Report of the Paris Conference on Open Research Information

September 23-24 2024, Sorbonne University, Paris

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Executive Summary

In September of 2024 signatories, supporters and parties interested in the Barcelona Declaration met at Sorbonne University, in Paris to discuss next steps in taking the agenda of the Declaration forward. In a two day hybrid in-person and online meeting, participants shared progress and challenges of advancing the production, management and use of open research information, and worked together to prioritize concrete actions that will make up a shared road map.

Around 140 participants engaged in presentations and discussion, with the first day focussing on the sharing of experiences and the second day focussing on actions. A total of 21 talks were presented with panels covering University policies and concrete implementations; Funders, national organizations and governments; International collaborations; and Infrastructures for open research information. Concrete actions were formulated and prioritized on the topics of Journal article metadata; Metadata for research outputs in institutional repositories, preprint repositories and data repositories; Funding metadata; Replacing closed systems for research information; Sustainability of infrastructures; Evaluating open data; and Evidence of benefits of open research information.

Following the meeting, a theory of change framework was applied dividing actions into four categories (information gathering, frameworks & analysis, principles & guidelines and implementation & monitoring), guiding the placement of the actions onto a concrete roadmap for coordinated activities. We invite organizations to get involved in the working groups that will take forward the actions on the roadmap.

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Outline and Background

A large number of organizations that carry out, fund, and evaluate research have signed the Barcelona Declaration on Open Research Information. These organizations have committed (1) to make openness the default for the research information they use and produce, (2) to work with services and systems that support and enable open research information, (3) to support the sustainability of infrastructures for open research information, and (4) to support collective action to accelerate the transition to openness of research information. A number of organizations providing data, services and infrastructure for open research information have also formally declared their support for the Declaration.

To support signatories of the Barcelona Declaration in fulfilling their commitment to open research information, a two-day conference, hosted by Sorbonne University in Paris, was organized in September 2024 for current and prospective signatories and supporters of the Declaration.

The Paris Conference on Open Research Information had two aims:

- To provide a forum for sharing experiences and good practices regarding open research information.
- To develop a joint roadmap for open research information

In this hybrid in-person and online meeting, attended by around 140 participants, signatories and supporters of the Barcelona Declaration shared progress and challenges of advancing the production, management and use of open research information, and participants worked together to prioritize concrete actions that will make up a shared roadmap.

Presentations

The first day of the conference saw presentations from signatories and supporters of the Barcelona Declaration, with the aim of sharing experiences and good practices regarding open research information. A total of 21 talks were presented with panels covering the following areas:

- Universities - policies
- Universities - concrete implementations
- Funders, national organizations and governments
- International collaborations
- Infrastructures for open research information

The full conference programme with the list of presentations and many of the presentation slides are available on Zenodo: https://zenodo.org/communities/paris_conference_ori_2024

Roadmap

Methodology

The draft roadmap was a core goal for the conference. The aim of the Barcelona Declaration is to achieve change through concrete actions and a roadmap for identifying specifically where signatories, supporters and interested parties can work together and coordinate actions is key to that.

Prior to the conference a call for topics was circulated and these topics were rationalized and synthesized down to ten options. All signatories and supporters were invited to vote on the topics in advance of the conference to identify the priorities for discussion. The topics, along with the initial prioritization were presented to participants and the choice of the top seven topics was confirmed, while also collecting a range of additional topics of potential future interest (see Appendix A). The seven topics were discussed in each of two sessions by in-person participants, and four of the seven topics were discussed by online participants.

Each discussion section was tasked with identifying three concrete actions, using the SMART (Specific, Measurable, Achievable, Realistic and Time limited) rubric with the guidance to identify actors and timescales for each action. Actions were collected and collated, using paper sheets (in person) and online slides for online participants. Participants then voted, assigning six votes amongst all the actions each. Votes by current and potential signatories were counted separately to those of current and potential supporters.

A quick summary and presentation of the results of the voting was presented at the workshop, with each topic receiving support and interest for taking part in the actions. Following the conference the actions were collected, the voting results analyzed in more detail and actions categorized into their topics and into stages of development. A simple theory of change model was developed to inform the stages and this further identified potential gaps and areas for coordination of actions.

Topics

Through the pre-conference call and a collation and combination of proposals, ten general roadmap topics were identified for consideration.

1	**Increasing the open availability of metadata on journal articles** (e.g. through requiring this in publisher negotiations)
2	**Increasing open availability of metadata on research outputs in institutional repositories, preprint repositories, data repositories** (e.g. through creating improved systems and standards for creating, transporting and shared metadata on other research outputs)
3	**Increasing the open availability of metadata held in CRIS systems** (e.g. through requiring this as a capacity in vendor negotiations, and using this capacity to share and communicate more metadata where appropriate)
4	**Increasing the open availability of metadata on research funding, grants and resourcing** (e.g. through funders publishing and releasing data via open standards)
5	**Promoting openness of the data underlying university rankings** (e.g. by disengaging from closed rankings and making information provided to rankings public)
6	**Replacing closed systems like Web of Science and Scopus by open alternatives** (e.g. through developing shared strategies and creating a critical mass of adopters)
7	**Supporting the sustainability of infrastructures for open research information** (e.g. through financial support and by participating in governance)
8	**Evaluating open data sources on their quality, coverage, and openness aspects** (e.g. through creating a programme of assessment and critique)
9	**Providing the evidence of the benefits of adopting open research information** (e.g. by developing body of evidence, arguments and case studies, on consequences of closed vs open research information)
10	**Creating a program of (self)-monitoring of progress of signatories and supporters** (e.g. through the creation of organizational action plans and a framework for regular reporting)

The online voting on prioritization gave a fairly even set of priorities with “replacing closed systems” being the most prioritized. Funding metadata, evaluation of open data qualities and evidence of benefits were prioritized next with some variation between signatories and supporters in the prioritization.

	(potential) signatories		(potential) supporters	
1. Journal article metadata		33%		44%
2. IR/Preprint/Data metadata		36%		52%
3. Metadata in CRIS		22%		33%
4. Funding metadata		53%		37%
5. Data underlying rankings		31%		26%
6. Replacing closed systems		72%		70%
7. Sustainability of infrastructures		42%		59%
8. Evaluating open data		53%		52%
9. Evidence of benefits		56%		56%
10. (Self)monitoring		28%		15%

During the conference the question of shared curation systems arose in multiple conversations and presentations. This was offered as a potential alternative topic - however participants chose to focus on the top seven topics from the prioritized list in the light of a planned workshop on coordination of curation taking place right after the Paris Conference. The remaining topics not covered were: Metadata in CRIS systems, Data underlying rankings and (Self)monitoring (from the set previously raised), as well as a set of other topics suggested by survey respondents and conference participants. The full list of additional suggestions is included in Appendix A.

As such, the topics covered by conference discussions were: Journal article metadata, IR/preprint/data metadata, Funding metadata, Replacing closed systems, Sustainability of infrastructures, Evaluating open data, and Evidence of benefits. All were covered twice by group discussions in Paris. A subset of four topics was covered online (Funding metadata, Replacing closed systems, Sustainability of infrastructures and Evidence of benefits).

Actions

A total of 18 group discussions returned 55 individual actions (for the full list see Appendix B), with some overlapping significantly as would be expected. Online actions were collected in a Google Slide format and in-person actions collected on sheets of paper. Each set was cross-transcribed. However, two sets of online actions were not transcribed to paper and meant there was no in-person voting on those actions. Some priorities have been adjusted to reflect this, with the full details of the voting also available in Appendix B.

Participants were given an allowance of six dots to vote (digital or physical) and given time to read and discuss the proposed actions. Within the context of the conference an effort was made to combine and summarize the actions. However, given the time constraints this was necessarily imperfect as a process and the voting was analyzed in detail following the conference.

Amongst the actions with the most votes were a mix of direct actions (e.g. requiring comprehensive metadata deposit as part of future negotiations with publishers), setting of standards (e.g. quality standards for open metadata), analysis and framework development, and information gathering (e.g. what is currently spent on closed and open research information sources).

In several cases there were staged sets of actions that related to each other, and in others actions were proposed that would benefit from coordination and consistency. This helped develop a theory of change that would divide actions into four categories, guiding the placement of the actions onto a concrete roadmap for coordinated activities. The four categories can be divided into two broad phases, a research and development phase, and a planning and implementation phase.

The theory of change can be used to identify where there is a desire for action, such as demanding comprehensive metadata deposit as a service within publisher negotiations, but there is currently not a shared understanding of what “comprehensive” would mean, what is practically achievable and how coordination can be achieved.

It also helps to link actions together to identify how they might be staged to most effectively achieve coordination and practical outcomes. For example, several actions suggested surveying signatories - which might be most efficient when combined into one survey, rather than carried out as separate actions.

Synthesis

The tables below show the prioritized actions that came out of the conference, organized according to the different stages defined in the theory of change model. Together, these actions, grouped by topic, form a roadmap for joint action on open research information.

It should be emphasized that although these are the actions that were prioritized, this does not necessarily mean there is consensus on each and every action. Also, while conference participants identified actors and timeframes for each action, these are best considered when looking at actions together, rather than individually. Therefore, the time frames and actors have not been included here.

Journal article metadata

Action	**Stage**
Develop a framework for open publication metadata (incl. for books) including a list of the most important metadata elements for journal articles and books.	Frameworks & Analysis
Organize a gap analysis based on the developed framework	Framework & Analysis
Develop principles for community control over publication metadata (incl. for books)	Principles & Guidelines
Demand in future negotiations with publishers the deposition of comprehensive metadata to infrastructure providers (e.g., Crossref, DataCite), preferably using PIDs, and monitor delivery	Implementation & Monitoring [collective action]
Create affordable ways for poorly-resources publishers to start using PIDs (e.g. DOIs) and to start making metadata openly available	Implementation & Monitoring [capacity building]

Overall, this implies an integrated program of identifying a framework that describes key metadata for inclusion (and potentially a program for expansion) combined with actions to require that key metadata be made openly available by publishers. Effective coordination of these demands will be key to success. An example of this would be developing shared standards and procurement terms that would provide consistency and specificity in the metadata requirements transmitted to publishers, creating a more coordinated action and simplifying the response for publishers.

Metadata on research outputs in institutional repositories, preprint repositories, data repositories

Action	**Stage**
Share experiences of giving credit to authors and other staff members for sharing data/code and improving metadata quality	Information gathering [user stories]
Draft guidelines to create and use linked research objects	Frameworks & Analysis
Propose guidelines about human resources to dedicate to metadata validation/moderation in IRs	Principles & Guidelines
Pilot implementing a machine-learning pipeline to detect datasets and software from full-text	Implementation & Monitoring [technical]

This topic represented an interest in the general program of expanding the set of research output types for which high quality metadata is available and ensuring that this growth contributes to the expansion of open research information systems. The proposed actions in this topic tend to cover multiple stages explicitly or by implication (e.g. guidelines for human resources to dedicate to metadata validation would presumably need to be based on a study of what current resources are being dedicated, where and how). An examination of potential dependencies on earlier steps (and what resources are already available) would be useful in this topic.

Funding metadata

Action	Stage
Organize a workshop with vendors, publishers and funders to discuss the minimum requirements for how the submission system should support the registration of grant metadata and the progression through the system to registration.	Frameworks & Analysis
Expanding the use of existing systems for metadata management amongst a wider and more geographically distributed group of funders.	Implementation & Monitoring [capacity building]
Produce a set of resources to show how funders are making grant metadata available for advocacy and for improving the use of standards	Information gathering [user stories, technical], Implementation & Monitoring [resources]

Improving the availability of data on funding decisions and resourcing was a strong focus throughout the meeting. This was also an area where significant initiatives are already in train, and with concrete commitment from various organizations represented at the conference. This set of activities could be generalized to include a wider range of pilots and initiatives to support funders to make more consistent and comprehensive metadata available. A particular focus was to consider how existing initiatives could be designed to support more funders and how best to coordinate experiments and pilots that could be expanded in the future. In comparison with publishing metadata, funding and resourcing metadata is less coordinated and less available, particularly for open research information.

Replacing closed systems

Action	**Stage**
Develop and distribute a survey, to make an inventory of user stories, and all Barcelona Declaration signatory organizations will have the results ready	Information gathering [user stories]
Create guidelines that prioritize research outputs with persistent identifiers (handle or not handle), encouraging any indexing service to have equal access to these products.	Frameworks & Analysis
Set a minimum quality standard for data submitted to PIDs' operators.	Guidelines & Principles
Scientometrics and relevant management teams at signatory organizations have access to required training to support the active use of open research information. Monitor uptake and usage of resources.	Implementation & Monitoring [capacity building]
Identify at least 20 organizations that are willing to sign a statement to unsubscribe from the closed data sources.	Implementation & Monitoring [collective action]
Include currently missing provenance information in Open Research Information Resources (e.g., source of data, whether it has been reviewed/curated) and make filters available for users.	Implementation & Monitoring [technical]

Processes and efforts to build viable replacements for closed data sources and pathways for the adoption of open research information systems was a key focus of the meeting participants. An element that emerged, also within “Sustaining Infrastructures” below, was a lack of clarity on requirements and standards for the quality and completeness of data. A second issue was coordination of action, specifically with regard to canceling subscriptions. Capacity building, and training was a further issue to support a transition away from existing systems and expertises, which is often challenging in an institutional context. Putting this in the context of the theory of change, the proposed actions are quite concrete but would benefit from being placed in a wider context in which their coordination can aid implementation.

Sustaining infrastructures

Action	**Stage**
Information sharing on how open research infrastructures and resources are supported yearly	Information gathering [data]
Survey of signatories to know how much is spent on proprietary tools and resources	Information gathering [data]
Produce a model & guidelines of what they need , want and expect from open research information infrastructure -> how it can translate to supporting	Principles & Guidelines
Adopt and agree a model guideline of required open research information services/systems	Implementation & Monitoring
Contribute to an endowment pool over a ten year period with a governance entity that could support infrastructure sustainability	Implementation & Monitoring [collective action]
Commit to redirecting funding saved from cancellation of closed services to directly support open infrastructure providers rather than returning savings to institutional overhead	Implementation & Monitoring [collective action]

Sustaining infrastructures over time is a long standing concern. This was also the topic on which votes most diverged between signatories and supporters, indicating the differing interest of those expected to pay and those who need resourcing. There was substantial value seen in gathering a broader range of information on what resourcing is currently being deployed, particularly from research performing organizations. This could complement current efforts such as the IOI State of Open Infrastructure report, which is making a start on tracking grant funding to infrastructures, including open research information systems. Similar to “Replacing Closed Systems” there is a call for clear standards and expectations of information quality and completeness to qualify for access to resources, and a goal to encourage signatories to commit to support in the medium to longer term.

Evaluating open data

Action	**Stage**
Agree on a set of criteria for open research information sources with a focus on minimal requirements that support adoption	Frameworks & Analysis
Develop a set of reporting guidelines for evaluations	Principles & Guidelines
Support projects for developing evaluation tools and methods	Implementation & Monitoring [resources]
Implement evaluation tools and methods in a monitoring framework	Implementation & Monitoring [resources]

Again paralleling topics above, the quality and completeness of open research information was the focus here. With an emphasis towards implementation of monitoring frameworks and the consequent requirement for the development of frameworks and delivery guidelines, these actions tended towards the later stages of the theory of change, compared to those above focused on financial aspects. There will be a need to coordinate across these topics and beyond. For instance actions here on developing frameworks and quality standards will be critical for the implementation of provenance information within “Replacing Closed Systems”. This also illustrates the need for integrating across the topics.

Evidence of benefits

Action	**Stage**
Collect case studies of use of signatories' open research information by the public	Information gathering [user stories]
Produce a stakeholder map and a taxonomy of benefits	Frameworks & Analysis
Map costs, inequities and other undesirable effects of closed systems	Information gathering [data, user stories]
Engage with journal editors to launch an open call for a special issue about the benefits of open research information	Implementation & Monitoring [resources]
Identify, develop and implement actions to improve multilingual metadata and other forms of bibliodiversity.	Implementation & Monitoring [technical]

Actions under this topic tended to the beginning and end of the theory of change, perhaps reflecting a current lack of frameworks for organizing evidence of benefit. Actions under this topic would naturally flow into wider evaluation, defining what benefits are possible or prioritized and leading through to ongoing monitoring of how implementation delivers them. It also reflects the need to publicize and make clear existing and developing benefits, both to researchers (as suggested here through the peer reviewed literature) and more widely to research leadership and managers.

Implementing the roadmap

The core focus of the conference was "what actions should we take *together*". The actions identified in Paris, grouped by topic, signify where there is shared interest in pursuing specific actions and areas. Together, they form a roadmap for joint action on open research information. The next step is for signatories and supporters to work together on each of these topics to bring these actions forward.

It is clear that there are actions that can be taken immediately and which will benefit from working together to maximize impact and minimize unnecessary duplication of effort. There are also significant overlaps between the actions across topics, with emerging dependencies between them. The theory of change also suggests gaps amongst the current sets of specified actions.

Another key aspect is checking for alignment with existing initiatives and for where important resources already exist. Examples of existing guidelines and principles include such documents as the UNESCO Open Science Monitoring principles, the Agreement on Reforming Research Assessment, organizational guidelines including the Principles of Open Scholarly Infrastructures and the FOREST Framework, as well as the recorded experiences of organizations that are leading the change, existing monitoring tools and frameworks, and of course the information gathered at the conference itself. Existing initiatives where actions are already planned and/or implemented include the CoARA working group Towards Open Infrastructures for Responsible Research Assessment, the Global Sustainability Coalition for Open Science Services (SCOSS), Invest in Open Infrastructure (IOI), Transparency to Sustain Open Science Infrastructure (TSOI) and others.

Setting up working groups

We are seeking expressions of interest from organizations that wish to take forward, and potentially coordinate, the actions around specific topics. For each of the seven roadmap topics we plan to have a dedicated working group.

The role of working group coordinators is critical in achieving success in the goals for each topic and across the roadmap. Our goal is that working groups should be coordinated by signatories, while both (prospective) signatories as well as supporters can be involved as working group members. In many cases there is a symmetry of accountability, with early stages requiring work on the part of signatories to clarify requirements, and later stages and implementation tending to require commitments from supporters.

While the starting point is to seek interested parties for working groups arranged around each of the existing seven topics, we expect there will be shifts and changes over time as specific topics and actions are connected and new ones emerge. This is a natural part of evolving the program.

Coordination and support

The key to success in the goals of the Barcelona Declaration will be coordinating our collective work. In parallel with working group formation and definition, an organizational structure will be developed to support the work of both the working groups and their coordinators. A minimal set of goals will be to have support for meeting scheduling, keeping a record and coordination and communication across and amongst the groups in place by the beginning of 2025.

While we aim to bring together a modest amount of funding to enable this central coordination, working groups themselves are expected to be based on in kind contributions of time and expertise. This may help both your own organization in working towards the commitments of the Barcelona Declaration, as well as the wider community of signatories and supporters.

Working groups will be responsible for setting goals and target outcomes for a 6-24 month timeframe. Working groups will have leadership responsibility for those goals and the intent is for coordination to be lightweight rather than heavily structured. Regular reporting and communication will be key and our goal is to support this and report regularly to working groups and their coordinators, all signatories and supporters. The coordinating team will organize regular updates via the website, mailing list, social media and other appropriate channels.

Get involved!

If your organization is interested in participating in one or more working groups, or, as a signatory organization, in coordinating one of the working groups, please fill out this form by November 30.

We aim to set up a meeting with potential working group coordinators in December 2024, and have working groups populated and starting active work in January 2025.

Paris conference organizing committee

- Amélie Church (Sorbonne Université)
- Bernardo Rondelli (SIRIS Foundation)
- Bianca Kramer (Sesame Open Science)
- Cameron Neylon (Curtin Open Knowledge Institute)
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For more information, please get in touch at:
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Appendix A - additional topic suggestions

Manage & build capacity for open data curation
Improve synchronization between different open infrastructures
Increase the availability of open metadata on books
Include other output types and other metadata types
Harmonize terminology
Identify low hanging fruit - impactful actions that can be taken with relatively little effort
Create a program to build capacity and outreach supporting the open research information movement
Support the academic community in the use of open data sources for (choices around) discovery, publication and evaluation.
Look across roles for training and education - including administrators and managers

Appendix B - list of proposed actions

All actions are presented as they were reported from the discussion sessions during the conference. Actions indicated with * could only be voted on by online participants.

	Signatory votes	Supporter votes	Total votes
Journal article metadata			
Supporters and signatories will develop principles for community control over publication metadata (incl. for books) by May 2025	8	4	12
Supporters and signatories will develop a framework for open publication metadata (incl. for books) by May 2025	6	7	13
Supporters and signatories will organize a gap analysis based on the above-mentioned framework by May 2026	11	12	23
Institutions and infrastructure providers will create a list of the most important metadata elements for journal articles and books	0	2	2
Institutions will demand in future negotiations with publishers the deposition of comprehensive metadata to infrastructure providers (e.g., Crossref, DataCite), preferably using PIDs	19	3	22
Infrastructure providers will create affordable ways for poorly-resources publishers to start using PIDs (e.g., DOIs) and to start making metadata openly available	8	6	14
IR/Preprint/Data Metadata			
At least 2 research organizations try to implement a machine-learning pipeline to detect datasets and software from full-text by mid-2026	4	3	7
A group of signatories propose guidelines about human resources to dedicate to metadata validation/moderation in IR's by end 2025	6	1	7
A group of signatories shares their experiences of how they gave credit to authors and other staff members for sharing data/code and improve metadata quality by end 2026	5	9	14
Supporters develop a trust framework for metadata enrichment workflow for review by signatories by end of 2025	0	5	5
Signatories draft guidelines to create and use linked research objects by end of 2024, iterations in 2025	8	4	12
Signatories showcase evidence to published/deposit negative results by mid 2025	4	3	7

	Signatory votes	Supporter votes	Total votes
Funding Metadata			
NWO + FWF + ANR + Crossref are producing a set of resources to show how funders are making grant metadata available for advocacy and for improving the use of standards during the next year	11	3	14
In 2024, a crowdsourced database of open grant management tools will be launched by Crossref and then populated by the community	0	2	2
NWO and Crossref are organizing a workshop (2025) with vendors, publishers and funders to discuss the minimum requirements for how the submission system should support the registration of grant metadata and the progression through the system to registration	8	5	13
California Digital Library develops training on how to develop internal grant system with persistent identifier ecosystem rationalization engaging other US funders -> next 6-12 months	1	2	3
California Digital Library (CDL) and SIRIS will design a pilot project to export the funding metadata management pipeline used by CDL to a number of funders in the Global South over the next 12 months	1	3	4
Crossref and Datacite agree on a set of core, easily translatable metadata that allows one to be transferred to the other	5	1	6
Funders will curate their Funder ID, ROR ID… and the Grant ID for the projects they fund by end of 2025 *	2	2	4
Publishers will adopt responsible actions (such as policies and best practices) to link research outputs to grants, using PIDs in Crossref (or validated schemas), by end of 2026 *	0	0	0
Funders will pilot a minimal metadata schema to publish grant applications data by end of 2025 *	1	2	3
Barcelona Declaration signatories will compile and publish use cases on reusing grant information by end of 2025 *	0	1	1

	Signatory votes	Supporter votes	Total votes
Replacing Closed Systems			
Research performing organizations will have a comprehensive inventory of use cases, user stories, and the various purposes for which closed data sources are currently utilized within their organization by spring 2025	16	6	22
Research performing organizations will identify limitations in the user interfaces of open data sources that hinder systematic reviews and literature searches. They will collaborate with these open data sources to address and resolve these issues by spring 2025	5	3	8
Identify missing provenance information (e.g., peer-reviewed status, journal/source details) in open data sources that is essential for accurate research analytics and decision-making. Collaborate with these open data sources to ensure this information is included and that filters for it are made available by summer 2025	5	6	11
By the end of 2026 we have identified at least 20 organizations that are willing to sign a statement to unsubscribe from the closed data sources	6	8	14
By 2026 the scientometric teams at all the BD signatory organizations have learned how to use open research information	13	4	17
By January 2025 a survey is developed and distributed, to make an inventory of user stories, and all BD signatory organizations will have the results ready by June 2025	4	7	11
By mid-2025, funders will create guidelines that prioritize research outputs with persistent identifiers (handle or not handle), encouraging any indexers (Web of Science, Scopus or OpenAlex) to have equal access to these products, allowing researchers and institutions to choose from a wider range of indexing services. They will also enhance the quality of metadata by providing access to PIDs for everybody and setting a minimum quality standard for data submitted to PIDs' operators	9	8	17
By the end of 2025, research institutions will commit to identify gaps and errors in open databases and platforms to improve quality by maintaining up-to-date open research platforms	2	3	5
By December 2025, funders and research institutions will provide us with educational resources in open data sources as texts (guidelines) and short videos	1	0	1

	Signatory votes	Supporter votes	Total votes
Sustainability of Infrastructures			
Working group from signatories produce a model & guidelines of what they need , want and expect from ORI infrastructure -> how it can translate to supporting	1	3	4
Supporting infrastructures provide: roadmap, ecosystem model for sustainability	0	0	0
Working group of institutions and infrastructures to work on advocacy tools and support	1	0	1
Signatories share between them, how they support open research infrastructures and resources yearly	8	13	21
Working group on guidelines for supporting infrastructures (advocacy for POSI)	1	1	2
Survey of signatories to know how much is spent on proprietary tools and resources	12	8	20
Barcelona Signatories will create a set of governance criteria that will be used in purchasing decisions by the end of 2025 *	1	0	1
Funding bodies contribute to an endowment pool over a ten year period with a governance entity that could support infrastructure sustainability *	1	2	3
Barcelona Signatories will commit to redirecting funding saved from cancellation of closed services to directly support open infrastructure providers rather than returning savings to institutional overhead within the next 18 months *	2	3	5
Evaluating Open Data			
Providers of ORI will do POSI self-evaluations every 2 years	1	2	3
Groups of similar metadata providers should agree on a set of quality standards by 2026	13	5	18
A working group of Barcelona Declaration signatories develops a set of reporting guidelines for evaluations by 2026	3	1	4
A working group creates a set or sets of criteria and reporting guidelines for evaluation with a focus on minimal requirements by July 2025	2	0	2
Providers self-report on evaluation criteria and their progress in a transparent and verifiable way by end of 2025	2	0	2
Signatory or other interested funders will support projects for creating evaluation tools and methods by 2026	4	3	7

	Signatory votes	Supporter votes	Total votes
Evidence of Benefits			
A group of universities and research organizations is engaging with journal editors to launch an open call for a special issue about the benefits of open research information by June 2025	8	6	14
The Leibniz Association will demonstrate the benefits of data curation in CRIS with Open Research Information by end of 2025	1	0	1
Signatories of BD will collect case studies of use of their ORI by the public (by June 2025)	11	0	11
Organizations will produce a stakeholder map and a taxonomy of benefits and implement them by mid 2025	2	11	13
S&S will map costs, inequities and other undesirable effects of closed systems (6 months)	3	7	10
Organizations will develop studies that show the value of open research information systems (by mid 2025)	1	3	4
Signatories will identify the benefits, establish criteria to measure them, and share it by mid-2025	3	2	5
Signatories/supporters will identify actions to improve bibliodiversity in the coming year	0	3	3
Signatories will create technical opportunities for multilingual metadata in 2 years	6	5	11