

***Name of Proposed Interest Group: Social Dynamics of Data Interoperability***

***Introduction*** (A brief articulation of what issues the IG will address, how this IG is aligned with the RDA mission, and how this IG would be a value-added contribution to the RDA community):

Extensive work has been, and continues to be done on data interoperability at the technical and information domains. However, a large portion of the challenges in building interoperable information infrastructures are the result of the interplay between organisations, institutions, economics, and individuals. Collectively these form the social dynamics that foster or hinder the progress towards achieving technical and information interoperability.

These are some of the most difficult challenges to address. Currently there is only a limited body of work on how to address these challenges in a systematic way. In keeping with the mission of the RDA, the focus of this group is to focus on what is required to build the social bridges that enable open sharing and re-use of data.

The focus of this interest group is to identify opportunities for the development of systematic approaches to address the key social challenges and to build a corpus of knowledge on building and operating interoperable information infrastructures.

***User scenario(s) or use case(s) the IG wishes to address*** (what triggered the desire for this IG in the first place):

Within Australia, the National Collaborative Research Infrastructure Strategy (NCRIS) set forth the need to establish a National Environmental Prediction System (NEPS). This requires the collaboration, coordination and (most importantly) the interoperability between a range of facilities, organisations and government entities for this system to work effectively. A number of facilities involved have recently come to the realization that the Social dynamics between the facilities is a key factor in the success (or failure) of this initiative.

Within the United States, initiatives such as the Pacific Research Platform, the National Research Platform, and the Eastern Regional Network are a few examples of cross-institutional initiatives whose success is dependent as much on social dynamics as on overcoming technical challenges.

Within Europe, the need for organisational interoperability is being recognised through initiatives such as the Organisational Interoperability framework, and the work streams in RDA4EOSC.

The problem exists at smaller scales as well. At the institutional level, the need to drive adoption across IT, IT Security, Research units, and Libraries provides a persistent challenge.

The BoF session held at the 13th Plenary session highlighted that similar challenges exist within other research domains.

There are many solutions that are being applied everyday around the world to address these challenges. Many of these are conceived and developed through the knowledge and experiences of the individuals involved. However, at present there is limited systematic knowledge gathered on this topic with a focus on how it can be applied to data and data infrastructures. Therefore they have limited systematic knowledge to draw upon and therefore it is difficult to identify the good practices relevant to a given situation.

For example, the RDA itself is an instrument intended to address some of the challenges that exist in the social dynamics across the global research data landscape. As such it provides both an interesting case study as well as a representative microcosm of the broader challenges in this space.

***Objectives*** (A specific set of focus areas for discussion, including use cases that pointed to the need for the IG in the first place. Articulate how this group is different from other current activities inside or outside of RDA.):

Currently there is no other IG within the RDA that has a specific focus on the organisational and social dynamics, (ie: the interplay between organisations, institutions, economics, and individuals) relating to interoperable information infrastructure.

The main objective of this IG is to:

- Identify the key challenges relating to organisational and social dynamics that are encountered when establishing or operating data infrastructures.
- Identify a key set of organisational, institutional, economic, and individual challenges that increase the friction to achieving information interoperability.
- Gather case studies that help define the set of problems, and compile a collection of existing solutions that have addressed these problems. It is acknowledged that often the details of specific case studies could be sensitive and documented case studies may need to be synthesised drawing upon actual cases.
- Develop guidelines, principles as recommendations for practitioners to apply when attempting to address similar problems in the future.
- Develop a corpus of knowledge, including models, frameworks and patterns that can be applied by practitioners to develop the desired social dynamics that reduce friction and foster information interoperability. This could potentially be published as a supporting output once validated.

The purpose of this IG is to create a set of outputs which identify common problems and provide illustrative case studies for practitioners to be able to understand the social dynamics that exist in their specific context and to be able to apply this knowledge in their context to influence positive change.

**Participation** (*Address which communities will be involved, what skills or knowledge should they have, and how will you engage these communities. Also address how this group proposes to coordinate its activity with relevant related groups.*):

The participation in this IG is left open and broad to anyone who has an interest in the social dynamics as it relates to building interoperable data infrastructures. Specific skills and knowledge that would be useful for this IG include,

- Social psychology
- Organisational behaviour and organisational psychology
- Economics
- Legal frameworks
- Digital anthropology
- Digital ethnography

It is expected that many of the topics of interest for this IG will have some degree of overlap with other IGs and WGs within RDA. It is intended that this IG will keep these related IGs informed of its activity, and seek to coordinate with them on topics that overlap or have a common interest. It is feasible that in the future we could hold joint sessions at plenary events around common topics.

Drawing on the description provided in the RDA website, the following IGs have been identified as potentially having overlapping interests with this IG,

1. RDA4EOSC initiative
2. Big Data IG
3. Biodiversity Data Integration IG
4. Chemistry Research Data IG
5. CODATA/RDA Research Data Science Schools for Low and Middle Income Countries
6. Data Economics IG
7. Data Fabric IG
8. Data Foundations and Terminology IG
9. Data in Context IG
10. Data policy standardisation and implementation IG
11. Digital Practices in History and Ethnography IG
12. Domain Repositories IG
13. Early Career and Engagement IG
14. Education and Training on handling of research data IG
15. ELIXIR Bridging Force IG
16. Engaging Researchers with Data IG
17. Ethics and Social Aspects of Data IG
18. Federated Identity Management
19. Global Water Information IG
20. National Data Services IG
21. Physical Samples and Collections in the Research Data Ecosystem IG
22. PID IG

- 23. Preservation Tools, Techniques, and Policies
- 24. RDA/CODATA Legal Interoperability IG
- 25. RDA/CODATA Materials Data, Infrastructure & Interoperability IG
- 26. RDA/NISO Privacy Implications of Research Data Sets IG
- 27. RDA/WDS Certification of Digital Repositories IG
- 28. Research Data Architectures in Research Institutions IG

**Outcomes** (*Discuss what the IG intends to accomplish. Include examples of WG topics or supporting IG-level outputs that might lead to WGs later on.*):

The IG intends to have the following outcomes:

1. Create a community of interest on the Social dynamics of interoperable information infrastructures;
2. Identify a set of common organisational, institutional, economic, and individual challenges that increase the friction to achieving information interoperability.
3. Gather case studies that help define the set of problems, and compile a collection of existing solutions that have addressed these problems.
4. Develop guidelines, principles as recommendations for practitioners to apply when attempting to address similar problems in the future.

Some initial topics that could lead to Working Groups include,

- Problem and solution patterns in Information Infrastructure;
- Governance & participation models;
- Frameworks for trust;
- Incentives and disincentives for collaboration and participation;
- Specific institutional partnerships known to exist, how they came to be, and their varying degrees of success

**Mechanism** (*Describe how often your group will meet and how will you maintain momentum between Plenaries.*):

The group will aim to have at least 1 virtual meeting between sessions. The group will also consider establishing a Zotero library, and utilise the RDA wiki for sharing information.

**Timeline** (*Describe draft milestones and goals for the first 12 months*):

Identify key set of problems	Month 1-6
Identify case studies	Month 7-12
Develop guidelines, and principles applicable when addressing the key set of problems	Month 12-24
Apply knowledge corpus to case studies	Month 24+

**Potential Group Members** (Include proposed chairs/initial leadership and all members who have expressed interest):

FIRST NAME	LAST NAME	EMAIL	TITLE
Kheeran	Dharmawardena	kheerand@cytrax.com.au	Co-Chair
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Alexandra	Delipalta		
Angus	Whyte		
Annajiat	Alim Rasel		
Anupama	Gururaj		
Christina	Drummond		
DUGUE	Alexandra		
Francesca	Morselli		
Francoise	Genova		
Frankie	Stevens		
Hanna	Shmagun		
Helen	Glaves		
Isabelle	PERSEIL		
Jennie	Larkin		
Joao	Moreira		
Kristal	Spreadborough		co-chair
Krassen	Stefanov		
Larry	Lannom		
Lesley	Wyborn		
Marie-Lise	Dubernet		
Mark	Parsons		
Pascal	Suppers		
Priyanka	Pillai		
Robert	Quick		
Robin	Rice		
Romain	DAVID		
Rouven	Schabinger		
Shufan	JIANG		
Timea	Biro		
Venice	Bayrd		