# World landscape of repositories and repository networks: achievements, challenges, opportunities

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**http://indico.cern.ch/e/oai10**

# repositories

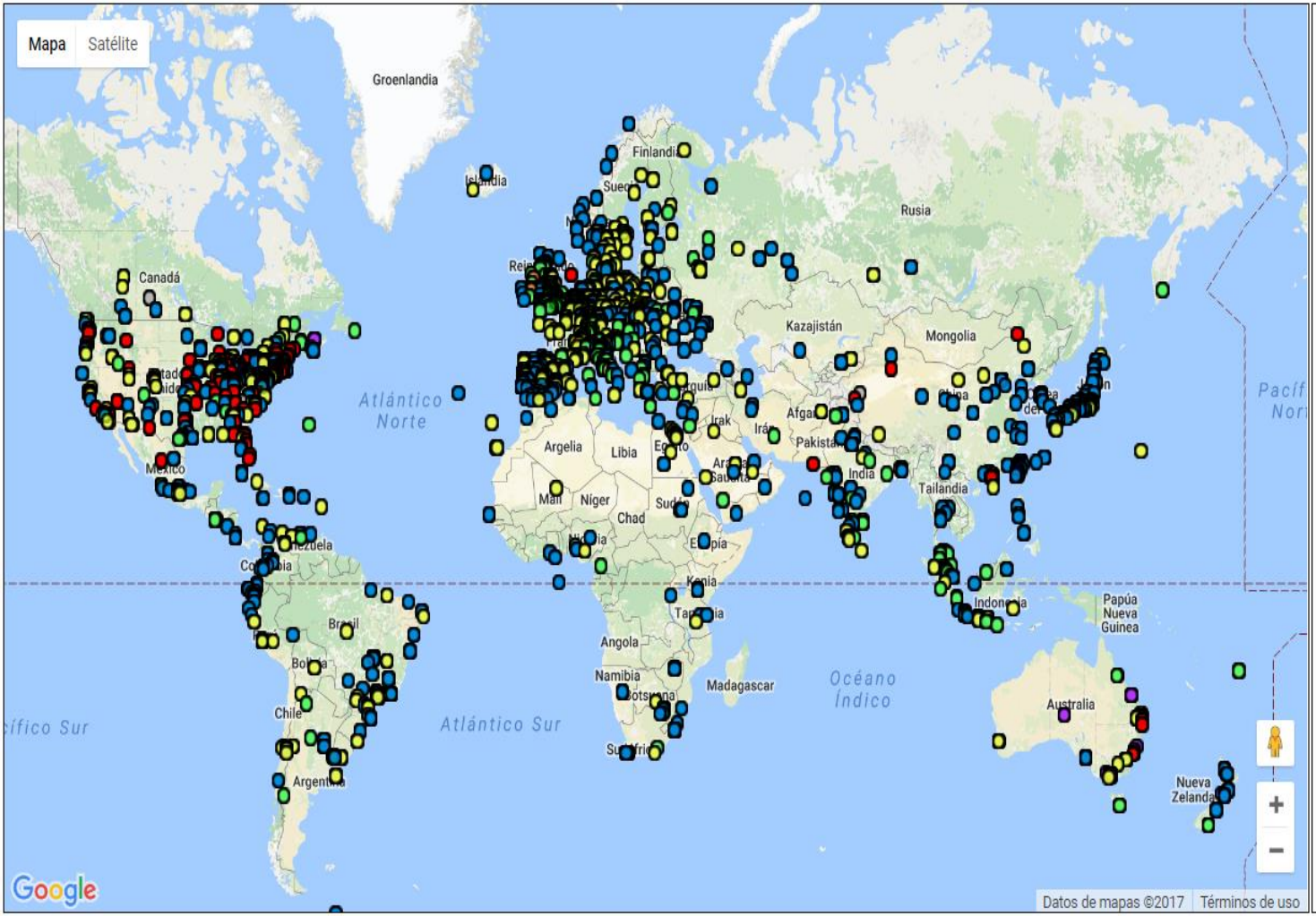
An open access repository is a set of services that provide open access to research or educational content created at an institution or by a specific research community. They may be institutionally-based or subject based collections.

*Kathleen Shearer. Promoting Open Knowledge and Open Science Report of the Current State of Repositories. COAR, 2015. https://www.coar-repositories.org/files/COAR-State-of-Repositories-May-2015-final.pdf*

# Repository66.org Repository Maps

Hide information bar

Platform: All (3045) Country: All (3045) Registered between January 1990 and May 2014 filter results show all




## Information bar

- DSpace (1225)
- EPrints (468)
- BEPress (168)
- ETD-db (44)
- Fedora (40)
- OPUS (26)
- OpenRepository (15)
- Other repository (1059)

(Show all)

Normal icons | Repository size icons

There are **12,301,750** items held in the 3045 repositories on this map.

Download a map for Google Earth:
>> Google Earth map <<

Data provided by: ROAR & OpenDOAR

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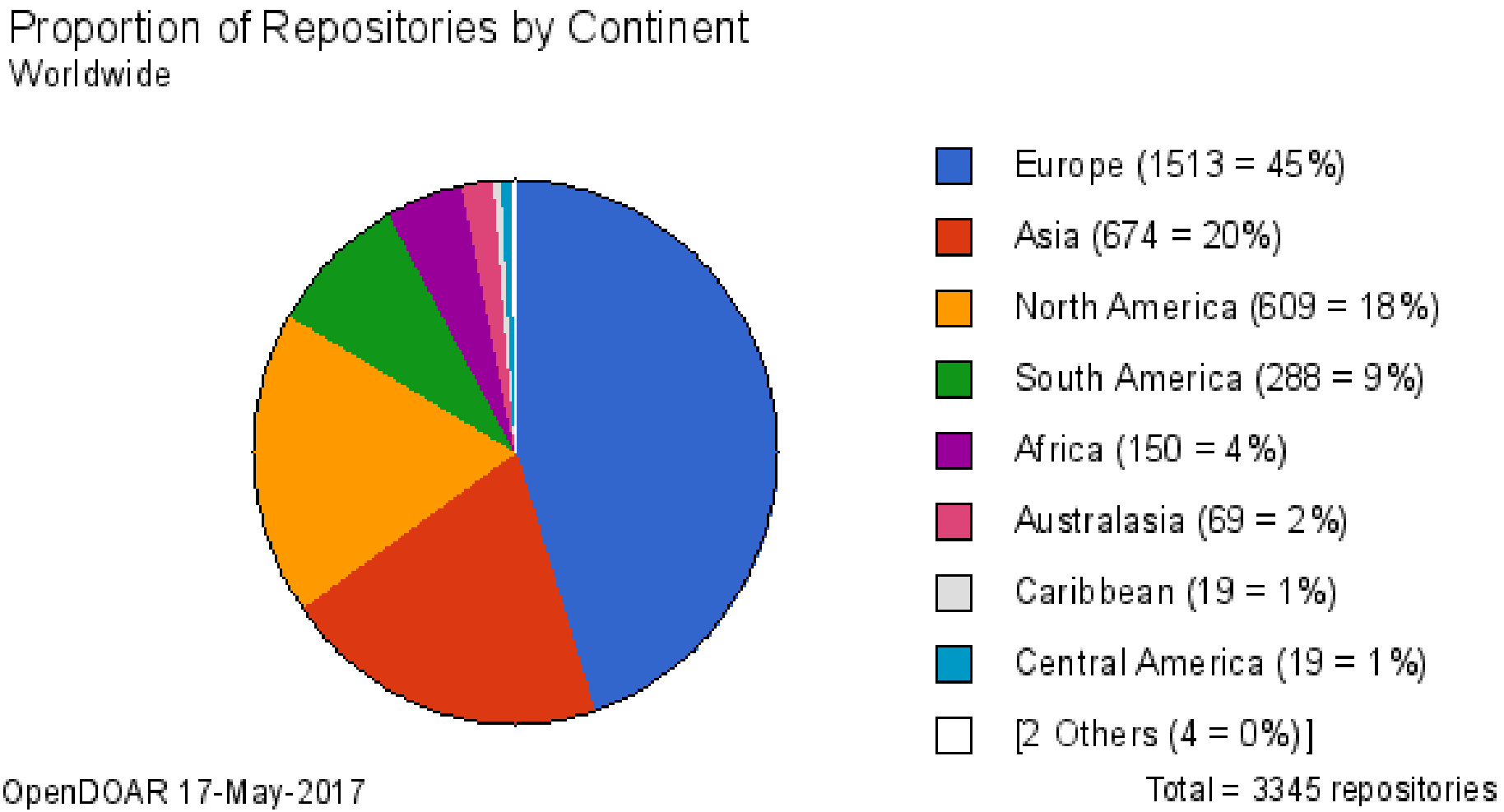
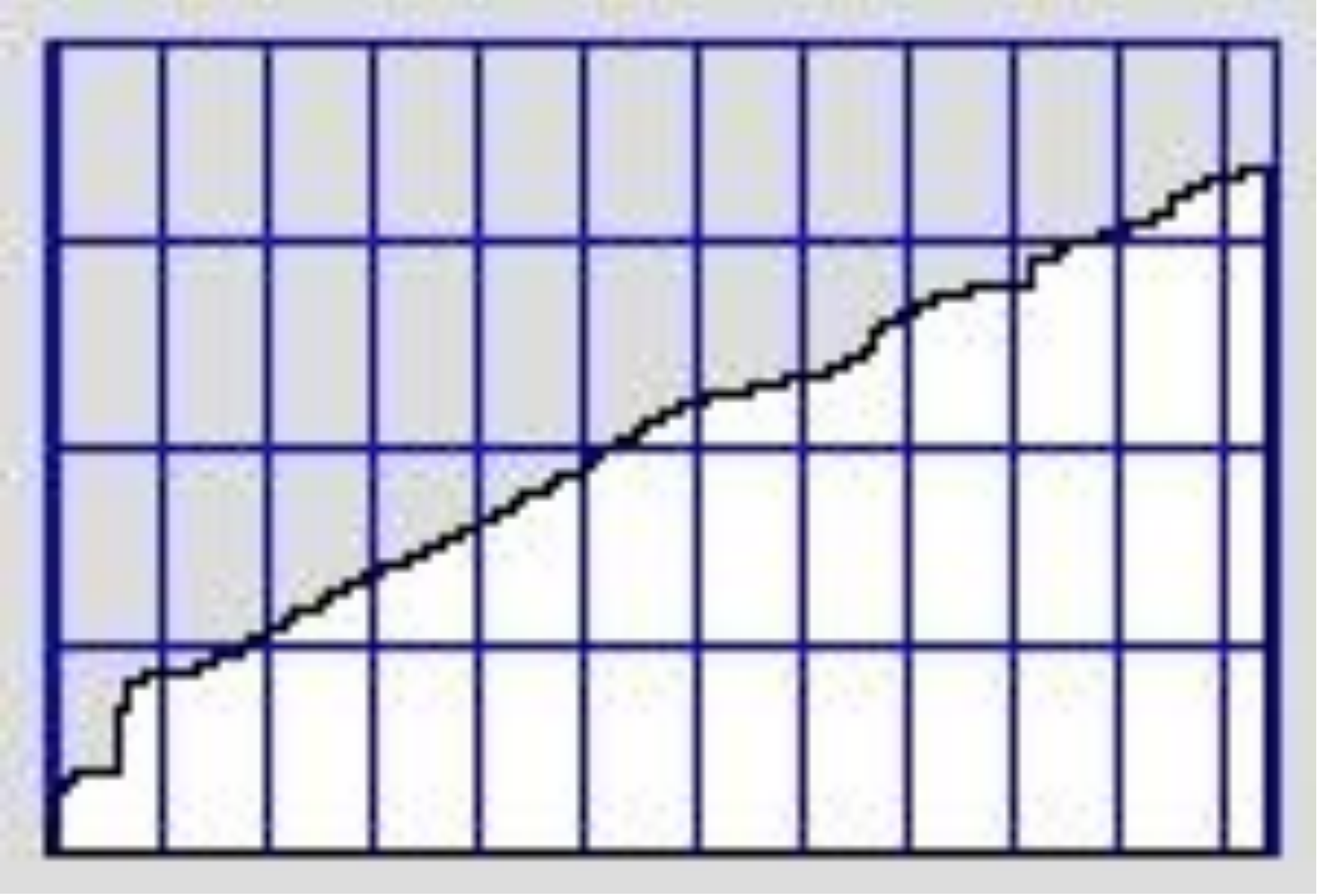
- About the maps -
- Incorrect or missing repository location? -

Data last harvested: 20-Apr-2014 12:15

# current geographic distribution of repositories around the world



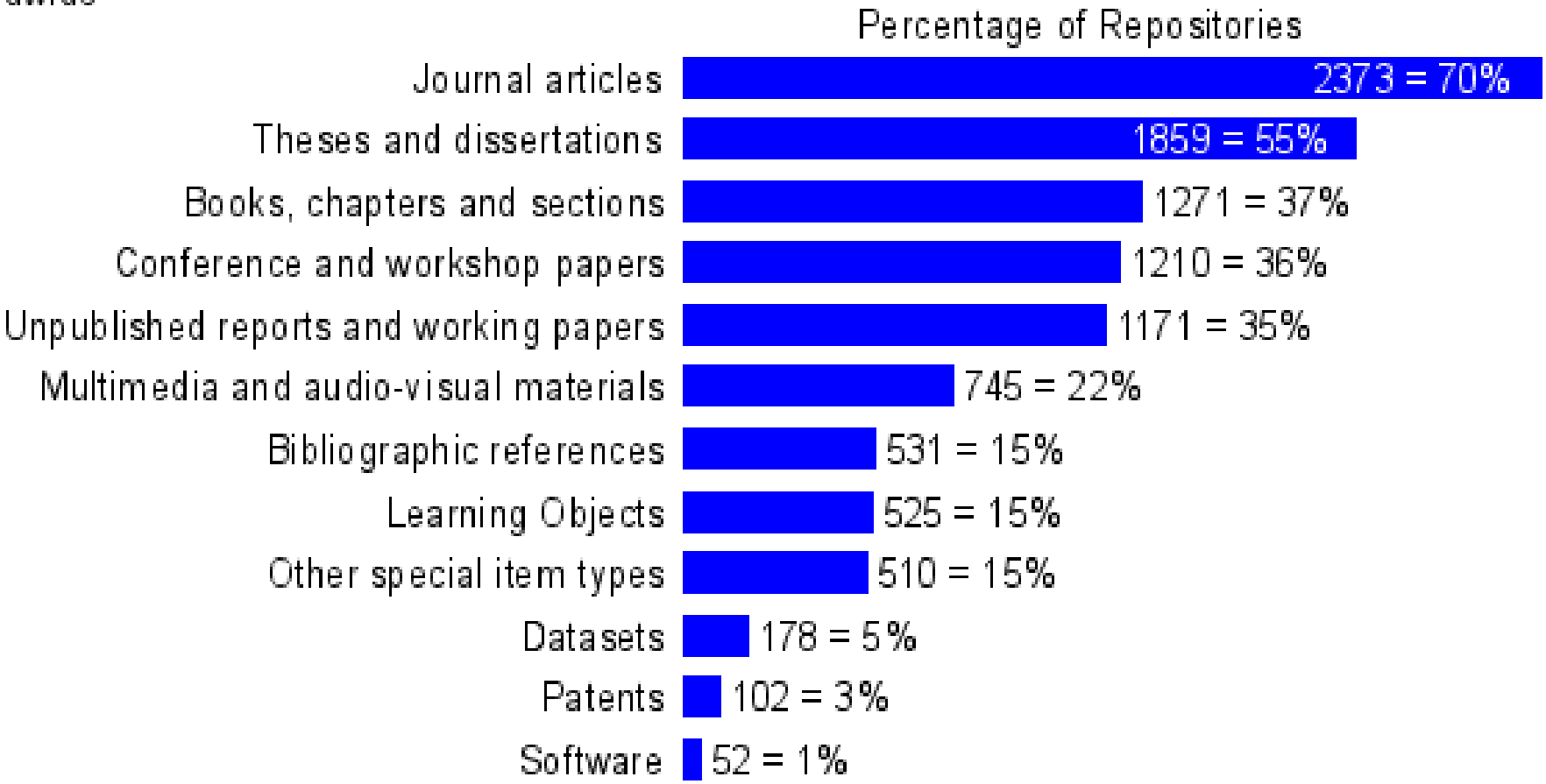

Source: OpenDOAR May 2017



Growth of the OpenDOAR Database since 2007 http://www.opendoar.org/find.php?format=charts

# Content Types in OpenDOAR Repositories

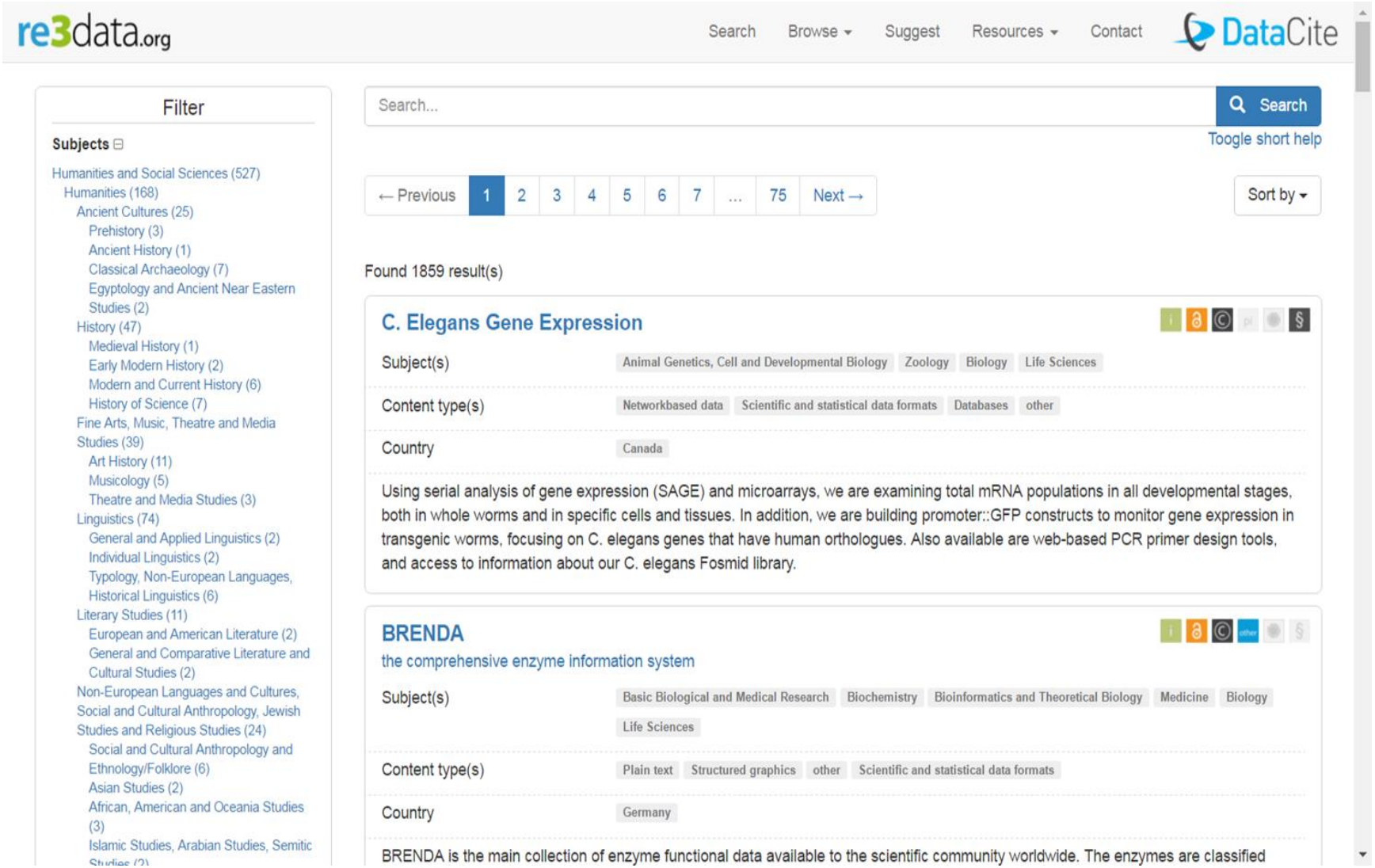
Worldwide




OpenDOAR 19-May-2017

Total = 3345 repositories

# research data repositories



# Worldwide repository landscape

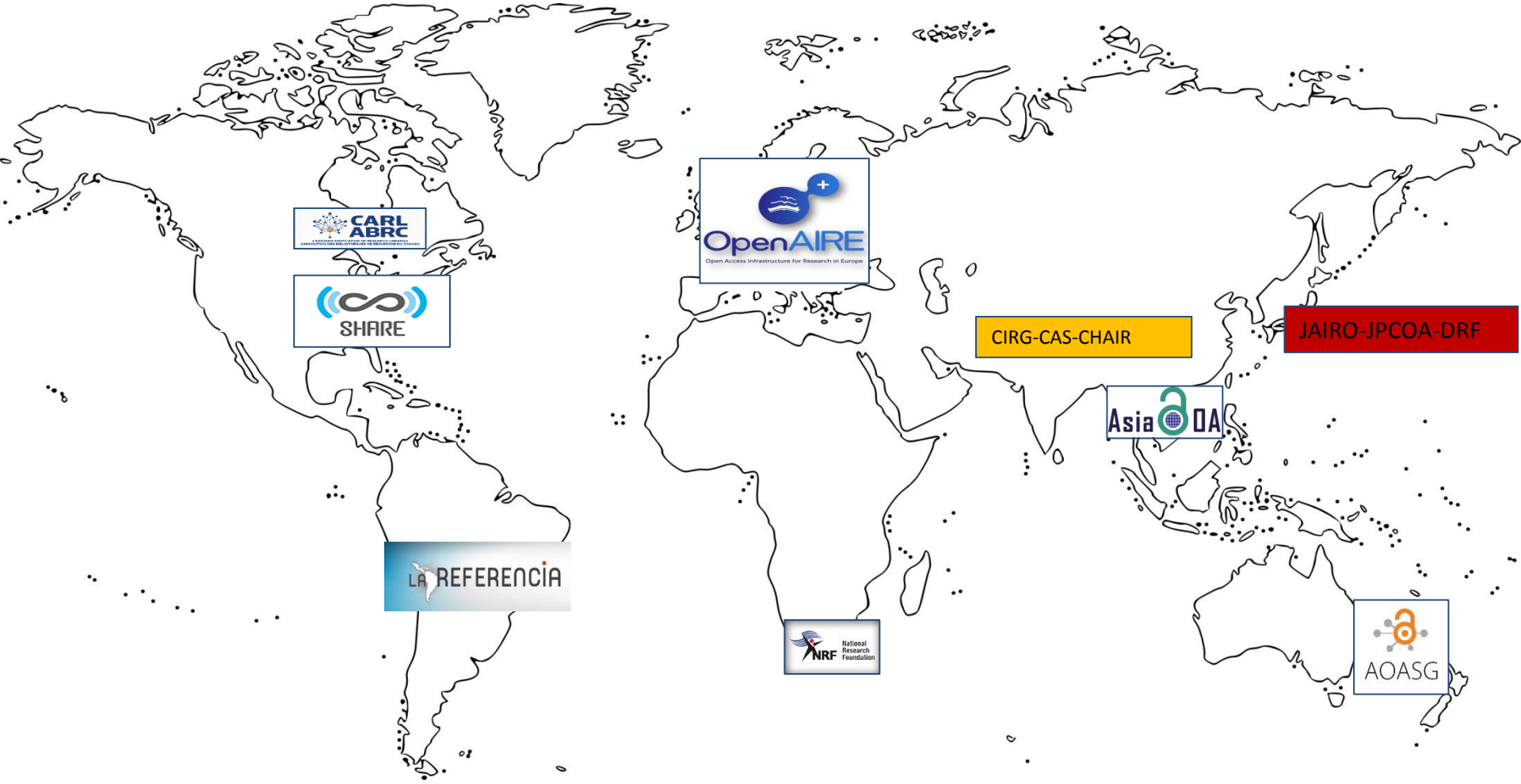
- initial repository development: North America, Western Europe and Australasia
- since 2010: East Asia, South America and Eastern Europe
- small number of large repositories and a large number of small repositories
- predominantly
  - Institutional
  - multidisciplinary
  - English-language-based
- open-source OAI-compliant software
- immature licensing arrangements

**Pinfield, S., Salter, J., Bath, P.A. et al. (4 more authors) (2014)** ***Open-access repositories worldwide, 2005-2012: Past growth, current characteristics and future possibilities.*** Journal of the American Society for Information Science and Technology. Article first published online: 28 APR 2014. http://eprints.whiterose.ac.uk/76839/15/wrro_76839.pdf

# repository networks

- National
- Regional

# Aligning Repository Networks: International Accord May 2017



Partners

NOADs

OpenAIRE
Open Access Infrastructure for Research in Europe

# e.g. of repository aggregators

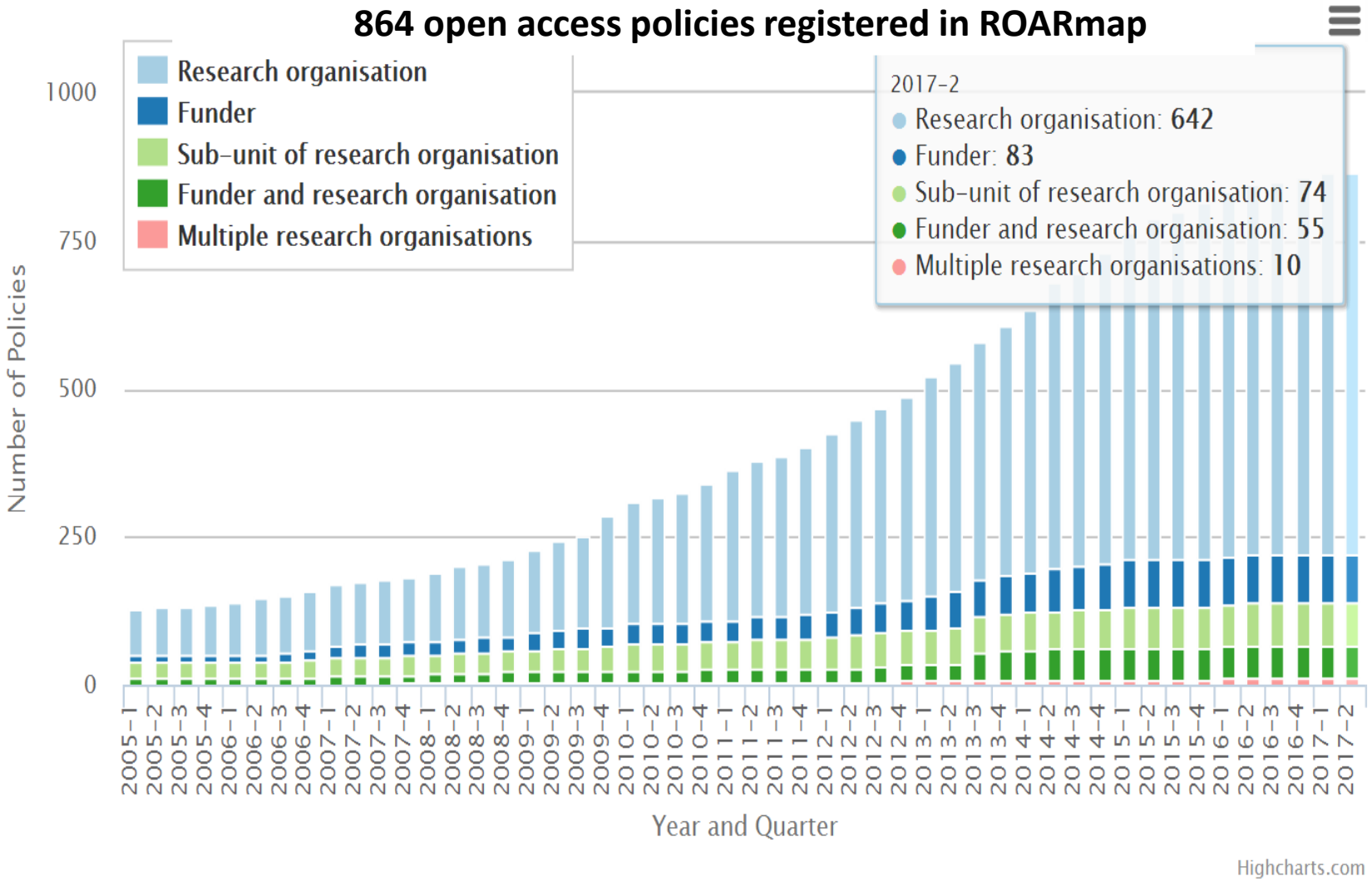
# Challenges: interoperability/synchronization

- Institutional repositories
- disciplinary/thematic repositories
- preprints repositories
- data repositories
- Journal repositories (international-regional-national-institutional)
- theses and dissertations repositories

# Challenges (cont.)

- Position repositories in the scholarly and research lyfecycle
- Open access/open science policies that support repositories
- Evaluation systems that incorporate repositories indicators
- Metadata that describes the quality assessment process of each digital object
- Technological challenges
- Governance and social interoperability

# A global inclusive and distributed open science/open access infrastructure needs policies that support repositories


864 open access policies registered in ROARmap
Research organisation
Funder
Sub-unit of research organisation
Funder and research organisation
Multiple research organisations
2017-2
Research organisation: 642
Funder: 83
Sub-unit of research organisation: 74
Funder and research organisation: 55
Multiple research organisations: 10
Number of Policies
1000
750
500
250
0
2005-1
2005-2
2005-3
2005-4
2006-1
2006-2
2006-3
2006-4
2007-1
2007-2
2007-3
2007-4
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2014-3
2014-4
2015-1
2015-2
2015-3
2015-4
2016-1
2016-2
2016-3
2016-4
2017-1
2017-2
Year and Quarter
Highcharts.com

indicators provided by repositories to complement traditional evaluation indicators

within the lifecycle of research, describe quality assessment of each output so this information is available when metadata is produced

Managing scholarly communications as a commons
is
innovation

FORCE11
The Future of Research Communications and e-Scholarship

# Principles of the scholarly commons

**P1. The scholarly commons is an agreement among knowledge producers and users.**

*This means that:*

- The commons is developed by its members through their practice
- There is global commitment and participation in the commons' long-term viability and preservation

**P2. Research and knowledge should be freely available to all who wish to use or reuse it.**

*This means that:*

- The commons is open by default
- Scholarly objects and content in the commons is FAIR: findable, accessible, interoperable and reusable by humans and machines

**P3. Participation in the production and use of knowledge should be open to all who wish to participate.**

*This means that:*

- The commons welcomes and encourages participants of all backgrounds
- The commons is open to all participants who accept its principles

https://www.force11.org/scholarly-commons/principles

https://ocsdnet.org/wp-content/uploads/2015/04/Open-Science-English.pdf

# knowledge as a commons in support of sustainable development agenda

http://www.un.org/sustainabledevelopment/sustainable-development-goals/