

SONAR (181-007)

Swiss Open Access Repository

This project proposes to set up a Swiss Open Access Repository "SONAR", whose primary goal is to collect, promote and preserve scholarly publications by authors affiliated with Swiss public research institutions. This central repository operates as an aggregator, drawing content and metadata from existing platforms and institutional repositories (IR). In parallel, direct depositing of content by authors, or their representatives, is also possible. Alongside the national repository, SONAR also offers autonomous IR solutions as outsourced platform to serve Swiss partnering institutions of higher education ("Institutional Repository as a Service").

The project intends to lay the groundwork for maximizing the coverage rate of open access publications by Swiss institutional repositories, with an exploratory approach. A survey conducted in 2017 by one of the applicant institutions and covering 7 major Swiss institutional repositories, shows that existing IRs make openly available about 35% of the full-text articles authored by their affiliated researchers, when compared with articles available in international or disciplinary repositories such as PMC or HAL. In contrast, the study suggests that nearly 80% of the publications could be legally available under open access conditions. The project intends to explore and develop automated procedures for tracking down and collecting from external sources, such as international subject repositories, the largest possible number of publications that, while possessing an open access status, are either not registered as such in existing institutional repositories, or the end of their embargo period has not been acknowledged, or their full-text has not been deposited. SONAR can then feed those full-text publications back to the corresponding institutions, complementing and reinforcing existing Swiss repositories. The goal is to raise the coverage rate above 70%, thus doubling the current coverage of Swiss IRs.

The dissemination on the web of the content hosted by SONAR is also an important component of the proposed solution. Given that institutional repositories, where publications are deposited, are not the only location for searching publications, another key value proposition of the project is the creation of a highly interoperable repository powered with semantically rich data, import/export and content exposure with regard to external platforms and global search engines (Google Scholar, Twitter...). It is expected that through an interaction between SONAR and other scholarly content sources, researchers should be able to make their publications highly visible, citable and openly accessible in the long term, with the least possible effort.

Another focus of the project is data normalization and analysis, with the planned creation of a database of entities such as authors, publishers, journals, research institutions, funding agencies, research projects/grants and patents (the "SONAR data hub"). Automatic content processing procedures will be investigated to support the extraction of specific metadata, as successfully explored by the applicants in Europe PMC. By uniformly collecting and normalizing such data in a central database, the project should greatly reduce discrepancies and data drifts likely to emerge from the current Swiss IR landscape. SONAR builds on an existing service: RERO DOC, which is a multi-institutional repository operated since 2004 by RERO, the Library Network of Western Switzerland. This new development is meant to extend its range of services and its institutional coverage. The proposed project is consistent with several principles formulated in the Swiss open access strategy commissioned by the Confederation through swissuniversities and the Swiss National Science Foundation, namely in the areas of resource coordination and pooling, as well as national monitoring. It also presents a high potential of collaboration with both existing services and ongoing projects in the framework of the program "Scientific information: Access, processing and safeguarding".