RESEARCH DATA ALLIANCE

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Report on the Research Data Alliance's 23rd Plenary Meeting

By the RDA Technical Advisory Board (TAB) 2024

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The Research Data Alliance's 23nd Plenary meeting (P23) took place in the capital of Costa Rica - San José and online on 12-14 November 2024, with the theme "Sustainable Science". The plenary programme features 5 plenary sessions and 51 breakout sessions, with 170 virtual and 194 in person attendees from 48 countries across 6 continents. Daily highlights of P23 have been summarised daily by the RDA Secretariat in the RDA Blog. Recordings of the sessions are available to the wider RDA community via the programme.

This post-plenary report highlights the breakout sessions, detailing session summary, key takeaways, and connections identified within and beyond the RDA. Information from 37 of the 51 plenary breakout sessions forms the basis of this report (accessed by COB 4 Dec. 2024).

The report presents a pathway-wise summary of session highlights and key messages, followed by a mapping of synergies across all sessions. An Annex provides detailed summaries and takeaways from all 37 participating sessions, organised in tables by pathway, compiled from sessions' collaborative notes.

Pathway Summaries

The plenary features 15 Birds-of-a-Feather (BoF) sessions, 5 joint sessions, and 36 group sessions (21 from IGs, 15 from WGs). These sessions were organised into 9 pathways to help participants navigate the plenary programme and select sessions of interest.

A session can fit into several pathways. To save space, a session's summary will be placed in a "best-fit" pathway, and be referenced in other pathways.

FAIR, CARE, TRUST – Adoption

FAIR, CARE, TRUST – ADOPTION

2 Sessions: 1 BoF, 1 Joint session

2 Groups: 2 IGs

Pathway summary: This pathway includes only two sessions, which are also categorised under other pathways: FAIR, CARE, TRUST - Implementation and Data Infrastructures and Environments, respectively. As a result, the summaries of these two sessions will be included in the relevant summaries for their other pathways.

FAIR, CARE, TRUST – Implementation

FAIR, CARE, TRUST – Implementation

19 Sessions: 5 BoF, 3 Joint sessions, 11 Single group sessions

17 Groups: 1 CoP, 8 IGs, 8 WGs

Pathway summary: Sessions in these two pathways (Adoption and Implementation) highlight continuous implementation of FAIR, CARE, and TRUST in a number of disciplinary areas and at different implementation granularities.

Highlights include but not limited to:

- Standards and interoperability are discussed from data commons, objects, to data property layers.
- Application of FAIR to data quality, legacy data, as well as gray areas such as instruments and facilities etc.
- The governance and ethics of applying AI is discussed within the context of the group's deliverables.

FAIR, CARE, TRUST – Evaluation and Policy

FAIR, CARE, TRUST – Evaluation and Policy

12 Sessions: 2 BoFs, 1 Joint session, 9 Single group sessions

11 Groups: 6 IGs, 5 WGs

Pathway Summary: 6 out of 12 sessions in this pathway overlaps with the Pathway: FAIR, CARE, TRUST - Implementation. The remaining 6 sessions cover topics on evaluation of research and evaluation/certification of data repositories, applying FAIR principles and having FAIR policies in areas including creative and performing arts, collections as data, and virtual research environments.

Highlights include but not limited to:

- FAIR shouldn't be separated from CARE, and it should bring more awareness of Indigenous Data Sovereignty to the research community, especially early career researchers.
- Some groups identified possible synergies or established liaison with other groups

Data Infrastructures and Environments – Generalist

DATA INFRASTRUCTURES AND ENVIRONMENTS – GENERALIST

22 Sessions: 6 BoFs, 3 Joint sessions, 13 Single group sessions

17 Groups: 9 IGs, 8 WGs

Pathway Summary: Sessions in this pathway focused on topics specifically related to data repositories, for example, trustworthy, data review and data curation processes, data discoverability, sample classification, community engagement, and features of general repositories, as well as broad topics from national data service, data policies for crisis facilitated by open science, to up taking of a data infrastructure.

Highlights include but not limited to:

- A new interest group invites RDA members to discuss and exchange experience on uptaking of a data infrastructure, whether it's already developed or still in progress.
- Two new interest groups are proposed, one focusing on cross-domain collaborations among national data infrastructures, the other on national data services.
- Examples highlighted the potential of AI in tagging subject headings, identifying common topics, and facilitating user search experience, to improve data discoverability.

Data Infrastructures and Environments – Discipline Aligned

DATA INFRASTRUCTURES AND ENVIRONMENTS – DISCIPLINE ALIGNED

17 Sessions: 3 BoFs, 1 Joint sessions, 1 Cancelled session, 13 Single group sessions

14 Groups: 1 CoP, 6 IGs, 7 WGs

Pathway Summary: This pathway focuses on topics specific to disciplines such as federated disciplinary database, data integrity, data management, metadata schemas and terminologies. 7 disciplines are covered in this pathway: creative and performing arts, health, photon and neutron science, agriculture, multi-omics (Genomics, Proteomics, Metabolomics, and lipidomics), earth and environment, and material science.

Training, Stewardship skill, and Data Management Planning

TRAINING, STEWARDSHIP SKILL, AND DATA MANAGEMENT PLANNING

14 Sessions: 7 BoFs, 2 Joint sessions, 5 Single group sessions

10 Groups: 8 IGs, 2 WGs

Pathway Summary: Half of the sessions in this pathway are BoF sessions, which indicates that skills and training is a continuing topic in RDA and more groups in this pathway are going to be formed.

Highlights include but not limited to:

- Develop networks of data ambassadors and stewards with focus to share experiences across various levels (national, regional, institutional).
- Advance data and research data management skills by creating sustainable training programmes, researching the right audience despite limited resources, and adopting "data hunters" card games for broad disciplines and training scenarios.
- Introduce career tracks for data stewards using the persona methodology

Semantics, Ontology, and Standardization

SEMANTICS, ONTOLOGY, AND STANDARDIZATION

15 Sessions: 2 BoFs, 4 Joint sessions, 8 Single group sessions, 1 Cancelled Session

15 Groups: 7 IGs, 8 WGs

Pathway Summary: The pathway includes sessions on harmonising terminologies and improving interoperability in material science, health data commons, metadata for machine learning, common framework and terminologies to describe and name variables, interdisciplinary standards to classify sample types, data management & quality of data management, etc.

Highlights include but not limited to:

- Practices and technologies for semantic support of research data are rapidly advancing. The integration of Large Language Models into workflows has accelerated this trend, particularly for workflows that support choosing ontologies and terms.

Data Lifecycles – Versioning, Provenance, Citation, Reward, and Preservation

DATA LIFECYCLES – VERSIONING, PROVENANCE, CITATION, REWARD, AND PRESERVATION

14 Sessions: 2 BoFs, 1 Joint session, 11 Single group sessions

12 Groups: 1 CoP, 6 IGs, 5 WGs

Pathway Summary: Citation, versioning, data curation and review are main topics in this pathway. Highlights include but not limited to:

- Two sets of draft recommendations are out for the RDA community to provide feedback: one is on implementing data versioning principles, the other on handling complex citation.
- Possibility of setting up a working group on reproducibility, to advance efforts to map reproducibility initiatives and proposed working groups to enhance collaboration and create accessible resources.
- Identify challenges and best practices for legacy data curation, aiming to collaborate and draft policies for curating legacy data.

Discipline-Focused Sessions

DISCIPLINE-FOCUSED SESSIONS

9 Sessions: 3 BoFs, 6 Single group sessions

6 Groups： 1 IG， 5 WGs

Pathway summary: The summary is included in the Pathway: Data Infrastructures and Environments – Discipline Aligned, which includes 6 out of 9 sessions on this pathway.

Other

OTHER

2 Sessions: 1 BoF, 1 Single group session

1 Group: 1 WG (Research Software)

Pathway summary: Two sessions in this pathway don't fit in any other category: one is a BoF session on connecting FAIR data and software with the art world, and the other is a group session on updating activities from the WG "Policies in Research Organisations for Research Software", checking out a set of institutional policies on software.

Mappings and Synergies

RDA has been fostering connections and collaborations among groups, encouraging groups to expand their expertise and adopt work that may have already been conducted by other groups. From this plenary, session organisers were asked to record “Synergies and/or possible collaborations identified with RDA groups and other groups" in their session collaborative notes. These recorded group connections are visualised in Figure 1. It is important to note that the recorded connections are perhaps based on session topics for this plenary and may not cover all activities of a group. Furthermore, the absence of a group from the visual map doesn’t imply that the group hasn’t identified connections with others, as not all sessions provide this information, and some groups didn’t organise a session at this plenary.

Some highlights from this group connection visualisation:

- 33 out of 37 plenary participating groups provide group connection information.
- 4 groups identify connections with 5 initiatives/groups outside of RDA.
- Plenary sessions indicate connection with 23 RDA IGs or WGs that didn’t have a session at this plenary.
- It may not be surprising that the following 7 groups have (potential) connections with more than 4 other RDA groups, given that these groups either have broad topics or intention to build or integrate work from other groups. These groups are: Vocabulary services (aka VSSIG IG), Reproducibility IG, Creating personas - Introducing the data steward career tracks WG, GORC IG & GORC International Model WG, National Data Services IG, Professionalising DATA Stewardship IG, and Multi-Omics metadata standards integration (MOMSI) WG.

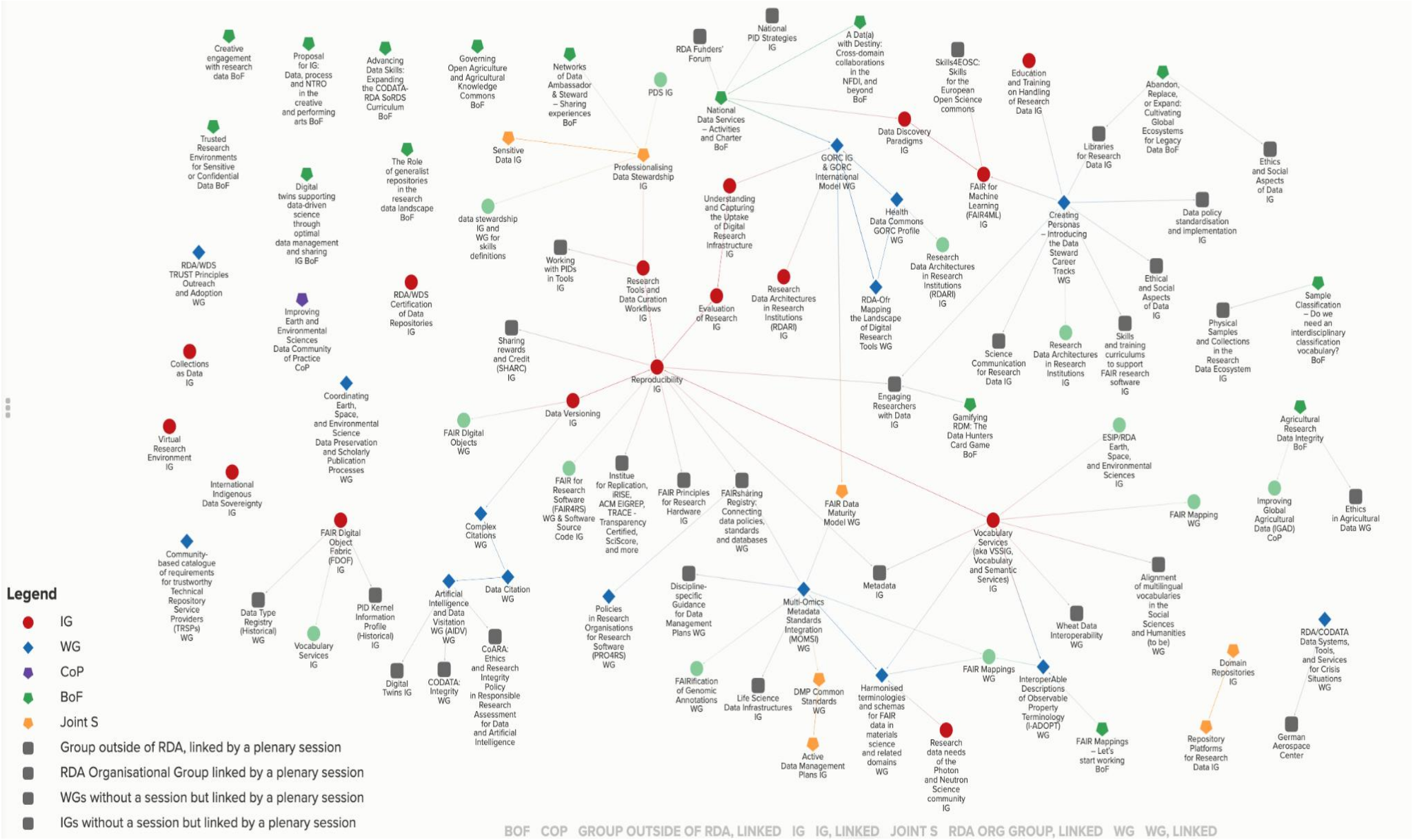


Figure 1. Group connections as provided in session's collaborative notes. Each group of a joint session is assigned the same connections. (Link to interactive graph)

Pathways provide another perspective on group connections. Primarily used for organising plenary sessions, pathways also offer insights into the coverage of these pathways topics by various groups.

Figure 2 illustrates the relationship between groups and pathways. This information was gathered from session submissions, where session organisers were asked to nominate specific pathways for their proposed session. One session can nominate more than one pathway.

Figure 2 indicates there are a lot of overlapping sessions among the pathways. Two possible causes could be: 1) Some pathways may overlap with each other, for example, FAIR, CARE, TRUST: Adoption and FAIR, CARE, TRUST: Implementation, Data Infrastructures and Environments - Discipline Aligned and Discipline Focused data issues. 2) About 9 sessions chose 4 pathways and more. If these four pathways are merged into two, sessions are fairly distributed among all pathways; in another word, the pathway topics are well represented by plenary sessions.

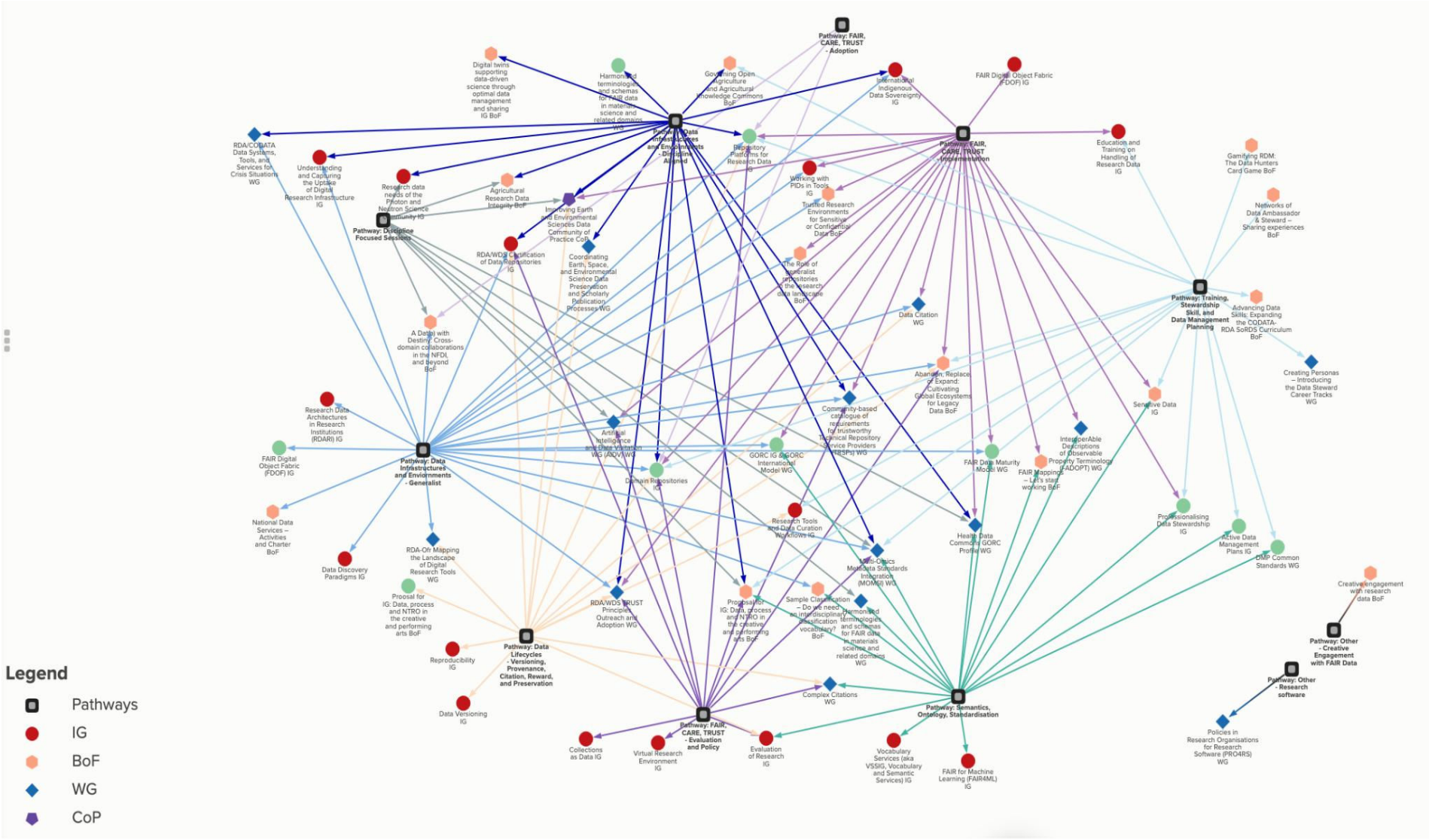


Figure 2: Relationship between pathways and groups (Link to interactive graph.)

Conclusion

Plenary 23 was a successful community-driven event, overcoming unforeseen challenges to deliver impactful outcomes. Of the 51 breakout sessions, 15 were Birds-of-a-Feather (BoF) sessions, highlighting the community's drive to form new IGs/WGs to expand and deepen current RDA's forum areas. Several BoF sessions progressed into discussions on the group's Statement of Work. Notably, five sessions explored the application and implications of cutting-edge AI technologies.

Major overlaps were identified between FAIR, CARE, TRUST: Adoption and FAIR, CARE, TRUST: Implementation, and between Data Infrastructures and Environments - Discipline Aligned and Discipline Focused Data Issues; these four pathways will be merged into two pathways in the Plenary 24: FAIR, CARE, TRUST: Adoption and Implementation, Data Infrastructures and Environments: Discipline Focused. There will also be a new pathway: AI meets data: Exploring Use Cases, Applications and Innovation.

Annex

FAIR, CARE, TRUST – Adoption

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
F1	IG, IG	Repository Platforms for Research Data IG Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	In DG7	In DG7	In DG7
F2	To form an IG	To be decided	A Dat(a) with Destiny: Cross-domain collaborations in the NFDI, and beyond	In DG12	In DG12	In DG12

FAIR, CARE, TRUST – Implementation

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
F3	2 IGs	Professionalising Data Stewardship IG	Terminologies for Data Management & Quality of Data	In S4	In S4	In S4

		Sensitive Data IG	Management : Ensuring FAIR Principles			
F4	WG	Artificial Intelligence and Data Visitation WG (AIDV-WG)	The global evolution of AI governance and the relevance of the AIDV-WG's deliverables			RDA Digital Twins Model COARA ERIP CODATA Integrity
F5	WG	Health Data Commons GORC Profile WG	Health Data Commons GORC profile: Methodology, Means, and Moving forward	In S2	In S2	In S2
F6	WG	RDA/WDS TRUST Principles Outreach and Adoption WG	Findings on TRUST Principles Adoption			
F7	WG	InteroperAble Descriptions of Observable Property Terminology WG	Challenging I-ADOPT	In S6	In S6	In S6
F8		Repository Platforms for Research Data IG Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	In DG7	In DG7	In DG7

F9	BoF		The Role of generalist repositories in the research data landscape			
F10 (T8)	BoF		Creating Personas – Introducing the Data Steward Career Tracks WG	In T8	In T8	In T8
F11	IG	FAIR Digital Object Fabric IG (FDOF-IG)	Coordinating Dialogs in the FAIR Digital Object Landscape	This plenary session summarized past efforts of both this IG and the FDO Forum organisation. Participants discussed the future of the interest group. Participants emphasized that this IG could spread awareness about how FDOs are defined and the important things to know about them.	1. This IG should work to spread awareness about how FDOs are defined and what is important to know about them. 2. This IG should organize seminars/talks about past work (e.g., DTR, PID Kernel Information) relevant to FDOs. 3. This IG should explore ways to engage with the lead-up to the next FDO Forum Event in Washington DC in 2025.	Vocabulary Services IG, and past groups like Data Type Registry WG, PID Kernel Information Profile IG
F12	IG	Working with PIDs in Tools IG	PIDs in the Gray Areas: Tackling the Challenges of Identifying Instruments, Facilities, and the Research Tools Continuum			
F13	WG	Community-based catalogue of	Technical Repository Service Providers:	1. Review of case statement for newcomers, feedback from	1. Members and interested parties updated on status	

		requirements for trustworthy Technical Repository Service Providers WG (TRSPs WG)	Community Engagement #2	previous consultation 2. Landscape assessment: state of play, and community consultation #2 3. Feedback, Open Discussion, Next Steps	of WG and the work plan 2. Sharing information on the landscape analysis, getting community inputs on this 3. Next steps and how to contribute is clear to participants	
F14	WG	Data Citation WG	Assisting data infrastructures in making their data precisely identifiable and citeable	In DL10	In DL10	In DL10
F15	WG IG	FAIR Data Maturity Model WG GORC International Model WG GORC IG	To whom does the "I" in FAIR belong? A cross-group discussion	The FAIR Data Maturity Model WG and GORC groups showcased their existing outputs and how they enable interoperability of various kinds and in different ways, considering both technical and social approaches, connectors, and solutions. The panel discussion confirmed that a mix of top-down and bottom-up approaches is needed with involvement from all stakeholders including researchers and those working within organizations such as technical staff. Flexibility for a changing data and technology landscape is key, with a focus on identifying actions that can be realistically taken. To map out the needs, use cases would be necessary.	1. Interoperability doesn't belong to any one group or approach, it requires multiple perspectives and solutions across technical and social spheres. 2. Identify a common vocabulary of the stakeholders for interoperability within and between commons 3. Identify use cases of where interoperability between commons and research communities more generally has been successful	FAIR Data Maturity Model WG
F16	BoF	To be decided	Trusted Research Environments for Sensitive or			

			Confidential Data: FAIRness for Controlled Data and Processes			
F17	(to be WG)	FAIR Mappings WG	FAIR Mappings – Let's start working	This BoF session aims at presenting the ongoing work of the FAIR Mapping WG. We will first briefly discuss the status of the case statement and then focus on the use case collection task by going through the current version of the use case collection template and process. The BoF session provides visibility to the new WG and enables it to gather feedback and comments on the use-case collection approach as well as to collect additional use-cases by tapping into the international audience of the plenary.	1. The role of provenance related to mappings must be addressed with a correct granularity in the outputs of the working group. 2. Use case collection form needs a revision with better instructions and adjustments to the collected data 3. There are great mapping cases amongst the group members	There are many groups within RDA that are dealing with mappings in one way or another. For example the I-ADOPT model relies on mappings to make the variable descriptions interoperable across disciplines.
F18		Education and Training on Handling of Research Data IG	Training RDM? Teaching RDM? What is our future?	In T10	In T10	In T10
F19		Improving Earth and Environmental Sciences Data Community of Practice	Introducing the Earth, Space, and Environmental Science Community of Practice			
F20			Abandon, Replace, or Expand: Cultivating Global Ecosystems for Legacy Data	In DL12	In DL12	In DL12

F21	IG	International Indigenous Data Sovereignty IG	Implementing CARE Principles: Indigenous Data Governance using the Local Contexts Hub	This session discussed Indigenous data governance, focusing on implementation of the CARE principles to ensure participants get a fuller understanding of the capabilities of Local Contexts and how it is being integrated into downstream applications, so that repository staff can see its full potential. There were some questions on how to teach Indigenous communities and researchers in Costa Rica (or Central and South American countries in general) about Local Contexts and the Indigenous Cultural and Intellectual Property and Indigenous Data Sovereignty work. With the CARE Principles and Indigenous Data Sovereignty being relatively new concepts, the ultimate goal is to have individuals, organizations, repositories, etc. add this work to their best practices and, as the Labels or Notices start to appear, understanding and interest in this work will continue to grow.	1. It is sometimes unclear who should be doing the work of marking data as Indigenous. Until there are systems in place to standardize the disclosing of Indigenous interests, any individual, organization, repository, etc. interested and able to do this work should. 2. Along with #1, having workshops with researchers, especially those who are just entering their careers (ex. Graduate students), can help establish a foundation or routine to consider Indigenous Data Sovereignty when doing research. 3. When thinking of FAIR, it should go hand-in-hand with CARE. For example, to have something considered as FAIR, that should include data on where items are collected and, by extension, what lands they were collected from and whose lands those are. As FAIR is continuing to be emphasized, it should include all information associated with said data,	

					including Indigenous Intellectual Property. This will allow for further work to be possible on Indigenous Data Sovereignty.	

FAIR, CARE, TRUST – Evaluation and Policy

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
F22	BoF	To form an IG	Proposal for IG: Data, process and NTRO in the creative and performing arts	In DD1	In DD1	In DD1
F23	WG	RDA/WDS TRUST Principles Outreach and Adoption WG	Findings on TRUST Principles Adoption	See F6(n)		
F24	WG	Artificial Intelligence and Data Visitation WG (AIDV-WG)	The global evolution of AI governance and the relevance of the AIDV-WG's deliverables			In F4
F25	IG	Evaluation of Research IG	Evaluation of Research: Leveraging	The session enabled us to discuss the Evaluation of Research IG activities and	1. The IG will work on a registry of initiatives in the	• Liaisons within RDA

			liaisons	plans. Liaison was confirmed or established with several relevant RDA Groups. A list of activities to perform during the coming months was identified, including a focused IG meeting on considering disciplinary perspectives of research evaluation, an IG stakeholders forum meeting, and a proposal for a registry of current research evaluation efforts.	space of evaluation of research and on a glossary of relevant terms 2. The IG will continue to identify relevant RDA Outputs and disseminate them 3. A meeting of the IG Stakeholder Forum, which includes a representative of the Funders' Forum, will be organised	Liaison is established in particular with the Reproducibility IG, Sharing Rewards and Credit (SHARC) IG, and the Uptake of Digital Research Infrastructure IG which is being proposed. Liaison is also established with the informal 'RDA Ambassadors group of friends', with in mind the fact that it is key to take disciplinary aspects into account in the evaluation of research. The importance of liaising with the Funders' Forum was stressed. ● Liaison with CoARA Liaison with the Coalition for Advancing Research Assessment (CoARA) and its National Chapters will be pursued.

F26	IG	RDA/WDS Certification of Data Repositories IG:	Building trustworthy data repositories through certification	In DG2 (n)	In DG2(n)	In DG(2)
F27	IGs	Repository Platforms for Research Data IG Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	In DG7	In DG7	In DG7
F28	IG	Virtual Research Environment IG	VREs/Virtual Labs/Science Gateways: Defining FAIRness badges for VREs			
F29	WG	Complex Citations WG	Recommendations for handling Complex Citations	In DL8	In DL8	
F30	WG	Community-based catalogue of requirements for trustworthy Technical Repository Service Providers WG (TRSPs WG)	Technical Repository Service Providers: Community Engagement #2	In F13	In F13	
F31	WG	Multi-Omics Metadata Standards Integration (MOMSI) WG	Evaluating Multi-Omics Data Standard Integration Challenges	In S12	In S12	In S12

			and Building Solutions			
F32	IG	Collections as Data IG	Gathering Metrics and Setting Boundaries: Reusing Collections as Data and the impacts of AI	The session profiled a number of efforts within the cultural heritage sector to support the reuse of digital collections as data, including work by the International GLAM Labs Community and the British Library Labs, 2 projects to model ethical and responsible reuse (Responsible AI and D-CRAFT) as well as an example of AI applied to abstracts of multilingual catalogue records. The goal of the session was to gather audience contributions on further initiatives and best practices used to foster best practices at other institutions and organisations.	1. There were not many examples of published AI policies and only about half the room raised their hands when asked about whether they thought AI policies were necessary. 2. This prompted a related conversation about the role that GLAM organisations play in 'gatekeeping' risk assessment so that decision-making around inappropriate reuse is not passed on to the users, and how to document the investment in that work. 3. The D-CRAFT toolkit is an under-utilised resource that could benefit from wider community uptake (or at least, more widely documented uptake!) Is there the potential for this IG to work on developing a machine-readable D-CRAFT analysis tool?	
F32	BoF		Abandon, Replace, or Expand: Cultivating Global Ecosystems for Legacy Data	In DL12	In DL12	In DL12

Data Infrastructures and Environments – Generalist

#ID	Group Status	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
DG1	WG	RDA/WDS TRUST Principles Outreach and Adoption WG	Findings on TRUST Principles Adoption	F6, F23 (no summary)		
DG2	IG	RDA/WDS Certification of Data Repositories IG	Building trustworthy data repositories through certification			
DG3	IG	Research Data Architectures in Research Institutions (RDARI) IG	The Repercussions for an Institution of a Research Data Commons	The session brought together various implementations of the building of a 'data commons' at a thematic, but also at an institutional scale. GORC model is a helpful mapping exercise to consider elements required to support researchers with their data challenges, not only at a national or thematic scale, but also for an institution.	1. GORC model is a helpful mapping exercise to consider elements required to support researchers with their data challenges, not only at a national or thematic scale, but also for an institution. 2. Building a 'data commons' at an institution requires much more than a cloud storage and compute environment, and needs to consider the human components, policies and agreements, skills and much more. 3. The model raises the importance of	The Research Data Architectures in Research Institutions group is a great channel to take this forward, and the topic can be addressed in national exchanges between institutions. The Global Open Research Commons related groups are a logical fit to be a collaborator when discussing the use and implications of the model.

					interoperability between thematic initiatives and institutions, an area which would be worth exploring further	
DG4	IG	Data Discovery Paradigms IG	Applying AI in Data Discovery	The session presented three different approaches of using AI to improve metadata quality and user-interface for data discovery, and gathered interest from participants to start a new task force "Applying AI to improve data discoverability".	1. AI is becoming more relevant to the Data Discovery 2. Users use AI to look for data 3. AI can be used to improve metadata for Data Discovery	FAIR4ML
DG5	IG, WG	Global Open Research Commons IG GORC International Model WG	Global open research commons: Recommendations, implementations, and profiles	The GORC IG and IM WG outputs and recommendations were reviewed, including known adoption stories. Identified areas of work from P22 was presented, and intermediate work in these areas was showcased, specifically mapping to other frameworks and models and as well as the GORC II WG case statement. The case statement was discussed, covering deliverables, timeline, and methods.	1. Submit GORC II WG case statement before the end of 2024 for RDA community review 2. Coordinate with NDS IG and MaLDReTH WG to ensure our timelines and work plans align for 2025 3. Apply for RDA TIGER support for 2025	NDS IG MaLDReTH WG (and MaLDReTG 2 WG)
DG6	WG	RDA / CODATA Data Systems, Tools, and Services for Crisis Situations WG	On the Path to Enhancing Crisis Management Through Advanced Digital Technologies	The session provided an update on the work of the RDA / CODATA Data Systems, Tools, and Services for Crisis Situations WG (DSTS_CS WG) and its sister group, the UNESCO-CODATA Working Group on Data Policy in Times of Crisis Facilitated by Open Science (DPTC): The global consultation by UNESCO and CODATA: Developing	1. Launch of global consultation by UNESCO and CODATA: Developing data policies for crises facilitated by open science. Engagement with RDA is critical on this. Feedback can be sent to	Possible related work at German Aerospace Center

				data policies for crises facilitated by open science is open until 16 December 2024, and the survey for key parties in crisis situations developed by the DSTS_CS WG will be disseminated following ethics approval. In the second half of the session, the group captured input from the attendees on how best to progress the work of the WG.	openscience@unesco.org by 16 December 2024. 2. Upcoming launch of the survey of academic, local government, national government, private sector, NGO & other interested individuals involved in crisis situations. The survey will be disseminated following ethical approval to continue the engagement with RDA and CODATA and other colleagues.	
DG7	IGs	Repository Platforms for Research Data IG Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	The Joint Session of the Repository Platforms for Research Data (RPRD) Interest Group (IG) and the Domain Repositories IG titled, Implementing and Facilitating Data Review in Data Repositories, focused on the development and adoption of data review practices by data repositories. The joint session presenters described approaches, opportunities, and challenges for implementing data review practices in data repositories. The presentations were followed by a discussion among session participants on overcoming challenges for data review that are faced by data repositories.	1. The discussion among session participants recognized the importance of data review and the challenges for implementing data review in data repositories. 2. Session participants recommended that the session chairs organize further events to address the challenges for implementing data review in data repositories and guide the implementation of consistent approaches. 3. The session chairs agreed to continue pursuing the topic of data review in data repositories.	Repository Platforms for Research Data IG Domain Repositories IG

DG8 (S7)	BoF	To form a WG	Sample Classification – Do we need an interdisciplinary classification vocabulary?	The session was discussing the question whether we need an interdisciplinary classification vocabulary for samples: while there are metadata standards for the description of samples in some disciplines, there is not a common one that would be applicable to all kinds of samples. At least some classification of the sample type at the top level would be needed in order to decide which metadata standard to use to describe it in detail.	1. There is clearly a need for a standardized vocabulary for sample type classification 2. From the presentation on iSamples we learned that there is already significant existing work that we can (and should) base upon 3. We will go ahead forming an RDA working group	Physical Samples and Collections in the Research Data Ecosystem IG
DG9	BoF		The Role of generalist repositories in the research data landscape			
DG10	IG	Understanding and Capturing the Uptake of Digital Research Infrastructure IG	Who cares about the Uptake of Digital Research Infrastructures? Understanding use cases and needs	The session gave a brief overview of the group's Statement of Work, in community review until 21 November 2024, and introduced the proposed group activities for the next 12 months. In the second half of the session, the co-chairs gathered input from participants about key concepts about DRI uptake. During the resulting discussion, connections to other RDA groups were proposed by the attendees.	1. During the session, the co-chairs collected participants' suggestions for a. Definition of "Uptake" b. Categories of "Digital Research Infrastructure" c. What do we want to find out about key use cases? (i.e.,what survey questions should we ask?) 2. The uptake of DRI is	● Global Open Research Commons IG and GORC International Model WG ● Evaluation of Research IG

					regarded as an important topic among the DRI service providers, operators, and users. 3. There are additional groups within RDA that this group should liaise with, including the GORC International Model WG and the Global Open Research Commons IG.	
DG11	IG	Research Tools and Data Curation Workflows IG	Effectively Utilizing Research Tools in Curation Processes	The IG was introduced and presentations around the definition of RDM and curation from the VP22 BoF were summarised. Three presentations around potential areas of focus for the IG were given: PID infrastructures (DataCite), a sample metadata processing tool (COPO), and interoperability development points of friction (RSpace). The presentations were discussed, and initial feedback was given on the desired direction for the IG, topics of focus, and the type of output that would be most beneficial.	1. There is a wide variety of topics at the intersection of research tools and data curation workflows, all interlinked and best practices are highly dependent on the specific institutional infrastructure and workflows. 2. Attendees felt they would benefit most from concrete implementation examples related to curation support in research tools, interoperability, and PIDs 3. Next steps: exploration of what to include in case studies, how to approach their development, and whether to create a formal WG	Working with PIDs in Tools IG Professionalising Data Stewardship IG Reproducibility IG
DG12	BoF	To form an IG	A Dat(a) with Destiny: Cross-domain collaborations in the	F2	1. Plenty of interest in this topic 2. Next steps: Decision to	National Data Services IG

			NFDI, and beyond		focus efforts *for now* on the national infrastructure IG 3. We will still consider how to shape the specific aspects of cross-disciplinary good practice and if this is something that can be leveraged e.g in one of the metadata groups or if there is a gap in RDA. Also to promote RDA among national infrastructures as a mechanism for exchange and building 4. Need a talk at Conference on Research Data Infrastructure (CoRDI) 2025 on RDA!!! 5. Focus internally on mapping in NFDI who is active in RDA and where	
DG13	IG	FAIR Digital Object Fabric IG (FDOF-IG)	Coordinating Dialogs in the FAIR Digital Object Landscape	In F11	In F11	In F11
DG14	IG	Working with PIDs in Tools IG	PIDs in the Gray Areas: Tackling the Challenges of Identifying Instruments, Facilities, and the Research Tools Continuum			

DG15	WG	Community-based catalogue of requirements for trustworthy Technical Repository Service Providers WG (TRSPs WG)	Technical Repository Service Providers: Community Engagement #2	In F13	In F13	In F13
DG16	WG	Data Citation WG	Assisting data infrastructures in making their data precisely identifiable and citeable	In DL10	In DL10	In DL10
DG17		FAIR Data Maturity Model WG GORC International Model WG GORC IG	To whom does the "I" in FAIR belong? A cross-group discussion	In F15	In F15	In F15
DG18	BoF		Trusted Research Environments for Sensitive or Confidential Data: FAIRness for Controlled Data and Processes	F16 (n)		
DG19	BoF	National Data Services	Activities and Charter	The session confirmed the interest of the RDA community for renewing the National Data Services (NDS) IG. The draft charter and activities foreseen for the coming months were discussed. The renewed charter should be submitted to	1. The renewed National Data Service IG draft charter was approved with suggestions for improvement 2. National Data services	• The collaboration with the GORC II WG, which should be submitted

				the community for comments during the coming months.	from Australia, Canada and Germany will propose co-chairs 3. Volunteers were identified for the proposed activities	for comments soon, was confirmed by the GORC session and the BoF. The aim is to build an NDS GORC profile, with the NDS presentations at the GORC International Model WG as a starting point. A Task Group common to the GORC II IG and the NDS IG will be constituted for this purpose. ● The importance of liaising with the Funders' Forum is identified ● Liaison should be established in particular with the National PID Strategies IG ● The Data Discovery Paradigms IG is happy to

						contribute experience in collecting user experience
DG20	BoF		Abandon, Replace, or Expand: Cultivating Global Ecosystems for Legacy Data	In DL12	In DL12	In DL12
DG21	IG	International Indigenous Data Sovereignty IG	Implementing CARE Principles: Indigenous Data Governance using the Local Contexts Hub	In F21	In F21	In F21
DG22	WG	RDA-Ofr Mapping the Landscape of Digital Research Tools WG	Report and Plans	A summary of work done by MaLDReTH I. An introduction to plans for MaLDReTH II. A discussion pertaining to the future directions of the group.	1. Example Organizations are already using MaLDReTH as a reference for building, delivering and recommending RDM infrastructure – including UCL, Oxford and JISC 2. Example Beyond these specific examples, there is substantial interest in MaLDReTH and seeing it developed further 3. Example Several excellent suggestions about issues to consider when developing MaLDReTH further in the MalDReTH II WG were made, including collecting use cases, and making it	GORC II. Health GORC

					clear that MaLDReTH is a kind of reference map, and not a catalog of tools	

Data Infrastructures and Environments – Discipline Aligned

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
DD1	BoF	To form an IG	Proposal for IG: Data, process and NTRO in the creative and performing arts	The session convened a diverse group of stakeholders from various institutions and locations to discuss the management and recognition of data and processes in the creative, visual, and performing arts. A new Interest Group (IG) focused on the data and processes in creative, visual, and performing arts was initiated, building momentum and fostering international sector engagement. Participants shared strategies and developed a roadmap to advance the recognition and effective management of data within these specific art forms, with key milestones	1. Commitment to establishing a dedicated Interest Group centered on creative, visual, and performing arts data and processes, supported by participants, including from the UK, the Netherlands, France, Finland, and Costa Rica.	1. Collaboration possibilities with RDA groups focused on collecting and managing data, particularly in the context of creative, visual, and performing arts. 2. Synergies with Data Infrastructures and Environments groups to develop frameworks that support data management in these specific arts disciplines. 3. Engagement with groups focused on developing semantic standards to properly address the

				set for 2025.	2. Creation of a collaborative action plan, which includes drafting a case statement by January 2025, followed by an IG proposal submission in March 2025, culminating in community activities and the first IG meeting at P25. 3. Strengthened international partnerships to facilitate ongoing dialogue and collaboration on managing data and processes within the creative, visual, and performing arts sectors	data needs of the creative, visual, and performing arts sectors globally.
DD2	WG	Health Data Commons GORC Profile WG	Health Data Commons GORC profile: Methodology, Means, and Moving	In S2	In S2	In S2

			forward			
DD3		RDA/WDS TRUST Principles Outreach and Adoption WG	Findings on TRUST Principles Adoption	See F6(n)		
DD4		RDA/WDS Certification of Data Repositories IG	Building trustworthy data repositories through certification	DG2 (No S)		
DD5		Research data needs of the Photon and Neutron Science community IG	Converging PaN FAIR data activities around the world	The session brought together participants from Photon and Neutron facilities across the world. It was split in two blocks: 1) some presentations of national infrastructures and 2) on federated X-ray absorption spectroscopy (XAS) databases.	1. Presentations and discussion on work on FAIR data in national Data Infrastructure projects: we shared information about projects and identified a need for better standardizatio n of metadata between facilities. 2. Towards federating XAS Databases: We will definitely continue cooperation on federated XAS databases. We identified the need to work	Harmonised terminologies and schemas for FAIR data in materials and related domains WG

					towards standardisation of metadata and interfaces in order to lessen the work required for federation. 3. We will meet in January (28th of January 2025 at 1:00 CET, 12:00 UTC)) to include more stakeholders (University Wuppertal, KIT) and continue the federated XAS database work.	
DD6		RDA / CODATA Data Systems, Tools, and Services for Crisis Situations WG	On the Path to Enhancing Crisis Management Through Advanced Digital Technologies	DG6		
DD7	BoF		BoF – Agricultural Research Data Integrity	This session introduced Agricultural Data Integrity as a potential topic for a Working Group within RDA. After the presentation of our problem statement and a few lightning talks to set the scene, the second half of the session	1. There was interest in forming a WG on this topic, under the umbrella of the	• RDA Improving Global Agricultural Data (IGAD) Community of Practice • RDA Ethics in Agricultural Data WG

				started to clarify the scope of the proposed group. This included discussion of what we mean by "Agricultural Data" and "Agricultural Data Integrity", as well as a brief discussion of use cases and key parties to be involved.	RDA Improving Global Agricultural Data (IGAD) CoP. 2. We need to provide clear definitions of "Agricultural Data" and "Agricultural Data Integrity". 3. We need to capture use cases in agriculture data integrity which will be utilised in a definition and guidance document for policy and designing technical solutions.	
DD8		Repository Platforms for Research Data IG Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	In DG7	In DG7	In DG7
DD9		Understanding and Capturing the Uptake	Who cares about the Uptake of Digital	In DG10	In DG10	In DG10

		of Digital Research Infrastructure IG	Research Infrastructures? Understanding use cases and needs			
DD10		Community-based catalogue of requirements for trustworthy Technical Repository Service Providers WG (TRSPs WG)	Technical Repository Service Providers: Community Engagement #2	In F13	In F13	In F13
DD11		Multi-Omics Metadata Standards Integration (MOMSI) WG	Evaluating Multi-Omics Data Standard Integration Challenges and Building Solutions	In S12	In S12	In S12
DD12	CoP to be	Improving Earth and Environmental Sciences Data Community of Practice	Introducing the Earth, Space, and Environmental Science Community of Practice	F19 (n)		
DD13	BoF		BoF – Governing Open Agriculture and Agricultural Knowledge Commons			
DD14		Coordinating Earth, Space, and Environmental Science Data Preservation and Scholarly Publication	Ensuring Data Underlying Publications are Sustainable, FAIR, CARE, and TRUSTed			

		Processes				
DD15		International Indigenous Data Sovereignty IG	Implementing CARE Principles: Indigenous Data Governance using the Local Contexts Hub	In F21	In F21	In F21
DD16		Harmonised terminologies and schemas for FAIR data in materials science and related domains WG	Updates and community feedback for HarmonisedMatChem WG	The session presented the goals of the group and summarized progress to date on the recommendation documents. The document outline developed by the group was validated and augmented by session participants. The working group will now focus on writing within the consensus-based outline and kickoff the next stream of activities aimed at vocabulary mapping and extending schema.org for the materials and chemistry community following the paradigm of Bioschemas.	1. Consensus has been reached on the recommendation document outlines and writing will commence. 2. Consensus has been reached on developing an extension to schema.org for materials and chemistry. 3. The HarmonisedMatChem WG will work closely with the FAIR Mappings WG going forward.	FAIR Mappings WG

Training, Stewardship skill, and Data Management Planning

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
T1	BoF	IG to be decided	Proposal for IG: Data, process and NTRO in the creative and performing arts	In DG1	In DG1	In DG1
T2	IGs	Professionalising Data Stewardship IG, Sensitive Data IG	Terminologies for Data Management & Quality of Data Management : Ensuring FAIR Principles	In S	In S4	In S4
T3	BoF		BoF – Networks of Data Ambassador & Steward – Sharing experiences	The session allowed to share experiences between different levels of the data ambassador and data steward network (national, regional, institutional) and to discover projects about training and skills upgrade for the network's agents.	1. Join Task Group 7 in Professionalising Data Stewardship IG and discuss the next steps (make an inventory of networks ? write guidelines ?) 2. Make a link between networks and the skills in these networks 3. Keep a strong link and communication between co-chairs of Professionalising Data Stewardship IG and TG7	Professionalising Data Stewardship IG - (TG7)

T4	BoF		BoF – Advancing Data Skills: Expanding the CODATA-RDA SoRDS Curriculum			
T5	BoF		BoF – Gamifying RDM: The Data Hunters Card Game	In the BoF session on gamifying RDM, participants engaged with "Data Hunters," a role-play card game designed as a collaborative tool for researchers, support staff, and data stewards, as well as a training resource for students. The game uses a case study to simulate real-world challenges in creating effective data management plans. The session aimed to foster learning, promote collaboration, and encourage knowledge sharing within the research data management community.	1. Hands-on Learning: Participants gain practical experience in RDM by role-playing various stakeholder roles and addressing realistic challenges. 2. Collaboration: Role-playing fosters understanding of different perspectives and promotes knowledge sharing within the RDM community. Game Refinement and Broader Use: Feedback from participants will guide future improvements and expand the game's applicability across diverse training settings and disciplines (and Countries?).	Alessandra Soro and I, Carla Strubbia, identified several synergies and potential collaborations with RDA groups and other organizations. We connected with Shannon Sheridan and Briana Ezray Wham from the Engaging Researchers with Data Interest Group of RDA, who run a podcast highlighting innovative ways data professionals engage researchers. They expressed interest in featuring the Data Hunters card game and the Nexum Data4Art project (this session was brought as Creative use of Data BoF) on their show to share these initiatives with a

						broader audience. Additionally, we proposed the same Data Hunters session at RDA-NL and were contacted by DANS, who are exploring the implementation of a similar game in their training materials. These collaborations demonstrate the growing interest in gamified approaches to research data management and their potential to enhance training and engagement across various communities.
T6	IGs	Repository Platforms for Research Data IG, Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	F1, F8, F27, DG7, DD8, DL6		
T7	IG	Research Tools and Data Curation	Effectively Utilizing Research Tools in	In DG11	In DG11	In DG11

		Workflows IG	Curation Processes			
T8	BoF		Creating Personas – Introducing the Data Steward Career Tracks WG	• Introduce the prospective Data Stewards Career Tracks working group to the community building on the outputs and work already undertaken in the the Professionalising Data Stewards IG on career tracks focus area • Discuss with the community the persona methodology, it's fit for purpose and explore what type of information should be included • To recruit members to the potential working group	1. Attendees were positive about the the need for and aims of the proposed working group. 2. The challenges around career tracks for data stewards resonated across the different countries and organisational settings of the participants. 3. The lively discussion from both online and in person attendees generated additional points for consideration and useful resources to consult in the drafting of the WG charter.	• Engaging Researchers with Data IG • Libraries for Research Data IG • Education and Training on Handling of Research Data IG • Research Data Architectures in Research Institutions IG • Data policy standardisation and implementation IG • Ethical and Social Aspects of Data IG • FAIR for Machine Learning IG • Skills and training curriculums to support FAIR research software IG Science Communicatio

						n for Research Data IG
T9	WG	Multi-Omics Metadata Standards Integration (MOMSI) WG	Evaluating Multi-Omics Data Standard Integration Challenges and Building Solutions	In S12	In S12	In S12
T10	IG	Education and Training on Handling of Research Data IG	Training RDM? Teaching RDM? What is our future?	A persistent challenge is getting the training to the people who need it, which is exacerbated by the tension between the amount of training needed and the resources available to provide it. While different approaches are successful in different ways, the truly winning characteristics go back to: making partnerships in the Library and across the campus and intersecting with researchers at the point of need either through asynchronous resources/guidance or synchronous training and consultations.	1. There is a need to meet people where they are, whether researchers or trainers. a. One aspect of this may be creating a "starter pack" for starting a training programme in your area b. Another aspect is to consider the longer term vision and sustainability plans of training programmes and researcher education. This could include a shift in focus to	Education and training relates to all of the things, all of the time. How else do we expect the research, software, and data communities to be able to understand and effectively use the wealth of materials and tools available to them?

					incorporating RDM into undergraduate syllabi. 2. A component of successfully building and expanding an RDM training and education programme is creating and using FAIR educational resources. We are often challenged by the distributed nature of these resources.	
T11	IGs	Active Data Management Plans IG DMP Common Standards WG	Active Data Management Plans: What are the actions that we need to realize them?			
T12	BoF		BoF – Abandon, Replace, or Expand: Cultivating Global Ecosystems for Legacy Data	In DL12	In DL12	In DL12
T13	BoF		BoF – Governing Open Agriculture and Agricultural Knowledge			

			Commons			

Semantics, Ontology, and Standardization

#ID	Group Status	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
S1	BoF	IG to be decided	BoF – Proposal for IG: Data, process and NTRO in the creative and performing arts	In DD1	In DD1	In DD1
S2	WG	Health Data Commons GORC Profile WG	Health Data Commons GORC profile: Methodology, Means, and Moving forward	In this session, the HDC GORC WG presented it's main objectives, timelines, and workplan which focus on a gap analysis (literature review and questionnaire), hearing from the health data community (speaker series, community of practise), and exposing metadata on choices made by HDCs on implementing their infrastructures, specifically regarding FAIR, CARE, and TRUST, via a GORC model profiles. The draft questionnaire was discussed, with identification of differences in service needs between the GORC	1. The questionnaire is a good starting tool to gather data, but should not be the only tool used to gather information - holding space for conversations will be paramount. 2. Explicit consideration for federated organizations should be included in any tools we use and communications. 3. The questionnaire needs to be further refined to ensure adequate	GORC IG, WG Research Data Architectures in Research Institutions

				model and HDCs already identified. Presentations on the EU Health Data Space and complimentary work done for HDCs in the US were presented and discussed.	guidance to HDC participants and that the options presented reflect what we already know of the health data community.	
S3	IG	FAIR for Machine Learning (FAIR4ML) IG	FAIR4ML IG Activity Updates and Feedback	Updates on progress in TF1 and TF2; invitation to members to contribute; invitation for new members to join the IG	1. Progress continues slowly towards a first draft of a white paper on FAIR and ML 2. Progress is occurring more quickly on defining metadata for ML, attendees interested in joining 3. Collaboration happening with Skills4EOSC	FAIR4ML TF1 (White Paper) Skills4EOSC (Top 10 FAIR Data Things in AI)
S4	IGs	Professionalising Data Stewardship IG, Sensitive Data IG	Terminologies for Data Management & Quality of Data Management : Ensuring FAIR Principles	The session "Terminology for data management & quality of data management" focused on issues, challenges and possible solutions for establishing and standardising terminologies for data management within the scientific community, emphasising the integration of FAIR principles. The discussion addressed the creation of common terminologies for key components of data management, such as data management professionals, data policy statements, project submissions, data management plans, data dictionaries, and repositories.	1. Censing Terminologies for data management and quality of data management 2. Paper about 'Terminology for data management & quality of data management" challenges to be launched 3. CheckList about Terminology management for data stewards?	-> Sessions on data stewardship IG and WG for skills definitions -> Sensitive Data IG and PDS IG focus

S5	WG	Global Open Research Commons IG, GORC International Model WG	Global open research commons: Recommendations, implementations, and profiles	In DG5	In DG5	In DG5
S6	WG	InteroperAble Descriptions of Observable Property Terminology WG (I-ADOPT WG)	Challenging I-ADOPT	The session presented the outcomes of the I-ADOPT Variable Modelling Challenge. The overall challenge organization, materials, and the prepared variable list were presented, along with concrete examples that illustrated common modelling problems. The discussion focused on key challenges in modelling to find suitable solutions.	1. Winners of the Challenge 2. Modelled examples in GitHub 3. Key challenges in modelling variables	FAIR Mappings WG, VSSIG
S7	BoF	WG to be decided	BoF – Sample Classification – Do we need an interdisciplinary classification vocabulary?	In DG8	In DG8	In DG8
S8	IG	Vocabulary Services IG (aka VSSIG, Vocabulary and Semantic Services IG)	All About Terms and Ontologies (You Can Help!)	The first part of our session (presentations) connected attendees with ongoing VSSIG, RDA, and community activities involving Vocabularies and Semantic Services, describing the latest progress for particular projects. The last part of the session engaged	1. Outcomes: Excellent speakers presented significant progress in multiple important projects to 60 attendees, and OntoChoice members and RDA/plenary staff facilitated a very complex interactive session! Invited speakers presented	Possible groups (++ indicates high connectivity and relevance at this RDA session): A. Metadata IG B. Reproducibility IG C. ESIP/RDA Earth, Space, and

				the audience in identifying, defining, and prioritizing evaluation techniques for choosing terms and ontologies. The activity especially captured insights from new and local meeting attendees who provided unique perspectives on these challenges.	many major product releases that are likely to see wide adoption. 2. Actions: The OntoChoice project acquired several new community members, added significant content to the draft document, and identified potential collaborative projects and proposals to grow the effort. 3. Takeaways: Practices and technologies for semantic support of research data are rapidly advancing. The integration of Large Language Models into workflows has accelerated this trend, particularly for workflows that support choosing ontologies and terms. 4. Outcomes: Excellent speakers presented significant progress in multiple important projects to 60 attendees, and OntoChoice members and RDA/plenary staff facilitated a very complex interactive session! Invited speakers presented many major product releases that are likely to see wide adoption.	Environmental Sciences IG D. InteroperAble Descriptions of Observable Property Terminology WG (I-ADOPT WG) ++ E. FAIR Mapping WG ++ F. Harmonised terminologies and schemas for FAIR data in materials science and related domains WG G. Wheat Data Interoperability WG H. Alignment of multilingual vocabularies in the Social Sciences and Humanities WG (Not yet approved)

					5. Actions: The OntoChoice project acquired several new community members, added significant content to the draft document, and identified potential collaborative projects and proposals to grow the effort. 6. Takeaways: Practices and technologies for semantic support of research data are rapidly advancing. The integration of Large Language Models into workflows has accelerated this trend, particularly for workflows that support choosing ontologies and terms.	
S9	WG	Complex Citations WG	Recommendations for handling Complex Citations	In DL8	In DL8	
S10	WGs, IG	FAIR Data Maturity Model WG, GORC International Model WG, GORC IG	To whom does the "I" in FAIR belong? A cross-group discussion	In F15	In F15	In F15
S11	WG (to be)		BoF – FAIR Mappings – Let's start working			

S12	WG	Multi-Omics Metadata Standards Integration (MOMSI) WG	Evaluating Multi-Omics Data Standard Integration Challenges and Building Solutions	During this P23 breakout session we introduced and discussed the first set of completed outputs and deliverables from our Multi-Omics Metadata Standards Integration (MOMSI) WG activities. During this session we also heard from invited speakers representative of "Multi-omics Data Standard Integration Challenges, Gaps, and Community Use-Case Developments" in alignment with our MOMSI WG work plan outlined in our case statement. Outcomes from this session serve to promote new diverse collaborations and discussions for strengthening ongoing Multi-omics data standard harmonization efforts and to improve educational awareness across Omics disciplines at a global level where integration gaps remain. Presentation slides from VP23 Breakout sessions can be accessed at https://doi.org/10.5281/zenodo.14187653.	1. As a first of its kind, there was much excitement around our first set of Multi-omics WG deliverables we presented and we were able to recruit many new members stemming from this session. 2. There was a consensus after hearing from our invited speakers that there still remain persistent gaps in Multi-omics metadata reporting and new collaborations/engagements are needed with policy holders, journals, and databases with domain experts to improve these data reporting gaps (especially around reusability and interoperability). 3. Moving forward we will be defining Multi-omics standard selection criteria accommodating both domain and FAIR recommendations, leveraging existing collaborations with communities developing extended FAIR maturity model metrics. We are preparing a set of article publications stemming from first deliverables in	● FAIRification of Genomic Annotations WG ● FAIRsharing Registry: Connecting data policies, standards and databases RDA WG ● Life Science Data Infrastructures IG ● Harmonised terminologies and schemas for FAIR data in materials science and related domains WG ● FAIR Mappings WG ● FAIR Data Maturity Model WG ● Discipline-specific Guidance for Data Management Plans WG ● DMP Common Standards WG

					identifying standards representative of both FAIR and community standard domain models, terminologies, and formats.	
S13	IG	Active Data Management Plans IG,	DMP Common Standards WG	Active Data Management Plans: What are the actions that we need to realize them?		
S14	WG	Harmonised terminologies and schemas for FAIR data in materials science and related domains WG	Updates and community feedback for HarmonisedMatChem WG			

Data Lifecycles – Versioning, Provenance, Citation, Reward, and Preservation

#ID	Group Status	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
DL1			Proposal for IG: Data, process and NTRO in the creative and	In F22	In F22	In F22

			performing arts			
DL2		RDA/WDS TRUST Principles Outreach and Adoption WG	Findings on TRUST Principles Adoption	See F6(n)		
DL3		Evaluation of Research IG	Evaluation of Research: Leveraging liaisons	In F25	In F25	In F25
DL4		RDA/WDS Certification of Data Repositories IG	Building trustworthy data repositories through certification	DG2 (No S)		
DL5		Data Versioning IG	What do we actually mean when we talk about data versioning?	The session presented draft (ten) recommendations on data versioning, and got participants' feedback on each recommendation.	1. Good feedback from participants on each data versioning recommendation. 2. The feedback will be taken into account when finalising the recommendations.	Complex Citations WG FAIR DIgital Objects WG Reproducibility IG
DL6		Repository Platforms for Research Data IG, Domain Repositories IG	Implementing and Facilitating Data Review in Data Repositories	In DG7	In DG7	In DG7

DL7	IG	Reproducibility IG	Reproducibility at RDA and beyond: What do we know and what do we need	The Reproducibility IG discussed and built on previous work around surfacing internal RDA and external groups that focus on reproducibility efforts. Attendees worked on a document to categorise the types of work that are happening with the aim of making this into a resource that can be shared out to disseminate information on current efforts. After discussion with attendees, the Reproducibility IG is looking to start working groups that continue to focus on consensus building around reproducibility.	1. Group members found our efforts at surfacing internal and external groups working on reproducibility to be useful for their own work. 2. The information we have gathered and worked on in the plenary will be turned into a more digestible format for anyone to access as an RDA output. 3. A number of ideas for possible WGs were put forward and the co-chairs will explore these with group members.	By design the Reproducibility IG aims to have crossover with multiple RDA groups. The RDA groups listed in our resource document (see mapping document) are those that have been identified so far. Following this plenary, the co-chairs will explore collaboration on a WG with the Evaluation of Research IG.
DL8		Complex Citations WG	Recommendations for handling Complex Citations	The draft recommendation of the RDA Complex Citation WG was presented and discussed with the members. Members are invited to review the draft before submission to RDA end of November. The plan to set up a follow-up WG focussing on the implementation of the recommendation was announced.	1. Members rated the draft recommendations positively. 2. The plan to focus on the implementation of the recommendations in a follow-up WG was supported. 3. Additional aspects and contacts to engage with were provided during the lively discussion.	

DL9	IG	Research Tools and Data Curation Workflows IG	Effectively Utilizing Research Tools in Curation Processes	In DG11	In DG11	In DG11
DL10	WG	Data Citation WG	Assisting data infrastructures in making their data precisely identifiable and citeable	The recommendations of the Working Group on Data Citation, adopted originally in 2015, enable unambiguous identification of the precise subset and version of data used, supporting reproducibility of processes using data and the sharing and reuse of data. They are being revised to enhance clarity without resulting in any substantial changes to the actual content, as this has proven to meet expectations in all data settings encountered so far in numerous adoptions.	1. The main point of clarification is that these recommendations focus on precise identification and reference to dynamic data. 2. While there are now fewer recommendations, none of the original recommendations have been superseded. 3. *Data infrastructures interested in adopting the recommendations are invited to take a look at the paper summarizing the principles and reporting on a number of implementations in different settings* (Rauber, A., Gößwein, B., Zwölf, C. M., Schubert, C., Wörister, F., Duncan, J., Flicker,	• Artificial Intelligence and Data Visitation (AIDV) WG https://www.rd-alliance.org/groups/artificial-intelligence-and-data-visitation-aidv-wg/ • Complex Citations Working Group https://www.rd-alliance.org/groups/complex-citations-working-group/ • Data Granularity Working Group

					K., Zettsu, K., Meixner, K., McIntosh, L. D., Pröll, S., Miksa, T., & Parsons, M. A. (2021). Precisely and Persistently Identifying and Citing Arbitrary Subsets of Dynamic Data. *Harvard Data Science Review*, *3*(4). https://doi.org/10.1162/99608f92.be565013*) and to share their experiences with the working group, which is happy to assist with specific questions.* 4. *Current version of the revised recommendations is available for comments at: https://docs.google.com/document/d/1UO0xmywSL1GC3xEnBVljjdo9QLygLqWLU_4L2ItnhjA/edit?tab=t.0*	https://www.rd-alliance.org/groups/data-granularity-wg/ ● Data Versioning Interest Group (formerly Working Group) https://www.rd-alliance.org/groups/data-versioning-ig/
DL11	CoP (to be)	Improving Earth and Environmental Sciences Data Community of Practice	Introducing the Earth, Space, and Environmental Science Community of Practice	F19 (n), DD12		

DL12	BoF		BoF – Abandon, Replace, or Expand: Cultivating Global Ecosystems for Legacy Data	Session Goals: ● Further establish community needs for legacy data curation in different contexts. ● Identify common challenges and best practices in managing legacy data and discuss approaches for extracting value and insights from historical datasets. ● Develop preliminary recommendations for international policies and models of collaboration in legacy data curation.	1. Refined Understanding of Community Needs: Insights on challenges and best practices in legacy data curation. 2. Stakeholder Engagement Strategy: Outline strategies to broaden engagement, especially in underrepresented regions and disciplines. 3. Recommendations for Collaboration and Policy: Draft recommendations for international and equitable legacy data collaborations and policies. Refined Understanding of Policy Needs: Insights into policy gaps, challenges, and best practices for legacy data.	Libraries for Research Data IG Ethics and Social Aspects of Data IG
DL13	WG	Coordinating Earth, Space, and Environmental Science Data Preservation and Scholarly Publication Processes	Ensuring Data Underlying Publications are Sustainable, FAIR, CARE, and TRUSTed			

DL14	WG	RDA-Ofr Mapping the Landscape of Digital Research Tools WG	Report and Plans	In DG22	In DG22	In DG22

Discipline-Focused Sessions

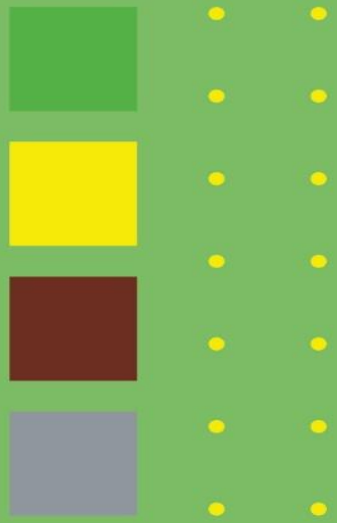
#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations
DF1			BoF – Proposal for IG: Data, process and NTRO in the creative and performing arts	In DD1	In DD1	In DD1
DF2		Health Data Commons GORC Profile WG	Health Data Commons GORC profile: Methodology, Means, and Moving forward	In S2	In S2	In S2
DF3		Artificial Intelligence and Data Visitation WG (AIDV-WG)	The global evolution of AI governance and the relevance of the AIDV-WG's deliverables			
		Research data needs of the Photon and Neutron Science community IG	Converging PaN FAIR data activities around the world			

DF4			BoF – Agricultural Research Data Integrity			
DF5			BoF – A Dat(a) with Destiny: Cross-domain collaborations in the NFDI, and beyond			
DF6		Multi-Omics Metadata Standards Integration (MOMSI) WG	Evaluating Multi-Omics Data Standard Integration Challenges and Building Solutions	F31		
DF7	CoP	Improving Earth and Environmental Sciences Data Community of Practice	Introducing the Earth, Space, and Environmental Science Community of Practice			
DF8		Harmonised terminologies and schemas for FAIR data in materials science and related domains WG	Updates and community feedback for HarmonisedMatChem WG			

Other

#ID	Group Type	Group Name	Session Title	Session Summary	Session Takeaway	Possible Collaborations

O1	BoF		BoF – Creative engagement with research data			
O2	WG	Policies in Research Organisations for Research Software (PRO4RS) WG	Update from Policies in Research Organisations for Research Software (PRO4RS) WG	A review of the present findings of PRO4RS. An interaction with the audience about how to annotate software policy review documents. A broader discussion on what to do with respect to curation.	1. WG reported on completed work: database on RS policies & resources for policy change; attendees provided information on additional RS policies 2. Suggestion of storing all policies, but not really considering those policies that only briefly mention RS but that focus on something else 3. Discussion about policy analysis and the role/value of AI in doing so, which so far is not promising but has been interesting and meaningful to try	FAIRsharing Registry



research data sharing without barriers

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