Open Access to Research Data: 
is it a Solution or a Problem?

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Panel Introduction

In the past few years, we have witnessed a (slow) paradigm shift about the way in which research results are being published and disseminated. More and more we have seen the push for publishing research results as Open Access (OA) “digital publications” and more recently the push (especially from the European Commission) towards “Open Science”. This means not only the OA publication of research results, but also the OA publication of the “input to research”, i.e. the raw material underlying the research process, generically identified as Research Data.

The main argument in favour of Open Access is that most of research is being done with public funds, with research results and research data being produced in the public interest, and therefore they should remain publicly available. Availability should be restricted only by legitimate reasons, such as privacy protection or intellectual copyright. Of course, Open Access does not prevent commercial exploitation and protection of the research results and the research data, with patents and copyrights.

Following the recommendations of the European Commission, to ensure open access, publication should be done either by self archiving the material in an online repository, or by open access publication in peer-reviewed open access journals, which very often charge “Article Processing Charges” to the authors, to offset the cost of making the content of the journal freely available. The first alternative is commonly indicated as “Green OA” and the second one as “Gold OA”. The diagram below, borrowed from the European Commission, summarizes these concepts.

The push towards open access to research data has only increased the number of issues generally encountered with open access to scientific publications. More than ten years ago, a report from OECD [1] identified and categorized the main issues related to Open Access.

- Technological issues: Broad access to research data, and their optimum exploitation, requires appropriately designed technological infrastructure, broad international agreement on interoperability, and effective data quality controls;
- Institutional and managerial issues: While the core open access principle applies to all science communities, the diversity of the scientific enterprise suggests that a variety of institutional models and tailored data management approaches are most effective in meeting the needs of researchers;
- Financial and budgetary issues: Scientific data infrastructure requires continued, and dedicated, budgetary planning and appropriate financial support. The use of research data cannot be maximized if access, management, and preservation costs are an add-on or after-thought in research projects;
- Legal and policy issues: National laws and international agreements directly affect data access and sharing practices, despite the fact that they are often adopted
without due consideration of the impact on the sharing of publicly funded research data;

- Cultural and behavioural issues: Appropriate reward structures are a necessary component for promoting data access and sharing practices. These apply to those who produce and those who manage research data.

Fig. 1. Gold and Green Open Access

Panel Objectives
Given the breadth and depth of all the issues, it should be clear that the main objective of the panel is not to solve the issues of Open Access, but is rather to stimulate a discussion and an exchange of ideas among the panellists, which is expected to trigger a wider discussion with the audience. The panellists will bring to the table their experience in many of the issues mentioned before, such as infrastructures and institutional repositories, data curation in libraries and archives, long term preservation of data, education and training for data producers and data curators, and so on.

As it is often the case in this type of events, most probably at the end of the panel there will be even more questions than answers, but hopefully it will have contributed to gain a more global view and a better understanding of the issues related to the actual implementation of Open Access to Research Data.

References
1. Arzberger, P et al., Promoting Access to Public Research Data for Scientific, Economic, and