

MORIS – Modular Open Research Information System for the Applied Sciences

Section 1 – Applicant(s)

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| Section 2 - Summary | | |
|------------------------------|---|--|
| Proposed project title | MORIS - Modular Open Research Information System for the Applied Sciences | |
| Project type | Large | |
| Project duration (in months) | 48 months | |



Section 3 – Project description

3.1 Alignment of your project with the aim of the call

The Universities of Applied Sciences (n=36) have collectively endorsed the Open Science Ambition, accelerating efforts to make research processes more transparent and research outputs openly available for reuse. An example of this progress is <u>Publinova</u>, a platform launched in 2023 to showcase practice-based research for a broad audience. Nevertheless, considerable variability remains among institutions regarding the quality, completeness, and openness of research information that is required for **steering**, **reporting** and **discoverability**.

Aligned with the principles of the <u>Barcelona Declaration</u> on open research information, the proposed Modular Open Research Information System (MORIS; see image 1 below) strengthens **digital sovereignty** by allowing institutions to control their own research information, reducing dependency on proprietary platforms that may limit transparency and result in black-box decision-making. MORIS integrates information from existing components using open standards, enabling alignment across institutions and facilitating efficient information exchange relevant to research, education, and industry. This modular approach respects institutional differences and provides a customizable, scalable solution for institutions of varying sizes, as each institution can integrate the modules that they deem relevant provided they adhere to the community standards.

A core module of MORIS focuses on projects and serves as a nexus that connects researchers, funding, organisations, and the variety of outputs— ranging from scholarly publications to datasets, industry reports, policy briefs, prototypes, to educational resources—generated during projects. Shifting to a project-centric view promotes transparency by recognizing all stages of the research process, beyond merely final outputs.

By linking research information within and across institutions, the latter through Publinova, MORIS aims to advance the impact of research, offering better tools to aid in evaluating impact, fostering reuse, and promoting collaboration with education, industry and public sector partners. At the institutional level, MORIS offers increased operational efficiency, reduced administrative burden, higher-quality research information, and improved monitoring and reporting, particularly for Open Science initiatives. MORIS will also support greater international visibility through alignment with platforms like OpenAIRE and EOSC, better embedding applied sciences research within the global Open Science ecosystem.

3.2 Project plan

The project is structured into the following work packages (WPs):

WP 1 - User-driven integration

Objective: To integrate existing services, tools, and repositories based on user stories, enabling a central viewpoint on project-related information that connects researchers, funding, organizations, datasets, software, and other research output

Activities: We will take an iterative approach to the development of MORIS starting with the integration of two of the most common modules and slowly extending functionalities to other use cases. The following activities are foreseen to reach a minimal viable product within the scope of the project:

- Develop a metadatahub (MORIS) that integrates information from existing components based on key use cases;
- Establish connections between MORIS and relevant PID services (ORICD, RAiD);
- Integrate repositories like SURFsharekit to enable automatic linking of research outputs to UAS projects;
- Test and validate the integrated system through pilots with select UAS.

Deliverables: Central datahub, Integration with PID services, Integration with repositories

WP 2 - Flexible Data model, Standards, OR-API

Objective: To develop a data model and a set of open metadata standards for MORIS. This will include the development of an Open Research API that enables seamless integration with existing infrastructures, including exchange to Publinova and OpenAIRE.

Activities:

- Establish agreements, standards and protocols to ensure consistent information exchange across all integrated



components. Here we build on the recommendations in this report;

- Develop a flexible Data Model for MORIS based on common use cases;
- Develop an Open Research API that supports interoperability with existing services (i.a.., Publinova, SURFsharekit, ORCID, RAID, ARGOS, DSWizard, DataverseNL, Research Software Directory);
- Create comprehensive documentation covering API usage, metadata standards, and integration protocols.

Deliverables: Data Model, Open Research API, Standards and protocols documentation through EduStandaard

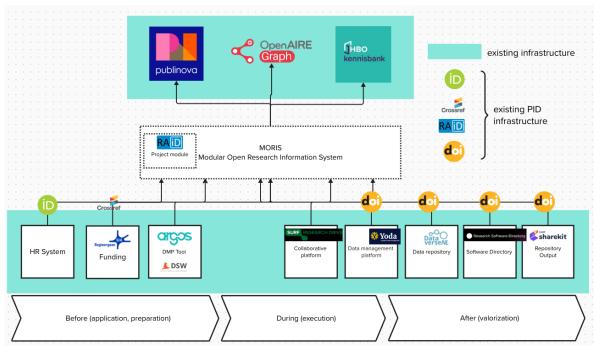


Image 1 Vizualization of the architecture showing optimal use of existing infrastructure and integration with (inter)national platforms

WP 3 - Sustainable business model and governance

Objective: To develop a sustainable business model and governance framework to ensure long-term viability, funding, and management of MORIS.

Activities:

- Establish a governance structure that represents all stakeholders, defining roles, responsibilities, and decision-making processes for managing the system;
- Develop a business model that addresses cost-sharing, service-level agreements (SLAs), and maintenance based on the Lifecycle Product Development approach used by SURF
- Ensure alignment with related developments (e.g. ORI program (SURF), and the DURF, BROCCOLI, and Researcher Journey Framework pre-proposals)

Deliverables: Sustainable business model proposal including SLAs, Governance framework document, financial business case

3.3 Team composition

The MORIS project is a collaborative effort, developed with the <u>DCC-PO</u>, a powerful platform for collaboration within the UASs as evidenced by previous products, handouts, trainings and events. With this project we are building on that foundation, focusing on collaboration between universities of applied sciences and external parties such as SIA, ZonMW and Publinova.

- WP 1: Eileen Waegemaekers (project lead ORI, SURF) work package lead
- WP 2: Edwin Castelein (architect, HAN) work package lead
- WP 3: Leon van Ekeren (project lead, DCC-PO) work package lead

We have received commitment on this proposal from the following Universities of Applied Sciences: NHL Stenden, Windesheim, Hogeschool Leiden, Hogeschool Rotterdam, Aeres, Hogeschool Utrecht, Fontys, Zuyd, HAN, Saxion



Section 4 – Budget

| Type of costs | Short explanation (budget over 4 years) | In kind (SURF) | Costs |
|------------------------|---|----------------|-------------|
| Personnel costs | Project coordinator (0,4 FTE) | € 62.720 | € 217.280 |
| | Information architect / metadata specialist (0,2 FTE) | € 31.360 | € 119.840 |
| | Community manager (0,1 FTE) | | € 68.800 |
| | Data engineer (0,2 FTE) | | € 165.120 |
| | Work package leads (3 x 0,2 FTE) | | € 412.800 |
| | Implementation managers (at the participating institutions) | | € 250.000 |
| Other costs | Training and communication | | € 5000 |
| | Contractors (e.g. developers, UI / UX) | | € 100.000 |
| | IT Costs (e.g., cloud storage, licenses) | | € 75.000 |
| | Travel costs | | € 10.000 |
| | Unforeseen | | € 50.000 |
| Total in-kind | In-kind contribution by SURF | € 94.080 | |
| Total request from NWO | | | € 1.473.840 |

Section 5 – Declaration

By submitting this form, I declare that:

- I and all the individuals involved in this proposal satisfy the nationally and internationally accepted standards for scientific conduct as stated in the Netherlands Code of Conduct for Research Integrity (The Universities of the Netherlands).
- The research organisation has been informed of this grant application and the research organisation accepts the grant conditions of this programme.
- I have completed this application form truthfully.

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