

The ODIN Mission

'Data as infrastructure' is a critical concept for a fully-integrated European Research Area (ERA) to drive innovation forward as envisaged by the Digital Agenda for Europe. The lack of data availability hinders this vision. In academic publishing, peer review and citation have long been recognised as mechanisms for endorsing the trustworthiness of research outputs and incentivizing researchers to contribute. Trustworthy research data will only be widely available if the same principles are applied. Key, participative, initiatives have emerged to address this challenge.

The [DataCite consortium](#) aims to establish easier access to research data and increase acceptance of research data as legitimate contributions in the scholarly record, and to support data archiving to permit results to be verified and re-purposed for future study. DataCite has assigned over 1m digital object identifier (DOI) names in the last few years to make research data citable, true to emergence of the '4th paradigm', Jim Gray's vision of "data-intensive scientific discovery".

The [Open Researcher & Contributor ID Initiative \(ORCID\)](#) is an open, non-profit, community-based effort to provide a registry of unique researcher identifiers and a transparent method of linking research activities and outputs to these identifiers. ORCID is unique in its ability to reach across disciplines, research sectors, and national boundaries and its cooperation with other identifier systems.

ODIN aimed to build on the success of DataCite and ORCID by designing an 'awareness layer' for persistent author and object identifiers, thereby reducing technical, cultural and logistical barriers to the accessibility, attribution and trust of data. Identifier awareness will make it possible to stabilise: (1) References to a data object; (2) tracking of use and re-use; (3) Links between a data object, subsets, articles, rights statements and every person involved in its life-cycle (creator, editor, reviewer, aggregator, etc.).

Given the importance of these functions as we approach [HORIZON 2020](#), we aimed to prove the feasibility of author, data and rights identification, promote trust building towards open scientific data e-Infrastructures and lay the foundation necessary to promote future interoperability (technical, semantic, reference architecture, etc.) in the scientific data domain in Europe and globally.