

Piloting the use of RAiD in research.fi

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[Research.fi](#) is a national service for collecting, integrating and disseminating information on research conducted in Finland. This includes information on publications and related research outputs (including in the arts), datasets, funding decisions and research infrastructures (Suominen & Rydman, 2021). There is a specific section for researcher profiles, focusing on researcher descriptions, their research activities, merits, education - moving towards an affiliation independent research CV of sorts (Nikkanen & Puuska, 2022). Research.fi also collects information on research news and open funding calls and hosts statistical information on the development of research resources and impact on a national level.

The Research.fi service includes information on projects, but at the moment this is synonymous to positive funding decisions. The biggest research funders in Finland, i.e. [Research Council of Finland](#) and [Business Finland](#), as well as [many private research funding foundations](#) provide information on their funding decisions. In addition, information on the funding received by Finnish organisations from the Horizon2020 and Horizon Europe framework programmes is being imported from the European Commission's Community Research and Development Information Service (commonly known as [CORDIS](#)). The plan is that within the Research.fi service, projects will become entities that bind many research objects together and can be funded by several funding decisions, involve various researchers and organisations over different periods of time.

As a first step in realising this plan, Research.fi takes over the content of a legacy repository on research projects from 'Projectnet'. Projectnet was a service that collected information about research projects focusing on natural resources from six Finnish research organizations. The information was either harvested from their websites or transferred directly from the organizations' databases. All in all the Projectnet service collected over 12 000 descriptions of research projects between 2008 and 2023.

As a second step, Research.fi will pilot the Research Activity identifier (RAiD) (ISO 2022) as part of an EU-funded project [FAIRCORE4EOSC](#). The RAiD service, developed originally by [ARDC](#) in Australia, is being adopted for the European context in the project. RAiD provides persistent, unique and resolvable information for research projects. Minting persistent identifiers for research projects allows managing information about project-related participants, services and outcomes. RAiD also collects related identifiers as well as descriptive information about the project, and stores them in an editable metadata record associated with the identifier.

The aim of piloting RAiD is first of all to gain insights on how this type of identifier could work in the context of Research.fi. Some of the main challenges in adopting RAiD on a national level will be charted, and at the same time possible process improvements to make it more palatable to local stakeholders will be considered. In the piloting, an adoption plan is drafted using a set of Projectnet-data as a case example. Projectnet-data offers a glimpse into the information that organizations already collect on their research projects and it can therefore be used in defining a basis of what a project means and what sort of project information can ideally be collected in the Finnish context. For example, the RAiD data model makes a clear distinction between project funding and project activities, thereby facilitating project reporting, which is often required as a condition for funding. From a funder perspective, adoption of RAiDs for funded projects enables future impact analysis at the level of funding calls and funding policies.

Projectnet-data constitutes basic information about the research projects such as the name and duration of the project and identifierless information about organizations and people related to the project. It also includes abstracts and descriptions of project goals and results, non-controlled keywords and identifierless information about partners and funders to a varying degree.

In the pilot, the [RAiD datamodel](#) is used as a basis for designing a datamodel for research projects in Research.fi while expanding the Research.fi model to better cater to the needs of Projectnet-data and Finnish research organisations. The RAiD datamodel offers a basis on how to handle a project entity that mainly comprises of different related entities and changes in the project structures. Broadly, the RAiD metadata scheme facilitates documentation of project funding, participants, resources (such as data sets, infrastructure etc. used in conducting a research project) and wide range of outputs (such as datasets, published outcomes, software, etc.). The RAiD model being versatile it can also function as a basis for determining what information should be mandatory in the Research.fi model. Furthermore, RAiD is a multi-actor object that enables different levels of administrative access for different project roles, thereby also enabling flexibility in how and by whom project information is managed.

Using legacy data that has originally been harvested to cater the needs of a different service in piloting RAiD does cause some challenges. It is obvious that persistent identifiers are the key to creating project entities capable of transforming over time and linkages between objects. However, Projectnet-data lacks persistent identifiers. Some challenges can be solved by manual labour, such as adding identifiers for organisations involved in the projects, but unfortunately people involved in the projects are only recorded by their names, and this leads to being unable to fulfil the requirement of identified contributors for RAiD.

The piloting of RAiD is still a work in progress, with efforts being made to solve the challenges faced so far in deploying RAiD in Finland and with attention towards identifying opportunities for optimizing project information practices that align with Finnish project analytics priorities. To ensure optimal resolution of challenges faced, the Research.fi works in collaboration with the RAiD registration authority, ARDC, and the in-progress RAiD Registration Agency for Europe at SURF. The team doing the work described in the paper is confident that sharing the challenges they face as well as the solutions they find are of interest to the wider CRIS community.

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