

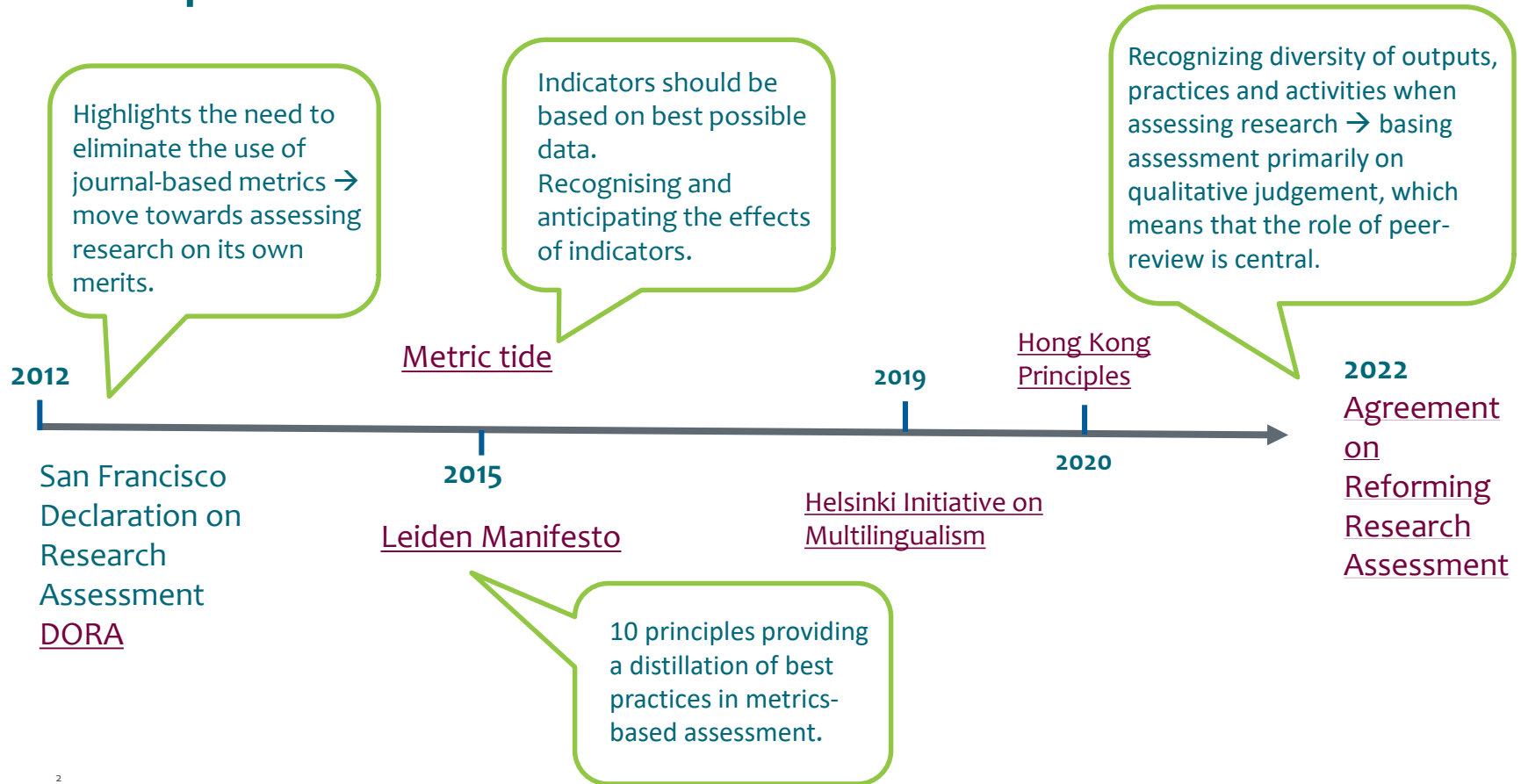


Responsible research assessment principles for research information management

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Responsible research assessment



Responsible research information management

Research information has a role in ensuring responsibility

- reliability, comprehensiveness, comparability
- expertise in processing data, enabling responsible use
- practices and tools for using data

Presenting research information in a responsible way

Always consider:

- is the information relevant
- is the trouble of collecting information proportional to the benefits
- can presenting information cause unintended negative consequences

DATA

Openness and transparency

Allow those evaluated to have access

Base metrics on the best possible data in terms of accuracy and scope

INDICATORS

Abandon inappropriate uses of journal- and publication-based metrics

Avoid misplaced concreteness and false precision

Underpin indicators by an open and interoperable data infrastructure

Account for variation by field



Research information management in RRA principles (*)

INFORMATION CONTENT

Recognize diversity of activities and practices

Consider a broad range of indicators (also qualitative!)

Protect excellence in locally relevant research (vis-à-vis existing bias towards English-language publications)

SYSTEMIC LEVEL

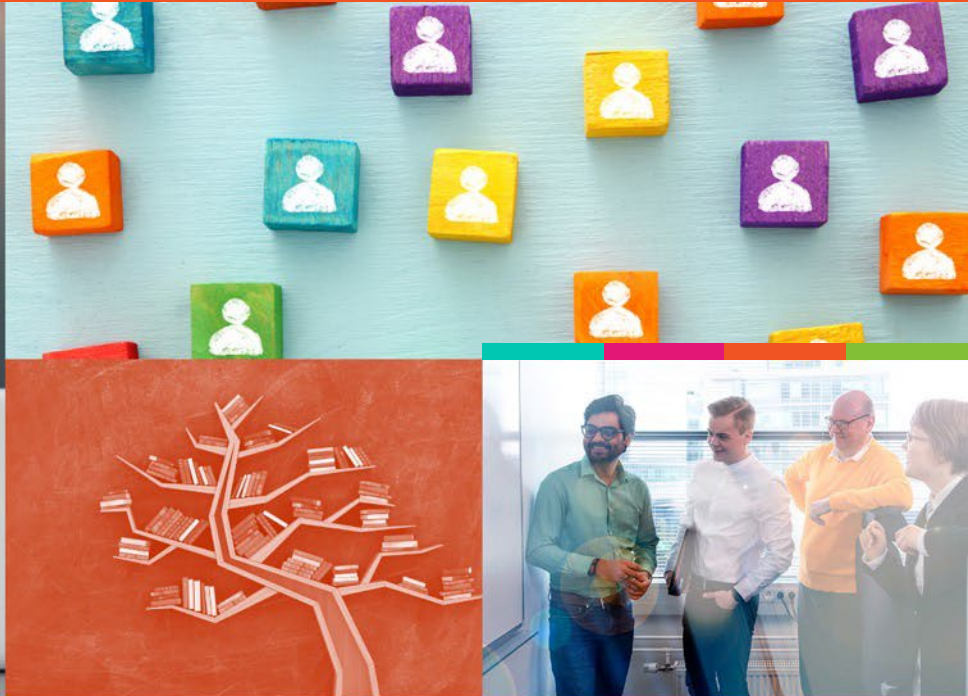
Recognize and anticipate the systemic effects of assessment and indicators

Making systems used by HEIs, RFOs and publishers more interoperable

Harmonize definitions of research-related concepts

Ensure control and ownership by the research community over critical infrastructure and tools

Examining RRA principles in a CRIS: case Research.fi



GraspOS: Next generation research assessment to promote open science



Supporting the merging policy reforms and paving the way towards an open science aware responsible research assessment system.

Aims at developing, assessing and operating an open and trusted federated infrastructure for next generation research metrics and indicators, offering data, tools, services and guidance *for real-world assessment needs*.

➤ A user-centred approach to development: *Nine pilots conducted to ensure that metrics and indicators are created for specific needs, not the other way round*



1/2023 – 12/2025

2 985 M€

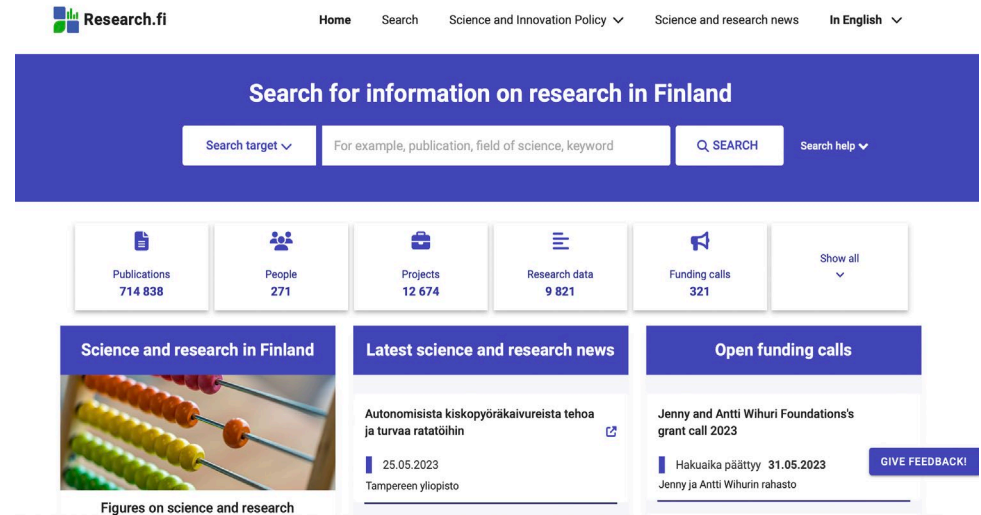
18 partners, from 10 countries



Research.fi is one of the pilots

Introduction to Research.fi

- The National Research Information Hub (= Research.fi) project was launched in 2017
- Owned and financed by the Ministry of Education and Culture, implemented by CSC – IT Center for Science Ltd.
- Information is publicly and freely available in www.research.fi launched in 2020



The screenshot shows the Research.fi website interface. At the top, there is a navigation bar with the Research.fi logo, a Home link, a Search link, a Science and Innovation Policy dropdown menu, a Science and research news link, and an In English dropdown menu. Below the navigation bar is a large blue search bar with the text "Search for information on research in Finland". Inside the search bar, there is a "Search target" dropdown menu, a search input field with the placeholder text "For example, publication, field of science, keyword", a "SEARCH" button, and a "Search help" dropdown menu. Below the search bar is a row of six white boxes with blue icons and text: "Publications 714 838", "People 271", "Projects 12 674", "Research data 9 821", "Funding calls 321", and "Show all" with a dropdown arrow. Below this row are three main content sections: "Science and research in Finland" with a photo of an abacus, "Latest science and research news" with a headline "Autonomisista kiskopyöräkaivureista tehoa ja turvaa ratatöihin" dated 25.05.2023 from Tampereen yliopisto, and "Open funding calls" with a headline "Jenny and Antti Wihuri Foundations's grant call 2023" with a deadline of 31.05.2023 and a "GIVE FEEDBACK!" button.

Research.fi collects and disseminates information on Finnish research and its outputs

- All information is harvested from external sources – no manual input
 - comprehensiveness and timeliness of the information depends on the organizations providing the information, each organization is responsible for the accuracy of its own information
- Supports the highly decentralized landscape of systems (e.g. CRIS systems, domain-specific services, funders' systems, etc.)



Information type / Research output	Information sources
Publications	Research organizations
Funding decisions / grants	Funders
Open funding calls	Funders
Research data	Research organizations, institutional and national data services and repositories
Research infrastructures	Research organizations, infrastructure providers
Research news	Research organizations, funders, and other research supporting organizations
Research organisations	Research organizations
Researchers and other research activities, research projects	Research organizations, researchers, ORCID

Research.fi as a pilot case for GraspOS

First task of the pilots is to conduct an analysis to describe the current status of their research evaluation aims, context and resources:

- pilots' local state of affairs in terms of open science and research assessment
- evaluation context
- pilots' ambitions in regard to developing new ways of evaluating open science.

All pilots are to examine their current activities as well as future ambitions **in the context of responsible research assessment.**

Research.fi is not an evaluation tool, principles of RRA are still relevant:

- Disseminating information carries a responsibility to ensure it is presented appropriately
- Research.fi enables monitoring, which is a close relative to evaluation.

Analyzing Research.fi

1. Research.fi's local state of affairs in terms of open science and research assessment
 - workshop with people responsible for the maintaining and developing of Research.fi
2. Research.fi's evaluation context and ambitions in regard to developing new ways of evaluating open science
 - workshop with the stakeholder community represented by the Steering Group of Research.fi



What does OS aware RRA mean?
What are the relevant policies, guidelines, etc. referring to OS and/or RA?
Where is OS and/or RA defined?
What is currently missing in terms of tools, services, data, indicators, etc..?



Who are the intended stakeholders, audiences, beneficiaries? What is their influence?
Should OS be considered more diversely in Research.fi? If yes, why and how?
What are the anticipated challenges?

Preliminary results: challenges of research information management vis-à-vis RRA principles 1/2



- All information comes from external sources, it is not curated by Research.fi before dissemination
 - In case of publications the information is accurate and comprehensive (Ministry uses publication data as basis for funding), but for the rest of the information this is not the case.
- Lack of comprehensive information is a challenge to search functions
 - if a search cannot result in a comprehensive list, it can be considered as misleading
- Content of the information is not coherent
 - metadata for older information is not as complete as for more recent information

Challenges to do with quality of information is not explicitly pointed out in the portal.

Preliminary results: challenges of research information management vis-à-vis RRA principles 2/2



- Since March 2023, research actors (i.e. the Ministry, research performing, funding and supporting organisations) can apply for reading access to the public information in Research.fi
- Issues to do with the quality of information cause challenges especially with reuse of information → compiling statistics, benchmarking or creating indicators based on data that is not the best possible (and not being aware that the data is not best possible for most cases).
- ALSO: Reading access enables making comparisons between entities that might not be comparable (something that Research.fi has avoided)
→ whose responsibility? Provider or reuser of information?

Conclusions: RRA principles on research information management

- Research information management plays a crucial role in responsible research assessment.
- RRA principles emphasize importance of recognizing diversity in research activities and practices, prioritizing qualitative assessment and avoiding inappropriate use of metrics and indicators → offer very little guidance on how to collect new types of information to support the assessment of diverse activities and practices, even less on how to utilize new types of information in assessments.

Conclusions: responsible research information management

- One of the biggest challenges in research assessment has to do with the information the assessments are based on → how to consider a diversity of research activity and practices?
- Significant development work is required:
 - defining new types of activities
 - collecting reliable information on new types of activities
 - storing and utilizing new types of information
- Considering the costs → collecting information is resource intensive, it needs to create benefits, not just a mass of new information for the sake of having it.



Thank you!

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