Highlights in the Comments on the *Amsterdam Call for Actions on Open Science*

INTRODUCTION

About this document

This document is to inform you about the comments the Dutch EU Presidency received after publishing the Amsterdam Call for Actions on Open Science on April 6th 2016. We thank all organizations and individuals who sent in their comments. We greatly appreciate that the discussion continued also after the Open Science Presidency Conference on 4-5 April.

Having studied the comments and considering the wide variety of the input, the Dutch Presidency decided not to publish a second or final version of the Amsterdam Call for Actions on Open Science. Also, composing a summary of the input was not really possible. Therefore we decided to select a great number of highlights emerging from the comments – you will find them below.

Target groups

We offer this document - along with the Amsterdam Call for Action on Open Science - to the Open Science Policy Platform of the European Commission. The Open Science Policy Platform will take on the further development of the European Open Science Agenda. We look forward to the work of Open Science Policy Platform members as well as of the Platform's working groups and we hope that they may include into their responsibilities taking the actions in the Amsterdam Call further.

Also, Open Science will be paid attention to through activities in the European Research Area: EU member states may contribute through the ERA Priority 5 Open Science working group.

Of course, we publish this document and the comments' highlights also to inform the participants of the conference and all people and organizations who are taking part in the transition to Open Science. We encourage all to continue their discussions and Open Science initiatives.

About the comments

The Dutch Presidency received comments from organizations, from a few countries and from individuals (see Annex). The types of comments varied greatly, ranging from suggestions to do small changes or additions to the text, to suggestions to reshuffle the themes of the Amsterdam Call or to add one or more chapters on specific topics (for instance citizen science/citizen engagement). We received comments on the Amsterdam Call in general, and on the individual chapters. Some readers found a lack of focus in the Amsterdam Call; others were happy with the approach chosen. A positive, co-operative attitude towards Open Science was expressed by publishers.

Most input was written into the electronic version of the Amsterdam Call, either through the wiki offered by SURF (closed for comments on 21 April) or it was sent to us through (E-)mail in a separate document. We wish to express our great appreciation of input of all people who took the trouble to send their comments to us.

Three remarks before the highlights are presented. One is about 'Gold versus Green Road to Open Access'. We wish to explain that in the Amsterdam Call for Action on Open Science the Dutch Presidency has not expressed any preference for either of these two roads, although some readers seem to have read such preference implied. Generally the opinion is that also other and different ways have come into existence in the last years, and will emerge in the future. It is clear that there is no 'one size fits all' solution; Article Processing Charges, for instance, is just one way to Open Access, but there are, and will be, many more.

The second remark is about the question: who is the owner of the Amsterdam Call for Action on Open Science? The participants of the Presidency Conference cannot be called owners of the Call, nor can the Dutch Presidency be called the owner. We hope that the concrete actions described in the Call and in the comments, will be owned at some time by the actors mentioned in the Amsterdam Call. We hope that all stakeholders – national authorities of the EU member states, research funders, research performing institutes, publishers, research/university libraries, individual researchers and members of the public – will take up, or elaborate on, their piece of Open Science work and by doing that execute their part of ownership of Open Science.

The third remark is about the 59 actions in the Amsterdam Call. Some comments expressed concern about overlap, sequence, or even conflicts between the actions. And pointed out that distributing actions across stakeholders does not ensure co-ordination at a European level. We agree with these concerns, but we felt the need to propose such actions and assign actors to them in order to increase awareness among stakeholders. We wanted to draw a picture of actors working together to the common goal of free and easy access to results of publicly funded research and better connections among research disciplines themselves and between science and society including industry for innovation.

GENERAL COMMENTS ON THE 'AMSTERDAM CALL FOR ACTION ON OPEN SCIENCE'; HIGHLIGHTS

- **Stakeholder groups:** Repeated comments were that stakeholders groups should not be defined too narrowly. Depending on the groups mentioned in different chapters of Amsterdam Call for Action on Open Science, suggestions were to include also (research) libraries, learned societies, civil society organizations, the public in general, as well as researchers themselves and their networks, and students.
- **Global context**: Some comments reminded us that Open Science is a global topic; the United States and Australasia were mentioned. There was a plea for coordination between policies of the European Commission (European Open Science Cloud) and the Organization for Economic Co-operation and Development (OECD). Initiatives to change the way research is being evaluated will reflect the global nature of research (and not just research as performed in the European Union). One comment referred to increasing moves towards a a global metrics based research assessment movement.
- European Open Science Cloud: Although the EC Communication on the EOSC was not published yet at the time of the Open Science Presidency Conference, there were some comments on it already. For instance in the comments on chapter 6 'Set up common e-infrastructures' a statement appeared that the EOSC should meet all stakeholders' needs (research, SMEs, industry, public sector, society), with clear responsibilities, incentives, business models and visible benefits; EOSC should branch out to other e-infrastructures such as Open Education Material, Public Sector Information data, cultural heritage data, et cetera.
- Top-down or bottom-up initiatives: Some comments pointed out that actions should be addressed to the proper governance level. The autonomy of institutions should be respected when ascribing actions to specific levels of governance. The actions should also be precise with regard to the responsibilities of national or where applicable decentralized or regional governments . Related to this topic is the concept of no 'one size fits all'. A comment was to adopt a tailor-made approach for access to research data particularly in health research, and to projects that are publicly and privately funded. Some comments were that many new, community based models of scholarly communication and publishing emerge barriers need to be removed, rather than try to impose models in a top-down fashion.
- **Costs**: This topic was addressed quite often, in various ways. One suggestion was to add a separate chapter on cost/benefit distribution issues around Open Science. Concerns exist

around the mismatch between short-term project funding and long-term curation and archival costs; it is thought to be essential that the costs and sustainability issues of research data and wider research objects are addressed, along with the infrastructure. Costs were mentioned regarding the education of data stewardship experts; the transition to Open Access of publications; and regarding the publication, curation and sharing of data; Open Data being called an expensive goal. It was stated that where data management plans are an integral part of the research process, the associated costs for data sharing should be an integral part of funding the research. A comment contained the request to the European Council: to take actions to facilitate a European-wide dialogue on cost transparency, taking into account regional needs.

- Zero months embargo periods for publications, and Open research data: These topics appeared to be a point of discussion that is not ended; clearly, views differ. The Amsterdam Call for Action proposes actions towards zero months embargos for publications. Zero months embargo is seen by quite a few comments to be a threat to the Green Road to Open Access, or to national policies focused on the Green Road. Publishers call embargo periods necessary to support Open Access. With regard to Open research data, publishers mentioned their fears that companies will search for collaborations with researchers outside Europe if such policy would be widely accepted in Europe; and they point to the importance of not opening up research data because of 'return on investments', start-ups, patenting, commercial interests.
- Text & Data Mining: This topic elicited quite a few comments from different angles depending on the sender. These comments appeared both in the general section of the Call and in chapter 2. On the one hand comments were: legal services are already available, for TDM is already legally possible; copyright framework is not to be 'undermined'. On the other hand comments were received saying; TDM requires legal reforms; TDM should be there for anyone and not only for researchers; no conditions to be for research; TDM is not a use in the copyright sense. One comment raised the question: are rules and legislation possible for national governments or is EU reform copyright law sufficient?
- 'Science' or 'scholarship': On the wiki a short discussion arose on what word should be used in order to avoid that social sciences and humanities would be or would feel to be excluded from the discussion on Open Access and Open Science. Awareness of this sensitivity existing in these academic disciplines may help to alternate between words referring to the research community, such as there are: scholars, academics, scientists, or simply: researchers.

COMMENTS ON THE AMSTERDAM CALL FOR ACTION ON OPEN SCIENCE, CHAPTERS 1-12; HIGHLIGHTS

Highlights of comments on chapter 1 'Change assessment, evaluation and reward systems in science'

- **Impact:** Comments referred to the diversity of programme designs, research goals, evaluation methodologies; metrics never to substitute for human judgement. Metrics should be developed in a process of research organisations and communities, and demand legal and cultural changes. Metrics are differing for research settings, regions, and disciplines. We may move towards the use of a multi-parametric assessment system. Metrics and indicators should be open, replicable, transparent, non-proprietary, and used with care.

Highlights of comments on chapter 2 'Facilitate text and data mining of content'

- **Text & Data Mining** (see also above for general comments): This chapter elicited comments such as: reform to allow the use of TDM for societal purposes is essential; legalize TDM for all purposes; TDM is not copyright protected usage; 'the right to read is

the right to mine'; TDM is to be considered outside the purview of copyright altogether. The exception adopted in the UK was mentioned: TDM cannot be limited by contractual terms. TDM technologies must be freely shared and applied by all. TDM must be enabled for all, not only for research purposes. Publicly governed hubs of TDM scientific content and services for all should be encouraged.

- Copyright: Also when someone wants to mine social media or blogs copyright issues are there. European copyright laws are to be modernized in order to support TDM. It was pointed out that there are copyrights held by third parties (non-profit or small businesses) who rely on the income generated by such rights; negative effects for non-profit organisations should be off-set by appropriate measures. Public research organizations are to make it a minimal standard to demand that authors retain copyright of their work.

Highlights of the comments on chapter 3 'Improve insight into IPR and issues such as privacy'

- **Security:** should be added, together with the development of strategies for making privacy-sensitive data safe for future developments in information extraction.
- **Awareness building**: needs to be done among researchers, and about licensing issues and about the diverse possibilities of exploitation. And it needs to be done in industry, to make clear that there are many levels of openness and many exceptions possible. Private organizations commented on the (importance of the) topic of intellectual property rights.

Highlights of comments on chapter 4 'Create transparency on the costs and conditions of academic communication'

- 'Grass-roots' initiatives: Readers of the Amsterdam Call for Action on Open Science wished to see more of these initiatives mentioned. Such initiatives should be supported by national authorities and the European Commission. Research Performing Organizations are to reach out more to them. Grass roots initiatives may challenge the assumption that in Article Processing Charges business models countries and Research Performing Organisations pay more than under the subscription model, assuming current price levels.
- **Conditions set by LingOA**: They are: no 'double dipping' (no subscriptions); no transfer of copyright by authors; ownership of the journal title with the editorial board, low Article Processing Charges (€ 400 € 600).
- **Publishers**: Comments were that they should provide complete and easily findable information about publication costs, about their services and licenses offered. Off-setting mechanisms may work well if costs, payment histories and price-structures are disclosed. Transparency is called for at all levels (negotiation, licensing, publishing).

Highlights of comments on chapter 5 'Introduce FAIR and secure data principles'

- Data re-use: Research funders should incentivize the re-use of data. Libraries provide the
 local data management support services that make data sharing possible, and support
 researchers in working towards making their data FAIR.
- Training; good examples: Actions by research funders, Research performing
 Organizations, Higher Education Institutes could be added: that they support the training of
 (early career) researchers on issues related to data management and sharing. Learned
 societies may encourage members by collecting and publicizing examples of good practice
 etc. from their respective disciplines.
- **Cross-disciplinarity and cross-domain standards**: should be developed in concert and in a complementary way to the development of the disciplinary standards.

Highlights of comments on chapter 6 'Set up common e-infrastructures'

- **European Open Science Cloud** (see also above in the general section): One comment was to recognize that on a global level there is no level playing field: governments, companies, research performing organizations may have conflicting interests; the idea therefore is to share data and results on a basis of parity. Another comment said that

- dataflows from local infrastructure to the European Open Science Cloud should be described and transparent to the researcher.
- Existing infrastructures: Comments put forward the importance of developing, managing and maintaining existing infrastructures rather than set up new infrastructures. And to develop business models for sustainable entities, and also to assign responsibility for maintaining data after the end of projects. The federation of existing and new services, systems and e-infrastructures as well as the continuous support of existing open infrastructures for publications and data at local, national and European levels has been called a good practice. One publisher's comment contained the idea to leverage existing infrastructures; to have a comprehensive audit of existing services.
- 'The 1% solution': Instead of many different Open Access initiatives, a comment was that libraries can join forces and play a key role in the transition to Open Access if they would make a small part of their acquisitions budget available for the collective funding of Open Access services and library-side funding models. This 'solution' could be adopted by an international association (LIBER, or SPARC).

Highlights of comments on chapter 7 'Adopt Open Access principles'

- National authorities; alignment: One comment pointed out that in many EU member states it is the national authorities (governments) who offer the public funds for journal subscriptions; an action on their side should be that they rebalance budgets. And they should develop Open Access policies together with research funders, research performing organizations and e-infrastructure organizations, aligning their policies with other national authorities, in order to reduce complexity; they should apply a standard set of terms and definitions generally agreed upon. Alignment between national authorities in EU member states and their national plans is important.
- Standards on Open Access publishing (Science Europe): A set of minimal standards for Open Access publishing contains: proper indexing of OA journals in recognised databases so that journal quality is assured; authors keep full copyright ownership; OA content has to be archived immediately and sustainably in third-party repositories; OA means machine readable.
- **Transparency of costs**: In the context of negotiations with publishers on big deals, opposite positions are taken. Publishers, on the one hand, refuse to share pricing information for competitive reasons (and anti-trust rules); on the other hand, transparency of costs is one of the Open Access principles.

Highlights of comments on chapter 8 'Stimulate new publishing models for knowledge transfer'

- Existing alternative Open Access publishing models: These are just like any new publishing model equally worthy of support, for instance: repositories, national repositories networks, OpenAIRE, research community driven publishing initiatives, and other dissemination initiatives like publishing on repositories. Existing models should be made more visible ('bibliodiversity'). Instead of APCs, National authorities and the European Commission should support the development of neutral, open and public infrastructures and auxiliary services, and remove barriers rather than try to impose models in a top-down fashion. Taking stock of information needs should be among SMEs, NGOs, and societal partners. Libraries should take a proactive role in stimulating new publishing models, not only providing funds for APCs or as institutional publishers, but actively exploring and experimenting with new disruptive publishing models that will be possible through the opening up of the research life cycle.
- **Grey literature** (dissertations, reports, communications): Too often there are embargoes or other access restrictions too; initiatives are called for to amend this for this type of (non-peer reviewed) publications.

Highlights of comments on chapter 9 'Stimulate evidence-based research on innovations in open science'.

- Research libraries can participate in project calls regarding evidence based research.

Highlights of comments on chapter 10 'Develop, implement, monitor and refine Open Access plans'

- Win-win not guaranteed: National authorities and the European Commission should support the development of neutral, open and public infrastructures. Different stakeholders may have conflicting interests; some losses are unavoidable.
- **Targets in 2020:** Some comments expressed concern that the main goals to be achieved (full Open Access to scientific publications; data sharing by default) are not feasible by 2020; at the same time they expressed support to that ambition. One comment suggested that a target of 100% Open Access in 2025 would be more realistic. The Horizon2020 policy was referred to (maximum embargo 12 months for social sciences and humanities; 6 months for STEM disciplines).
- A European Open Access policy observatory: should be set up to monitor progress in Open Science closely, building upon initiatives that have already been undertaken by JISC, Pasteur4OA and others, to monitor costs, transactions, licences, infrastructures etc.

Highlights of comments on chapter 11 'Involve researchers and new users in Open Science'

- **Training and involvement:** Training for the public, citizen scientists, SMEs could be offered in libraries, schools or universities; the library as a neutral space and traditional provider of access to knowledge is very well placed to engage these new users. Education and training of a new generation of scientists at universities with respect to integrity, Open Science, academic freedom, data skills etc. is also important. Researchers need to become comfortable with sharing.

Involvement is about the participation and the integration of different sorts of expertise in scientific knowledge production; experimental, pilot spaces would be helpful. Publishers' comments reminded that they quickly opened content during disasters or emergencies (Ebola Information Centre) and facilities offered for research on the Zika virus.

Highlights of comments on chapter 12 'Encourage stakeholders to share expertise and information on Open Science'

- **Learned societies:** can act as catalyzers both for exchange of experiences and best practices as well as for the alignment of policies and practices across national boundaries.
- **Policy discussions:** should be followed by concrete roadmaps for implementation.

ANNEX: OVERVIEW OF COMMENTING ORGANIZATIONS

Comments on the wiki (on behalf of organizations, or comments from individuals indicating their organizations) came from:

- Australasian Open Access Strategy Group
- EiC Glossa, LingOA
- Confederation of Open Access Repositories (COAR)
- Creative Commons Europe
- GreyNet International Amsterdam
- Jisc
- Knowledge Exchange
- LIBER
- Ministry of Education and Research, Estonia
- Ministry of Economic Affairs and Competitiveness, State Secretariat for Research and Innovation, Spain
- OAPEN Foundation / DOAB

- OECD
- Open Access Working Group of the European Research Council
- OpenEdition
- OpenAIRE
- Philips Europe
- Science Europe
- SPARC Europe & DOAJ
- Swedish Research Council
- Uni Vienna
- Université Libre de Bruxelles
- University of Lisbon
- VAWO scientists' union
- VLIR, the Flemish Interuniversity Council
- Wikimedia Deutschland e.V.
- YEAR Network

Comments by (E-)mail were received from a few countries participating in the Council for Competitiveness, and from these organizations:

- Business Europe
- EARTO
- Elsevier
- DG CONNECT (per Email, also on the wiki)
- LERU
- LIBER
- STM (also on the wiki)
- UK HMG and UUK (Universities UK also on the wiki)
- Wellcome Trust (also on the wiki).