

DataCite – Data Citation, DOIs and Cooperations

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Why publish research data?

- Articles with published data have higher citation rates.
- Easier reusability and verification of data.
- Recognition for collection and documentation of data (Citation Indexes).
- Compliance with funders' requirements.
- Avoiding duplication.
- Motivation for new research.

What does DataCite do?

- Global consortium
- Facilitate easier access to and publication and citation of research data
- **Setting standards:** DataCite Metadata Schema
- **Endorsing community standards:** Force11 data citation principles
- **Giving recommendations:** Best practices regarding granularity or dynamic datasets

- **At the core:** DOI registration agency for data

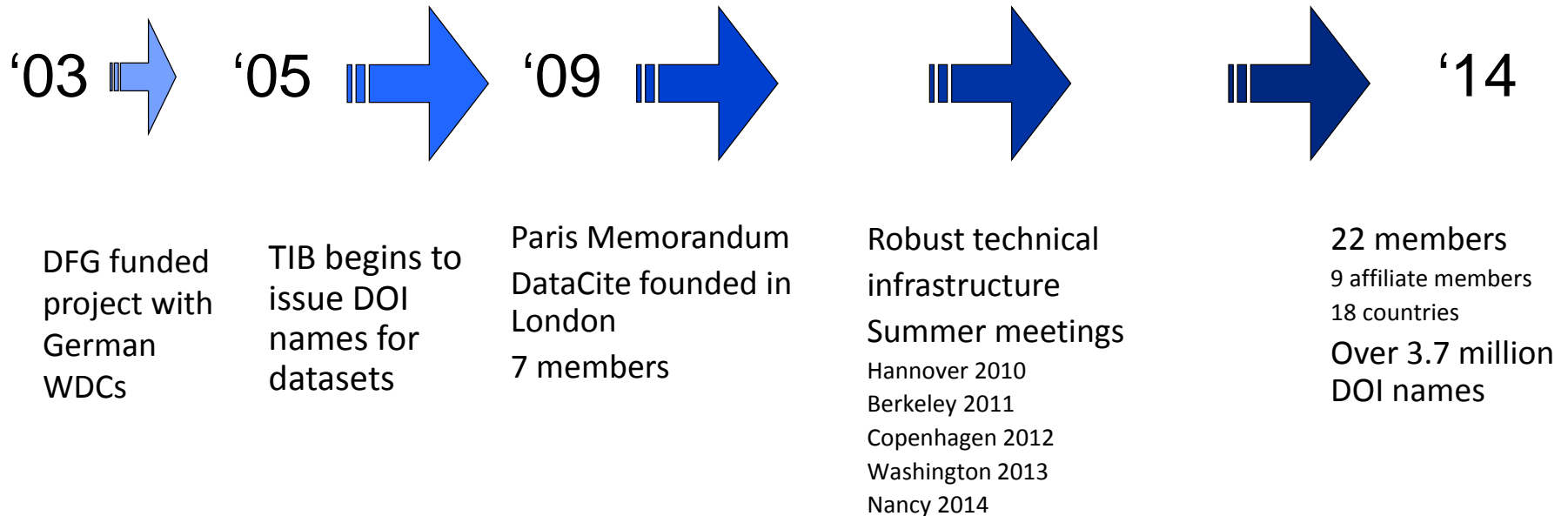
What is a DOI?

- Digital Object Identifier
- Unique and persistent identifier
- Mostly known in scientific publishing – most scientific articles get a DOI from the publisher

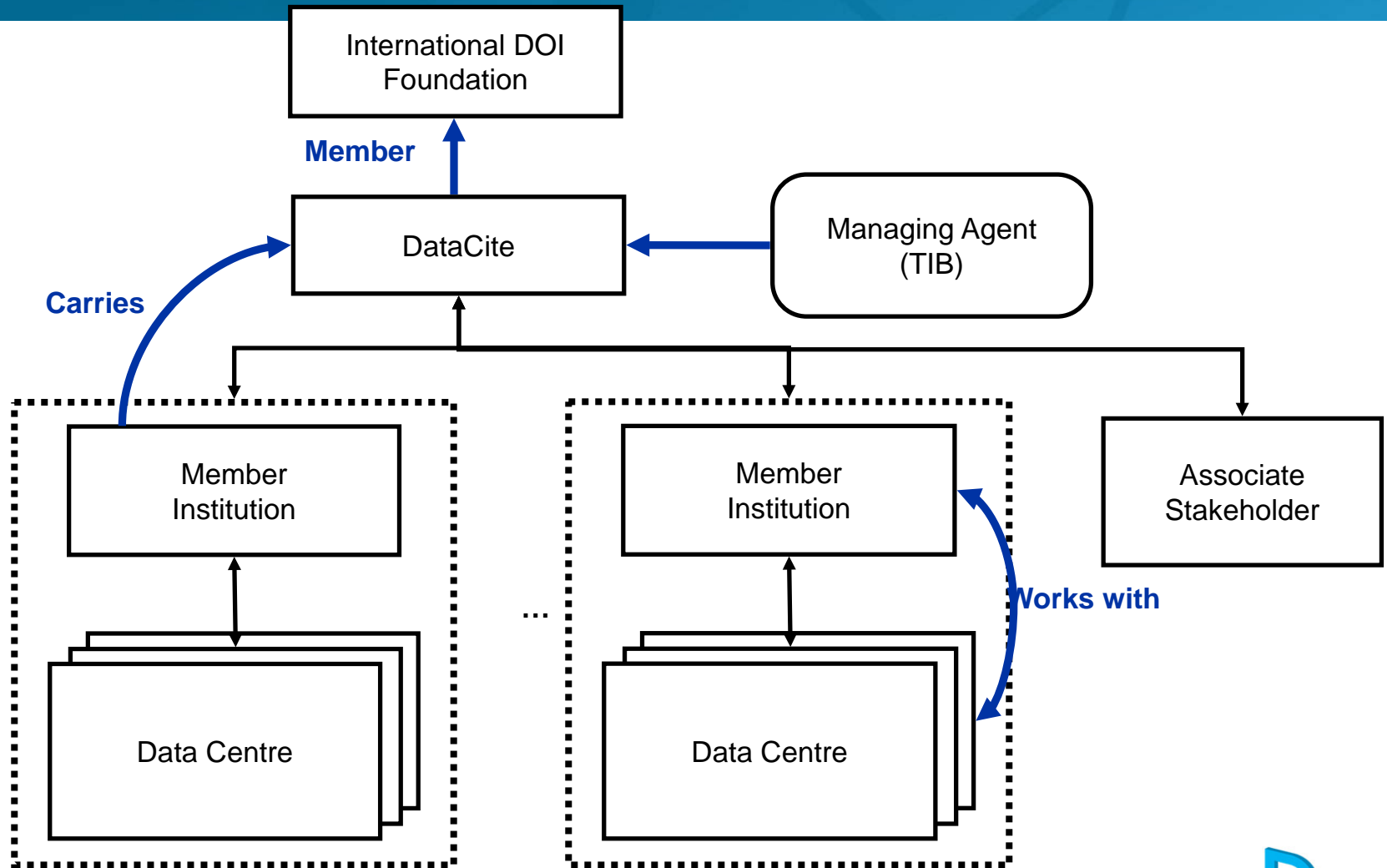
doi:10.3205/123abc

<http://doi.org/10.3205/123abc>

History

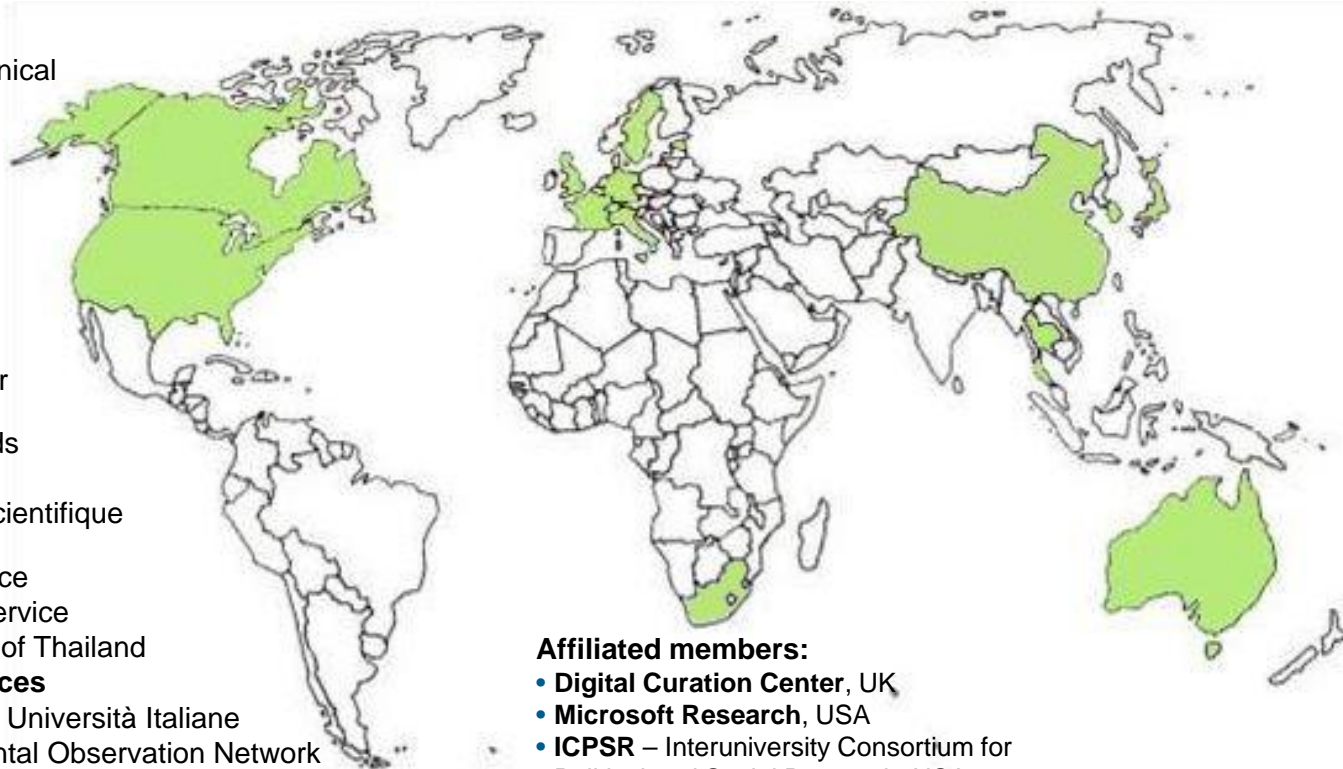


DataCite structure



DataCite members

- **CISTI** – Canada Institute for Scientific and Technical Information
- **California Digital Library**, USA
- **Purdue University**, USA
- **OSTI** – Office of Scientific and Technical Information, USA
- **The British Library**
- **TIB**, Germany
- **ZB MED**, Germany
- **ZBW**, Germany
- **GESIS**, Germany
- **University of Tartu**, Estonia
- **JaLC** – Japan Link Center
- **DTIC** – Technical Information Center of Denmark
- **Library of TU Delft**, The Netherlands
- **Library of ETH Zürich**, Switzerland
- **INIST** – L'Institut de l'Information Scientifique et Technique, France
- **SND** – Swedish National Data Service
- **ANDS** – Australian National Data Service
- **NRCT** – National Research Council of Thailand
- **The Hungarian Academy of Sciences**
- **CRUI** – Conferenza dei Rettori delle Università Italiane
- **SAEON** – South African Environmental Observation Network
- **CERN** – European Organization for Nuclear Research



Affiliated members:

- **Digital Curation Center**, UK
- **Microsoft Research**, USA
- **ICPSR** – Interuniversity Consortium for Political and Social Research, USA
- **KISTI** – Korea Institute of Science and Technology Information
- **BGI** – Beijing Genomic Institute, China
- **IEEE**, USA
- **Harvard University Library**, USA
- **WDS** – World Data System
- **GWVG**, Germany

DataCite Working Groups

Business Practices Metadata

Business Practices Working Group

- What we do:
 - Develop and implement policies.
 - Develop, document, and disseminate Best Practices.
 - Monitor new developments, initiatives, norms and evaluate their impact practices and policies.
- Who we are:
 - Members from France, Germany, Switzerland, UK, US, Canada

Metadata Working Group

What we do

- Create and update the Metadata Schema
- Communication with the community

Who we are

- 12 members
- 7 nations (USA, Canada, Germany, UK, Sweden, Netherlands, France)

More Information on Metadata

- <http://schema.datacite.org>
Access to all versions of the DataCite metadata schema, with documentation, schema definition, and examples.
- Google Discussion Group:
<https://groups.google.com/forum/?hl=en&fromgroups#!forum/datacite-metadata>

Data Citation I

- DataCite Recommendation:

Creator (PublicationYear): Title. Publisher. Identifier

- Crosscite Citation Formatter:

- <http://crosscite.org/citeproc/>
- Cooperation of DataCite, CrossRef and mEdra
- Format your citation in different styles with the DOI

Data Citation II

Best Practice Example:

Dataset:

Kuhlmann, H et al. (2009):

Age models, iron intensity, magnetic susceptibility records and dry bulk density of sediment cores from around the Canary Islands.

[doi:10.1594/PANGAEA.727522](https://doi.org/10.1594/PANGAEA.727522),

Is cited in this article:

Kuhlmann, Holger; Freudenthal, Tim; Helmke, Peer; Meggers, Helge (2004): *Reconstruction of paleoceanography off NW Africa during the last 40,000 years: influence of local and regional factors on sediment accumulation. Marine Geology, 207(1-4), 209-224,*

[doi:10.1016/j.margeo.2004.03.017](https://doi.org/10.1016/j.margeo.2004.03.017)

Cooperations

- Thomson Reuters - Data Citation Index

- Harvesting of metadata through DataCite
- Benefit for clients:
Access to DCI for statistical uses



- ORCID – ODIN project

- *ORCID and DataCite Interoperability Network*
- Referencing a data object
- Tracking of use and re-use
- Links between a data object, subsets, articles, rights statements and every person involved in its life-cycle.



Cooperations

- re3data.org / Databib merge
 - Providers of repository lists
 - will merge under the umbrella of DataCite



- MoU with RDA to become organizational affiliate
- Endorsement of the Force11
„Joint Declaration of Data Citation Principles“



Cooperations

- With CrossRef:



- <http://crosscite.org/citeproc/>

A Citation Formater which provides over 100 different formats for citations.

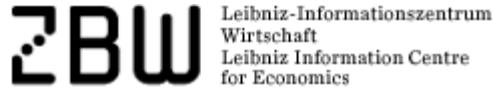
- <http://crosscite.org/cn/>

With Content Negotiation it is possible to access different media types of a registered object (machine-to-machine only).

- With STM publishers:

- Improve the availability and findability of research data
- Encourage Data Archives to enable bi-directional linking between datasets and publications
- Increase visibility of links from publications to datasets and vice versa

Thank you!



WORLD DATA SYSTEM

