

Open Science as *modus operandi* of Horizon Europe

Safeguarding open access to scientific publications and research data as central principles of Horizon Europe

The European Union has led the way in advancing **open science** practices, including open access to scientific publications and research data. As the proposed Horizon Europe legislation passes under the scrutiny of the European Parliament we, **a number of European open science stakeholders from a variety of backgrounds**, call on Members of the European Parliament to support the provisions in the original Commission proposals (**recital 5, article 10 and 35** of the Regulation and **article 2.2.f** of the Decision) that **ensure open access to scientific publications and research data as central principles of Horizon Europe**.

With regard to the drafting of compromise amendments and the upcoming vote in the ITRE committee we call on European legislators to **oppose**:

- the open access reciprocity requirement (introduced in the draft EP **amendment 5** of the Regulation in the ‘Nica report’)
- the weakening of open science as a principle of Horizon Europe (as proposed in the draft EP **amendment 8** to the Decision in the ‘Ehler Report’)

Scientists, innovative business and societal actors (NGOs, journalists and citizens) need access to scientific results in order to generate new scientific knowledge, ensure its industrial uptake and retain societal support for research and innovation. However, too much of publicly funded-research is currently hidden behind paywalls, which forces taxpayers to pay for research twice: once to generate scientific knowledge (through universities and research institutes funded with public money) and the second time to access this knowledge, most of which is only available through subscription-based journals.

In Europe, EU Member States and other countries are therefore establishing strategies for open access and open science, and have politically endorsed the transition towards an open science system in the Competitiveness Council [Conclusions](#) adopted in May 2016. Furthermore, through the recently released [Plan S](#) by [cOAlition S](#), a number of European funders have committed to only fund open access publications by 2020.

Developing EU open science policies has been a stakeholder driven process, e.g. through the Open Science Policy [Platform](#) established by the European Commission in 2016. Adopting policies towards open science is also recommended by the [RISE](#) high level advisory group for policy development. Internationally, open science and the significance of open data was underlined in the G7 Science [Communiqué](#) in Turin of September 2017.

In the current EU framework programme for research and innovation, Horizon 2020, open access to scientific peer reviewed [publications](#) is already an obligation. In addition, the European Commission ran a flexible Open Research [Data Pilot](#) (ORD) in some areas of Horizon 2020, from 2014 to 2016, which was then extended to cover all thematic areas (“open data as the default”) with the possibility to opt-out in certain circumstances. Based on these results, the Commission concluded that in Horizon Europe more can be done to improve the transition to open science.

We therefore strongly support the open science provisions contained in [recital 5, article 10 and 35](#) of the Commission’s proposal for the Horizon Europe [Regulation](#) and [article 2.2.f](#) of the proposal for the Horizon Europe [Decision](#).

With regard to the drafting of compromise amendments and the upcoming vote in the ITRE committee, we call on Members of the European Parliament to:

- Retain an obligation to provide **open access to scientific publications** that are the outcome of Horizon Europe funding.
- Continue with stipulating **open research data** whilst allowing opting-out possibilities in duly justified cases.
- Implement Data Management Plans as an obligation for all projects producing data in order to ensure the proper curation and preservation of data. Emphasis will be put on making data **Findable, Accessible, Interoperable and Re-usable (FAIR)**.
- Provide incentives and rewards to promote **open science practices**.

By placing high quality content in the open, the Commission aims not only to increase the availability of scientific output in open access but also to achieve higher levels of excellent research and innovation. This will also improve science communication and enable interdisciplinary research as well as foster innovation for SMEs and other companies.

Acknowledging the negotiation process in the European Parliament towards compromise amendments, which is currently ongoing, we would like to highlight that **several of the amendments proposed** in the draft reports of the rapporteurs of Horizon Europe **could endanger this open science *modus operandi* approach**, which has been proven to be very successful in the current framework programme Horizon 2020.

Amendment 8 to the Decision (in the [Ehler report](#)) and **amendment 5** to the Regulation (in the [Nica report](#)) are particularly problematic, as the former would make open access **purely optional** and the latter would introduce a **reciprocity** requirement. This runs against the basic principles of scientific publications. Even in the current paywall-based subscription system, it is not possible to exclude a specific country from access. As for open access, many countries already have open access policies in place, most notably Canada, Australia and the United States or are currently developing them, like China. Strict reciprocity is not enforceable in the open-science *modus operandi* and will thus hinder and not facilitate a switch to an open access system. **We therefore call on these draft amendments not to be considered in the compromise amendments and for MEPs not to vote for them in any shape or form should they be part of the documents submitted to the ITRE committee vote** (for more details see table 1 below).

Table 1: Integration of Open Science Amendments from Nica and Ehler reports in the compromise amendments and recommendations if retained for ITRE VOTE		
Amendment	Retain in compromise amendments (Yes/No)	Recommendation for ITRE VOTE and rationale
Horizon Europe Regulation (based on 'Nica report')		
EP Amendment 5 proposes to modify recital 5 to add the principle of “as open as possible, as closed as needed” as well as to include provisions for reciprocity in association and international cooperation agreements.	NO	OPPOSE – the principle of “as open as possible, as closed as needed” is a good clarification but the amendment also contains a reciprocity clause which is not needed since many countries already have their own open access policies which are similar in nature, although these may not be enshrined in cooperation treaties with the EU.
EP Amendment 135 proposes to modify article 10 to include the principle of “as open as possible as closed as needed”.	YES	SUPPORT – this is a welcome clarification. It is sufficient to add it in article 10 and does not necessarily need to be included in recital 5.
EP Amendment 137 stipulates that open access shall be foreseen in all association and cooperation agreements with third countries.	NO	OPPOSE – many countries have similar arrangements in their national legislation and scientists can always refrain from publishing and/or keep data closed.
EP Amendment 138 proposes that open science practices should be “fair” and that responsible management of research data shall be “internationally” promoted.	NO	OPPOSE – unclear what is meant by “fair”. If by “fair” what is meant is FAIR as in – Findable, Accessible, Interoperable and Reusable – this should be clarified further.
EP Amendment 207 modifies the text of article 35 again introduces the term “fair” open access and other (minor) changes in the wording, including an opt-out for open data for “the Union’s external competitiveness”.	NO	OPPOSE – unclear what is meant by fair. Opt-outs are already included due to the inclusion of the “as open as possible, as closed as needed” principle in amendment 135. No need to add again.
Horizon Europe Decision (based on 'Ehler report')		
EP amendment 8 modifies article 2 – paragraph 2 – point f to add “when appropriate” to the objective of Horizon Europe to foster open science and ensure visibility to the public and open access to results.	NO	OPPOSE – It is unclear how this qualifier shall be applied and who is the judge. It risks making open access and open science purely voluntary. Not acceptable from an open science perspective.

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