

17 March 2016

BUSINESSEUROPE comments on Open Science

In principle, BUSINESSEUROPE is supportive of Open Access to scientific publications and research data from publicly funded research. Yet, in particular research data must be handled with caution to avoid hampering the public-private collaboration along the innovation chain. In view of the conference on Open Science organized by the Dutch Presidency of the European Union on 4 and 5 April in Amsterdam, BUSINESSEUROPE would like to underline the following key points:

Open access to scientific publications

To achieve a wider use of the results of publicly funded research, we support the principle of open access (either via the “gold” or the “green” route¹) to scientific publications. After the successful pilot on open access to scientific publications in selected parts of the Seventh Framework Programme, we welcomed the approach² taken by the European Commission in Horizon 2020. It extends the obligation to provide open access to scientific publications to the entire programme without affecting (i) the freedom to choose whether to publish or not, (ii) the commercial exploitation of research results and (iii) the possibility of protecting those results by means of intellectual property³ or confidentiality.

To ensure a sustainable model for the future, all relevant stakeholders should be involved in the transition towards open access of scientific publications. Universities, research and technology organizations, funding bodies, industry and not least scientific publishers each have important roles to play. The political drive to make progress towards open access to scientific publications – which BUSINESSEUROPE supports – can only be successful if governments are willing to facilitate this transition with the funding necessary to support the extra costs relating to open access.

Open research data

However, depending on the specific case at hand, granting open access to research data is a different matter. While acknowledging the potential benefits of making research data from public-sector research more widely available, caution is needed to avoid hampering the public-private collaboration along the innovation chain that is crucial for leveraging all Europe's research and innovation resources and boosting its global competitiveness. In particular, the protection of intellectual property and confidential information of private partners always needs to be ensured, as well as privacy and security.

Furthermore, open access should not apply by default to data from private-sector R&D performed in public programmes for research and innovation, nor from public-sector research performed in collaboration with industry or (co-) financed by industry. In those cases a tailor-made approach is needed, in which public and private partners contractually agree on a voluntary and case-by-case basis whether access can be given, and if so, to which data and to whom.

Failing to do so would endanger the interest of private parties in participating and/or co-investing in public programmes for research and innovation. Companies (especially those operating globally) could even prefer to perform their collaborations with universities and research institutes in other regions outside of Europe. As companies participating in such public programmes carry a substantial part⁴ of their R&D costs themselves, it is reasonable that they expect a return on their investments. Widely sharing all data from a research project could destroy the competitive advantage that consortium partners have gained in the project and negatively impact the worldwide competitiveness of Europe. Pushing the open access concept too far could also hamper the creation of start-ups from public-sector research, since start-ups often build on intellectual property generated in universities or research institutes as their key asset for attracting loans and venture capital. It should be kept in mind that patenting also contributes to the dissemination of research results: in exchange for typically twenty years of exclusivity on the protected invention, patents publicly disclose information that would be kept secret otherwise.

Pilot on open research data in Horizon 2020

In this respect, BUSINESSEUROPE was on the one hand pleased to note in the 2012 Commission Recommendation⁵ that “[...] *concerns in particular in relation to privacy, trade secrets, national security, legitimate commercial interests and to intellectual property rights shall be duly taken into account*”. On the other hand, BUSINESSEUROPE

feared that the subsequent sentence “*Any data, know-how and/or information whatever their form or nature which are held by private parties in a joint public/private partnership prior to the research action and have been identified as such shall not fall under such an obligation [to provide open access to research data]*” could imply that data, know-how and/or information resulting as outputs from publicly funded projects involving private parties fall under the open access obligation. Similar fears were triggered by the Commission’s initial plans⁶ for the pilot scheme on open access to and re-use of research data in selected areas of Horizon 2020: “*In designing and implementing the pilot the Commission will take into account possible constraints on making research data openly accessible which may pertain to privacy, national security or data, and know-how and knowledge brought into projects as inputs.*”

BUSINESSEUROPE is pleased to note that meanwhile above-mentioned concerns have been addressed properly in the Rules⁷ for Participation in Horizon 2020, the annotated Model Grant Agreement⁸ and the Guidelines⁵ for the pilot on open access to research data in Horizon 2020, including the opt-out provision. To ensure adequate private-sector participation, it is essential to maintain this opt-out provision in the remainder of Horizon 2020, its successor and other public programmes for research and innovation at European, national and regional levels.

FAIR research data

In policy debates on open access it is often argued that research data should be FAIR:

- Findable,
- Accessible,
- Interoperable,
- Re-usable.

Unfortunately, detailed explanations of these four principles are often lacking, or differ substantially between various sources^{9,10,11}. Whereas the FAIR approach in itself seems attractive at first sight, it may not always sufficiently safeguard the interests of private parties. For example, in the case of trade secrets or confidential information, companies might not even want their data to be findable and accessible.

Sharing research data

Granting open access to research data is sometimes referred to as “sharing” research data, for example in two recent reports^{12,13} on open access, which by the way each provide an excellent overview of the debate on open access. BUSINESSEUROPE fears that the notion of “sharing” may convey the false expectation of shared ownership. This is undesirable, not only because shared ownership may not do justice to the legitimate interests of parties involved, but also because the question^{14,15,16} of ownership of data still remains to be resolved. Furthermore, “sharing”, like “open”, might be confused with “free of charge”, another misconception.

Optimal re-use of research data

BUSINESSEUROPE very much welcomes the approach¹⁷ chosen by the Netherlands Presidency to refer to “optimal re-use of research data”, instead of (unconditionally) open research data. This wording, which reflects the understanding that not all data from all research projects can be open, should provide enough leeway to accommodate our above concerns, just like the Commission’s approach in the pilot on open research data in Horizon 2020: “as open as possible, as closed as needed”.



References

- ¹ https://ec.europa.eu/research/science-society/document_library/pdf_06/era-communication-towards-better-access-to-scientific-information_en.pdf, p. 5.
- ² https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf.
- ³ Not only patents, see http://europa.eu/youreurope/business/start-grow/intellectual-property-rights/index_en.htm.
- ⁴ Although Horizon 2020 grants may reach a maximum of 100% of total eligible costs - consisting of direct costs increased by a flat rate of 25% to cover indirect costs - in practice funding rates for companies are often much lower than 100% of their actual costs, as their actual indirect costs usually are much higher than 25% of their direct costs, and grants for innovation actions are limited to a maximum of 70% of eligible costs (instead of 100%). In national or regional programmes for research and innovation the EU rules on state aid for R&D limit funding rates for industrial R&D to 25-80% of eligible costs (depending on the type of R&D, the size of the company and other circumstances); in practice, national authorities often limit their grants to lower percentages than allowed by the state aid rules.
- ⁵ https://ec.europa.eu/research/science-society/document_library/pdf_06/recommendation-access-and-preservation-scientific-information_en.pdf, p. 6.
- ⁶ https://ec.europa.eu/research/science-society/document_library/pdf_06/era-communication-towards-better-access-to-scientific-information_en.pdf, p. 9.
- ⁷ http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h2020-rules-participation_en.pdf, article 43.
- ⁸ http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf, articles 29, 36, 37 and 39.
- ⁹ <http://www.dtls.nl/fair-data/>.
- ¹⁰ <https://www.force11.org/group/fairgroup/fairprinciples>.
- ¹¹ <http://www.fairdata.org.uk/10-principles/>.
- ¹² <http://data.consilium.europa.eu/doc/document/ST-1202-2016-INIT/en/pdf>.
- ¹³ <http://english.awti.nl/documents/publications/2016/01/20/summery-dare-to-share>.
- ¹⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0192&from=EN>, p. 15.
- ¹⁵ https://www.business-europe.eu/sites/buseur/files/media/position_papers/internal_market/2015-12-18_digital_transformation.pdf, p. 4 and 6.
- ¹⁶ https://www.business-europe.eu/sites/buseur/files/media/position_papers/internal_market/2016-01-05_position_paper_on_sharing_economy-platforms-cloud.pdf, p. 8.
- ¹⁷ <http://english.eu2016.nl/latest/events/2016/04/04/open-science-conference>.