



## DIRECTORATE-GENERAL FOR RESEARCH AND INNOVATION (RTD)

Public Consultation:

Horizon 2020 "Science with and for Society"

Work Programme 2018-2020

Fields marked with \* are mandatory.

The objective of Part V of Horizon 2020 'Science with and for Society' is: "to build effective cooperation between science and society, to recruit new talent for science, and to pair scientific excellence with social awareness and responsibility". To that end, it indicates that the focus will be on the following 8 specific activities:

- a)** Make scientific and technological careers attractive to young students, and foster sustainable interaction between schools, research institutions, industry and civil society organisations;
- b)** Promote gender equality, in particular by supporting structural changes in research institutions and in the content and design of research activities;
- c)** Integrate society in science and innovation issues, policies and activities by incorporating the needs and values of citizens, thereby increasing the quality, relevance, social acceptability and sustainability of research and innovation outcomes in various fields of activity, from social innovation to areas such as biotechnology and nanotechnology, etc.
- d)** Encourage citizens, including children and youth, to engage in science through formal and informal science education, and promote the diffusion of science-based activities, namely in science centres and through other appropriate channels;
- e)** Develop the accessibility and the (re-)use of the results of publicly-funded research;
- f)** Develop the governance for the advancement of responsible research and innovation by all stakeholders (researchers, public authorities, industry and civil society organisations), which is sensitive to the needs and demands of society, and promote an ethics framework for research and innovation;
- g)** Take due and proportional precautions in research and innovation activities by anticipating and assessing potential environmental, health and safety impacts;
- h)** Improve knowledge on science communication in order to enhance the quality and effectiveness of interactions between scientists, general media and the public.

The aim of this consultation is to obtain views and contributions from a broad constituency on the potential strategy and priorities of the 'Science with and for Society' Work Programme for the period 2018-2020. Contributions will complement the opinion provided by an External Advisory Group of high-level experts set up by the Commission according to article 12 of Regulation (EU) No 1291/2013 establishing Horizon 2020.

The present consultation is structured around a set of questions which take into account the policy momentum and general framework set by European Commission President Jean-Claude Juncker's priorities, Commissioner Moedas' strategy on 'Open Innovation, Open Science, Open to the World', and builds upon the Science with and for Society part of the Horizon 2020 Work Programmes 2014-2015 and 2016-2017.

## A. Information about the respondent

**\* 1. Are you responding to this questionnaire on behalf of/as:**

- An individual
- A single organisation
- A network of organisations

**\* 2. Please enter your name or the name of your organisation**

*300 character(s) maximum*

LIBER, the Association of European Research Libraries

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**3. Please enter your e-mail address (this data will not be made public)**

susan.reilly@kb.nl

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**4a. Please indicate the type of organisation represented**

- Not applicable (if individual)
- Higher education establishment
- Primary and/or secondary education
- Academy of science or technology
- International research centre
- Public research centre
- Private/commercial research centre
- Private non-profit research centre
- Non-research public sector
- Non-research private non-profit
- CSO (Civil Society Organisation)
- Non-research international organisation
- Non-research commercial sector including SMEs
- Consultancy
- Science museum or science centre
- Media sector
- Other

#### 4b. Transparency Register ID

If you are answering as an organisation/institution, please provide your Register ID number. If your organisation/institution responds without being registered, the Commission will consider its input as that of an individual and will publish it as such.

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#### 5. Have you or your organisation applied for funding under the current and/or any previous EC Framework Programmes for Research (e.g. H2020, FP7, FP6)?

- Yes  
 No

\*if so, please specify under which programme(s) (e.g. FP7 - Science in Society)

300 character(s) maximum

FP7- Science in Society 7 Research Infra, H2020 Science with and for Society  
& research infra

#### \* 6. Please enter your country of residence or where your organisation is based.

Netherlands

#### \* 7. Language of your contribution

English

#### \* 8. Please indicate your preference for the publication of your response on the Commission's website:

(Please note that regardless the option chosen, your contribution may be subject to a request for access to documents under [Regulation 1049/2001](#) on public access to European Parliament, Council and Commission documents. In this case the request will be assessed against the conditions set out in the Regulation and in accordance with applicable data protection rules.)

- Under the name given: I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication.
- Anonymously: I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication.
- Please keep my contribution confidential. (it will not be published, but will be used internally within the Commission)

\* 9. **Gender** (this data will not be made public but used for statistical purposes only)

- Female  
 Male

\* 10. **Year of birth** - e.g. 1975 (this data will not be made public but used for statistical purposes only)

1980

## B. "Science with and for Society" Priorities for the Work Programme 2018-2020

\* 1. **What aspects of 'Science with and for Society', relating for instance to public engagement, science education, gender, ethics, open access and governance, require action under the Work Programme 2018-2020? Do you think they should be integrated across societal challenges and leadership in enabling and industrial technologies?**

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All aspects should be integrated. Open access and data sharing and reuse initiatives in particular should help to increase the global impact of research into solving societal challenges and public awareness of innovations in enabling and industrial technologies and their implication should be increased.

Open Science allows the development of new approaches to publishing driving research organisations to develop their own open access publishing activities. As the EU-funded LEARN project is showing, there is a significant gap in organisations' and researchers' levels of preparation for Research Data Management (RDM). The same is true of their preparations for Open Science. Special attention should be paid to Citizen Science and solving societal challenges by implementing new technologies in data sharing and reuse. Collaboration between various stakeholders such as researchers, SME's and even civic engagement is vital.

**\* 2. What activities, types of publications and events, and impacts could be foreseen from the Work Programme 2018-2020? Which innovations (understood in their broadest sense including social innovations) relating to aspects of 'Science with and for Society' could reach market or societal deployment within 5-7 years?**

1000 character(s) maximum

Great strides have been made towards reaching an open access tipping point . In order to ensure that the move to 100% open access is achieved in a sustainable manner it is important for the Commission to explore and experiment with alternative open access business models. It is clear that hybrid open access is not a sustainable model for the future and that researchers therefore need more choice of publishing outlets coupled with better transparency re the quality of the publications that they publish in. There is also growing concern that APCs are too often viewed as the de facto route to gold open access and that this may disadvantage some researchers. Solutions that have been proven to work are researcher-led partnerships such as the Open Library of the Humanities, library and researcher-led open access institutional presses (UCL, Stockholm University). The European Commission should seek to invest in pilots to scale such initiatives to European level and across disciplines.

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**3. Which existing and emerging challenges (relating for instance to science and technology, innovation, markets and policies) and potential game changers (such as the role of the public sector in accelerating changes) should be taken into account?**

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Open Science has the power to transform how research and ideas are disseminated and communicated, just as fixed-type printing did in the West in the fifteenth century. We need to know what the baseline is, in terms of European research organisations' level of preparation for embracing Open Science approaches.

Text and data mining (TDM) potentially has an important impact on the development of Citizen Science as part of research or development of new business.

As emphasised repeatedly by LIBER, TDM will be a game changer for research and for industry. As well as requiring access to content and infrastructure that will support mining at scale, evidence is emerging from the FutureTDM project that Europe may need a centre of excellence to support uptake of TDM and knowledge transfer across sectors.

The Work Programmes should fund studies into these areas as the outcomes would influence future priorities and destinations for funding.

**\* 4. Which areas would benefit most from the integration of horizontal aspects such as the social sciences and humanities, responsible research and innovation, gender aspects, and climate and sustainable development?**

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We are of the strong opinion that although the European Commission has been visionary in its position on Open Science, there is significant scope for work on a European Open Science roadmap to provide an integrated overview of the role of various stakeholders in Open Science and its impact across these horizontal areas. As representatives of research institutions, we can particularly observe the need for this at institutional level. The EU-funded LEARN project is proving the efficacy of creating road maps for research data management (RDM) and open data. There is a need to repeat the process for Open Science. Whilst open access is familiar to many researchers, other aspects of Open Science such as RDM and new metrics are not. Mapping levels of knowledge at institutional level will form the baseline for the future growth of Open Science including digital humanities approaches in Europe.

**\* 5. Which policies or initiatives should be supported by a) 'Science with and for Society' and b) other parts of Horizon 2020, in order to mainstream Responsible Research and Innovation (RRI) within and outside the European Union?**

*1500 character(s) maximum*

The mega journal model has been hugely successful, with PLOS leading the field. Their success has also seen a growth in predatory mega journals. We argue that there is scope for the launch of European and publically owned megajournals, leveraging existing public infrastructure and the growing network of institutional open access presses. Such an initiative could increase diversity in the market and promote the transparency required to engender confidence in researchers seeking new open access publishing outlets. This should be supported by both Science with and for Society and Research Infrastructures.

For the arts, humanities and some social sciences, the unit of publication is the monograph rather than the article. For teaching and learning, especially in Science, Technology and Medicine the unit is the textbook. Investment for the infrastructures outlined above would enable new publishing models, new players, and new forms of communication to be developed as Open Access outputs. This would revolutionise the European citizen's access to high quality information and could provide the seedbed for financial and economic advantages to Europe in terms of companies having access to new sources of information, and for the creation of new employment opportunities for European citizens.

## **6. Do you have any further comments?**

*1500 character(s) maximum*

Open Science is a potential game changer in terms of how the citizen can have access to, and themselves disseminate, information. Whilst open access to publications is a theme widely understood by researchers, the European citizen is much less familiar with the concept. New themes in the Open Science debate, such as citizen science, have enormous potential to widen the scope for research activity by including citizens dynamically in the research process. The city of Barcelona, for example, has established a Citizen Science Office to co-ordinate Citizen Science approaches across the Catalan region. As well as the potential for delivering economic benefits, Citizen science brings social benefits too by underlining the inclusive nature of research and discovery in Society.

It is important that all funding schemes supported by the Commission support the Commission's Open Science agenda. The Council of the EU has encouraged the Commission to further develop the Open Science agenda: 'in order to further increase the impact of science to society at large, to stimulate an effective mobilization of all the potential knowledge from open science actions, and to address the requirements for training of ICT and data skills, in particular professional data management skills, which help to contribute to the access of citizens to the results of research'. It is important that H2020 supports this important initiative.

## **Contact**

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