Update on the Research Data Alliance
January 2015

research data sharing without barriers

rd-alliance.org

Research Data Alliance Created to Accelerate Development of Research Data Sharing Infrastructure Worldwide

- RDA community focuses on building **social, organizational and technical infrastructure** to
  - reduce barriers to data sharing and exchange
  - accelerate the development of coordinated global data infrastructure

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CREATE → ADOPT → USE

RDA Working Group Infrastructure Deliverables are:

- **Focused pieces of adopted code, policy, infrastructure, standards, or best practices** that enable data to be shared and exchanged
- **"Harvestable" efforts** for which 12-18 months of work can eliminate a roadblock for a substantial community
- **Efforts that have substantive applicability** to "chunks" of the data community, but may not apply to everyone
- **Efforts for which working scientists and researchers can start today** while more long-term or far-reaching solutions are appropriately discussed in other venues

RDA
RESEARCH DATA ALLIANCE

Precipitous Growth

Global Data Planning Meeting: October 2012

First Working Groups and Interest Groups

240 participants

RDA Launch / First Plenary

March 2013

First "neutral space" community meeting (Data Citation Summit)

First Organizational Partner Meet-up

First BOFs

380 participants from 22 countries

RDA Second Plenary

September 2013

First Organizational Assembly

6 co-located events

14 BOF, 12 Working Groups, 22 Interest Groups

497 Participants from 32 countries

RDA Third Plenary

March 2014

First RDA Deliverables presented

Organizational Assembly and first OAB / Council meeting

10 co-located events

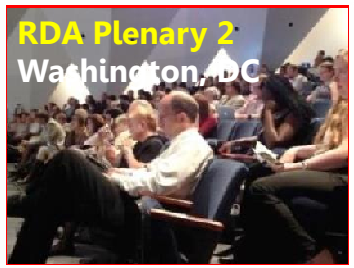
11 BOF, 14 Working Groups, 36 Interest Groups

550 Participants from 40 countries

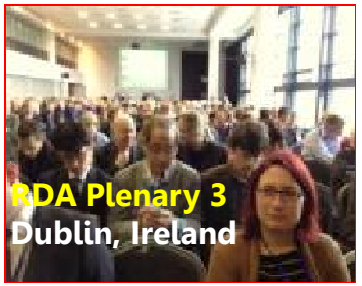
RDA Fourth Plenary

September 2014

First RDA organizational telecon: August 2012



First Working Group exchange meeting



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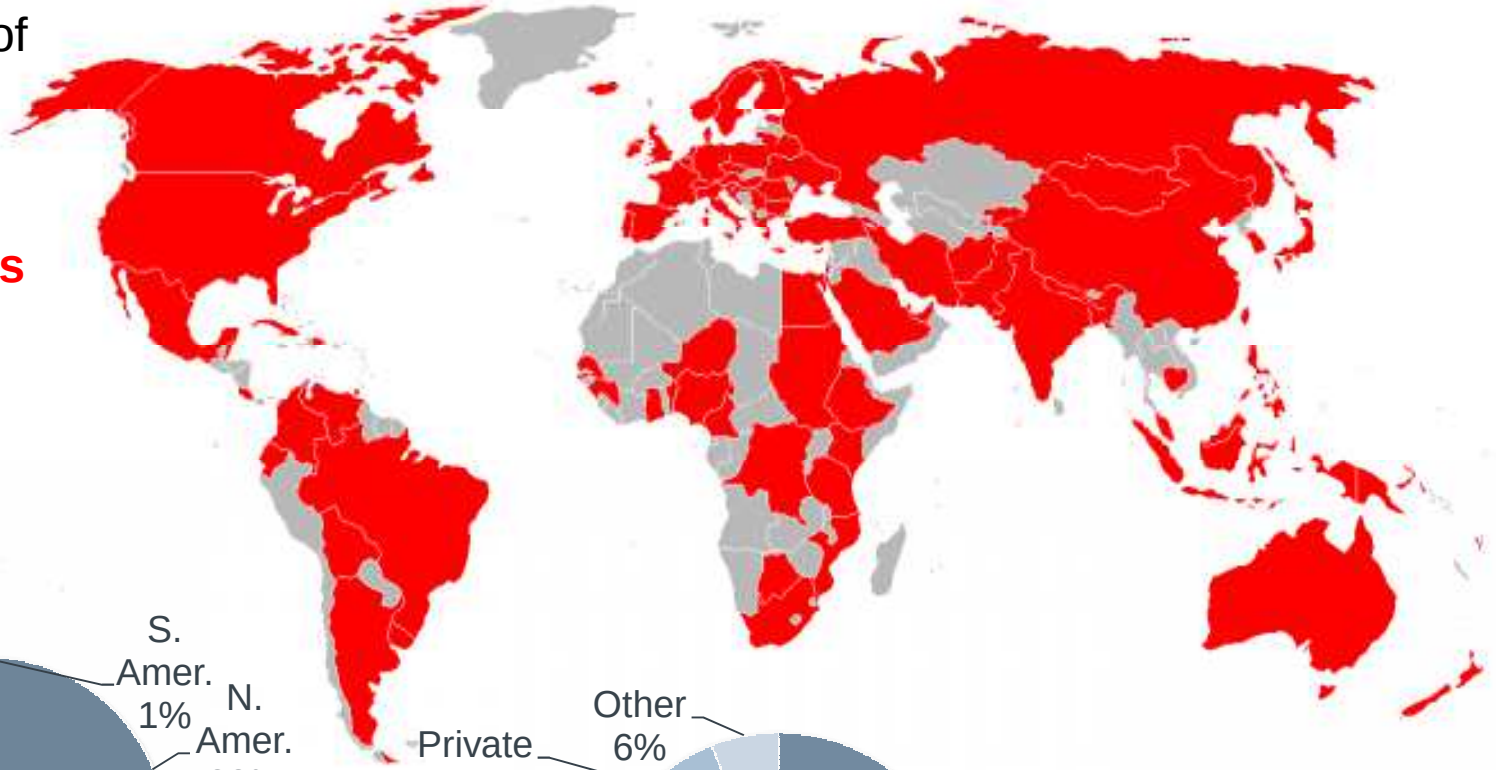
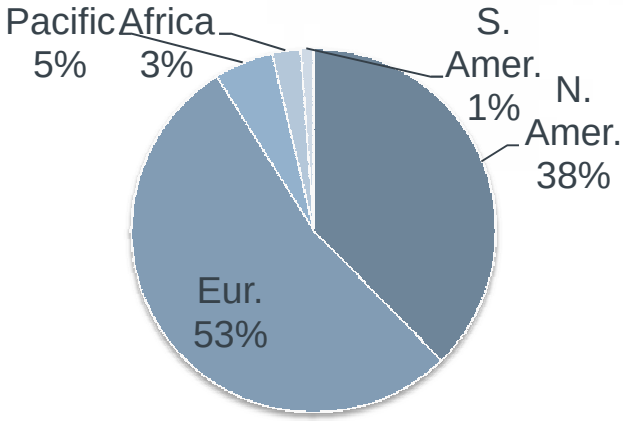
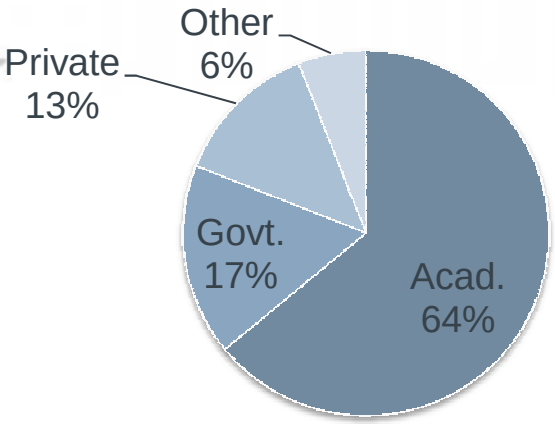
The Research Data Alliance Community Today

- Distribution of **2,538 RDA Members** in **92 Countries** *(3 December 2014)*
- **~1500** in **~70 countries** in **March 2014**







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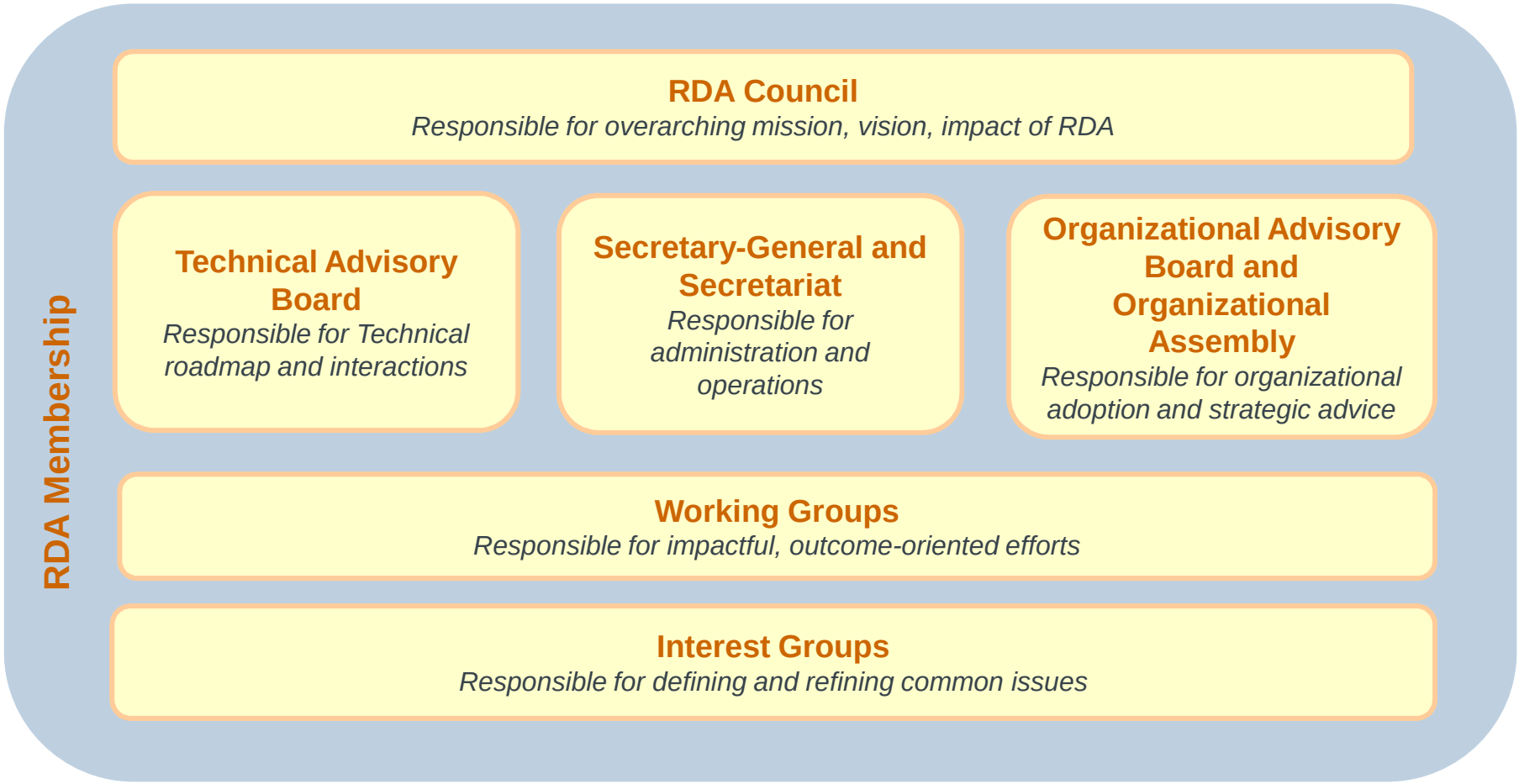
RDA Organizational Structure Complete



RDA Interest (IG) and Working Groups (WG) by Focus 1 (as of 12/14)

* under review

Domain Science - focused

- Toxicogenomics Interoperability IG
- Structural Biology IG
- Biodiversity Data Integration IG
- Agricultural Data Interoperability IG
- **Wheat Data Interoperability WG**
- Digital Practices in History and Ethnography IG
- Geospatial IG
- Marine Data Harmonization IG
- Metabolomics IG
- RDA/CODATA Materials Data Infrastructure and Interoperability IG
- Research Data Needs of the Photon and Neutron Science Community IG
- Defining Urban Data Exchange for Science IG*
- **The BioSharing Registry: Connecting data policies, standards and databases in the life sciences WG***
- Urban Quality of Life Indicators IG

Community Needs - focused

- Community Capability Model IG
- Engagement IG
- RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World IG
- Development of Cloud Computing Capacity and Education in Developing World Research IG
- Data for Development IG
- Education and Training on handling of research data IG

RDA Interest (IG) and Working Groups (WG) by Focus 2 (as of 12/14)

* under review

Reference and Sharing - focused

- **Data Citation WG**
- **Standardization of Data Cat. and Codes WG**
- RDA/CODATA Legal Interoperability IG
- Reproducibility IG
- **Data Description Registry Interoperability Working Group**
- **RDA / WDS Publishing Data Bibliometrics WG**

Data Stewardship and Services - focused

- Research Data Provenance IG
- Preservation e-infrastructure IG
- **RDA / WDS Publishing Data Services WG**
- **RDA / WDS Publishing Data Workflows WG**
- Long-tail of Research Data IG
- RDA/WDS Publishing Data IG
- **RDA/WDS Repository Audit and Certification**
- **DSA-WDS Partnership WG**
- Domain Repositories Interest Group
- Brokering Interest Group
- ELIXIR Bridging Force IG*
- Libraries for Research Data IG*
- RDA / WDS Certification of Digital Repositories IG
- RDA / WDS Publishing Data Cost Recovery for Data Centres IG

Base Infrastructure - focused

- **Data Foundation and Terminology WG**
- **Metadata Standards Directory WG**
- **Practical Policy WG**
- **PID Information Types WG**
- **Data Type Registries WG**
- Data in Context IG
- Big Data Analytics IG
- **Brokering Governance WG**
- Federated Identity Management IG
- Metadata IG
- PID Interest Group
- Service Management IG
- Data Fabric IG

First Deliverables

Working Group	Deliverables	Users
Data Foundations and Terminology	Data Model, Defined terminology in a registry	OIF, EUDAT, DASISH
Data Type Registries	Federation between data type registries	CNRI, EUDAT, IDF
Persistent Identifier Information Types	Core informational types, Prototype protocol/api that implements these.	DKRZ, CNRI
Practical Policy	Example policy sets for tasks (e.g. replication)	Participants

- Deliverables not always technical
  - DSA-WDS Certification

Deliverables Coming Soon

- A basic set of **machine actionable rules** to enhance trust
- A **metadata standards directory** so we can describe similar things consistently
- A **dynamic-data citation methodology** so we can reference precise subsets of changing data.
- Semantically linked **terms describing wheat data** so we can share harvest and related information around the world
- A **unified repository certification scheme** to reduce confusion and improve trust.

Organizations Committed to Joining RDA

Organizational Members:

- American University Library, USA
- Australian National Data Service, Australia
- Barcelona Supercomputing Center - Centro Nacional de Supercomputación, Spain
- CAP Digital, France
- Columbia University Libraries/Information Services, USA
- CSC, the Finnish IT Center for Science, Finland
- DANS, Data Archiving and Networked Services, The Netherlands
- Digital Curation Centre (DCC), UK
- EIROForum IT Working Group
- eResearch Services and Scholarly Application Development Division of Information Services, Griffith University, Australia
- European Data Infrastructure (EUDAT project)
- Information Technology Research Insititute (ITRI)- National Institute of Advanced Industrial Science and Technology (AIST), Japan
- International Association of STM Publishers
- STFC, UK
- Internet2, USA
- NZ eScience Infrastructure, New Zeland
- Purdue University Libraries, USA
- Research Data Canada, Canada
- Scholarly Publishing and Academic Resources Coalition (SPARC), USA
- Terrestrial Ecosystem Research Network (TERN), The University of Queensland, Australia
- Washington University in St. Louis Libraries, USA

Affiliates

- CODATA
- ICSU World Data System
- ORCID
- DataCite

RDA Plenary 3 (Dublin)

- March 26-28, 2014
- Theme : "Playing YOUR part"
- 500 attendees from 35 countries
- Hosted by Ireland and Australia
- Co-located events:
  - EUDAT Training
  - MUMIA Meeting on Verifiable Results in Multi-lingual/Multi-faceted Search: Challenges in Sharing Data, Tools and Results Workshop
  - SIM4RDM: Building Collaborations to address research data management workshop
  - APARSEN-EUDAT-SCIDIP-ES Workshop on Data Preservation and Re-use
- Focus on emerging professionals :
  - RDA/EU sponsored 22 European Early Career Researchers and Scientists
  - RDA/US sponsored 8 Student Interns

RDA Plenary 4 (Amsterdam)

- September 22-24, 2014
- Theme : "Reaping the Fruits"
- 550 attendees from 40+ countries
- Co-hosted by Netherlands
- Co-located conferences:
  - EUDAT Conference
  - Crowd Computing 2014
  - Data Seal of Approval Conference 2014, etc.
  - …
- First RDA deliverables presented:
  - Data Type Registries
  - PID Information Types
  - Practical Policy
  - Data Foundation and Terminology
- Focus on emerging professionals :
  - RDA/EU sponsored 14 European Early Career Researchers and Scientists
  - RDA/US sponsored 8 Student Interns and 5 Early Career and Student Fellows

RDA Plenary 5: San Diego

March 7:
RDA Strategic Planning Meeting *(RDA strategic leadership)*

March 8:
RDA Adoption Day *(open)*

March 9-11:
RDA Plenary 5

- *Registration is now open*

Next Steps for the RDA

More Infrastructure

Continuing pipeline of infrastructure deliverables adopted and used to accelerate data sharing

Increasing coordination of infrastructure

Effective Community

Increasing cross-boundary collaborations between domains, sectors, organizations

Synergistic Programs

International and regional programs focusing on workforce, outreach, expansion of infrastructure impact

Partnership with Industry

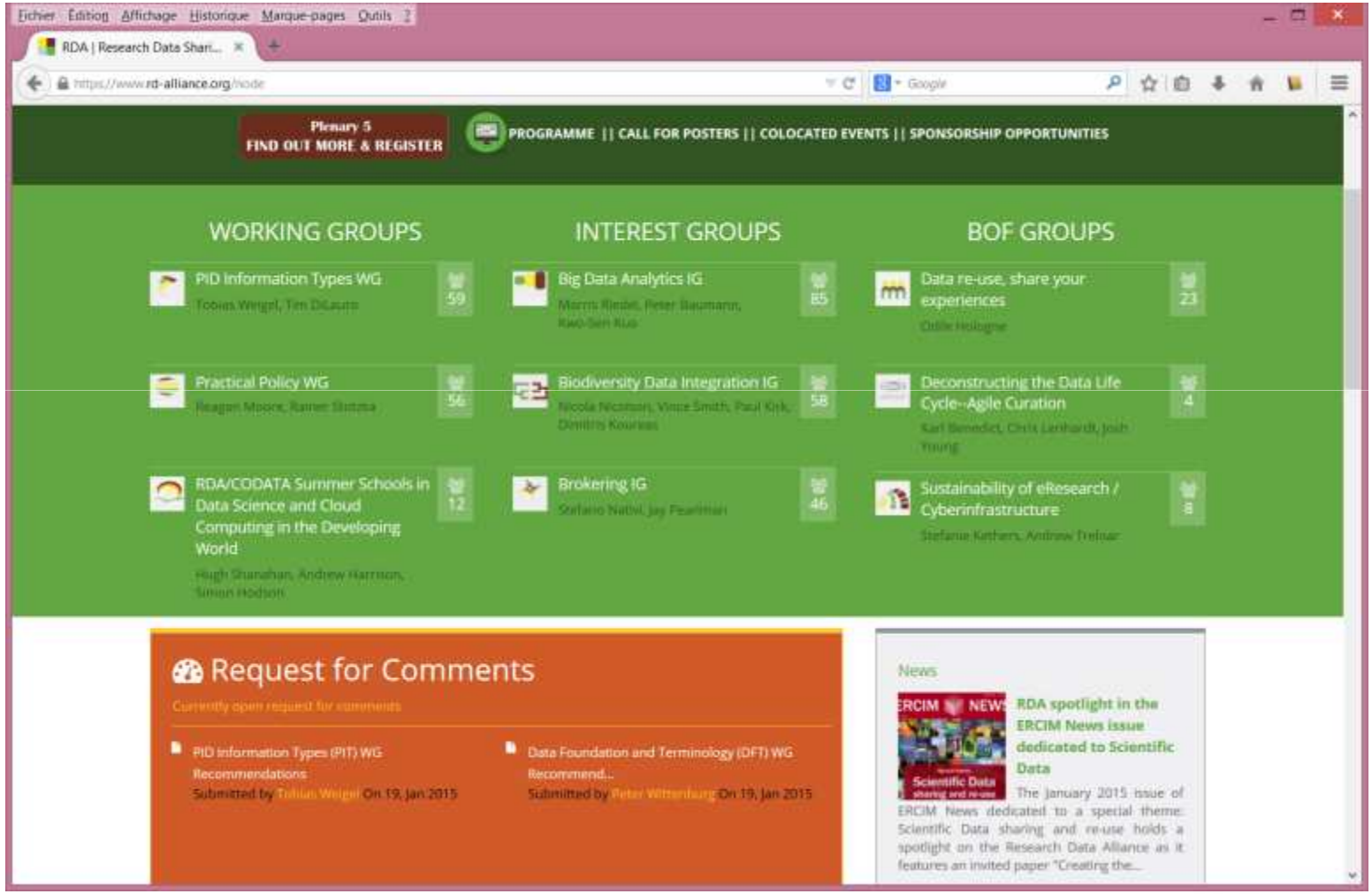
New partners in the Organizational Assembly

Focused strategy to support development of industry infrastructure for data sharing

The Data Harvest Report

How sharing research data can yield knowledge, jobs and grow

A RDA Europe Report

The Data Harvest, December 2014 © RDA Europe

Think about joining!
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