



The Research Data Alliance: enabling Open Science locally and globally

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RESEARCH DATA ALLIANCE
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*data and information developed
in the course of scientific
research can easily be
disseminated, protected, and
stored on short and
intermediate time-frames*

existing system allowed researchers to cite data and subsets of the data, but did not have a mechanism for managing those citations as new versions of the dataset became available

Cite data subject to change, to efficiently process data and link from publications.

Researchers apply a **common core data model** when organising their data, thus making data accessible and reusable.

Data producers **classify their data sets** in standard data types, allowing data users to automatically identify instruments to process and visualise the data.

Define standard **core PID information types** to enable simplified verification of data identity and integrity.

“Without these solutions it would not be possible for citations to be made that didn’t specify the version of the data being cited, posing problems for datasets where the responsible researcher submits updates or corrections to a dataset after a citation has been generated.”

4 RDA recommendations:

Dynamic Data Citation

Data Foundation & Terminology

Data Type Registries

PID Information Types



The Research Data Alliance
vision is researchers and
innovators openly sharing data
across technologies, disciplines,
and countries to address the
grand challenges of society



... to build the social and technical bridges that enable open sharing and re-use of data.

What is RDA?

Members come together, from across the world, 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.



RESEARCH DATA ALLIANCE

GUIDING PRINCIPLES

- ◎ **OPENNESS**
Membership is open to all interested individuals who subscribe to the RDAs Guiding Principles. RDA community meetings and processes are open, and the deliverables of RDA working Groups will be publicly disseminated.
- ◎ **CONSENSUS**
The RDA moves forward by achieving consensus among its membership. RDA processes and procedures include appropriate mechanisms to resolve conflicts.
- ◎ **BALANCE**
The RDA seeks to promote balanced representation of its membership and stakeholder communities.
- ◎ **HARMONIZATION**
The RDA works to achieve harmonization across data standards, policies, technologies, infrastructure and communities.
- ◎ **COMMUNITY-DRIVE**
The RDA is a public, community-driven body constituted of volunteer members and organizations, supported by the RDA Secretariat.
- ◎ **NON-PROFIT**
RDA does not promote, endorse, or sell commercial products, technologies or services.

Individual Membership

Benefits

Any individual, 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 can become an RDA community member

- *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

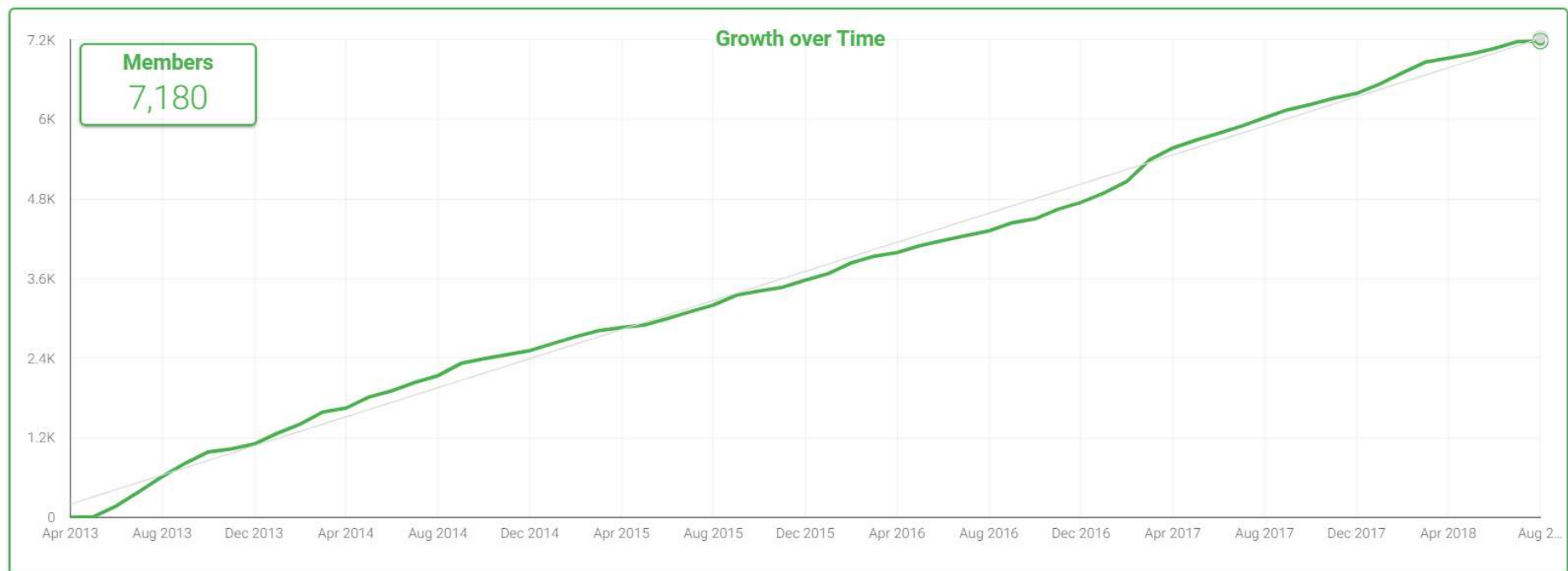
Individual RDA Members 7,180



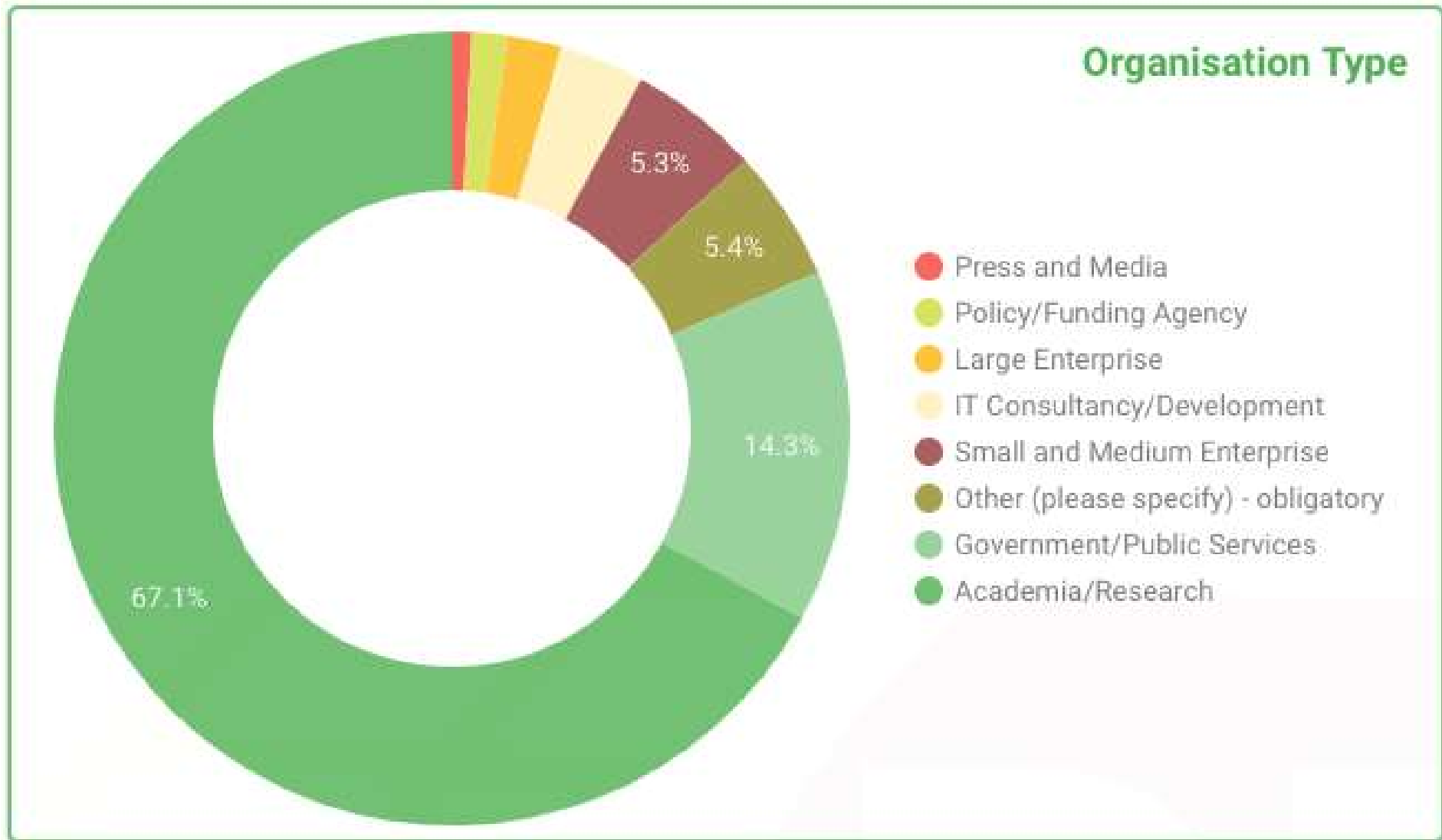
Who is RDA



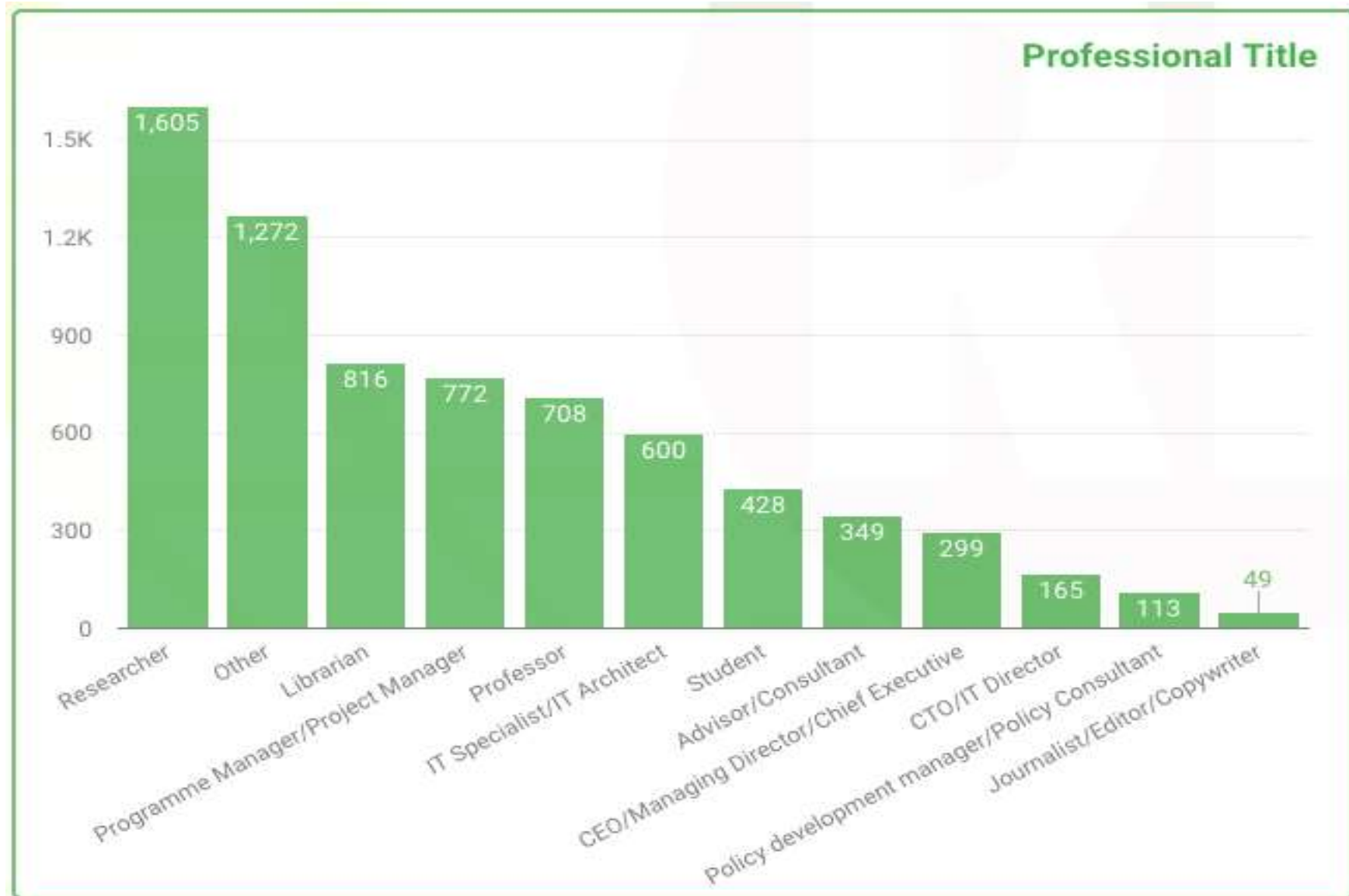
RDA Worldwide Growth



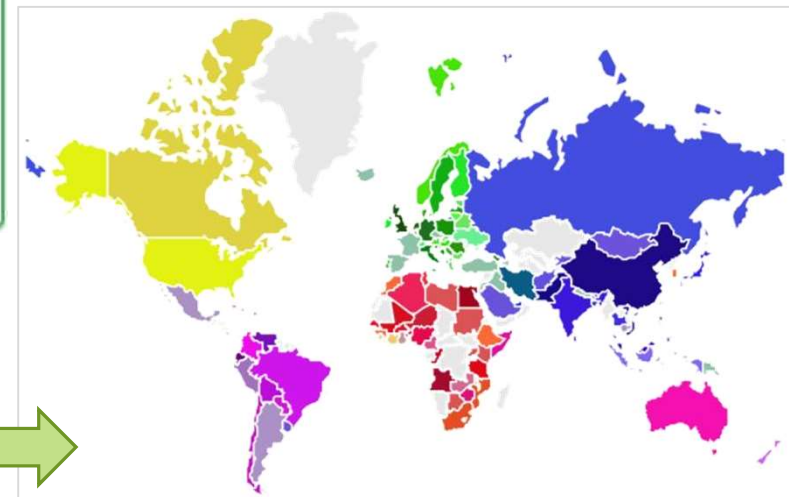
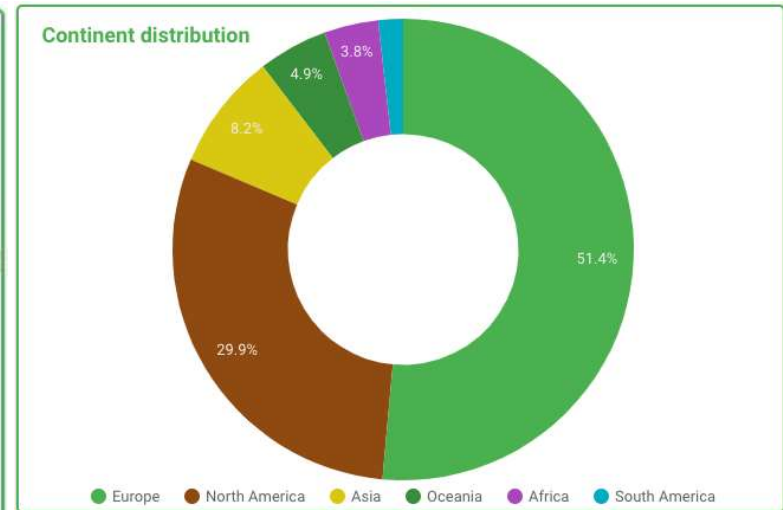
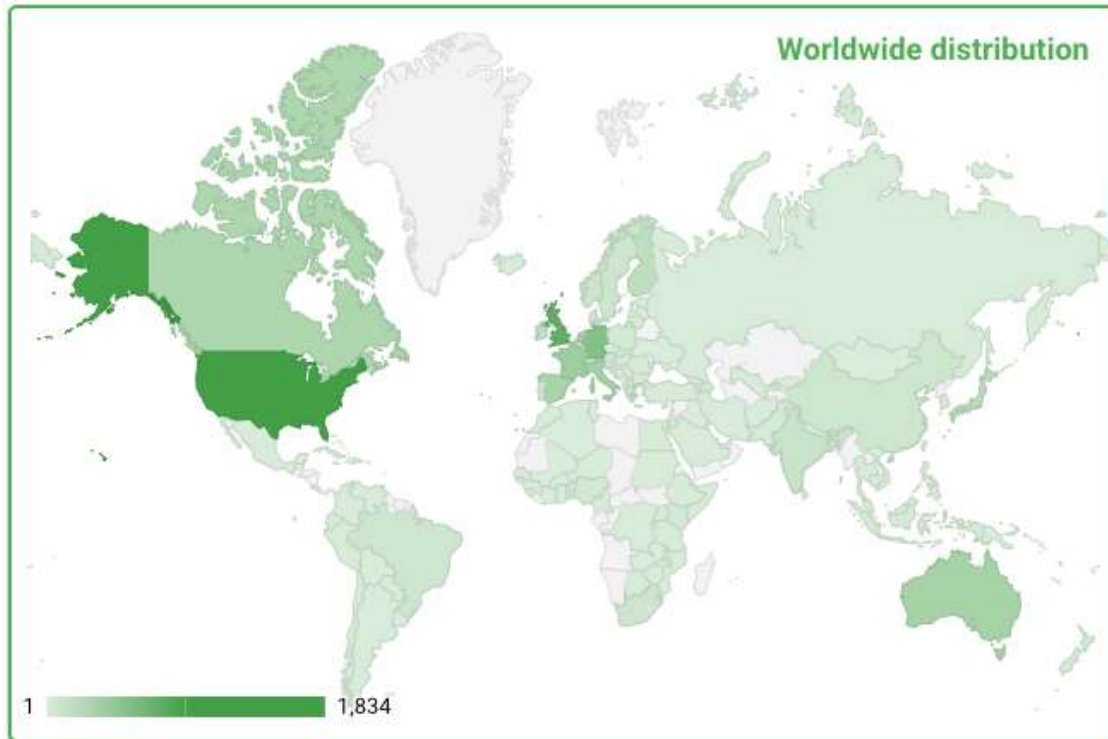
The Research Data Alliance was launched in March 2013



Who is RDA



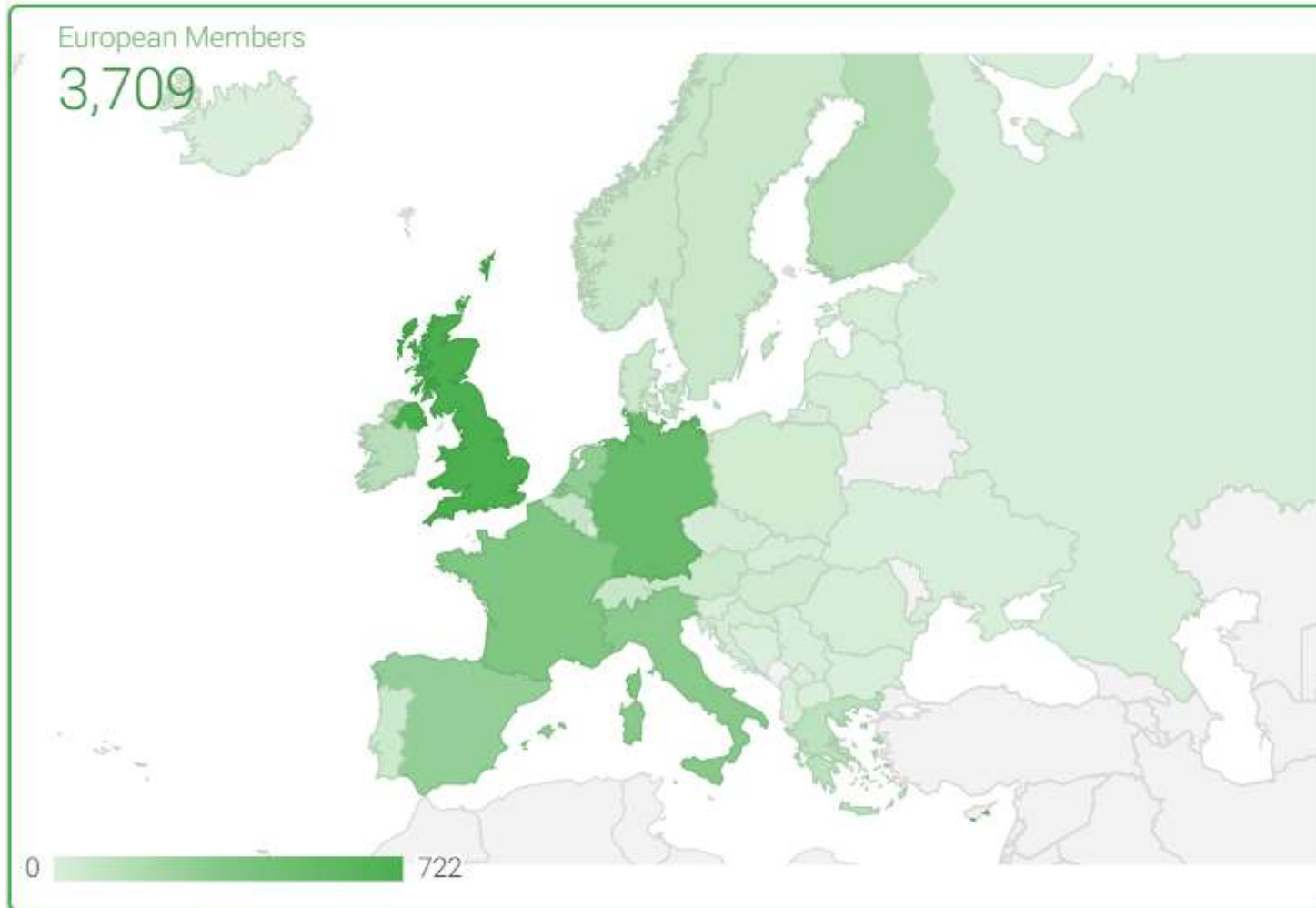
RDA Geographical Distribution



RDA members come from 137 different countries



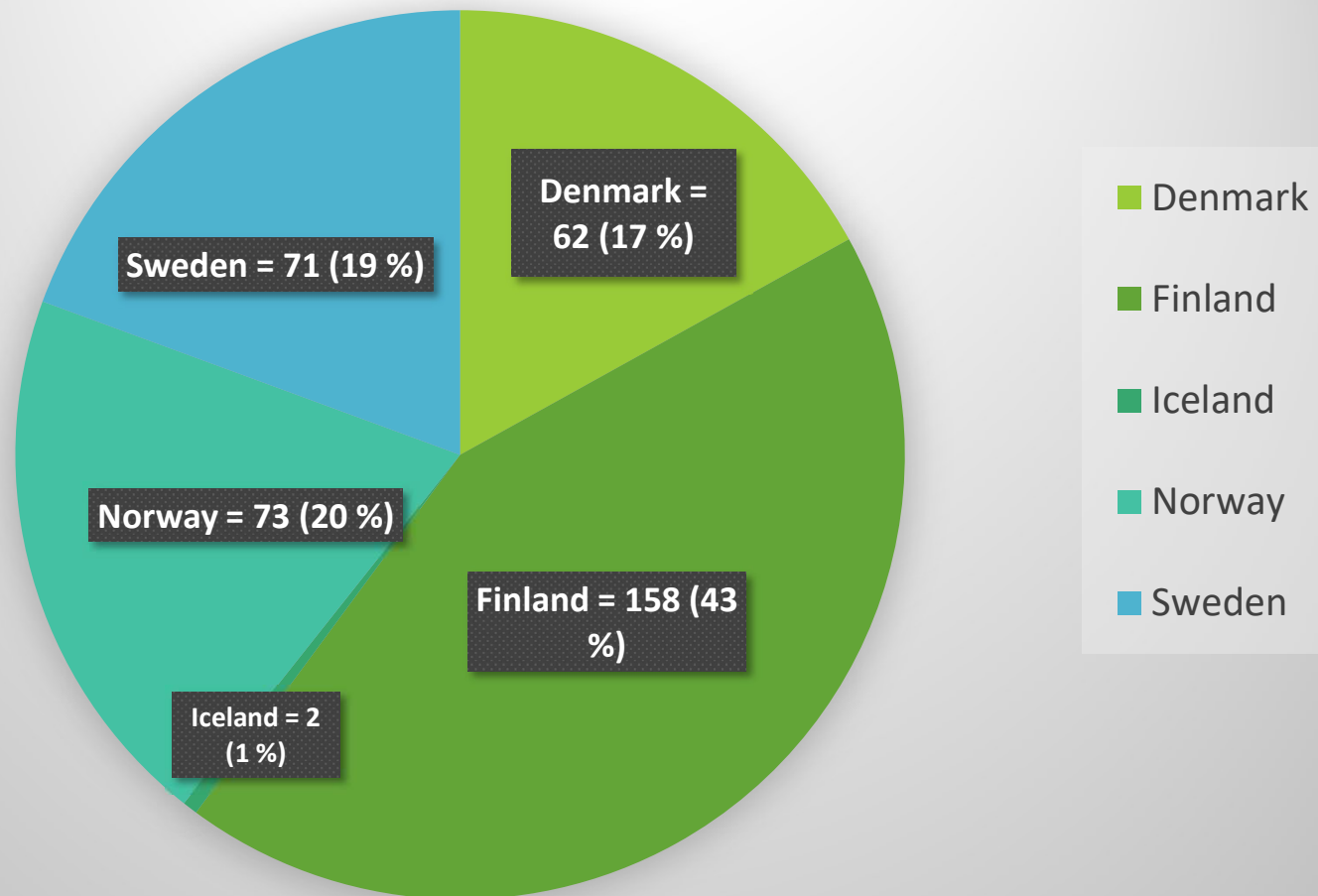
RDA in Europe



RDA members from Europe make up +50% community

RDA in Finland & Nordic Countries

RDA Community Members in Nordic countries (Total = 366)



RDA Working & Interest Groups

Working Groups

- develop and implement data infrastructure, e.g. tools, policy, practices & products that are adopted and used by projects, organizations, and communities
- **TIMING: 12-18 MONTHS**
- **TOTAL: 32 Working Groups**

RECOMMENDATIONS: Concrete deliverables - “Running code”, tools, standards, etc.

Interest Groups

- focus on solving a specific data sharing problem and identifying what kind of infrastructure needs to be built.
- **TIMING: as long as group is active**
- **TOTAL: 61 Interest Groups**

OUTPUT: Possibly case statements for new WGs, guidelines, communication



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

Total 93 groups:
32 Working Groups & 61 Interest Groups

Domain Science - focused

- Agrisemantics WG
- BioSharing Registry WG
- Blockchain Applications in Health WG
- Capacity Development for Agriculture Data 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
- ESIP/RDA Earth, Space, and Environmental Sciences 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
- From Observational Data to Information 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



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

Total 93 groups:
32 Working Groups & 61 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
- Storage Service Definitions WG

- Research Data Collections WG
- Research Data Repository Interoperability WG
- Data Usage Metrics WG
- Data Discovery Paradigms IG
- National Data Services IG
- RDA/CODATA Legal Interoperability IG
- Reproducibility IG
- Sharing Rewards and Credit (SHARC) IG

Community Needs - focused

- RDA/CODATA Summer Schools in Data Science and Cloud Computing in the Developing World WG
- Public Health Graph WG
- CODATA/RDA Research Data Science Schools for Low and Middle Income Countries
- 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
- Open Questionnaire for Research Data Sharing Survey IG
- Data for Development IG



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

Total 93 groups:
32 Working Groups & 61 Interest Groups

Data Stewardship and Services – focused

- ❑ Brokering Framework WG
- ❑ DMP Common Standards WG
- ❑ Exposing Data Management Plans WG
- ❑ WDS/RDA Assessment of Data Fitness for Use WG
- ❑ Data Versioning WG
- ❑ Active Data Management Plans IG
- ❑ Data in Context IG
- ❑ Data Rescue IG
- ❑ Domain Repositories IG
- ❑ Virtual Research Environments 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 Architectures in Research Institutions IG
- ❑ Research Data Provenance IG
- ❑ Data policy standardisation and implementation IG

Base Infrastructure – focused

- ❑ Array Database Assessment WG
- ❑ Data Type Registries WG
- ❑ Metadata Standards Catalog WG
- ❑ PID Kernel Information WG
- ❑ Persistent Identification of Instruments WG
- ❑ Data Fabric IG
- ❑ Data Foundations and Terminology IG

- ❑ Disciplinary Interoperability Framework IG
- ❑ Big Data IG
- ❑ Brokering IG
- ❑ Metadata IG
- ❑ PID IG
- ❑ Software Source Code IG
- ❑ Vocabulary Services IG
- ❑ Federated Identity Management IG

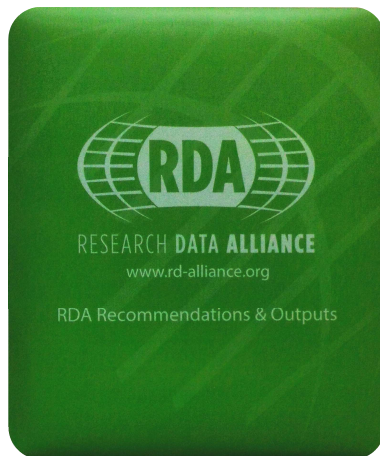
RDA Recommendations that make data work

“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

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

RDA Recommendations & Outputs



25
RECOMMENDATIONS
& OUTPUTS

75+ ADOPTION
CASES

Recommendations: are the flagship outputs of RDA. They are RDA's equivalent of the "specifications" or "standards" that other organisations create and endorse.

Supporting Outputs: are the outputs of RDA WGs and IGs that are fruit of RDA work, but are not necessarily adoptable bridges.

Other Outputs: include workshop reports, published articles, survey results, etc. Anything a WG or IG wants to register and report.



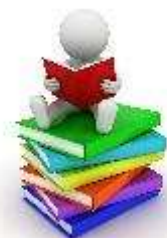
RDA Community Plenary Meetings

- organised around the world every 6 months
- bringing together a unique community of **data science professionals, from multiple disciplines and domains;**
- move the community forward in **creating tangible deliverables** that improve data sharing across disciplines, technologies, and countries;
- working meetings of **RDA Working & Interest groups** and new potential groups through **Birds of a Feather** meetings
- presentation of new **Outputs and Adoption** cases

RDA Plenary Meetings: benefits of attending



Exchange knowledge, share discoveries, discuss barriers and potential solutions



Learn about new trends, strategies, research developments, directions and policies



Expand your network and meet new committed and passionate data science professionals, working in multiple disciplines



Contribute to acceleration of data infrastructure development

International Data Week 2018

will be held on 5-8 November 2018
in Gaborone, Botswana.

Hosted by the Botswana Open Science and Open Data Forum, IDW 2018 will bring together data scientists, researchers, industry leaders, entrepreneurs, policymakers and data stewards from all disciplines and geographies across the globe.

Co-organized by the **ICSU World Data System (WDS)**, the **ICSU Committee on Data for Science and Technology (CODATA)** and the **Research Data Alliance (RDA)**, IDW 2018 combines the 12th RDA Plenary Meeting, the bi-annual meeting of the research data community, and SciDataCon 2018, the scientific conference addressing the frontiers of data in research.

Digital Frontiers of Global Science

INTERNATIONAL
DATA WEEK 2018
5 - 8 NOVEMBER

WWW.INTERNATIONALDATAWEEK.ORG

Organisers



To find out more visit:

<https://www.rd-alliance.org/plenaries/rda-twelfth-plenary-meeting-part-international-data-week-2018-gaborone-botswana>

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RDA's 13th Plenary Meeting Philadelphia, Pennsylvania 2- 4 April 2019

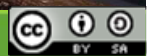


<https://rd-alliance.org/plenaries/rda-thirteenth-plenary-meeting-philadelphia-us>

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RDA EU Expert & Early Career **OPEN CALLS** for grants to support participation to the 12th Plenary meeting

- Seeking applications **from students and early career professionals** from higher education or research institutions with studies focusing on data sharing and exchange challenges

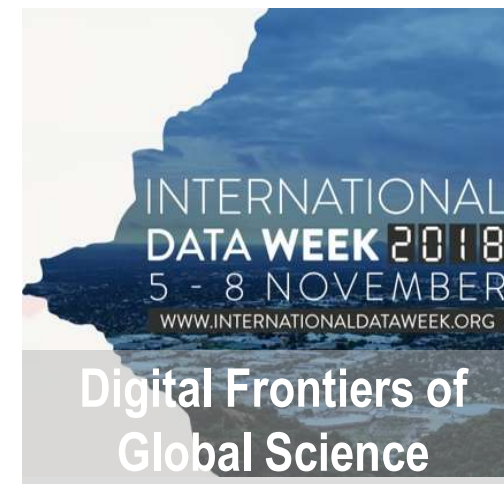
View Call details & apply for one of **7 grants of maximum €1750**

<https://grants.rd-alliance.org/OpenCalls/call-early-careers>

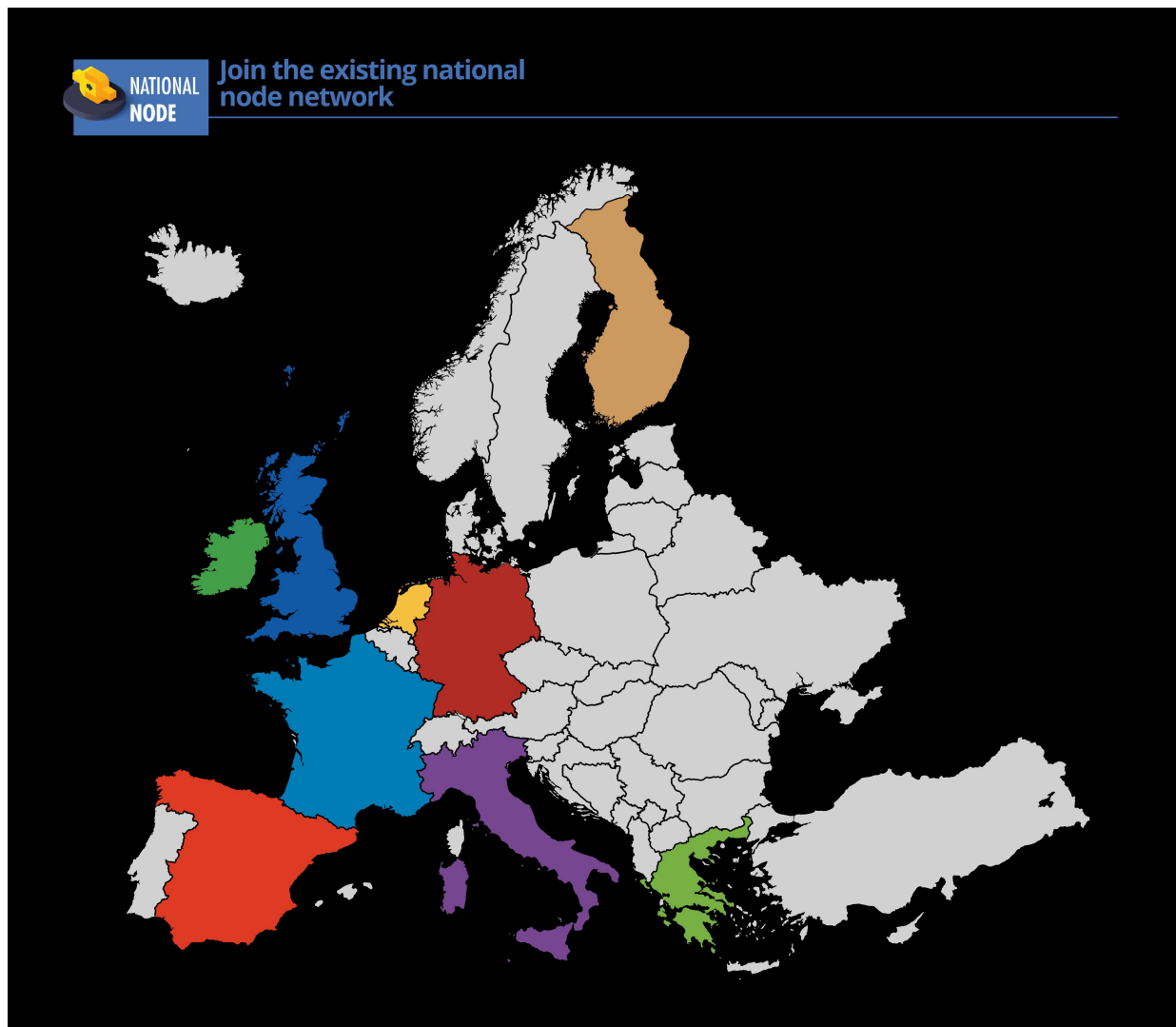
- Are you a **mid-career or senior data professional or scientist**, interested or already committed to RDA activities?

View Call details & apply for one of **5 grants of maximum €1800**

<https://grants.rd-alliance.org/OpenCalls/call-experts>



Deadline 30 august 2018, 17:00 CEST



- ✓ Raising awareness of RDA in Finland & Finland in RDA
- ✓ Research data focused events, meetings, etc.
- ✓ Animating & growing the Finnish RDA community members

Call to Action

Sign up as an RDA Community Member

Join Working & Interest Groups

Join National Group – RDA in Finland

Attend an RDA Plenary Meeting

Set up an Interest / Working group

Adopt an RDA Recommendation or Output

RDA and Nordics
13 August 2018
Helsinki, Finland

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RDA Global

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