# Challenges to adapt library services to Horizon 2020

**Benítez-Juan, Beatriz; Garcia-Gomez, Consol.**
**BCBL: Baix Llobregat Campus Library. UPC. Castelldefels**

## Abstract

This poster will highlight the value that librarians can bring to help researchers in the Horizon 2020 scenario where it appears for the very first time instructions about **Research Data Management (RDM)**.

There are services that are being rolled out for a while like advocacy for open access publication and others that are challenging due to mandates (within EU, national and institutional level) and copyright issues like research data. Some of these challenges regarding data curation that need to be considered from a librarian point of view in order to make data available and reusable:

- metadata
- advocacy for sharing data,
- support in licenses and copyright,
- how to deal with publishers who are already working with datasets
- the long-term preservation and archiving of the data

## Framing the context

**Horizon 2020** is the eighth phase of the Framework Programmes for Research and Technological Development, funding programmes created by the European Union in order to support and encourage research in the European Research Area. It implements Europe 2020 and Innovation Union strategies. The programme runs from 2014–2020 and provides an estimated €80 billion of funding.

The programme consists of three main research areas that are called "pillars". The first pillar, "Excellent Science", focuses on basic science. The second pillar is "Leadership in enabling and industrial technologies". The third pillar funds potential solutions to social and economic problems, "Societal challenges".

Horizon 2020 has supported **Open Access Publication** as a principle to scientific peer reviewed publications.

Horizon 2020 has implemented a **pilot action on open access** to **research data** limited to seven specific research areas. Participating projects will be required to develop a **Data Management Plan** (DMP), in which they will specify what data will be open.

In Spain, its **Science Law** (Ley 14/2011, de 1 de junio, de la Ciencia, la Tecnología y la Innovación), on Article 37 about Open Access Difussion, encourages researchers to deposit in an **Open Acess Repository** the final version of contributions sent to journals.

In our Institution, **UPC** researchers are encouraged to deposit in institutional repository an **open version** of their articles published in journals by 2015, if they want **to be evaluated.**
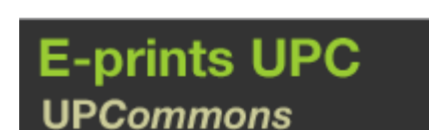
Horizon 2020 represent challenges in Library Services at least in two ways: Research data and Open Access

## Open Access for Science Publications

Changes Library Services in:

**Institutional Repository: Upccommons Eprints**
More contents in Open Access
Can allow research data?

**E-prints UPC**
**UPCommons**

**Current Research Information System (CRIS): DRAC**
Emergence of data sharing leads the way for new methodology for research evaluation.

**drac**

**Bibliometrics: Altmetrics**
Other bibliometric indexes can be studied such as number of downloads, likes, sharing in social networks... Reports provided regularly by the Library should consider them

**Altmetric**

## Research Data

The Library should take over new responsibilities and duties if it wants to succeed and play a role in Horizon2020.

Universities and research institutions, worried for the long term reservation and open access to research data are building up data repositories but it is not easy to understand the new landscape of data repositories. Researchers, funding bodies, publishers and scholarly institutions struggle to select appropriate repositories for storage, search and reuse of research data. Re3data is very welcomed and could help to navigate. Managed by DataCite is a global registry of research data repositories that covers research data repositories from different disciplines.
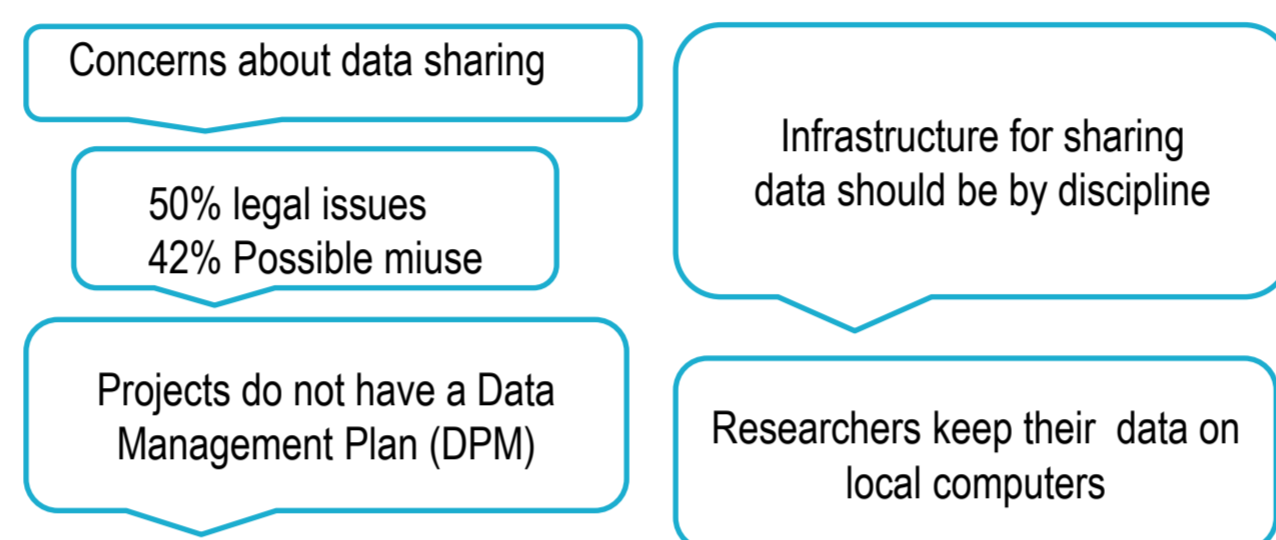
**re3data.org**
**REGISTRY OF RESEARCH DATA REPOSITORIES**

## CBL Campus
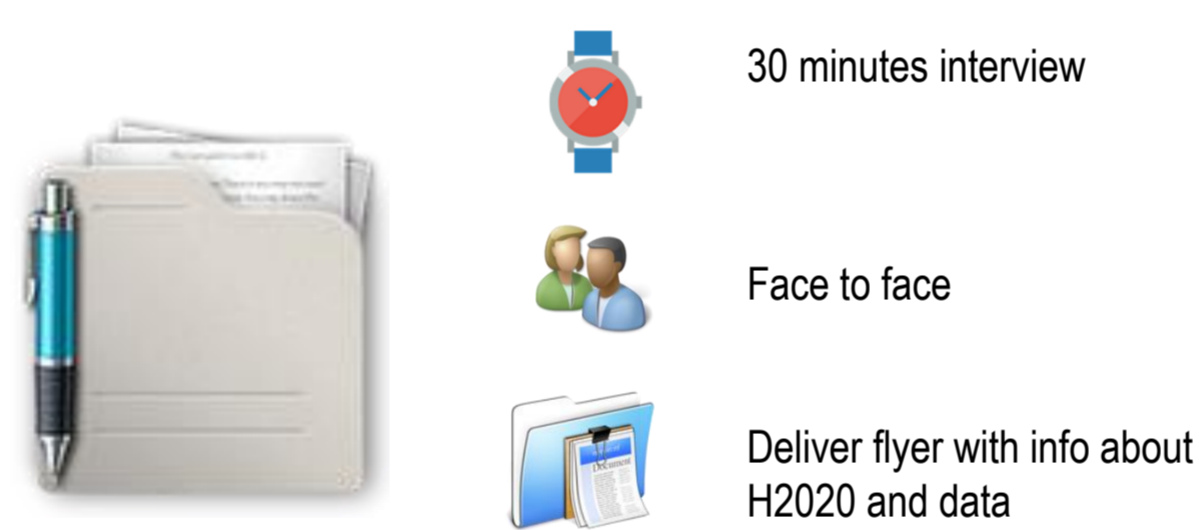
### What's the CBL researchers behavior with data?

Although by the time of preparation of this poster the CBL survey about researchers' behavior against data is not finished we can anticipate some results based on few responses that we have and on the responses of DATASEA project about research data management in Spain. Results from the 607 responses of DATASEA survey carried out in 2014 in Spain showed that:

Concerns about data sharing

50% legal issues
42% Possible miuse

Infrastructure for sharing data should be by discipline

Projects do not have a Data Management Plan (DPM)

Researchers keep their data on local computers

### Researcher selection criteria at CBL :

Who publish more

Who has been more granted and reports more incomes from R+D activities

Who has more research outputs in the CRIS

Interview tips:

30 minutes interview

Face to face

Deliver flyer with info about H2020 and data

## What's next? What's needed?

Conclude the survey
**Training for librarians**

**Advocacy** for researchers about:
- Authorship & attribution
- Benefits to share data
- Legal issues, such as licenses and copyright
- Metadata & standards
- Archiving and preservation
- Reuse and mining

The library should plan to **include information about RDM** in all the training and information sessions for early researchers as well as faculty and help them to be compliant with Horizon 2020.

At a university level
**Create a team to assist researchers with data related issues**:
Multidisciplinary backgrounds will enable communicating with researchers. The team should include librarian, IT people plus some early assistant able to understand the research being carried out at UPC.

At a national level
Sign manifestos such as *The Hague declaration on knowledge discovery in the digital age*, that promotes content mining and development of open access policies and infrastructure **and give credit for data as is a valuable researcher output**

Get used to these hot keywords:



## Future Scenario

**Deposit and citation making data discoverable**
The Library will encourage researchers to deposit their datasets on data repositories emphasizing the ones that cover CBL subjects. Among them:

**PANGAEA**, *Publishing Network for Geoscientific & Environmental Data*. Most datasets are open; some are restricted.

**DataONE** includes data from fields such as ecology, biology, evolution, and environmental sciences such as hydrology, oceanography, and atmospheric science.

**Astrophysics Data System**. From the Smithsonian Astrophysical Observatory (SAO) and National Aeronautics and Space Administration (NASA).

**CiteSeerX** provides its databases of nearly 2 million documents and the associated texts and pdfs for research.

**Zenodo**. Zenodo was launched within the OpenAIREplus project as part of a European-wide research infrastructure. Developed and hosted by CERN.
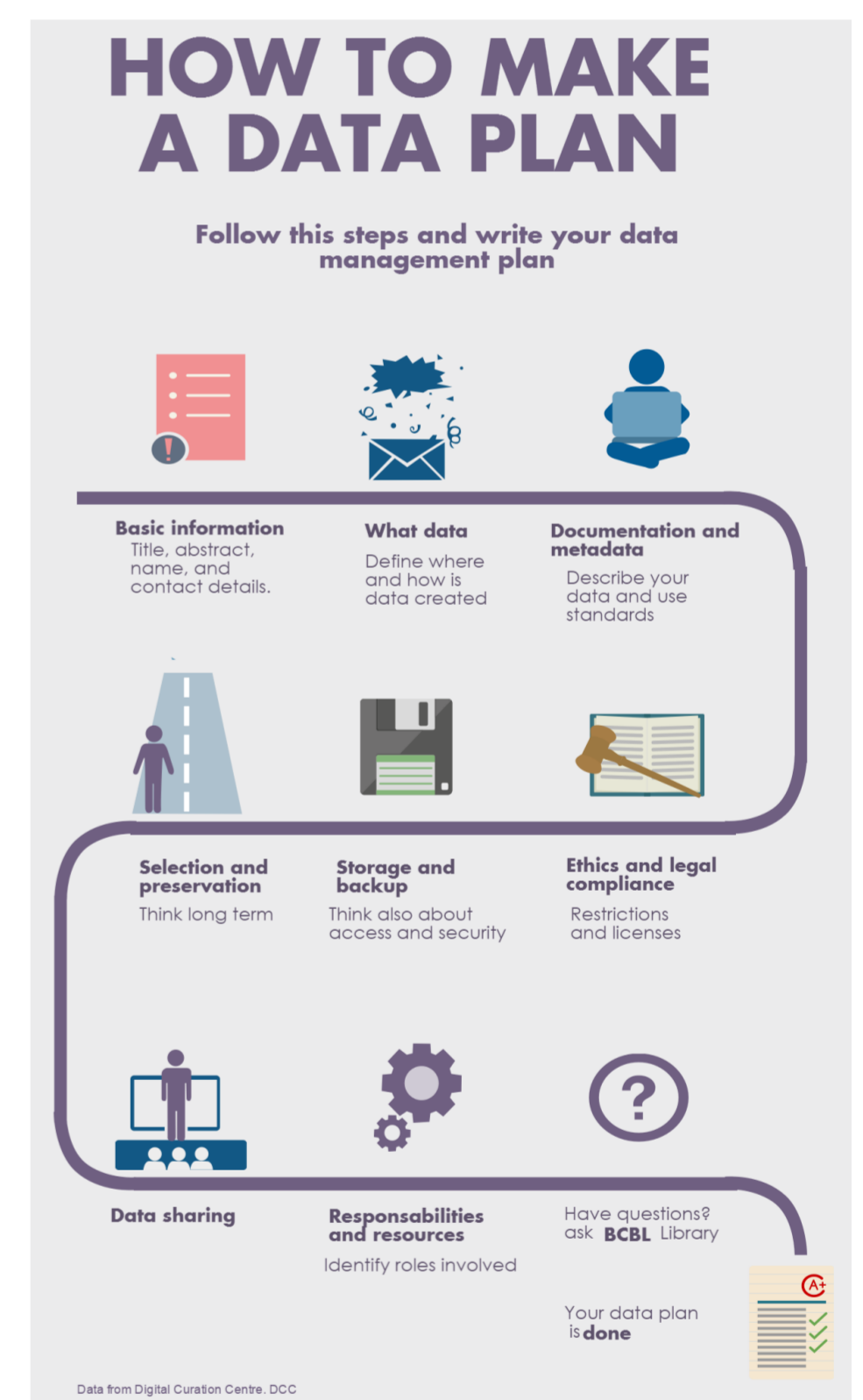
**Data citation** will be a key issue since it means attribution and credit for reuse and repurpose of data. Standards are on the way. Datacite encourages research communities to develop citation systems that work well for them following

Creator (Publication Year): Title. Version. Publisher. Resource Type. Identifier

For example:
Irino, T; Tada, R (2009): Chemical and mineral compositions of sediments from ODP Site 127-797. Geological Institute, University of Tokyo.
http://dx.doi.org/10.1594/PANGAEA.726855

**End user training** is basic to help spreading the word about data management. Data management plan infographic:



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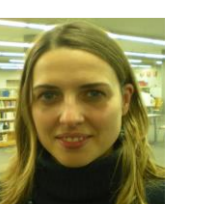
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## Contact Information

Beatriz Benítez Juan
orcid.org/0000-0001-5053-6522
beatriz.benitez@upc.edu

Consol García Gomez
orcid.org/0000-0001-5053-6522
consol.garcia@upc.edu

Biblioteca del Campus del Baix Llobregat
CBL Edifici D7- Esteve Terradas, 10
08860 Castelldefels

**Biblioteca del Campus del Baix Llobregat**
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