RDA in a nutshell

October 2017

RDA meets researchers in Croatia, 24 October 2017, Zagreb
Leif Laaksonen

If you answer YES, you are at the right place!

➢ Do you have to access files, which forma(s) you don't know?

➢ Are you uncertain on metadata standards directory?

➢ Do you want to share your data but you are uncertain how?

➢ How should data resources be referenced through persistent identifiers?

➢ How to best define practices of how to deal with data automatically and in a documented way with computer actionable policy?

➢ You want to meet the best people in data management at the RDA Plenaries?

Strong linkage into the European Open Science Cloud (EOSC)

THE EUROPEAN OPEN SCIENCE CLOUD (EOSC) AIMS TO ACCELERATE AND SUPPORT THE CURRENT TRANSITION TO MORE EFFECTIVE OPEN SCIENCE AND OPEN INNOVATION IN THE DIGITAL SINGLE MARKET.

Vision

Researchers and <u>innovators</u> openly share data across technologies, disciplines, and countries to address the grand challenges of society.

Mission

RDA builds the social and technical bridges that **enable open sharing** of data.

What is RDA?

RDA is an international **member based organization** focused on the development of infrastructure and community activities that reduce barriers to data sharing and exchange, and the acceleration of data driven innovation worldwide.

With more than 6,100 members globally representing 130 countries, RDA includes **researchers, scientists and data science professionals** working in multiple disciplines, domains and thematic fields and from different types of organisations across the globe.

RDA is building the social and technical bridges that enable open sharing of data to achieve its vision of researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society.

What does RDA do?

Members come together through self-formed, volunteer, focussed Working Groups, exploratory Interest Groups to exchange knowledge, share discoveries, discuss barriers and potential solutions, explore and define policies and test as well as harmonise standards to enhance and facilitate global data sharing & re-use.

RDA members collaborate together across the globe to tackle numerous infrastructure & data sharing challenges related to:

- ❖ Reproducibility
- ❖ Data preservation
- ❖ Best practices for domain repositories
- ❖ Legal interoperability

- ❖ Data citation
- ❖ Data type registries
- ❖ Metadata
- ❖ and so many more!

MY DATA   MY TAX MONEY

MONEY FOR RESEARCH

DATA SHARING

Who Can Join RDA?

Any individual or organization, regardless of profession or discipline, with an interest in reducing the barriers to data sharing and re-use and who agrees to RDA's guiding principles of:

- *Openness*
- *Consensus*
- *Balance*
- *Harmonization*
- *Community-driven*
- *Non-profit and technology-neutral*

Individual Membership is free @ https://www.rd-alliance.org/user/register
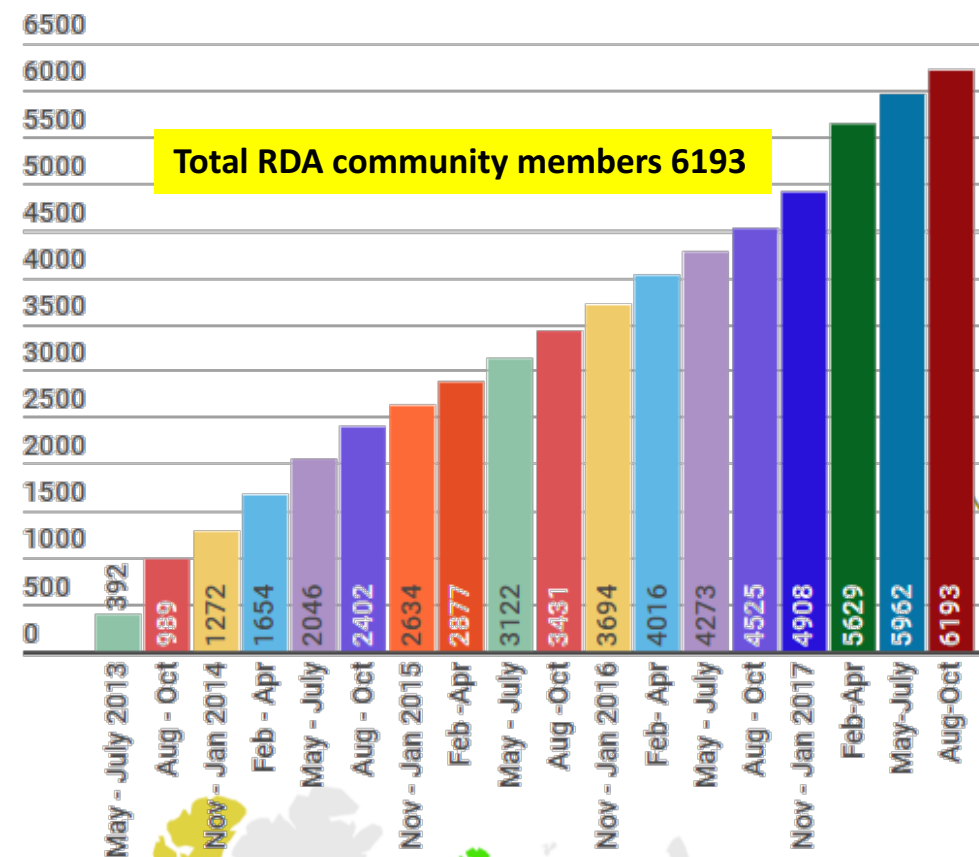
Why Join RDA as an Individual Member?

Individual Member Benefits

- *Contribute to acceleration of data infrastructure development*

- *Work and share experiences with collaborators throughout the world*

- *Access to extraordinary network of colleagues with various levels of experience, perspectives and practices*

- *Gain greater expertise in data science regardless of whether one is a student, early or seasoned career professional*

- *Enhance the quality and effectiveness of personal work and activities*

- *Improve one's competitive advantage professionally and positioning oneself for leadership within the broader research community*
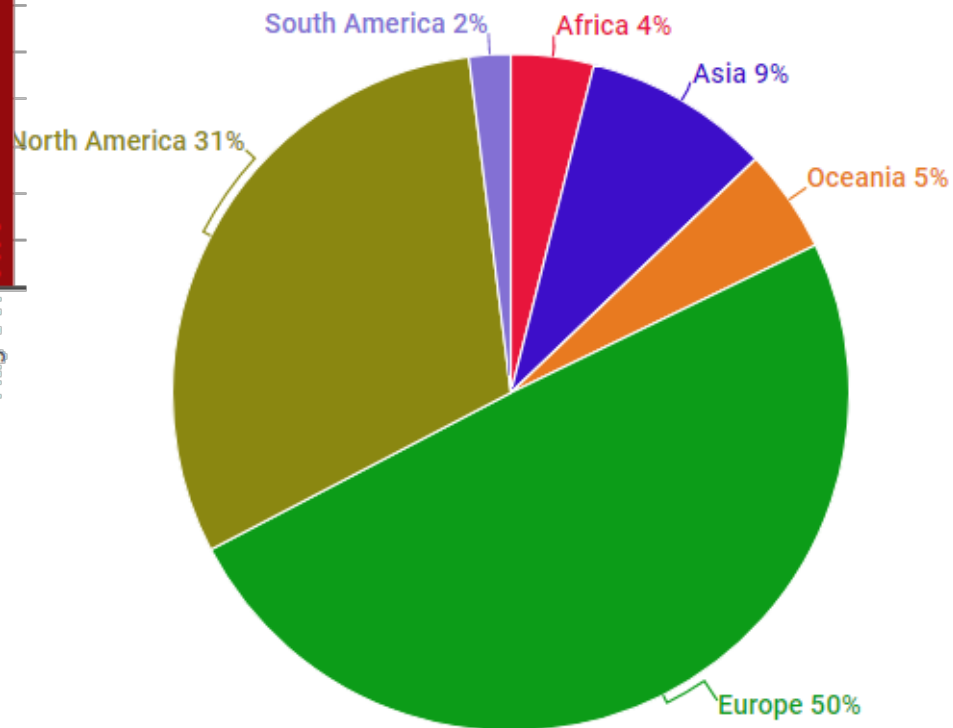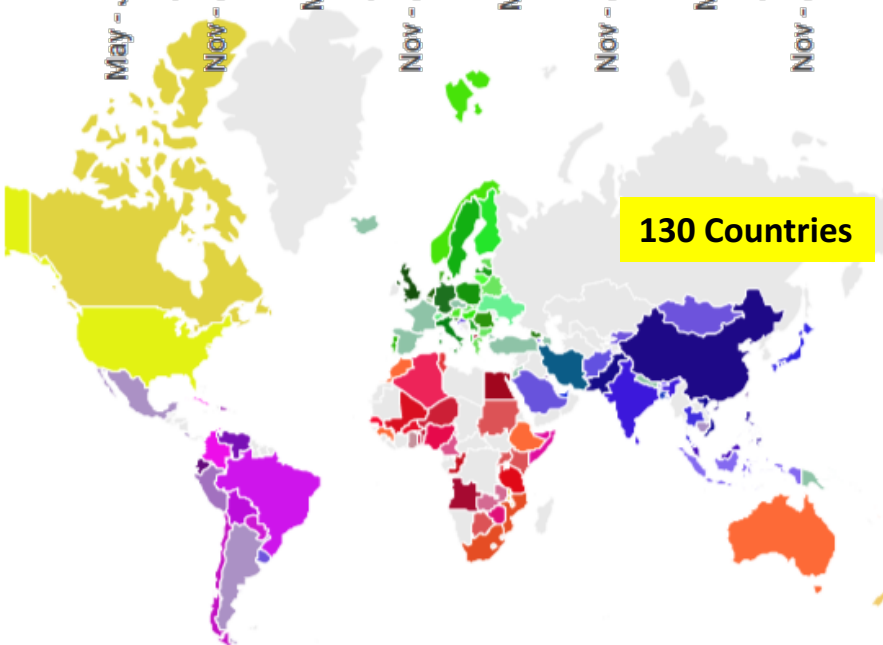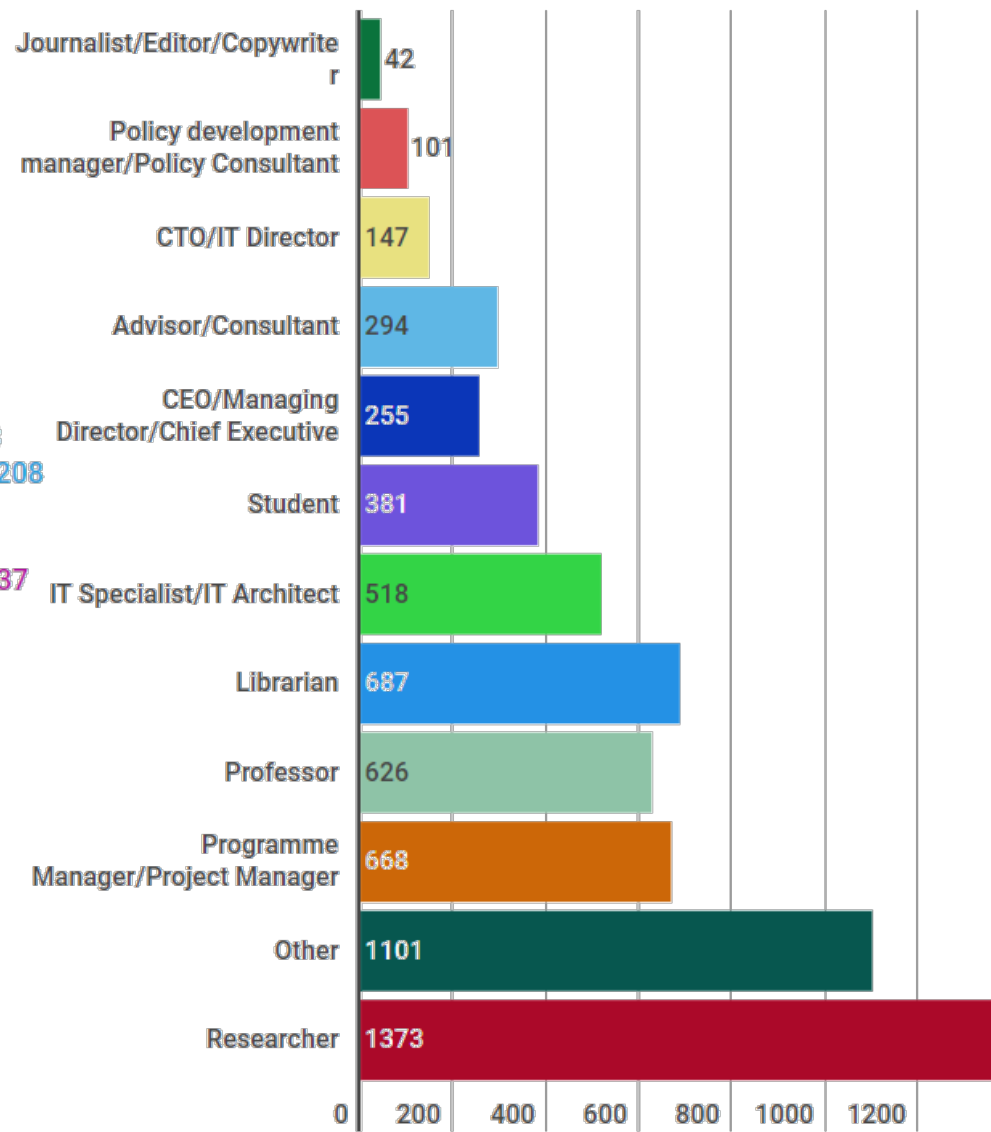
Individual RDA Members 6,193

RDA worldwide growth

Total RDA community members 6193

130 Countries

North America 31%
South America 2%
Africa 4%
Asia 9%
Oceania 5%
Europe 50%

Who is RDA?

Bar chart (respondents by role):

Role	Count
Journalist/Editor/Copywriter	42
Policy development manager/Policy Consultant	101
CTO/IT Director	147
Advisor/Consultant	294
CEO/Managing Director/Chief Executive	255
Student	381
IT Specialist/IT Architect	518
Librarian	687
Professor	626
Programme Manager/Project Manager	668
Other	1101
Researcher	1373

Pie chart (sector):

- Press and Media 51
- Policy/Funding Agency 94
- Large Enterprise 133
- IT Cons & Devt 208
- SME 330
- Other 337
- Academia/Research 4133
- Government/Public Services 907

Why Join RDA as an Organisational Member?

Organisational Member Benefits

- *Provide an **organizational perspective** on the work of RDA and ability to influence RDA's direction*

- *Assist in **implementation & adoption** of RDA Recommendations & Outputs*

- *Participate in all RDA Organizational Forums*

- *Receive regular **updates** on the work of the RDA*

- *Attend Organizational Assembly meetings and vote on **proposed policies** for consideration by the RDA Council and for members of the Organizational Advisory Board*

- *Provide **advice to RDA Council** through the Organizational Advisory Board*

- *Be recognized on the RDA Website and at RDA Meetings as a **supporter of data interoperability***

43 Organisational & 8 Affiliate Members

Organisational & Affiliate Members

43 Organisational Members

8 Affiliate Members

Total 88 groups:
30 Working Groups & 58 Interest Groups

Francoise will take you into details of WGs, IGs, BoFs and RDA Plenaries…

RDA Recommendations that make data work

"Create - Adopt - Use"

✓ Adopted code, policy, specifications, standards, or practices that enable data sharing

✓ "Harvestable" efforts for which 12-18 months of work can eliminate a roadblock

✓ Efforts that have substantive applicability to groups within the data community but may not apply to all

✓ Efforts that can start today

18 flagship recommendations & outputs with over
75 cases of adoption in different domains, organisations and countries

RDA Recommendations & Outputs

THE RDA OUTCOMES LEGEND

Recommendations: are the flagship outputs of RDA. They are RDA's equivalent of the "specifications" or "standards" that other organisations create and endorse. The process for creating and endorsing these is already defined.

Supporting Outputs: are the outputs of RDA WGs and IGs that are fruit of RDA work, but are not necessarily adoptable bridges. "Upon request", these sort of outputs go through a community comment period and if no major objections or gaps are identified they get the RDA Brand.

Other Outputs: include workshop reports, published articles, survey results, etc. Anything a WG or IG wants to register and report. Upon request, these are published and discoverable on the RDA website but have no level of endorsement.
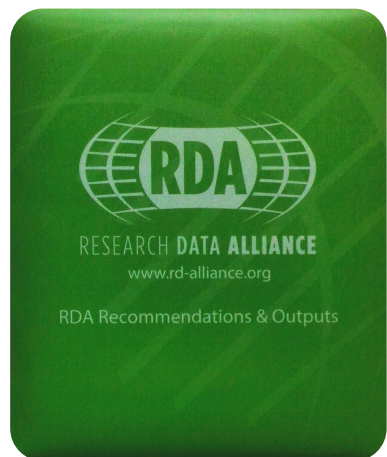
Call for Supporting and Other RDA Outputs

If your group has produced something that you would like to share with the broader community, please send it to enquiries@rd-alliance.org and indicate whether you would like it to be considered as a 'Supporting' or 'Other' output.

THE RESEARCH DATA ALLIANCE
RECOMMENDATIONS & OUTPUTS

https://rd-alliance.org/call-supporting-and-other-rda-outputs

RDA in Europe

SUPPORTED THROUGH THE RDA EUROPE 1, 2, 3 PROJECTS AND FROM 01.03.2018 BY THE RDA EUROPE 4PROJECT

RDA in Europe activities

❖ Ambassador program - The RDA Europe work on the definition of the Ambassadors programme is aligned at global level with the ongoing effort of the RDA

❖ Support for European early carreer researchers to take part in the RDA Plenaries

❖ Calls for Collaboration Projects to support communities that want to test or adopt RDA outputs in Europe

❖ Workshops, webinars, summer/winterschools and national events

❖ RDA Europe 4 will have the concept of National RDA Nodes

RDA in Europe Research Engagement

Three major activities

➢ Annual Science Workshop

➢ Participation in domain specific events

➢ Co-organisation of European level joint events with global initiatives

The Research Data Alliance Technical Specifications (TS1-9)

HILARY HANAHOE

TRUST-IT SERVICES LTD. & RDA SECRETARIAT

H.HANAHOE@TRUST-ITSERVICES.COM

European Cloud Initiative

European Open Science Cloud & European Data Infrastructure

Building on existing EU-funded e-Infrastructures

Networking, data and computing services closer to European researchers and innovators

Need for interoperability of data and computing

Avoiding fragmentation

RDA Technical specifications

Data federation cost efficiency

Avoid / reduce technology & market lock-in

Innovation friendly

Open & User-driven

Enable European and Global data Interoperability

Meeting public procurement needs

RDA Compliance with Requirements for ICT Technical Specifications

Openness: RDA WG processes & procedures are public & completely open

Consensus: foundation upon which RDA is built

- All processes and procedures, in connection with focus, work plans, deliverables, milestones & tangible specifications / recommendations are **consensus** based.

- WG work plans, activities & outputs go through an **open** & **transparent** public community review process in addition to feedback provided by RDA Technical Advisory Board and Council.

Transparency: all information available, balance and harmonisation ensured and all feedback considered and responded to.

https://rd-alliance.org/working-and-interest-groups/group-process-procedures.html

RDA Compliance with Requirements for ICT Technical Specifications

- ✓ **(a) maintenance**
- ✓ **(b) availability**
- ✓ **(c) intellectual property rights**
- ✓ **(d) relevance**
- ✓ **(e) neutrality and stability**
- ✓ **(f) quality**

MAIN TARGET MARKET:
- **Service Providers**
- **Data Providers**
- **Repositories**
- **E- & Research Infrastructures**
- **SW Developers**
- **Data Scientists**
- **Researchers & Scientists**

Open information exchange & **involvement of all interested categories** are at the core of RDA's vision of an open, global, collaborative science. RDA adopts a **consultative approach** involving all **relevant actors** to spur international collaborations necessary to address the global challenges.

RDA & first 4 Technical Specifications approved

The Basic Vocabulary of Foundational Terminology and Query Tool - produced by the Data Foundation & Terminology WG which ensures researchers use a common terminology when referring to data.

The Data Type Model and Registry published by the Data Type Registries WG providing machine-readable and researcher-accessible registries of data types that support the accurate use of data

The Machine Actionable Policy Templates produced by the Practical Policy WG designed to support data sharing and interchange between communities.

The Persistent Identifier Type Registry produced by the PID Information Types WG, a conceptual model for structuring typed information to better identify PIDs, common interface for access to this information.

Next 5 Technical Specifications under evaluation

EVALUATION PHASE STARTED IN MAY 2017

✓TS5: **Dynamic-data Citation Methodology** Supports efficient processing of data and linking from publications.

✓TS6: **Data Description Registry Interoperability Model**: Interoperability model addressing the problem of cross platform discovery by connecting datasets together.

✓TS7: **RDA/WDS Repository Audit and Certification Catalogues**: Creates harmonized Common Procedures for certification of repositories at the basic level, drawing from the procedures already put in place by the Data Seal of Approval (DSA) and the ICSU World Data System (ICSU-WDS)

✓TS8: **RDA/WDS Workflows for Research Data Publishing Model**: A data-publishing reference model assisting research communities in understanding options for data publishing workflows and increases awareness of emerging standards and best practices.

✓TS9: **RDA/WDS Publishing Data Services**: An open, universal literature-data cross-linking service to improve data visibility, discoverability, re-use and reproducibility

RDA in a Nutshell

**WWW.RD-ALLIANCE.ORG/
@RESDATALL**

RDA Global

Email - enquiries@rd-alliance.org

Web - www.rd-alliance.org

Twitter - @resdatall

LinkedIn - www.linkedin.com/in/ResearchDataAlliance

Slideshare - http://www.slideshare.net/ResearchDataAlliance

RDA Europe

Email - info@europe.rd-alliance.org

Twitter - @RDA_Europe

RDA US

Twitter - @RDA_US