The Research Data Alliance

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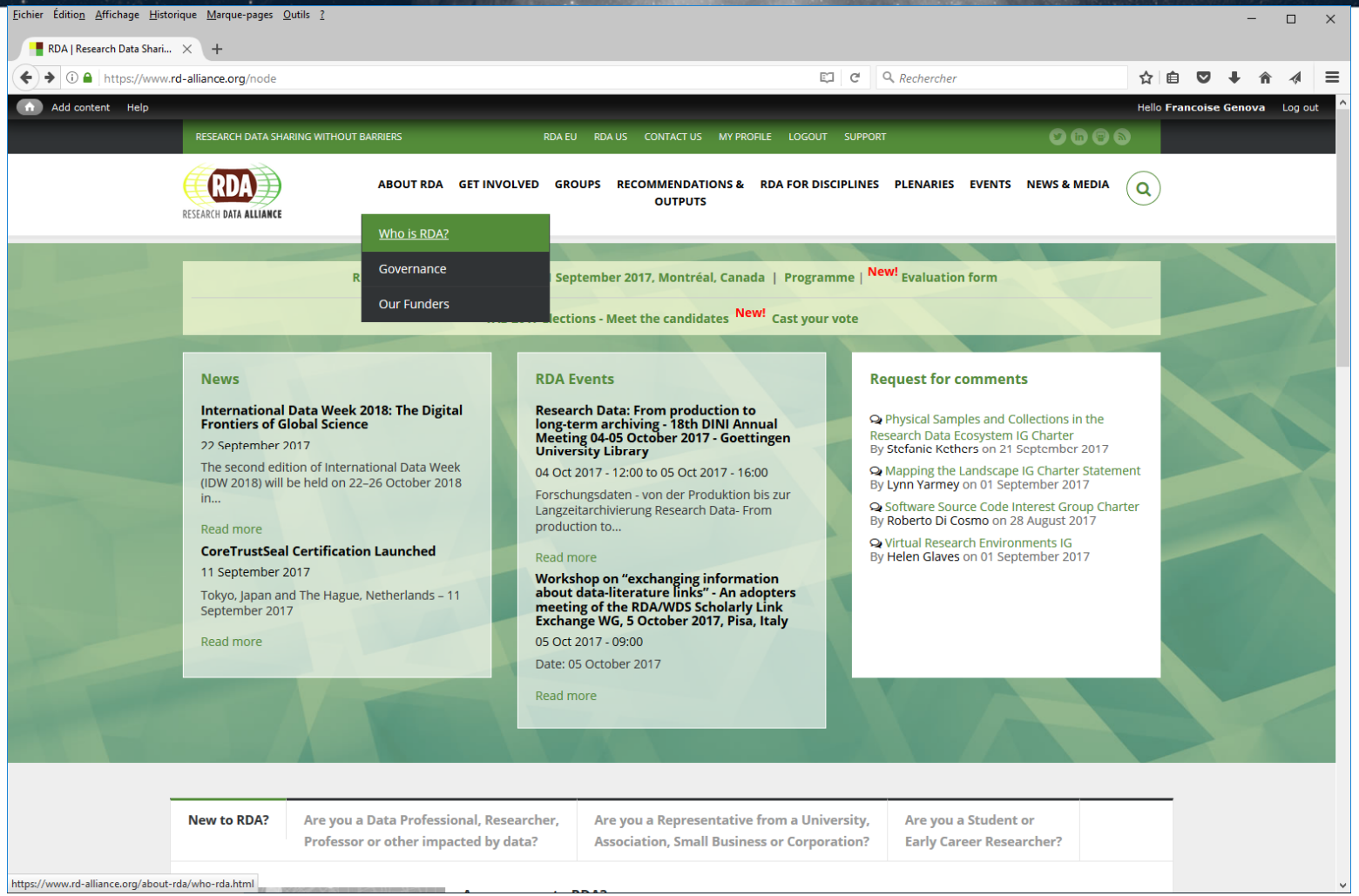
CDS CS, 10 October 2017

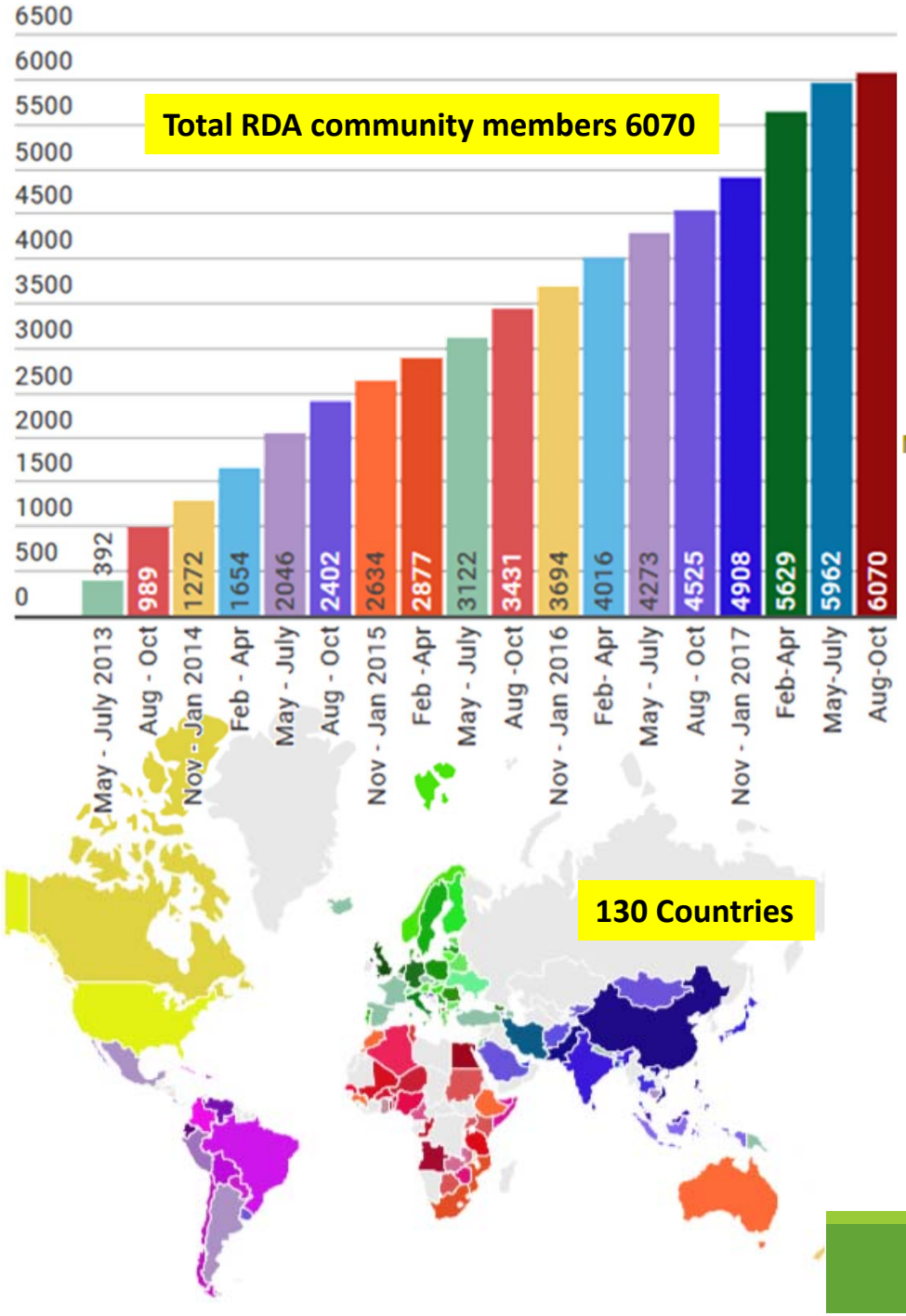
rd-alliance.org

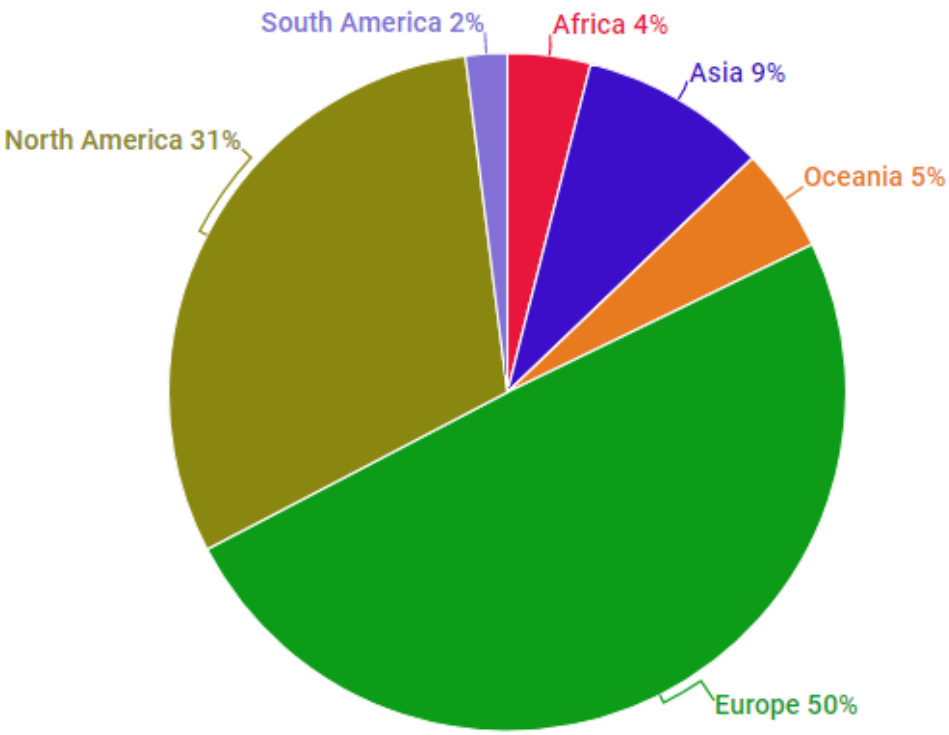


The RDA

- Created in May 2013 by EC, NSF and the Australian government
- Mission: build the social and technical bridges that enable open sharing of scientific data
- Bottom-up:
  - Anyone can join (a few basic principles to accept)
  - Members propose activities
  - Evaluation by Technical Advisory Board, acceptance by Council then go on

RDA worldwide growth





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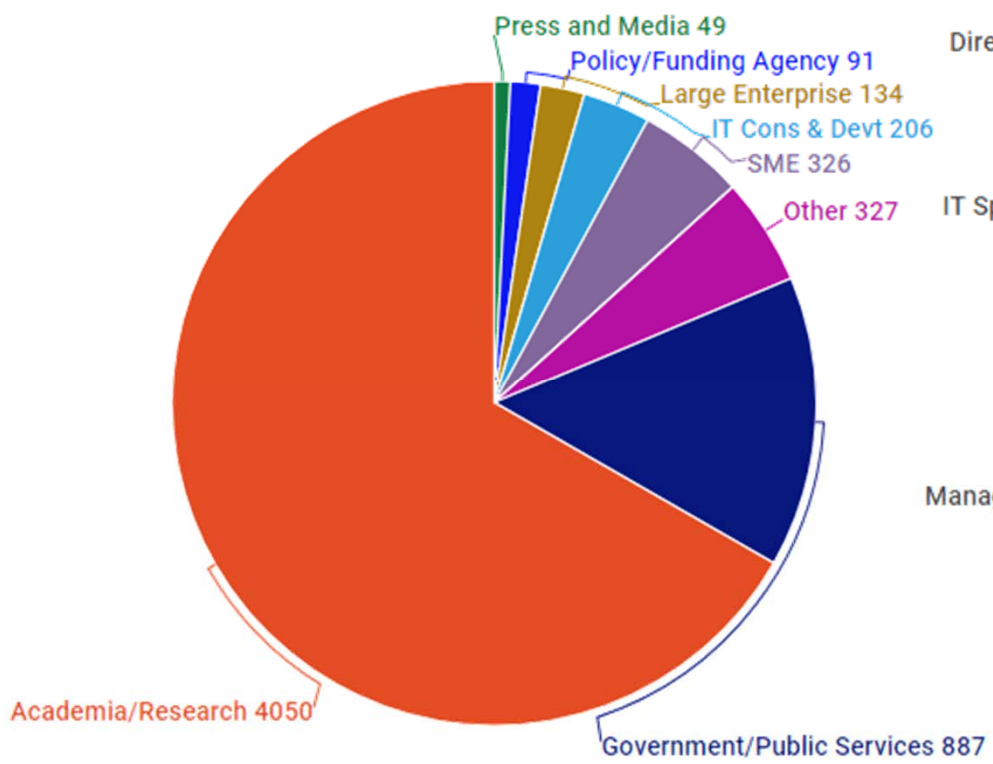
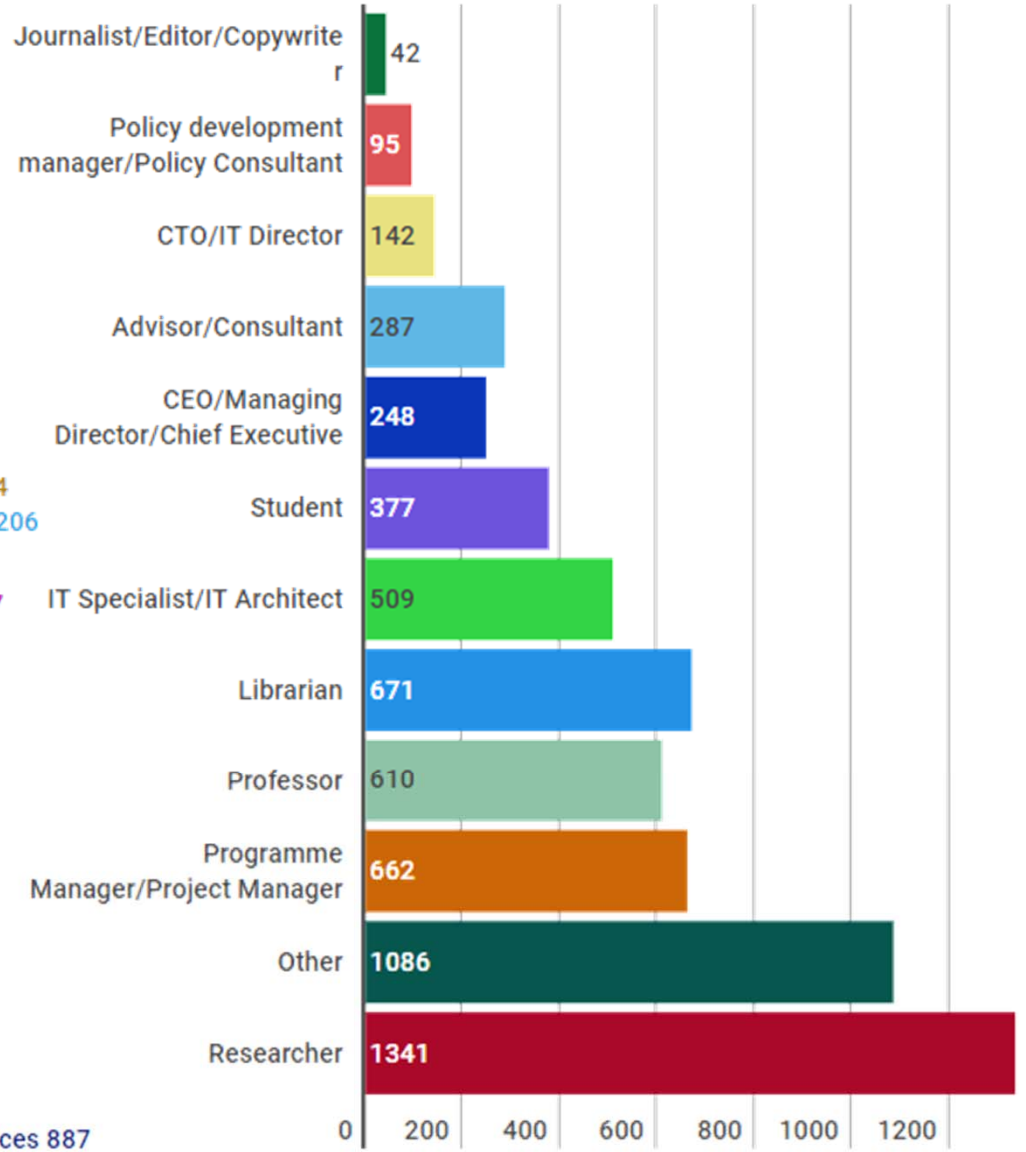
Who is RDA?





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What is RDA?

- A remarkable global, neutral, independant and open forum, to tackle your own needs
- Very diverse membership
  - Profiles: researchers interested in data sharing, IT specialists, librarians, publishers, funding agency staff, etc
  - Disciplines
- Some communities used it from Day 1
  - E.g., agriculture (Wheat, Rice, Agrisemantics, On-Farm data, etc)

RDA activities

- 88 Working Groups and Interest Groups
  - Working Groups (30) have 18 months for focused activities leading to implementable deliverables – RDA Recommendations
  - Interest Groups (58) are aimed at discussing a topic relevant to science data sharing and can also produce outputs
- WG can have a second phase and/or support implementation after they end
- Two Plenaries/year as milestones
  - A wonderful place to share on best practices and bring back ideas for your own activities
- A wide variety of activities – many different topics relevant to science data sharing

RDA Interest (IG) & Working Groups (WG) by Focus (1)

Total 88 groups:
30 Working Groups & 58 Interest Groups

Domain Science - focused

- **Agrisemantics WG**
- **BioSharing Registry WG**
- **Fisheries Data Interoperability WG**
- **On-Farm Data Sharing (OFDS) WG**
- **Rice Data Interoperability WG**
- **Wheat Data Interoperability WG**
- Agricultural Data IG (IGAD)
- Biodiversity Data Integration IG
- Chemistry Research Data IG
- Digital Practices in History and Ethnography IG
- Geospatial IG
- Global Water Information IG
- Health Data IG
- Linguistics Data Interest Group
- Mapping the Landscape IG
- Marine Data Harmonization IG
- Quality of Urban Life IG
- RDA/CODATA Materials Data, Infrastructure & Interoperability IG
- Research data needs of the Photon and Neutron Science community IG
- Small Unmanned Aircraft Systems' Data IG
- Structural Biology IG
- Weather, Climate and air quality IG

Community Needs - focused

- **Certification and Accreditation for Data Science Training and Education WG**
- **RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World WG**
- **Teaching TDM on Education and Skill Development WG**
- Archives & Records Professionals for Research Data IG
- Data for Development IG
- Development of Cloud Computing Capacity and Education in Developing World Research IG
- Early Career and Engagement IG
- Education and Training on handling of research data IG
- Ethics and Social Aspects of Data IG
- International Indigenous Data Sovereignty IG

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RDA Interest (IG) & Working Groups (WG) by Focus (2)

Total 88 groups:
30 Working Groups & 58 Interest Groups

Reference and Sharing - focused

- **Data Citation WG**
- **Data Description Registry Interoperability WG**
- **Data Security and Trust WG**
- **Empirical Humanities Metadata WG**
- **International Materials Resource Registries WG**
- **Provenance Patterns WG**
- **QoS-DataLC Definitions WG**
- **RDA / WDS Publishing Data Bibliometrics WG**
- **Repository Core Description WG**
- **Research Data Collections WG**
- **Research Data Repository Interoperability WG**
- Data Discovery Paradigms IG
- National Data Services IG
- RDA/CODATA Legal Interoperability IG
- Reproducibility IG
- Sharing Rewards and Credit (SHARC) IG

Partnership Groups

- **RDA / TDWG Metadata Standards for attribution of physical and digital collections stewardship WG**
- **RDA/WDS Scholarly Link Exchange Working Group**
- ELIXIR Bridging Force IG
- RDA/NISO Privacy Implications of Research Data Sets IG
- RDA/WDS Publishing Data IG

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RDA Interest (IG) & Working Groups (WG) by Focus (3)

Total 88 groups:
30 Working Groups & 58 Interest Groups

Data Stewardship and Services – focused

- **Brokering Framework WG**
- **DMP Common Standards WG**
- **Exposing Data Management Plans WG**
- **RDA / WDS Publishing Data Workflows WG**
- **WDS/RDA Assessment of Data Fitness for Use WG**
- Active Data Management Plans IG
- Data in Context IG
- Data Rescue IG
- Data Versioning IG
- Domain Repositories IG
- Libraries for Research Data IG
- Long tail of research data IG
- Physical Samples and Collections in the Research Data Ecosystem IG
- Preservation e-Infrastructure IG
- Preservation Tools, Techniques, and Policies IG
- RDA/WDS Certification of Digital Repositories IG
- RDA/WDS Publishing Data Cost Recovery for Data Centres IG
- Repository Platforms for Research Data IG
- Research Data Provenance IG
- Virtual Research Environments IG

Base Infrastructure – focused

- **Array Database Assessment WG**
- **Data Type Registries WG**
- **Metadata Standards Catalog WG**
- **PID Kernel Information WG**
- Data Fabric IG
- Data Foundations and Terminology IG
- Disciplinary Interoperability Framework IG
- Big Data IG
- Brokering IG
- Federated Identity Management IG
- Metadata IG
- PID IG
- Software Source Code IG
- Vocabulary Services IG

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CDS involvement in RDA

- Starting point: FG involvement in the EC High Level Expert Group on Scientific Data (2010)
- Led to CDS/CNRS participation in an EC project in support to Europe-US collaboration on data sharing proposed before RDA was defined, which soon became the first European support project to RDA
  - Participation in RDA set up (FG) & Astronomy task (AS)
- CDS/CNRS partner in the two next projects RDA EU2 & RDA EU3 (on-going until Feb. 2018)
  - Liaison with science communities, work in RDA Global, involvement in liaison with technical communities

Astronomy liaison with RDA (1)

- FG passes what we learnt while building the IVOA and the global astronomy data infrastructure
  - Member of the RDA Technical Advisory Board since 2013, co-chair since 2015, member of the Council Strategy sub-committee
- Astronomy staff from IVOA teams from several countries participate actively – for CDS main liaison AS, Provenance ML, etc
- Discussions of RDA status and activity at each IVOA Interop in the Data Curation & Preservation IG
- Presentations at ADASS, LISA, ASTERICS DADI Workshops, etc

Astronomy liaison with RDA (2)

- No Astronomy Group in RDA – IVOA tackles our interoperability discussions
- Interest of several RDA Groups for astronomy developments
- Active participation in several Groups, in particular Certification (which led to CoreTrustSeal), also Long Tail, Provenance, Dynamic Data Citation, Federated Identity Management, Research Data Repository Interoperability, Repository Platforms for Research Data, Digital Representation of Scientific Units of Measure

Liaison to continue

- CDS/CNRS will be involved in RDA EU 4.0 (starting March 2018)
  - National node for France
  - Lead of the Ambassador task + continuation of Ambassador for Astronomy
- Liaison through IVOA and ASTERICS will continue
- IVOA Registry reused by Materials science in a RDA Group (Hanisch/Plante)
- The discipline and its journals should follow the work on Data Publication (involves publishers)
- New RDA Group overarching the disciplinary groups:
  - Disciplinary Collaboration Framework (co-chair D. Schade, CADC)
  - Will allow more visible presence of disciplines with no specific Group
  - Expected to become the voice of scientific disciplines in RDA