

Concepts And Connections: Uptake of DRI

24th Plenary Meeting Collaborative Notes

Group(s) name(s) organising the session: [Uptake of Digital Research Infrastructure IG](#)

Session link:

https://www.rd-alliance.org/groups/uptake-digital-research-infrastructure-ig/plenary-participation/?application_id=174611

Session scheduled date/time/breakout session: 09.04.2025, Breakout 5, 07:00 UTC

This document: <https://tinyurl.com/DRIVP24>

Slides:  VP24 Uptake IG - Concepts and Connections.pptx

Statement of Work:

<https://www.rd-alliance.org/groups/uptake-digital-research-infrastructure-ig/work-statement/?sow=169902>

Session summary (for Group co-chairs)

We will use the content in the table below to highlight your work to the RDA community as a report organised by the Technical Advisory Board.

Please complete ALL fields below by **Friday 25th April, close of business** to be included in the report & social media activities.

Summarise your session in three sentences:
<i>After an overview of the Group's activities to date, this was a working session to finalise definitions of 'digital research infrastructure' and 'uptake', determine categories of DRI and progress a survey to different user groups to determine their use cases and needs. Valuable input was received from those attending, lending an international angle to this work that currently has a degree of Australian bias. Moving forward, collaboration with GORC and MaLDReTH will be mutually beneficial for the definitions and especially DRI categories.</i>
Key outcomes/actions/takeaways
1. Definition of Uptake - look beyond research/researchers 2. Form joint task force with GORC and MaLDReTH 3. Follow up on resources / links for the survey questions 4. Create Doodle poll to establish monthly meetings
Synergies and/or possible collaborations identified with RDA groups and other groups:
<i>GORC and MaLDReTH</i>

Get involved in [RDA Community](#)

This meeting will take place according to the [RDA Code of Conduct](#)

Attendee Check-in

Please complete this table to indicate your attendance (add rows as needed):

Full Name	Affiliation	Location	Email
Francoise Genova	Observatoire Astronomique de Strasbourg	Strasbourg, France	francoise.genova@astro.unistra.fr
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Collaborative Session Notes (To be used by participants and chairs during the session)

Agenda

1. Welcome, introductions and brief background to the group
2. Presentations
 - a. Summary of the Statement of Work
 - b. Summary of the progress on the IG's work plan so far, including the outcomes from the P23 session
 - c. Lightning talk from the GORC IG on how the two groups can work together, especially on infrastructure categories and metrics - CJ Woodford (video)
 - d. Questions and Feedback
3. Working session on group activities
 - a. Finalise definition of key concepts (including DRI, uptake)
 - b. Finalise proposed categorisation of DRI
 - c. Progress survey of different user groups to elicit and confirm their use cases and needs
4. Wrap-up and next steps

Notes

1. Welcome, introductions and brief background to the group

P21: BoF, P22: Further BoF, P23: progressed definitions, identified use cases

2. Presentations

a. Summary of the Statement of Work

Use cases, objectives and outcomes, timelines and milestones, candidate communities. Now endorsed by RDA

Key outputs:

- Environmental scan
- Typology of categories
- Measures of uptake
- Recommendations for stakeholders

b. Summary of the progress on the IG's work plan so far, including the outcomes from the P23 session

Zotero library created, finalising definitions, brainstorming on survey and typology

FG: Related FORCE 11 WG: <https://force11.org/group/data-usage-typologies/> which started in January 2025. She is a member

c. Lightning talk from the GORC IG on how the two groups can work together, especially on infrastructure categories and metrics - CJ Woodford (video)

CJ provided a short recorded overview of the GORC model and possible areas of collaboration between GORC and Uptake of DRI:

- KPIs and Metrics (possible joint task force?)
- Commons Types (possible joint task force?)
- Hierarchical relationship between KPIs and metrics as well as more granular metrics for ICT infrastructure
- Aligning definitions where that makes sense
- GORC spreadsheet:
<https://docs.google.com/spreadsheets/d/1tyFpCEbLvHRE2BKyo0EDyPc1Gz5w6jm9Q5RVYx2XETkM/edit?gid=1872877100#gid=1872877100>

d. Questions and Feedback

How to join the Task Force - these work across the GORC group and their collaborators. Eg MaLDReTH, looking at the ecology of tools and services around research data.

Definitions - we could do this collaboratively with GORC.

Email Andrew (andrew.treloar@ardc.edu.au) if interested in being part of a joint task force.

Our definitions need to align or have a good reason if they don't!

3. Working session on group activities

a. Finalise definition of key concepts (including DRI, uptake)

- b. Finalise proposed categorization of DRI
- c. Progress survey of different user groups to elicit and confirm their use cases and needs

Key Definitions

Digital Research Infrastructure

- DRI encompasses the tools, services, and facilities that enable researchers to effectively manage, analyse, and share data - Innovation Science Economic Development Canada
- DRI encompasses both the physical and virtual elements necessary for modern research, including high-performance computing resources, data management systems, and collaborative platforms - European Strategy Forum on Research Infrastructures
- Research infrastructure refers to the facilities, tools, equipment and other resources that are needed to perform research, and experts needed to run the infrastructure - National Collaborative Research Infrastructure Strategy (Australia)

AT: The Australian definition explicitly includes the experts needed to run the infrastructure (soft infrastructure) - “people as infrastructure” (also “data as infrastructure”)

KB: also reflected in the title “collaborative”

Other definitions that have not been captured

Plenary 24 Please add definitions below

No other definitions were suggested

Uptake

- The extent to which research communities and institutions adopt and integrate digital tools, services, and resources, including:
 - **Adoption of DRI: by researchers**
 - *Are there other user groups? The general public using e.g. platforms such as the iNaturalist platform*
 - *Government users - eg policy makers, example: Biosecurity*
 - *Industry (eg commercial, non-gov’t orgs and non-research users) - translation of research results and uptake of research outputs*
 - *FG: Private sector is a more neutral term than industry*
 - *Other infrastructures - repositories, registries - where*

interoperability is useful - adopters, not necessarily users

- **Integration of DRI into research workflows:** *digital tools become a core part of how research is conducted*
 - *Again, also other workflows? Policy development?*
 - *AT: Yes, but maybe we need to just remove the word research?*
- **Collaboration and data sharing:** *increase of DRI that facilitates collaboration and sharing of research data - seamlessly connecting researchers across disciplines*
- **Research outputs:** *the products or tangible outcomes that stem from research conducted with the use of DRI*
 - *Again, other outputs - policy documents etc?*
- **Innovation and efficiency:** *uptake of DRI driving innovation by enabling faster, more efficient research leading to new insights and discoveries*
- **Capacity building and training:** *how well institutions develop the capacity to support the use of DRI; training supports more efficient and effective use of the DRI by more researchers*
- **Policy and investment support:** *Plays a critical role in ensuring that the necessary resources are available for research communities to implement and use DRI effectively*

Other definitions that have not been captured

Plenary 24 Please add definitions below

Lots of suggested tweaks to the definitions, rather than entirely new ones

DRI categorisation

Draft functional categorisation:

- Repositories (including discovery services and commons catalogues, ie meta repositories)
- Services and Tools (including platforms)
- Persistent Identifier services
- Data management services
- Security and Identification services

- Plus funders and publishers

Any other categories to include? Eg compute and analysis (in the P23 feedback but not in the GORC model)

MaLDReTH categorisation

https://www.rd-alliance.org/wp-content/uploads/2024/09/D2_The-identification-categorisation-and-mapping-of-different-types-of-research-tools_-A-categorisation-schema.pdf

[Invest in Open, State of Open Infrastructure report](#)

Plenary 24 Please add categories below

Lots of different ways of slicing up infrastructure categories, and defining the problem

NREN - National Research and Education Network eg AARNet in Australia - another type of DRI

KB: Possible functional categorisation based on GORC approach (same colours belong together)

Category	Subcategory
Research Object Repositories	Research Data Repository Publication and research documentation Repository Research Software Repository Semantic Object Repository
Discovery Services (ie harvesting from other repositories)	
Services and Tools for direct research tasks	Data acquisition Services and Tools Analysis, processing, and visualisation Services and Tools Data collection and Research Object management Services and Tools
Services and Tools that enable workflows and middleware	
Persistent Identifier Services	
Data management services and tools	
Commons catalogues of all services and Tools, including those hosting Research Objects	Registry of Repositories
Security and Identification Services, authentication and Authorization (AAI)	Access protocol translation Remote access
Helpdesk Service	

Other types of categorisation? Eg coverage, maturity, any others? GORC levels are Maturity, Weight Class, Service Level, Reach, Approach.

Coverage came through quite strongly in our P23 discussion - is this the same as reach (GORC)? Domain and geographical reach?

- AT: Probably domain and geographical are both relevant and orthogonal

Plenary 24 Please add other types of categories below

How shall we work with GORC and MaLDReTH on this?

Come up with agreed definitions for coverage/reach, for one [Data Foundation Terminologies Working Group](#) - started pre-RDA and then delivered early on in the life of RDA. Might be useful to mine (Stefanie or Andrew will have it)

- Output from the group:
<https://www.rd-alliance.org/groups/data-foundation-and-terminology-wg/outputs/?output=94731>.
- Direct link to recommendation package:
doi.org/10.15497/06825049-8CA4-40BD-BCAF-DE9F0EA2FADE

Progressing the Survey

Personas - who should we survey?

Following groups might be interested in uptake (and why):

- DRI funders
- DRI Users

- DRI Providers
- Policy makers (suggested by Françoise) - separate but related to funders (quite possibly different departments within the same government)
-

From our Statement of Work:

DRI Funders

As a funder of Digital Research Infrastructure, I am interested in:

- Making sure the DRI is attractive to its potential user community
- Getting credit for funding the DRI
- Making the DRI sustainable rather than having to provide ongoing funding
- Getting a tangible return on investment

DRI Users

As a user of Digital Infrastructure, I am interested in:

- Assessing if I should use this DRI and what the cost and benefits are. This includes understanding if this DRI will be sustained long-term.
- Finding out how to best use this DRI and any tips & tricks to make this easier for me.

DRI Providers

As a provider of Digital Infrastructure, I am interested in:

- Getting credit and gaining reputation for providing the DRI
- Understanding who uses the DRI, for what, and why, as well as who could use the DRI but does not.
- Understanding how to reduce barriers and increase uptake for users to use the DRI
- Providing low-cost help and assistance to users
- Attracting more funding to sustain the DRI
- Understanding if the DRI is viable and how to close it down if it is not

Please add more / comment on the personas listed

- Users of DRI
 - Do we need subgroups of users, e.g. Researcher, General Public, Students, Policy Maker users, Communities
- Funders of DRI
 - Do we need subgroups of funders, e.g. national, international, discipline-based,...?
- Providers of DRI
 - Do we need subgroups of providers, e.g. commercial, public,... ?
- Implementers of DRI
 - Do we need subgroups of implementers?
- Trainers
 - Do we need subgroups of trainers?
- Researchers who have to teach
- Policy makers - as strategy developers
- Communities eg thematic infrastructure community, in addition to individuals
- Assurance, certification, risk, insurance providers?
- Others?

Graeme Diack: Terrible plug for my own work, but we go into a bit of detail on the differences between policy makers and funders in <https://www.npafc.org/bulletin-7-5/>, might not align with your thinking, but might be useful

FG: We might need to split users into researchers and students (that is people, learning to be researchers) - do this as a subgroup

ES: the underlying principle of all questions should be: how can the DRIs best serve research. This is most relevant for every group and it can lead to conclusions about the other aspects.

FG: the aim of some users may not be research

Generic survey questions

A general question is: why are you using (or rather, relating to) DRIs

Survey questions for different personas

Please add more / comment on the questions listed for each persona

Users of DRI using DRI

- What are barriers to using the DRI?
- What should be improved to help you if there are barriers?
- What is your relationship to the DRI?
- Which aspects of the DRI do you like?

Funders of DRI

-

Providers of DRI

-

Implementers of DRI

-

Trainers

-

Others?

SK: What about aspects of sustainability?

AT: For some thoughts on sustainability of infrastructures see:

- Treloar, A. and Woodford, C. J. (2025). Global Open Research Commons: enabling curation for the next 20 years. *Proceedings of IDCC 2025*. [Authors' preprint](#), pp. 2 and 3 in particular
- Gregory, Kathleen ; Zurbach, Jonathan ; Shankar, Kalpana ; Mayernik, Matthew ; Treloar, Andrew (2025). Sustaining Knowledge Infrastructures: Asking Questions and Listening for Answers. Submitted to IJDC. [Authors preprint](#).

4. Wrap-up and next steps

- In addition to our planned next steps (see slide 30 in the slide deck):
 - Speak to GORC and MaLDReTH about aligning our definitions (via a Task Force?)

- Have a look at Grame Diack's <https://www.npafc.org/bulletin-7-5/>
- Learn more about the [FORCE 11 group on data usage typologies](#)