

## **Research Software and Research data: dissemination, evaluation and reusability in the Open Science context**

Teresa Gomez-Diaz  
LIGM, Univ Gustave Eiffel, CNRS

Tomas Recio  
University Antonio de Nebrija

### **Abstract**

Reuse of research outputs is one of the aims of Open Science [1]. The goal of this poster is to analyse how dissemination and evaluation issues for Research Software and Research Data may enhance the reusability of these research outputs in the Open Science context. Recent dissemination and evaluation protocols for Research Data have been proposed in [2]. They stand over Research Software dissemination [3] and evaluation protocols [4], and they are the direct consequence of the fact that it is possible to propose similar formulations for the Research Software and the Research Data definitions [4,5].

The **CDUR** evaluation protocol for Research Software and for Research Data developed in [4,2] comprises four steps introduced as follows: **C**itation, to deal with correct output identification, **D**issemination, to measure good dissemination practices, **U**se, devoted to the evaluation of usability aspects, and **R**esearch, to assess the impact of the scientific work.

In particular the **CDUR** third step, **U**se, is devoted to the evaluation of the quality of the research output, where the evaluation committees look at best software development or data curation practices, and how their reuse has been facilitated in the Open Science context [4,2]. It is the reproducible science

*Submitted 8 Mars 2022*

Correspondence should be addressed to Teresa Gomez-Diaz, LIGM, Univ Gustave Eiffel, CNRS, F-77454 Marne-la-Vallée, France. Email: [Teresa.Gomez-Diaz@univ-eiffel.fr](mailto:Teresa.Gomez-Diaz@univ-eiffel.fr)

The 17th International Digital Curation Conference takes place on 13-16 June 2022

URL: [17th International Digital Curation conference | DCC](https://www.dcc.ac.uk/)

Copyright rests with the authors. This work is released under a Creative Commons Attribution License, version 4.0. For details please see <https://creativecommons.org/licenses/by/4.0/> .



# IDCC | *Poster proposal*

step, where it is measured how the published results obtained with the Research Data and/or the Research Software can be replicated and reproduced.

It is our claim that the extended use of **CDUR** evaluation protocols for Research Data and Research Software will enhance the quality of the disseminated research outputs and will improve their reusability conditions. It is as well one of the enablers to achieve Open Science objectives [1].

## References

- [1] T. Gomez-Diaz, T. Recio (2020-21). Towards an Open Science definition as a political and legal framework: on the sharing and dissemination of research outputs, POLIS N. 19, 2020, <https://uet.edu.al/polis/wp-content/uploads/2022/01/polis-19.pdf>, Version 3 dated 28/02/2021 available in <https://zenodo.org/record/4577066>
- [2] T. Gomez-Diaz, T. Recio (2022). Research Software vs. Research Data II: Protocols for Research Data dissemination and evaluation in the Open Science context, F1000Research 2022, 11:117, <https://f1000research.com/articles/11-117>
- [3] T. Gomez-Diaz (2014). Free software, Open source software, licenses. A short presentation including a procedure for research software and data dissemination. Zenodo Preprint, <https://zenodo.org/record/11709>. Presented at the EGI Conference 2015, Lisbon, <https://indico.egi.eu/event/2452/sessions/1522/>
- [4] T. Gomez-Diaz, T. Recio (2019). On the evaluation of research software: the CDUR procedure, F1000Research 2019 8: 1353, <https://doi.org/10.12688/f1000research.19994.2>
- [5] T. Gomez-Diaz, T. Recio (2022). Research Software vs. Research Data I: Towards a Research Data definition in the Open Science context, F1000Research 2022, 11:118, <https://f1000research.com/articles/11-118>

*Submitted 8 Mars 2022*

Correspondence should be addressed to Teresa Gomez-Diaz, LIGM, Univ Gustave Eiffel, CNRS, F-77454 Marne-la-Vallée, France. Email: [Teresa.Gomez-Diaz@univ-eiffel.fr](mailto:Teresa.Gomez-Diaz@univ-eiffel.fr)

The 17th International Digital Curation Conference takes place on 13-16 June 2022

URL: [17th International Digital Curation conference | DCC](https://www.dcc.ac.uk/)

Copyright rests with the authors. This work is released under a Creative Commons Attribution License, version 4.0. For details please see <https://creativecommons.org/licenses/by/4.0/> .

