Some reflections on the current PID landscape – with an emphasis on risks and trust issues

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The Knowledge Exchange (KE) is a European partnership formed by six key national organisations tasked with developing infrastructure and services to enable the use of digital technologies to improve higher education and research. These six organisations are CSC in Finland, CNRS in France, DeiC in Denmark, DFG in Germany, Jisc in the UK and SURF in the Netherlands.

One specific area of activity for KE – as part of its collaborative work to support the development of digital infrastructures to enable open science – is the analysis of the quickly evolving persistent identifier (PID) landscape, and in particular the issues around risks and trust in pursuit of a well-functioning Persistent Identifier infrastructure for research. Persistent Identifiers (PIDs) and their associated infrastructures are considered to be of vital importance for accountability, reproducibility and credibility of today's research. PIDs foster transparency in methods and scientific output, identification and referencing of scientific outputs, and thus contribute to Open Science and Open Scholarship.

Back in June 2021 the KE Task & Finish Group for PIDs Risk and Trust (see its composition <u>here</u>) commissioned an external study to explore the risks and trust issues associated with the current PID landscape.

The winning bid, issued by a team of four consultants in Germany, France and the UK under the banner of <u>Scidecode Science Consulting</u>, included two members of the euroCRIS Board among the experts to carry out this analysis. An early project presentation was delivered on Dec 8th, 2021 within a webinar on PID implementation organised by ORCID and DataCite for the Research Information Management community in Poland. In this short presentation the project methodology, objectives and time schedule were briefly described.

The project work – which will be fairly advanced by the time the CRIS2022 conference is held, hence the usefulness of having the opportunity to present its early findings for a discussion with the RIM community – is to be based on a number of interviews with PID experts in (mostly) the six KE member countries. The interviewees will represent the six main PID roles identified in the <u>scoping document</u> drafted by the KE T&F Group under the title "Risk and trust in pursuit of a well-functioning PID infrastructure for research" (these are PID Authority, PID Service Provider, PID Manager, PID Owner and PID User).



Source: OpenAIRE "What is a Persistent Identifier?", <u>https://www.openaire.eu/what-is-a-persistent-identifier</u>. Image licence CC BY 4.0

At the time of writing – mid-January 2022 – most interviews have already been conducted as part of the first stage of this project. Both well-established PIDs such as DOIs, ORCID and ROR and other, emerging infrastructure for persistent identification (such as conference IDs or identifiers for research equipment and facilities) have been addressed in these conversations with the experts. Other more decentralised IDs such as handleIDs, URNs, ARKs or IGSNs have also been covered, providing a thorough insight into a rather complex current PID landscape.

A literature study was carried out by the project team prior to the interviews examining the issues of risk and trust, whose results were used to draft a default template for the questions to be asked to the experts. A number of case studies will be produced summarising some of the findings of these interviews, followed by a report that will address the most pressing issues related to risk and trust in the current PID landscape.

As per the project timeline, a collection of case studies in PID implementation and operation should be close to completion by the time the CRIS2022 conference takes place. The proposed presentation at the conference aims to introduce these case studies and to provide a summary snapshot of the current PID landscape and its relevance for related initiatives like the European Open Science Cloud (EOSC). Emphasis will also be made on the key role of PIDs in Research Information Management Systems.