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.

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 on this topic and therefore they have limited systematic knowledge to draw upon.

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 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 organisational, institutional, economic, and individual aspects that increase the friction to achieving information interoperability.
- 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.
- Identify and develop case studies of solutions that demonstrate the application of the corpus of knowledge on this topic. 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.

The purpose of this IG is to create the body of knowledge and illustrative case studies for practitioners to be able to equip themselves with the best knowledge to understand the social dynamics that exist in their specific context and to be able to draw on this knowledge 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. Big Data IG
- 2. Biodiversity Data Integration IG
- 3. Chemistry Research Data IG
- 4. CODATA/RDA Research Data Science Schools for Low and Middle Income Countries
- 5. Data Economics IG
- 6. Data Fabric IG
- 7. Data Foundations and Terminology IG
- 8. Data in Context IG
- 9. Data policy standardisation and implementation IG
- 10. Digital Practices in History and Ethnography IG
- 11. Domain Repositories IG
- 12. Early Career and Engagement IG
- 13. Education and Training on handling of research data IG
- 14. ELIXIR Bridging Force IG
- 15. Engaging Researchers with Data IG
- 16. Ethics and Social Aspects of Data IG
- 17. Federated Identity Management
- 18. Global Water Information IG
- 19. National Data Services IG
- 20. Physical Samples and Collections in the Research Data Ecosystem IG
- 21. PID IG
- 22. Preservation Tools, Techniques, and Policies
- 23. RDA/CODATA Legal Interoperability IG
- 24. RDA/CODATA Materials Data, Infrastructure & Interoperability IG
- 25. RDA/NISO Privacy Implications of Research Data Sets IG
- 26. RDA/WDS Certification of Digital Repositories IG
- 27. 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.):

There are two primary outcomes of this IG:

- 1. Create a community of interest on the Social dynamics of interoperable information infrastructures;
- 2. Create a corpus of knowledge on the topic.
- 3. Identify and develop case studies of solutions that demonstrate the application of the corpus of knowledge on this topic.

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. It will also establish a mechanism (possibly the mailing-list) for offline discussions.

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

Research and identify organisational, institutional, economic, and individual challenges to achieving interoperability	Month 1-6
Identify case studies	Month 7-12
creation of knowledge corpus	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
Greg	Madden	gregmadden@psu.edu	
Heidi	Laine	heidi.laine@csc.fi	
Jay	Pearlman	jay.pearlman@fourbridges.org	
Jeremy	Cope	jez.cope@bl.uk	
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Stefanie	Kethers	stefanie.kethers@ardc.edu.au	

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