The action plan for Open Science of the universities of Catalonia

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"Focus on Open Science"

Scientific Knowledge Services in cooperation with Barcelona Knowledge Hub of the Academia Europaea.

Barcelona, 20th June 2018



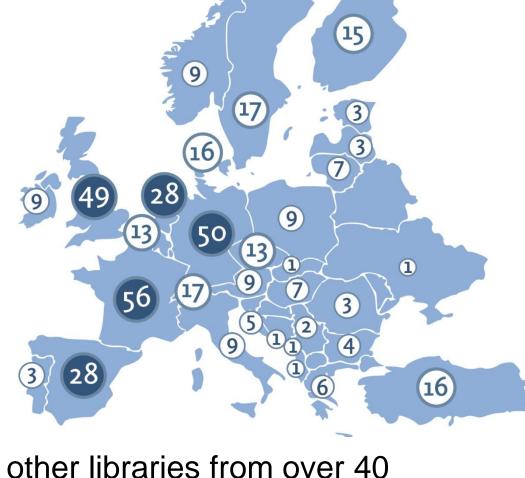
Outline

- ✓ Research and libraries
 - LIBER vision and strategyc Plan
 - Libraries support research in Catalan Universities
- \checkmark OS in CSUC = O (M + A + D)
 - O Metadata
 - O Access
 - O Data
 - O ther activities

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LIBER Europe

- Research Libraries
- Founded in 1971
- More than 400 national, universities and other libraries from over 40 countries







Vision

The research landscape in 2022





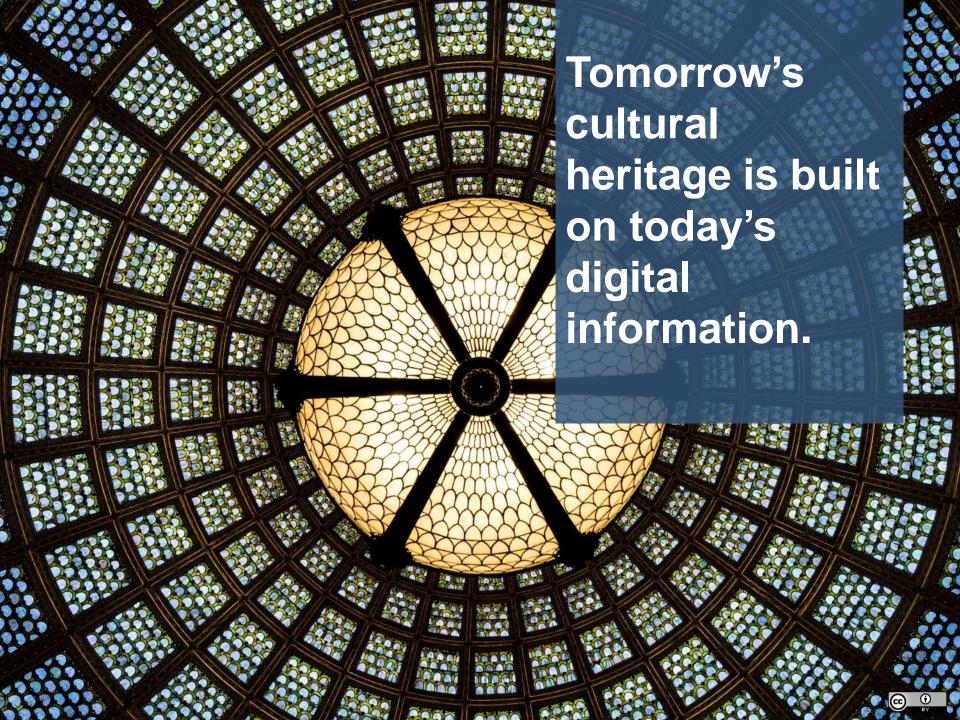
Open Access is of publishing.













LIBER strategy 2018-2022: Changing roles of research libraries

- ✓ Libraries as platform for innovative publishing
- ✓ Libraries as a hub for digital skills and services
- ✓ Libraries partnering in research infrastructure



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√ 1996-2013: CBUC consortia of academic libraries

- Traditional library activities
 - Union catalogue, ILL,
- Digital library activities
 - Licensing and also
 - Repositories (the oldest was set up in 2001!)
 - Promoting OA
 - ORCID implementation









- ✓ 2013: CBUC created a new activity line to give support to research
- √ 2014: CSUC = CBUC (libraries) + CESCA (supercomputing)
- ✓ 2017: CSUC created a new area for Open Science



Mission:

 Collaborate with universities to reduce the effort of adaptation to the requirements of Open Science

Guiding principles:

- Explore together
- Share good practices
- Build joint solutions (if applicable)



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Open metadata = transparency



Research portal of Catalonia

2013 - 2014

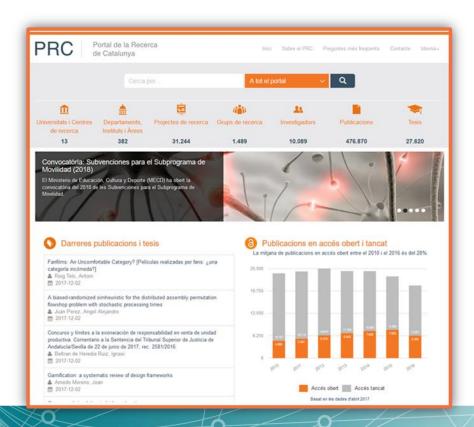
Maqueta / Proves

- Definició del projecte
- Les Universitats catalanes acorden l'ús d'ORCID
- Algunes dades de prova, entrades manualment
- Implementació del programari DSpace
- Mostra de dades per universitat, entrades automàticament (amb XLS)

2015

Prototip

- Eines de validació i deduplicació - Dades totals d'algunes universitats, entrades automàticament (amb CERIF-XML) - 10 càrregues-





What? How? Why?

✓ What?

- aggregating information from different institutions and CRIS systems
 - 12 universities, 40 research centers, 7 CRIS and a lot of no-CRIS information systems

✓ How?

- unifying elements of information
 - UNEIX + ORCID + CERIF + Dspace CRIS

✓ Why?

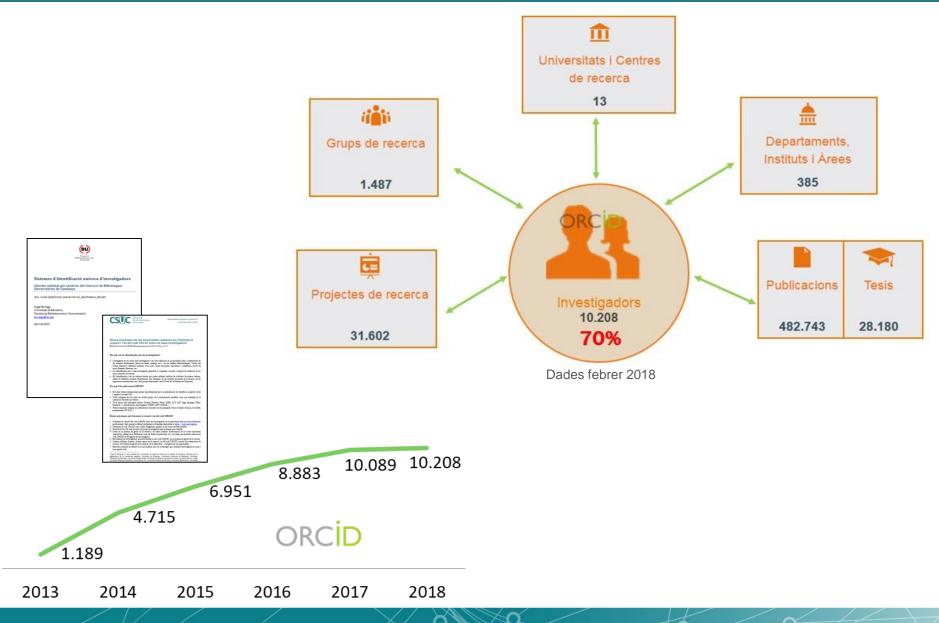
- 2 main goals:
 - visualize and disseminate from a unique place the research activity done in Catalan research system, and
 - promoting open access to scientific outputs (articles and data)

✓ Benefits:

- increasing access and visibility to the research done in Catalonia
- putting data in open and standardized forms to facilitate being harvested and reused

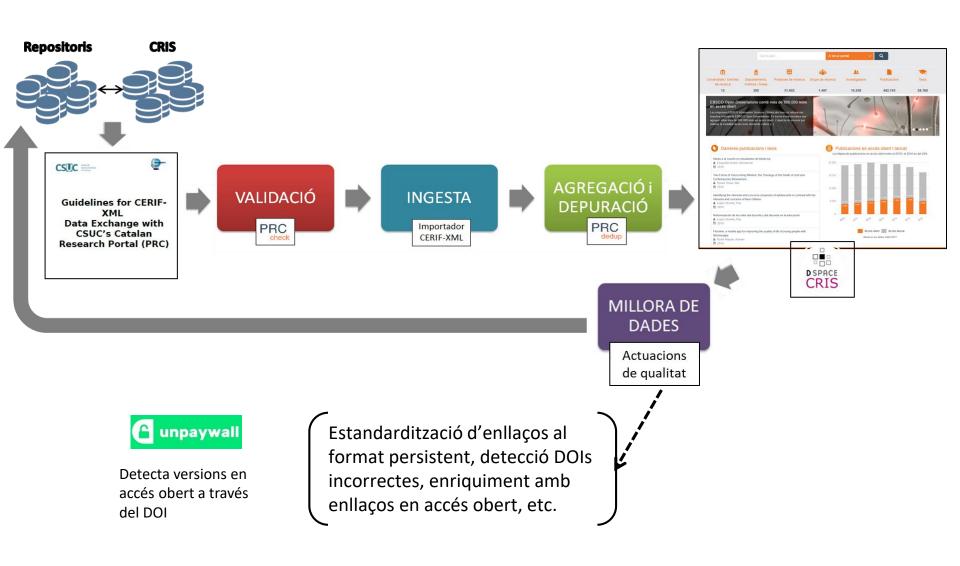


Content





We are using the information already in the system, but we deduplicate elements and add quality





Creixement

- Més informació
- Informació externa
- Identificadors comuns
- Millorar info. existent
- Fomentar Accés Obert



Extensió

- Visualització i cerca
- Dades bibliomètriques i d'impacte social
- Dades reusables

AMPLIAR SERVEIS

 Actualització a demanda



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The situation for a Spanish researcher

- ✓ The European Commission wants to have the 100% OA in 2020
 - But there are deep differences between countries and disciplines
 - In Europe, in a very general picture,
 - countries with a strong publishing industry (and powerful research) opt for the golden way (with payment of APCs) in gold and hybrid journals (UK, Netherlands, Germany, Austria, Finland),
 - In general, with a strong support by the Government and rectors
 - most countries have opted for the green way;
- ✓ The hybrid journals were born with the promise of not increasing overall costs (APCs should be discounted from subscription prices)
 - but, APCs meant an added cost (of a 10%?)
- ✓ The dilemma for Spanish researchers is:
 - to publish in IR with short embargo periods (it does not happen often),
 - or to publish in pure gold journals (there are not many in JCR)
 - or publish in hybrid journals (in most cases with payment and APC)



Hacia un acceso abierto por defecto RECOMENDACIONES Comissión de Seguimiento para la implementación del artículo 37 Difusión en Acceso Abierto de la Ley de la Ciencia, la

Recommendations (for universities, research centers, and consortia)

https://www.recolecta.fecyt.es/sites/default/files/contenido/hoja-informativa-Enero-2018-EN.pdf

- 1. Monitoring compliance with open access publishing
- 2. Facilitating the deposit
- 3. Focusing on researchers regarding OA and new indicators
- Transparency in journal subscription agreements and control mechanisms
- 5. Containing the expenses made in journals subscriptions



Research Vicerectors of universities of Catalonia Recommendations approuved (Nov. 2017)

✓ Containing the cost of the scientific communication system

- In contracting journal subscriptions it will be attempted not to accept annual increases in costs that are above the Catalan retail price index.
- In order to avoid paying an extra cost for publishing, universities will create mechanisms that allow them to monitor what they pay for open access publishing through APCs or participation in open access publishing initiatives.
- It will be ensured that journal subscription agreements include vouchers for open access publishing without payment of APCs for the principal researchers of the signatory universities.

✓ Depositing scientific articles published by the academic community in the institutional repositories of universities

- Universities will make it compulsory to deposit all scientific articles published by the academic community in their institutional repositories. Priority should be given to open access depositing, but if that is not possible, the works must be deposited with as short an embargo period as the funders and publishers allow.
- Compliance with the mandatory deposit will be monitored and the results will be made public

✓ Promoting transparency

- Universities will make public all agreements for access to information resources reached with publishers, as has been done in the Netherlands and in Finland.
- Universities will publicize the costs of the whole scientific communication system, including those of access to resources and those of publication.



From speaking to acting

- ✓ The objective is 100% OA, but, when? how?
 - To get it, we need a policy, and our problem is that we are still not ready to have one
 - We are not driving or navigating the scholarly communication transformation, we are skating and surfing in the OA landscape,
- ✓ We need the consensus between
 - more than 10 universities
 - vice-rectors, managers, administrators, librarians, researchers
- ✓ We need a feasible action plan, one that we can perform
 - (not one that is nice to talk about)

The CSUC OA Action Plan for 2018

✓ Offsetting:

We will try to sign offsetting licenses with some (3-5) small publishers

✓ Breaking:

- We will do not sign licenses if the publishers ask us for abusive conditions
- We will need to prepare alternatives for access to the publisher content

✓ OA by default:

- We would like to convince universities in making mandatory the deposit of all scientific articles published by the corresponding author of the universities
- Embargos guaranties the compliance with journal policies

✓ Transparency:

- We want to make public the costs of subscriptions (like Holland and Finland did)
- We will do it in an aggregate way



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- ✓ Open Research Data Pilot H2020 requires to:
 - Create a DMP
 - To publish research data in open and FAIR modes
 - Next Horizon Europe will maintain the requirement and monitoring this
- ✓ <u>Recommendation on access to and preservation of Scientific Information</u> (European Comission, 25.04.18):
 - research data that results from publicly funded research becomes and stays findable, accessible, interoperable and re-usable ("FAIR principles") within a secure and trusted environment



Data and supplementary materials have sufficiently rich metadata and a unique and persistent identifier.

INDABLE



Metadata and data are understandable to humans and machines. Data is deposited in a trusted repository.



Metadata use a formal, accessible, shared, and broadly applicable language for knowledge representation.

INTEROPERABL



enting FAIR Deta Principles: The Role of Librari usage licenses and provide accurate information on provenance.

REUSABLI

RDM: The CSUC vision

- ✓ It is necessary but not yet urgent
 - (and it is complex, and unknown, and diverse)
- ✓ The management of research data should be asymmetric.
 - solutions (probably) will be diverse and adopted progressively
- ✓ In the medium-long term (probably), the mandates, incentives, facilities, and habits of the researchers will be more important than the data infrastructures
 - Although, in the short term, the construction of infrastructures is probably at the center of the debates

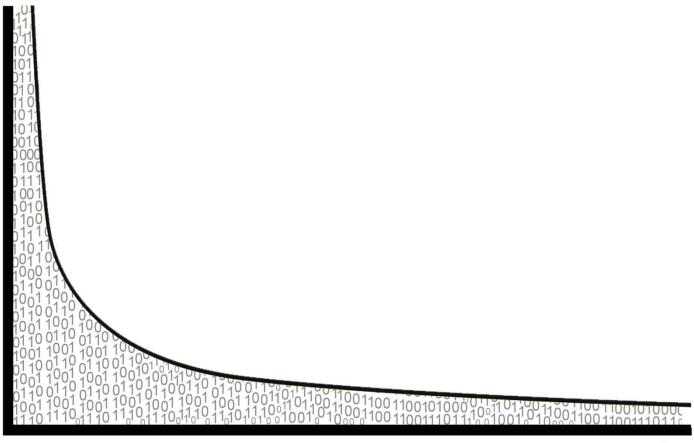
✓ Asymmetric research data management

- 0. (always and for all): Data Management Plans
- 1. (for very few, but very visible): the solution already exists
- 2. (for now and just in case): accommodate existing repositories
- 3. (for most, soon): a FAIR repository where to publish the data
- 4. (for all, in the not very distant future): management tools





Mida i complexitat







0. (always and for all): Data Management Plans







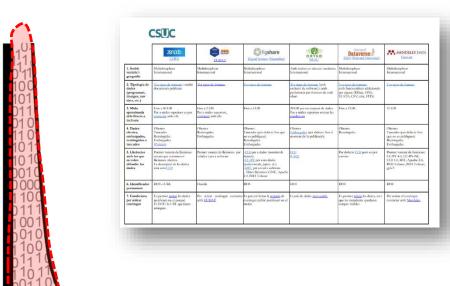
- ✓ we have a form online
 + prepared staff for
 helping researchers to
 create DMPs
- with information about the content of the Plan, descriptions and real examples
- ✓ but, only very few researchers used them (10% of the potential users)





1. When the solution already exists





- ✓ Recomendaciones de repositorios temáticos y multidisciplinares
 - For communities that already have their subject data repositories
 - For special cases
- ✓ A table that shows the public data repositories characteristics
- ✓ Systematic updates (v1 Jul'16, v2 Nov'16, and v3 Mei'17)







2. (for now and just in case): accommodate existing repositories





- ✓ Using existing IR has allowed us to easily and quickly respond to the need to publish data
- ✓ Changes: metadata, data visualizing, ...
- ✓ But this solution has clear limitations:
 - Files size
 - Preservation
 - PURLs used (handle and not DOI)
 - Software maintenance
 - •

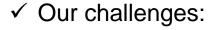






3. (for most, soon): a FAIR repository where to publish the data





- to establish a set of achievable FAIR principles:
 - persistent identifiers,
 - storage of different sizes and formats,
 - preservation of high performance,
 - Interoperability
 - ..
- taking advantage of economies of scale without institutions lose the sense of control of the data of their researchers

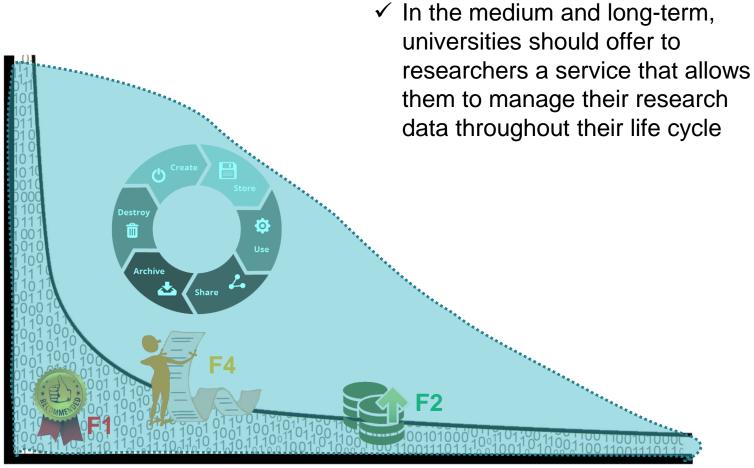






4. (for all, in the not very distant future): management tools









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Other activities

✓ Bibliometrics

- Current situation: unequal and inhomogeneous use of bibliometric indicators
- Objective: to create a Service that provides a wide range of bibliometric indicators to the research system of Catalonia (and introduce altmetrics)

✓ Repositories

- Continuing maintaining different repositories and portals
 - Doctoral theses: TDX / Research documents: Recercat
 - Images: Digital Memory of Catalonia / Journals: RACO

✓ Digital humanities

- A working group has been created
- Goals:
 - identify HD groups and projects
 - establish standards for the digitalization of contents
 - create a librarians working group to support HD



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✓ A final consideration



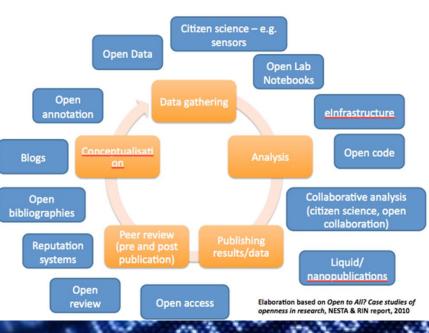
In the past, libraries supported research basically collecting, licensing, preserving, and disseminating journals





In the new OS context,
library services for
research should cover
the complete process or

cycle of research









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