



SICRIS, E-CRIS, Researchers' Bibliographies and Open Science within the COBISS.net Network

The Institute of Information Science (IZUM) is a Regional Centre for Library Information Systems and Current Research Information Systems – Category II Centre under the Auspices of UNESCO, located in Maribor, Slovenia. We develop and maintain COBISS, the Co-operative Online Bibliographic System and Services that form the backbone of Slovenia's national information infrastructure for libraries and, by extension, for science, education, and culture. Within this ecosystem, three tightly connected components enable comprehensive discovery, evaluation, and presentation of research: the national Current Research Information System - SICRIS, E-CRIS used across the COBISS.net network in other countries, and researcher bibliographies that leverage the national bibliographic and authority databases. Additionally, a digital repository dCOBISS serves as a central repository for scientific publications and other outputs that require a long-term preservation and are openly accessible. Together, these elements deliver an integrated view of researchers, projects, organizations, outputs, and indicators, while aligning with international data standards and national evaluation methodologies.

SICRIS is the authoritative Slovenian CRIS, developed and maintained in cooperation with the Slovenian Research and Innovation Agency (ARIS). It provides structured, public, bilingual (Slovene/English) information on researchers and technical staff, research projects and programmes, research organizations and groups, as well as research equipment. What makes SICRIS unique is that every registered researcher in Slovenia is part of the same system. They all use a single, unified platform, ensuring consistency, transparency, and accessibility of research-related data across the entire country. Its databases are interlinked and searchable across key fields, and the data model follows the CERIF recommendations, ensuring interoperability with European practice and facilitating future extensions. Importantly, SICRIS is integrated with the COBISS.SI environment—specifically with the COBIB.SI national bibliographic database—so users can directly access researchers' bibliographies from their SICRIS profiles, closing the loop between entities and outputs.

In recent years, the Slovenian research ecosystem has been actively implementing Open Science. National policy instruments and the Horizon Europe framework require open access to publications and research data under the principle of 'as open as possible, as closed as necessary'. Within COBISS and SICRIS, this translates into systematic use of persistent identifiers (for example DOIs for works and ORCID iDs for authors), authority control through CONOR (Authority files of personal and corporate names), and links to institutional or national repositories, ensuring that research outputs are findable, accessible, interoperable, and reusable. As part of IZUM's broader platform, services like COBISS Plus and digital content infrastructure support deposit, discovery, and long-term accessibility of publications and related research objects, strengthening compliance with Open Science mandates across institutions.

To complement licensed citation indexes and to broaden coverage in line with Open Science values, open tools such as OpenAlex can be used alongside COBISS/SICRIS when preparing evidence of outputs and influence. OpenAlex is an openly licensed, CCO dataset and API indexing hundreds of millions of scholarly entities and their citation links. It is well suited for transparent enrichment of researcher profiles and institutional analyses, for triangulating citations and discovering connections that may fall outside traditional, subscription-based databases. In practice, OpenAlex data can be used to verify citation counts, to surface open-access versions of works, and to map collaborations and topics; these insights can then be referenced in narrative CVs and in institutional reporting, while COBISS/SICRIS remains the authoritative source for bibliographic control and local evaluation exports.

Researcher bibliographies are an integral service within COBISS and across COBISS.net, providing a unified and reproducible view of the scholarly and professional output of individual authors. Bibliographic records originate in the national bibliographic database COBIB and are authority-controlled through the CONOR authority file; as a result, a researcher's output can be consistently retrieved by name, researcher code, or unique authority identifier. These bibliographies are used for a wide range of purposes—applications to project calls, academic promotion and habilitation processes, institutional reporting, and personal visibility—while the application supports convenient search and export for authors with or without a formal researcher code. Evaluation-oriented features include citation listings where records link to established citation indexes and standardized summaries of bibliometric indicators according to national methodologies, which can be complemented with indicators derived from open sources.

In the context of academic promotions, the trend in Slovenia and across Europe is to move beyond simple points-based tallies toward responsible research assessment. Habilitation committees increasingly emphasize complete and consistent citations (including DOIs where available), transparent authorship and contribution statements, and persistent identifiers (such as ORCID) to ensure unambiguous attribution. Consequently, narrative evidence of impact—supported by citation analyses, openness of outputs, data sharing practices, and societal engagement—carries more weight than legacy point summaries alone. Where individual institutions still provide or request semi-automated point overviews for transitional reasons, these are best presented as supplementary, while the centerpiece of the application should be an accurate, well-curated bibliography with proper citations and links to openly accessible versions of works.

The integration paths among SICRIS/E-CRIS and bibliographies are both technical and procedural. On the technical side, the systems share identifiers and authority control, with CONOR playing a pivotal role in binding researcher identities to bibliographic records, and with SICRIS/E-CRIS providing cross-links that surface representative works and complete bibliographies directly on a researcher's profile. On the procedural side, workflows ensure that authoritative changes (for example employment, classification, and official status) flow from ARIS to SICRIS, while researchers themselves can refine presentational elements and keep their representative works aligned with current assessment and Open Science needs. By design, this reduces duplication, minimizes inconsistencies, and provides a single point of truth for entities, while allowing flexibility in the presentation of outputs and indicators.

At the network level, COBISS.net connects national library-information systems and national CRIS implementations, promoting shared development and governance across participating countries. This ecosystem consists of 1500 school, public, national, university and other types of libraries in eight countries that all use the same system. This networked approach ensures comparable functionality and data models (including CERIF-aligned structures), facilitates cross-border discoverability through consistent metadata practices, and lowers the total cost of ownership as innovations in one member's environment can be ported to others. E-CRIS deployments in partner countries exemplify this model: they are connected to national COBISS instances and thus to the corresponding COBIB databases, which feed researcher bibliographies; at the same time, each country retains sovereignty over its data and policies.

Strategically, IZUM's role is to provide and evolve this shared platform: COBISS as the core library information infrastructure, SICRIS as the national CRIS in Slovenia, E-CRIS as the exportable CRIS application across COBISS.net, and bibliographies as the interface between catalogued outputs, Open Science practices, and responsible assessment. Products and services continue to advance—spanning the integrated COBISS Cat/Lib applications for library automation, COBISS Plus for end-user access, and complementary components such as authority control, digital content storage, and analytics—ensuring that libraries and the research sector benefit from a coherent, modern ecosystem. This architecture positions Slovenia and COBISS.net countries to adopt emerging standards and identifiers and to incorporate additional data types (for example project funding details, patents and innovation outcomes, research data links, and open peer-review artifacts) as needs evolve.

In sum, the integration of SICRIS/E-CRIS and researcher bibliographies within the COBISS environment, combined with the adoption of Open Science practices and the use of open tools like OpenAlex, exemplifies a mature, standards-based approach to research information management. By interlinking entities, outputs, citations, and indicators under authoritative governance and common technology, the system supports national and institutional frameworks, streamlines administrative processes, and amplifies the visibility and comparability of research at home and across the COBISS.net network—while remaining adaptable to future requirements in open science, persistent identification, and responsible metrics.

Keywords: Open Science; COBISS; SICRIS; E-CRIS; Researcher Bibliographies; dCOBISSM; CONOR; OpenAlex; ORCID; DOI; Responsible Research Assessment