Towards Sustainable Research Data Repositories



Organisation for Economic Co-operation and Development (OECD) adopts Income Streams for Data Repositories Report produced by the RDA/WDS Publishing Data Cost Recovery for Data Centres Interest Group.

An adoption story by **Carthage Smith,** Senior Policy Analyst and Lead Coordinator at <u>OECD Global Science Forum</u> **Taro Matsubara**, Policy Analyst at <u>OECD Global Science Forum</u>

The Organisation for Economic Co-operation and Development (OECD) Global Science Forum (GSF) adopted the Income Streams for Data Repositories report¹ produced by the RDA/WDS **Publishing Data Cost Recovery for Data Centres Interest Group.** Specifically, the RDA/WDS output fed into an OECD policy report and recommendations on Business Models for Sustainable Research **Data Repositories**². Two of the co-chairs of the RDA/WDS Interest Group chaired an Expert Group that oversaw the OECD work. The methodological approaches were similar and data collected in the earlier RDA work was used in the OECD project. The RDA community and Plenary meetings were also used to gather additional input to the OECD project and many RDA members attended two dedicated project workshops. The RDA/WDS Publishing Data Cost Recovery for Data Centres IG provided OECD a substantial overview on income streams for data repositories. This was consolidated and expanded in the OECD-GSF project and the in-depth economic analysis that was carried out within the project. The authors of this adoption story, Carthage Smith and Taro Matsubara, members of the OECD Secretary, involved in the OECD-GSF project and report, tell us about the challenges they faced, the solution found in the RDA output, the impact it had and the lessons they learned.



"In our experience, it is important to consider the final target audience in the initial stages of any project and to engage adopters early on. RDA networks have a lot of expertise, which they are ready to share very openly. The RDA processes also make it relatively easy for partners, such as OECD, to engage. However, it is clear that there can also be a cost to RDA, when organisations use its assets to develop their own 'branded' products. RDA outputs are freely useable by all, but acknowledgement is not the same as visibility. This may not be a problem as long as the issue is recognised by RDA funders.

Organisations can benefit from RDA when they work on issues related to Open Science and research data in an international context. RDA meetings provide an excellent opportunity to collect information and develop personal networks around Open Science."

Carthage Smith and Taro Matsubara (OECD-GSF)

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¹ Members of the RDA/WDS Publishing Data Cost Recovery for Data Centres IG (2016): Income Streams for Data Repositories, https://doi.org/10.5281/zenodo.46693.

² OECD (2017), "Business models for sustainable research data repositories", OECD Science, Technology and Industry Policy Papers, No. 47, OECD Publishing, Paris, https://doi.org/10.1787/302b12bb-en.

³ Full list of members in Appendix A of OECD (2017), "Business models for sustainable research data repositories", OECD Science, Technology and Industry Policy Papers, No. 47, OECD Publishing, Paris, https://doi.org/10.1787/302b12bb-en.

The Challenge

As described in the OECD "Business models for sustainable research data repositories" report, there are a large variety of repositories that are responsible for providing access to data used for research. As data volumes and demands for more open access to these data increase, repositories are coming under financial pressures that can undermine their long-term sustainability. In the absence of well understood business models and clear value propositions, many research data repositories

are likely to be unsustainable, which would undermine efforts to promote Open and FAIR data. This would have serious consequences for research in general. The OECD-GSF launched the project on Business Models for Sustainable Business Models with the aim of making recommendations to research policy-makers. In order to construct viable business models, the project focused on testing income streams against various stakeholder groups' willingness to pay.

The RDA output adoption

The OECD-GSF project built on, and expanded, the work of the RDA/WDS Publishing Data Cost Recovery for Data Centres IG. This RDA/WDS Interest Group was co-chaired by Simon Hodson, Executive Director of CODATA, Anita de Waard, VP Research Data Collaborations at Elsevier, and Ingrid Dillo, Deputy Director of Data Archiving and Networked Services (DANS). Simon and Ingrid also co-chaired the international expert group3 that oversaw the subsequent OECD-GSF project, which adopted the same case study approach. The sample of 22 repositories analysed by the RDA/WDS Publishing Data Cost Recovery for Data Centres IG was expanded to a

total of 48 and an in-depth economic analysis of potential business models was carried out.

From the OECD's point of view, the data in the RDA/WDS Publishing Data Cost Recovery for Data Centres IG's final report provided a sound basis for the subsequent GSF project and access to the RDA network of experts and organisations enabled the work to be done both effectively and efficiently. For the RDA/WDS Publishing Data Cost Recovery for Data Centres IG, the GSF-RDA partnership, enabled the IG work to be expanded and translated into the policy context, offering a more significant impact, as outlined below.

Adoption impact

The RDA/WDS Publishing Data Cost Recovery for Data Centres IG provided the OECD-GSF project with a substantial overview on income streams for data repositories. This was consolidated and expanded in the project and the in-depth economic analysis that was carried out within the project. The final OECD policy report has been written for, and provided to, research policy-makers and includes a number of recommendations that will help improve the strategic planning and support for data repositories. Several hundred copies of the report have been distributed via the OECD

policy networks and it can be openly downloaded from the <u>OECD iLibrary</u>, which is a vital resource for those working in the research policy domain. The study results have been presented to national policy-makers and funders in open science events in a number of European and Asian countries and have also been included in several OECD flagship publications and international conferences relating to the digital economy. **Feedback has been positive and ministries and funding agencies from several OECD countries have reported that they find the report useful and are implementing its recommendations**.

RDA Added Value

RDA provides unique access to expertise. There is much good work that has already been done, and we expect that, as in the OECD-GSF case, some of this could be expanded and re-packaged quite easily to improve its chances of adoption by people and institutions who are not RDA members. **Ensuring trust and mutual benefit are the key** to doing this successfully.

Carthage Smith and Taro Matsubara (OECD-GSF)

About OECD

The OECD Global Science Forum (GSF) provides a venue for consultation among senior research policy officials of OECD member and partner countries in the area of international scientific cooperation. It produces analyses and recommendations on high-priority research policy issues requiring international consultations/co-operation, and identifies opportunities for collaboration on major scientific undertakings. It is uniquely positioned to facilitate exchange of information



and best practices, propose global standards and foster collaboration between OECD member and partner countries. The main target group for the outcomes of GSF activities are research policymakers, but research funders and the academic community are also important GSF stakeholders. **Better awareness and policies for supporting data repositories should ultimately benefit all of research.**