



## Commitment 20

### Open Access to Research Results / Research Information Services

#### Innovation Union commitment text

*"The Commission will **promote open access** to the results of publicly funded research. It will aim to make **open access to publications the general principle for projects funded by the EU research Framework Programmes**. The Commission will also support the development of **smart research information services** that are fully searchable and allow results from research projects to be easily accessed."*

#### What is the problem?

Research information and results include publications (books and papers), scientific data (often related to a publication), and software for processing and visualisation. Data may be the input or output of research, including observational, experimental and computer-generated research. The trends in modern research [1] signal a significant increase in the number of scientific papers produced, the volume and complexity of associated data and the number of authors involved in scientific collaborations.

Despite some advances over the past years, access to the scientific publications and data needed to generate and share the knowledge that can boost innovation is not always sufficiently reliable, fast and affordable, and this can lead to duplication of research efforts. In many cases, research outputs (e.g. articles, data, conference proceedings) produced by researchers under public grants are not made available to others, and, when they are, are often in a format that does not facilitate re-use. In addition, there is usually no incentive and reward system in place to encourage researchers to deposit their work.

The potential of the internet for improving the access to scientific information is at present not fully exploited, due to the following barriers: i) the cost of access to scientific journals is high and is still increasing, a problem that will grow because of the reduced library budgets (the current financial crisis further accentuates this problem); ii) a large part of existing research data (e.g. scientific observations used as a basis for scientific publications) is not made widely available, and, even if data is available online, it is not necessarily presented in a format that facilitates (re)use; iii) e-infrastructures for data and publications are now rapidly emerging world-wide but are often not interoperable across countries and disciplines, or are unsustainable due to lack of commonly agreed financing models and standards. Costs are currently exploding as the generation of data from scientific instruments rises exponentially and iv) lack of appropriate financing and organisational models put the long term preservation of digital scientific material at risk. This could leave a gap in our scientific memory and jeopardise the use of scientific material by future generations.

Member States are increasingly attentive to the issues of access to and dissemination of digital scientific information; the growing number of national initiatives in this field shows a clear and encouraging move towards the development of policies in these areas. And yet, while many countries feature important activities coordinated by funding bodies, universities and libraries, to date there are very few of the nationally coordinated strategies or policies.

## What is our objective?

The risk that policies and infrastructures in the Member States on access to and management of scientific publications and research data develop at different speeds is real and requires action at the European level. In contrast to individual Member States, the EU can, while preserving the principle of subsidiarity, play the important role of coordinating existing (or developing) national policies on access and preservation and thus addressing the problem of lack of coherent European and coordinated policies.

Data and software have become an invisible and trusted e-infrastructure that is a valuable asset on which science, technology, the economy and society can advance. In the digital age, research publications, data, software and tools to manipulate data must work together seamlessly. This requires a European research communication ecosystem of efficient policies and fully functional infrastructures (including e-infrastructures) that enables and encourages a culture of sharing and open science, and that ensures long-term preservation of scientific information.

As a major research funding body, the Commission can contribute to enhancing the circulation of scientific knowledge generated by the Framework Programmes in the European Research Area and beyond. Moreover, EU action is needed to facilitate wider access to scientific information and the underlying resources that support R&D collaborations in order to evolve from a scattered landscape to a fully functional European e-infrastructure for scientific information.

## Implementation

- 1) Where not yet the case, **Member States should formulate clear and coherent national strategies on access and dissemination** by building on existing initiatives initiated by other actors. Ideally, these should address open access, copyright, investment in the dissemination of research results, VAT, repository and interoperability issues, and the inclusion of stakeholders. This could be implemented via a Commission Communication and Recommendation to Member States and followed by a monitoring obligation in the forthcoming ERA Framework.
- 2) **Member States should build on existing coordination initiatives to further enhance the coordination of policies and practices on access and dissemination.** Issues to address are open access, improving the transparency of big deals and negotiating contractual arrangements ensuring open access (versus only access for a limited group of users), and further work towards implementing trans-border interoperability of repositories.
- 3) The Commission should expand its policy on open access in the Framework Programmes. In this Commitment, **the Commission aims to make open access to publications the general principle for projects funded by the EU Research Framework Programmes.**
- 4) **The Commission will build a collaborative data e-Infrastructure in Europe**, leveraging on national, regional and institutional initiatives, where different institutes, universities, governments, companies and individuals can enjoy seamless access for use, re-use and trust scientific information. The e-Infrastructure should support open access policies, in particular when public funds are involved. The e-Infrastructure should seek global interoperability with

initiatives in other regions of the world that are important European partners in research. The e-Infrastructure should encourage the use of open access policies through permanent and persistent helpdesk systems, web interfaces to make the repository networks user-friendly and transparent.

5) **The Commission plans to establish data management plans (DMP)** as a pre-requisite and as assessment criteria in projects funded by the Framework Programmes. It also plans to launch a pilot, within specific parts of the CSF, to make the data generated in projects accessible and available for re-use.

## Milestones

Description	Type	Date	Indicative resources
Commission Communication towards better access to scientific information: boosting the benefits of public investments in research.  Accompanying Recommendation to Member States on access to and preservation of scientific information.	Legislative	July 2012	

## Links

[e-Infrastructures in the 7th Framework Programme](#)

e-Infrastructures in the 7th Framework Programme

[Open Access in the 7th Framework Programme](#)

Open Access in the 7th Framework Programme

[Access to scientific information in the Digital Agenda](#)

Access to scientific information in the Digital Agenda

## Documents

communication-towards-better-access-to-scientific-information_en.pdf	Communication Towards better access to scientific information: Boosting the benefits of public investments in research
recommendation-access-and-preservation-scientific-information_en.pdf	Recommendation on access to and preservation of scientific information

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