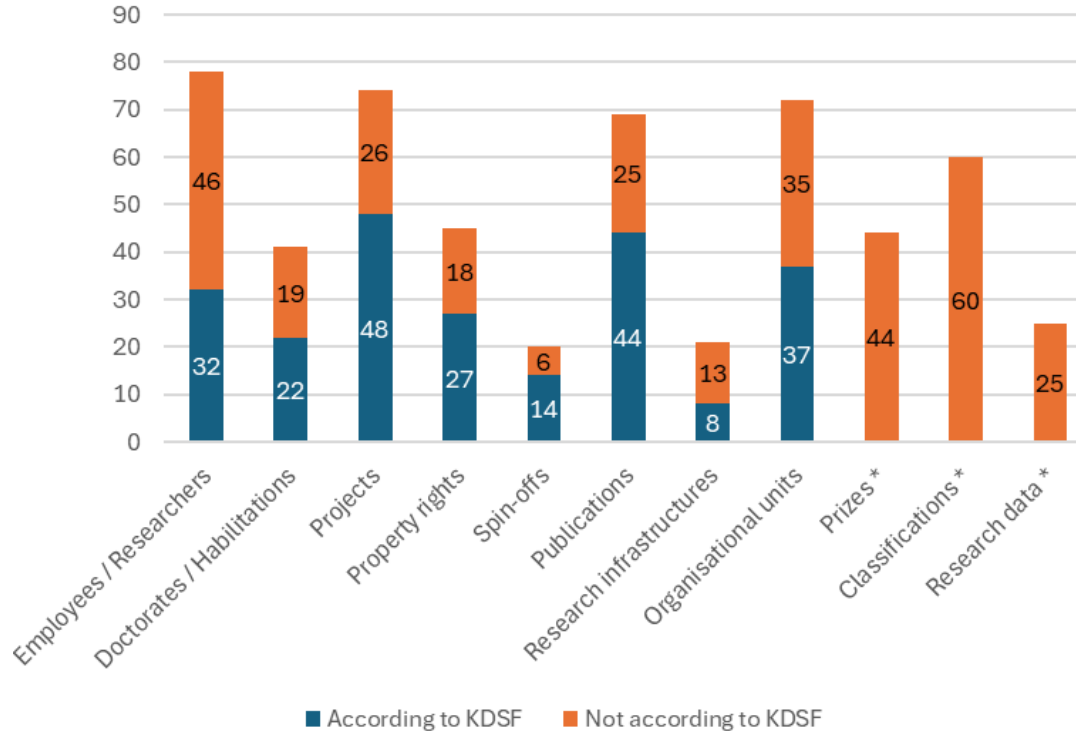
FIS-Landkarte portal

Monitoring



FIS-Landkarte portal

Monitoring



Research information covered by CRIS – number of universities

- based on CRIS registered by public universities and public universities of applied sciences (n = 93)

* Option „according to KDSF“ is not available

FIS-Landkarte portal

Next steps

- Synchronisation of information with the euroCRIS DRIS
- Gradual extension to become a full information portal on research information and CRIS
 - Information on the legal regulation of CRIS/RIM (in Germany)
 - Legal expertise (e.g. on the data protection compliance of the KDSF data model)
 - Information on relevant initiatives, networks or programmes
 - ...
- Networking functionalities for registered users



Thank you for your attention

Questions? Get in touch!

Dr. Sophie Biesenbender
Geschäftsstelle der KFiD

Kommission für Forschungsinformationen
in Deutschland

Schützenstraße 6a | 10117 Berlin

biesenbender@kfid-online.de
www.kfid-online.de