What You Need to Know to Establish an Interest Group

Interest Groups are long-term initiatives within the RDA. Interest Groups may do one or more of the following:

- 1) Serve as a platform that leads to the formation of one or more Working Groups. An existing Interest Group may refine their ideas into implementable actions by creating focused Case Statements to create one or more Working Groups. The process of establishing a Working Group is described in the "Setting up a Working Group" section below.
- 2) Support communication and coordination among a cluster of related Working Groups/Interest Groups that may be grouped by theme (e.g., research domain, data publishing, data life cycle component, etc.)
- 3) *Enable better communication and coordination across different Working Groups/Interest Groups* (e.g, all domain-specific groups, all education groups, between technically oriented and domain-specific groups, etc.)
- 4) Serve to communicate and coordinate with a specific community outside RDA, fostering synergies, bringing new groups/members to RDA and conversely bringing the WGs activities to the attention of external parties.

Please read through the next few pages, and complete the template at the end to begin.

Need additional help or guidance? Have other questions? Contact enquiries@rd-alliance.org.

Interest Group Charter Review Process What to Expect

Interest Groups undergo a formal review (see Figure 1) before they are recognized and endorsed by RDA.

- **Step 1**. One or more interested members write up a Draft Charter using the *RDA Interest Group Draft Charter Template* (see below), and send the completed draft to the *RDA Secretariat at enquiries@rd-alliance.org*. While writing your Draft Charter, please keep the following elements in mind:
 - There should be 2-4 co-chairs leading the initiative this helps to keep the group going and balance workload.
 - There should be a balance of expertise and geographic representation members are international experts, and ideally the group spans at least 3 continents
 - The proposed IG should provide a platform for communication and coordination around the topic of interest
 - The group should be technology and product neutral it shouldn't promote one specific product or technology
 - There should be no, or extremely minimal, overlap with existing IGs / WGs
- **Step 2**. The Secretariat puts the Draft Charter out for Community Review. During the Community Review phase (4 weeks), all members of the RDA community are invited to read and comment on any aspects of the document.
- **Step 3**. If any comments are received, the IG writing team addresses them and provides the revised Draft to the Secretariat. (1 week at most)
- **Step 4**. The Draft (revised or original) then goes to TAB for review. During the TAB Review phase (2 weeks), 2 members of the TAB volunteer to review the Draft Charter according to the following criteria:

Focus and Fit:

Are the Interest Group objectives aligned with the RDA mission? Is the scope too large for effective progress, too small for an

RDA effort, or not appropriate for the RDA? Overall, is this a worthwhile effort for the RDA to take on? Is this an effort that adds value over and above what is currently being done within the community?

Capacity:

Does the initial membership list include sufficient expertise, and disciplinary and international representation? Are the people involved in the Interest Group sufficient to make tangible progress? What individuals or organizations are missing?

Impact and Engagement:

Is it likely that the Interest Group will engage the intended community? Is there evidence that the research community wants this? Will the outcome(s) of the Interest Group foster data sharing and/or exchange?

The TAB reviewers will come to one of three conclusions, providing appropriate supporting material: the Charter is sufficient, requires revision, or is rejected. Depending upon the conclusion, another revision of the Draft Charter may be in order. This cycle may need to be repeated until TAB is satisfied with the content.

Step 5. Council then reviews the Draft Charter in consultation with TAB (2 weeks), and makes one of four possible decisions:

- Recognized and endorsed as is: Strong Charter. Group is recognized as an RDA IG and should commence its work.
- Recognized and endorsed subject to specific revisions: Worthwhile idea, changes need to be made to strengthen the Charter and meet approval criteria. After the approach has been modified, the group will be recognized by RDA and commence its work.
- *Encouraged but not presently endorsed*: Good idea but needs refinement. The group needs to mature its concept and refine its Charter for approval. Council and/or TAB will provide specific feedback and clarification on what is needed.
- *Not endorsed*: The idea is not a good fit for the RDA or does not meet other criteria for approval. Council will provide specific feedback and clarification.
- **Step 6**. Once again, any revisions required must be completed, and the cycle repeated until Council is satisfied with the content.
- **Step 7**. Upon approval, Secretariat will help the IG with its working, communication, and recording processes. Joint activities with RDA affiliates are encouraged.

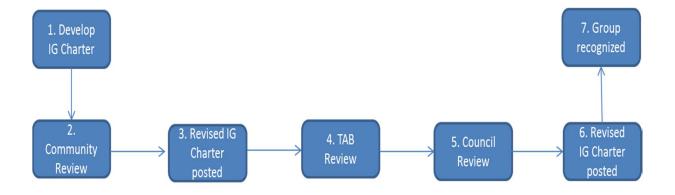


Figure 1. Interest Group Draft Charter Review Process.

RDA Interest Group Draft Charter Template

Name of Proposed Interest Group: SHARC (SHAring Reward & Credit)

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):

Data sharing statements and promotion is a strong reality but challenging, especially when considering the many obstacles that remain on several fronts. Among these obstacles is the lack of relevant and recognized rewarding mechanisms for the very specific efforts required to share organized datasets.

The prerequisite for data sharing lies in implementing the FAIR principles (Findability, Accessibility, Interoperability, and Reusability) which can add to the workload if done by the researchers themselves; however this aspect is never accounted for when activity is evaluated by funders or reviewers.

In some cases, resources may come from different domains that were not necessarily initially developed for research (e.g. museum, clinical care....). Data and physical resources sharing each comprise very different steps, methods and the involvement of diverse communities:

- Building of a research collection or resource infrastructure according to the FAIR principles (including all necessary steps for data and physical entities repositories)
- Elaboration of governance and sharing policies for the resource
- Development of tools to follow up on the use of the resource

Individuals with different expertise may contribute at each of these steps (laboratory technicians, resource managers, researchers, legal experts...).

In 2014, the Expert Advisory Group on Data Access (EAGDA) carried out, through UK cohort studies, research into the governance of data access. The aim of their research was to identify the factors that help or hinder individual researchers in making their data (both published and unpublished) available to other researchers, and to examine the potential need for new types of incentives in order to enable data access and sharing. Among their findings:

- Research culture and environment are not perceived as providing sufficient support, nor adequate rewards for researchers who generate and share high-quality datasets.
- Making data accessible to others can carry a significant cost to researchers (both in terms of financial resource and the time it requires);

- There is typically very little, if any, formal recognition for data outputs in key assessment processes including in funding decisions, academic promotion;
- Data managers have an increasingly vital role as members of research teams, but are often afforded a low status and few career progression opportunities;

Recommendations:

- At first, develop mechanisms that encourage and reward good practice, rather than on penalise researchers who fail to fulfil their planned approaches for sharing data (the carrot not the stick)
- It is vital therefore that funders and research leaders foster an active, on-going dialogue with international partners and work with them to build common incentive structures and effect cultural change.
- Recognise the contribution of those who generate and share high quality datasets, including as a formal criterion for assessing the track record and achievements of researchers during funding decisions.
- Form a partnership among funders, research institutions and other stakeholders to establish career paths for data managers.
- Ensure that the contributions of both early-career researchers and data managers are recognised and valued appropriately, and that the career development of both types of individuals is nurtured.
- Champion greater recognition of data outputs in the assessment processes to which they contribute.
- Strengthen career pathways for data managers; and recognise data outputs in performance reviews

(https://wellcome.ac.uk/sites/default/files/establishing-incentives-and-changing-cultures-to-support-data-access-eagda-may14.pdf)
These recommendations have not been promoted so much out of UK whilst they are of great interest at the international level of research governance.

Existing initiatives recognise the value of certain steps of the chain towards sharing resources however gaps remain to be filled, especially as regards physical resources. As an example, the BRIF initiative (BRIF: Bioresource Research Impact factor/framework) has already tackled these issues for human biological samples and data. As a result, the CoBRA guideline has been produced and work performed on unique identifiers and relevant parameters towards specific metrics.

RDA IGs could build on those previous results and ideas to further identify such gaps and suggest practical solutions to promote resources provision to the community as a valuable genuine activity in research practices.

The workflow of the entire process, from resources production to their impact back on the producer has not been explored in RDA groups, to our knowledge. Furthermore, RDA community is focused mainly on data. Extending the work to resources that also have physical samples in addition to data would be a value-added contribution. As part of its mission in keeping within the goal of RDA, the IG will work at finding solutions to foster open sharing of resources.

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

Use case n°1 - The biomedical community: A growing portion of research relies on sample collections and databases. This is especially true in biological and medical sciences with the development of large scale biology in the –omics era. High throughput 'omics' platforms require biospecimens, and generate a great amount of data on large numbers of patients and/or healthy individuals. The size and complexity of the collections needed to promote translational research typically extends far beyond the scope of individual research projects and the need to produce these valuable data is being met by contemporary bioresource facilities. While sharing of such resources is essential for optimizing knowledge production, so far only a very small part of them are. A major obstacle lies in the fact that establishing a valuable bioresource requires considerable time and effort. Finding ways to recognize and credit this upstream work is essential.

Use case 2 - The Industrial Ecology community: Industrial ecologists rely heavily on data to assess the environmental performances of product during their life cycle. This requires interdisciplinary data from several domains such: as chemistry, ecology, economy, toxicology and climate science, among others. Currently, the availability of harmonized datasets for environmental Life Cycle Assessment (LCA) of products is scarce and the existing proprietary databases are incomplete. Sharing research data on a Research Data Infrastructure is an additional, time-consuming effort for researchers that is not acknowledged. Reward mechanisms for sharing data would significantly improve the transparency of such products' environmental assessments and the accuracy of environmental models. Moreover, it would also have a high informational value, facilitating responsible consumption and thus, increase the weight of the public opinion's pressure for significant environmental improvements of activities with high environmental impact.

Use case 3 - Data produced by marine and terrestrial biodiversity research projects that evaluate and monitor Good Environmental Status have a high potential of use by stakeholders involved in environmental management. The accessibility of data on the environment, especially in ecology, has never been more problematic, however. The cost of these data and their heritage value is increasingly highlighted, whereas due to budgetary constraints, the resources allocated to their production and their availability are limited. Rewarding data sharing could have a beneficial impact on the whole system. As a case in point, the data produced by biodiversity research are heterogeneous and produced by a multitude of entities, therefore standard formats and protocols would allow the interconnection of databases, and semantic approaches could contribute significantly to their interoperability. However, the specific scientific objectives and the logistics of project management and information gathering lead to a decentralised distribution of data, which can hinder environmental research. Moreover, data are considered as a technical end, and should be more intended as a scientific end, as an object of study: by furthering primary analyses, in the context of a research question for which they have been collected, data can be reused - within the limits allowed by their quality - and their exploration, by appropriate method as graphs, may lead to the formulation of new scientific hypotheses. Actually, the "rising tide of data" requires new approaches to data management and data preservation; access and sharing should be supported in a seamless way. According to the situational analysis of the French landscape of

biodiversity research observatories¹, data planning, collection, quality assurance, description, conservation and analysis are mostly led by observatories, whereas data discovery (of potentially useful data) and data integration from varied sources are poorly done. This case study aims to present the latest trends in data infrastructure and data management solutions for research and to discuss the progress of the Open Science Cloud, tools and initiatives about data sharing rewarding in the field of biodiversity and environmental data.

A wide range of disciplines face the issue of no or little data sharing, including but not limited to the above mentioned use cases. They could be addressed within the SHARC IG along with its development and ongoing membership:

- Low-temperature physics: cryostats data
- Earth science: samples and data
- Materials science: catalysts, microscopy data, etc.
- Social science: raw data from surveys, interviews, focus groups or case studies
- Neuroscience: imaging data.

(See Anita de Waard 0000-0002-9034-4119; VP Research Data Collaborations; Elsevier RDM Services)

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.):

The SHARC IG group will have four main objectives:

1/ To review the existing rewarding mechanisms in various communities, as well as their limits and identify factors that could to improve the process and optimize the sharing of bioresources; i.e. data and physical samples (ex: tools, incentives, requirements...).

2/ To use this analysis to encourage the inclusion of bioresources sharing-related criteria in the research evaluation process at the European institutional level, (i.e. without making this activity mandatory, increase coherence between evaluation and real practice).

3/ To disseminate information and findings to diverse communities of stakeholders.

¹ Fondation pour la Recherche sur la Biodiversité (2016), Etat des lieux et analyse du paysage national des observatoires de recherche sur la biodiversité, une étude de l'infrastructure ECOSCOPE. Série FRB, Expertise et synthèse. Ed. Aurélie Delavaud et Robin Goffaux, 72 pp.

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.):

Currently, seven different communities are represented in the group (details in the table at the end of document): Biology and Biomedicine (7 ppl.), Information Sciences and Technology (3 ppl.), Geospatial data (1 ppl.), Marine Biology (1 ppl.), Biodiversity (2 ppl.), Industrial Ecology (1 ppl.), Bioethics (4 ppl.),

Anne Cambon-Thomsen is the initial leader.

Laurence Mabile will dedicate 30 % of her workload to the coordination of the group itself. Co-chairs will help in interacting with the relevant RDA groups and to coordinate meetings on their continent.

The different communities will contribute to the white paper detailing the existing and lacking rewarding mechanisms in the sharing process.

Three existing RDA groups have identified themselves during our BoF session at RDA P9, as having common concerns: the 'Research data provenance working group', the 'RDA / TDWG Metadata Standards for attribution of physical and digital collections stewardship' and the RDA/WDS Publishing Data Workflows WG. Data Citation WG, Elixir Bridging Force IG, Reproducibility IG may have some overlapping interests, too.

Those groups will be contacted via the RDA platform, and virtual meetings will be organized to start with. If relevant, cross-sessions will be organized at RDA plenaries. We also plan to alert them about the events organized by our BoF/IG group.

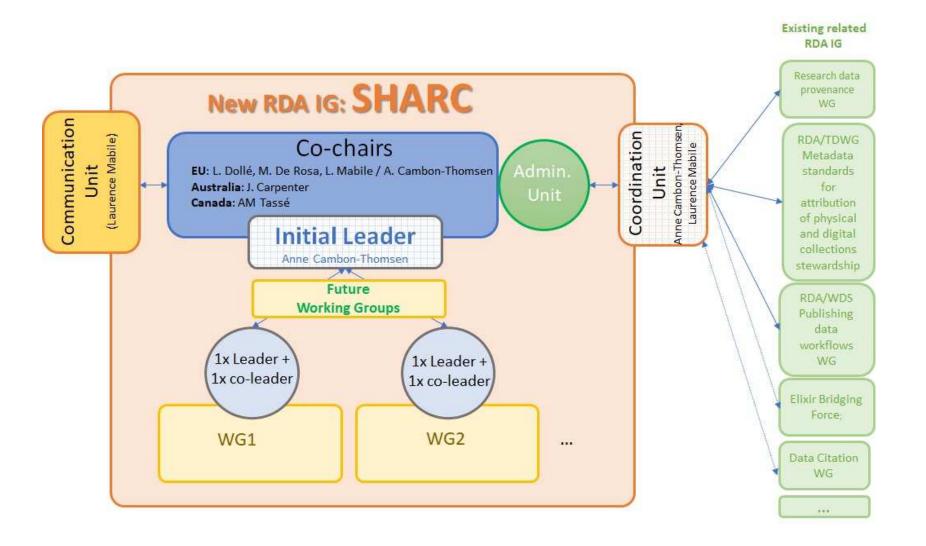
Outcomes (Discuss what the IG intends to accomplish. Include examples of WG topics or supporting IG-level outputs that might lead to WGs later on.):

- White paper /position paper on 'rewarding' mechanisms (existing and lacking) for sharing bioresources and their link to research institutional evaluation; To be published if possible as an RDA endorsed paper in an open access high visibility science journal with a science policy section
- Submission of a session proposal to European Science Open Forum 2018, Toulouse

- Answering to the next European Community public stakeholder consultation related to the preparation of the EU research FP9 and explore the possibility to include such recognition criteria in FP9 as well as in an EU-level strategies that foster implementation at an institutional level (such as what exists for human resources with the HRS4R (Human resource strategy for research)).
- Forming RDA working groups to address issues such as whether future working groups will pertain to a specific community (like ecological, biomedical, geospatial...) or resolve around specific stakeholders across communities (editors, funders, governing bodies of research institutions, research evaluation policy makers...) or both.

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

- -Virtual web meetings will be organized as often as necessary, with a minimum of once a month for a regular update.
- Face to face meetings will be encouraged at each RDA plenary conference.
- Regular feedback will be relayed towards all interested RDA groups about relevant meetings and conferences of interest for group members.



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

• June 2017: ESOF session proposal

The submission of a proposal to ESOF (Euroscience Open Forum) for a scientific session has been done under the coordination of Fiona Murphy.

The conference will be held in July 2018 in Toulouse, FR.

More info at:

http://www.esof.eu/en/about/programme/call-for-proposals.html

- RDA plenary conference 10, Montreal, 19-21 sept 2017: Attendance by some of the group members; mapping of overlapping topics by other groups and contacting them
- First draft of the white paper: end 2017

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

FIRST NAME	LAST NAME	EMAIL	TITLE		INSTITUTION/ Country	SKILLS
Anne	Cambon-Thomsen	anne.cambon-thomsen@univ-tlse3.fr		researcher	Department,	Bioethics, biobanking & immunogenetics
Laurence	Mabile	laurence.mabile@univ-tlse3.fr		manager	Department, INSERM-	Biochemistry, molecular biology, Biobanking,

					Toulouse III, FR	
Rodrigo	Costas-Comesana	rcostas@cwts.leidenuniv.nl	Ph. D	Researcher	Centre for Science and Technology Studies (CWTS). Faculty of Social and Behavioral Sciences. Leiden University.	Information Sciences Technology; metrics
Mogens	Thomsen	mogens.thomsen@univ-tlse3.fr	MD, Ph. D	Emeritus researcher	Public Health Department, INSERM- University Toulouse III, FR	Immunology
Michele	De Rosa	michele.derosa@bonsa.uno	Ph.D	Executive Manager		Industrial Ecology, Life Cycle Assessment
Laurent	Dollé	Laurent.Dolle@erasme.ulb.ac.be	Ph. D	Operating manager BWB, Board of Directors of BBMRLbe; Assistant Professor VUB	Hospital, ULB, 1070 Brussels, Belgium	Oncology, Cell Biology, Biospecimen science, biobanking, ELSI, business development, networking
Mohamed	Yahia	mohamed.yahia@inist.fr	Ph. D	Researcher	INIST, CNRS, FR	IST, in charge of DataCite activities; Physics and material sciences

Fiona	Murphy	fionalm27@gmail.com		Associate fellow	MMC Ltd (Research Data/Publishing Consultant); University of Reading	Publishing Data, Innovative Scholarly Communications
Elena	Bravo	elena.bravo@iss.it	Ph. D	Researcher	Research Coordination and Support Service, Istituto Superiore di Sanità (National Health Institute), IT	CoBRA guideline; quality and best policy for biological resource managements; biobanking; Lipid metabolism; Atherosclerosis and lipoproteins;
Martina	Zilioli	zilioli.m@irea.cnr.it	Ph. D	Research fellow	Institute for Electromagneti c Sensing of Environment (Milan), IT	Geospatial
Sofie	Bekaert	Sofie.Bekaert@uzgent.be		head of the Clinical Research Center & as president of the Board of directors of BBMRI.be	Clinical Research Center of Ghent University Hospital	Biobanking , biomedical

Romain	David	romain.david@imbe.fr	Ph. D	Researcher	CNRS, Mediteraneen Institute of Biodiversity and Marine and Continental Ecology	Terrestrial / marine ecological engineering and Database management - network animation, data mining and graph approach
Anna	Cohen Nabeiro	anna.cohen- nabeiro@fondationbiodiversite.fr	Engineer	Head of project		Biodiversity, metadata, communication
Alison	Specht	alison.specht@fondationbiodiversite.fr			la Recherche sur	Biodiversity, metadata, communication
Jane	Carpenter	Jane.Carpenter1@health.nsw.gov.au		Project manager	NSW Health Pathology - Biobanking Services , Australia	Biobanking Public Health
Anne Marie	Tassé	anne-marie.tasse@mcgill.ca	Ph. D in Law	Executive Director		Law and bioethics of biobanking and

						data sharing (international).
Gabrielle	Bertier	gabrielle.bertier@mail.mcgill.ca	M.I.A	student	Genomics and	Ethics, Law, Sociology, Genetics and genomics, clinical genomics
Jantina	De Vries	jantina.devries@uct.ac.za	Ph.D	Senior Researcher	Department of Medicine University of Cape Town, South Africa	Data sharing African networks
Louise	Bezuidenhout	louise.bezuidenhout@insis.ox.ac.uk	Ph.D	Researcher	Institute for Science Innovation and Society, University of Oxford	Ethics; Data sharing issues within the life sciences, in particular the African network.

^{*}In bold, co-chairs