

**CITIZEN SCIENCE
IN CENTRAL AND EASTERN EUROPE**

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IMPLEMENTATIONS AND EXAMPLES OF CITIZEN SCIENCE PROJECTS AND NETWORK IN SLOVENIA: THE CENTRAL ROLE OF LIBRARIES

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Citizen science has a well-established tradition in Slovenia. As early as the 1970s, researchers began systematically involving non-professional participants in research processes. One of the first ones was Dr. Marija Makarovič at the Slovene Ethnographic Museum, who engaged local communities in ethnological research. Another key figure was Dr. Zdravko Mlinar, who mobilised citizens as volunteer contributors in his sociological research on the town of Žiri.

Despite this long-standing practice, citizen science remained fragmented. Various terms were used to describe public participation in research, including participatory, amateur, community, popular, and civic science. This terminological diversity reflected both disciplinary differences and the absence of a unifying framework. A significant conceptual turning point occurred in 2021, when Dr. Mlinar proposed the term "občanska znanost", which can be translated as residents' science or municipality residents' science. The term emphasises inclusivity, local engagement, and collective knowledge production beyond formal citizenship, aligning well with contemporary European understandings of citizen science.

The Role of the Central Technical Library at the University of Ljubljana

Academic and research libraries have become key institutional actors in advancing citizen science by bridging the gap between scientific research and the wider public. In Slovenia, this role has been most prominently undertaken by the Central Technical Library at the University of Ljubljana (CTK), a publicly funded academic library established in 1949 as a library of the University of Ljubljana, but is now an independent public institution and an associated

member of the University of Ljubljana. CTK primarily provides library and information services to students and staff in technology and natural sciences, while also supporting users from other universities, research organisations, public institutions, and non-profit and for-profit organisations. Its services are based on professionalism, quality, user orientation, and the use of modern technologies, positioning the library as a central integrative hub connecting higher education, research, and other public organisations in Slovenia.

CTK's strategic focus on openness and innovation was clearly stated in its Development Plan (2020–2025), which identified the provision of open science infrastructure at the University of Ljubljana as one of its core goals. A key element of this objective is the establishment of a contact point for the implementation of citizen science, aligned with the principles of BESPOC (Broad Engagement in Science, Point of Contact). This framework positions the library as an accessible entry point for researchers, students, and members of the public interested in participatory research, while also ensuring institutional support, methodological guidance, and ethical awareness.

The library's systematic engagement with citizen science intensified from 2020. Building on earlier professional discussions, such as the Focus on Open Science meeting in 2017, CTK began mapping organisations and initiatives active in citizen science and exploring opportunities for collaboration. The explicit aim was to foster the inclusion of diverse user groups – students, pupils, retirees, and other members of the public – into research and knowledge production processes. This work was supported by the development of a Creative Workshop (makerspace) within the library, which provided physical infrastructure for hands-on experimentation, prototyping, and community-based research activities.

Through a combination of strategic planning, infrastructural development, and active outreach, CTK has positioned itself not merely as a support service but as a key institutional mediator and catalyst for citizen science in Slovenia. Its unique position at the intersection of academia and society enables the library to translate abstract policy goals of Open Science into concrete practices that are accessible, inclusive, and sustainable.

Policy Alignment and Institutional Recognition

The strategic importance of citizen science was formally recognised at the national level with the adoption of the Resolution on the Scientific Research and Innovation Strategy of Slovenia 2030, which explicitly promotes citizen science as part of Open Science. The subsequent Action Plan for Open Science, adopted in 2023, operationalised this commitment and identified specific activities to support the development of citizen science.

CTK was actively involved in drafting the Action Plan, drawing on its previous research, advocacy, and educational activities. As a result, the library was designated as the lead implementing partner for several citizen science actions, receiving targeted funding and institutional recognition. This formal role further highlights the strategic position of libraries as stable, trusted institutions capable of coordinating complex, multi-stakeholder initiatives.

The citizenscience.si portal: A National Information Infrastructure

One of the most significant outcomes of CTK's work is the establishment of the national citizen science portal, citizenscience.si. Initiated in late 2022 and developed entirely in-house, the portal was designed as a central digital infrastructure for citizen science in Slovenia. Drawing inspiration from international best practices, particularly the Austrian platform *Österreich forscht*, the portal serves multiple functions: information dissemination, project visibility, infrastructure mapping, and access to guidelines and tools.

The decision to retain the English term citizen science in the web address reflects both terminological pragmatism and international interoperability. From a library perspective, the portal demonstrates how digital services can support participatory research by lowering entry barriers, addressing diverse user groups (from children to senior citizens), and integrating researchers, practitioners, and the general public within a shared knowledge environment.

The Slovenian Citizen Science Network: Libraries as Connective Infrastructure

The establishment of the [Slovenian Citizen Science Network](#)¹ represents a further institutional innovation led by CTK. The Network was conceived as a voluntary, non-formal partnership framework connecting stakeholders across civil society, the public sector, education, local and national government, and the private sector.

Public libraries were prioritised as key partners due to their strong local presence, community trust, and established networks. Their proximity to residents enables them to serve as entry points for citizen participation and as intermediaries between local knowledge and academic research. Academic and research libraries, in turn, contribute methodological expertise, research infrastructure, and international connectivity.

The Network operates without formal statutes or contractual obligations, relying instead on consensus-building and thematic working groups. This flexible governance model has proven effective: within its first year, the Network expanded rapidly, attracting over 60 partner organisations and individuals from a wide range of disciplines. CTK's hybrid position (embedded in academia while remaining accessible to the public) has been instrumental in sustaining this growth.

Citizen Science Projects in Slovenian Libraries

In addition to their coordinating and infrastructural roles, Slovenian libraries actively participate in citizen science projects across various domains, including environmental sustainability, cultural heritage, health, and digital humanities. These projects demonstrate how libraries can serve as research partners, facilitators of public engagement, and providers of technical and organisational support.

1 PARTNERS | Mreža občanske znanosti

Local history activities

The collection, preservation, and interpretation of local history materials have long been core responsibilities of public libraries in Slovenia. In recent decades, these activities have increasingly developed into participatory research practices that can be recognised as established forms of citizen science. Libraries actively involve local residents in documenting cultural heritage by publishing local history materials, conducting collaborative research initiatives, and digitising heritage collections, which are made accessible through national and regional online platforms such as [Kamra](#)². An important aspect of these activities is the systematic collection of personal memories and privately held materials through initiatives such as the [Days of Collecting Memories](#)³ project. In these projects, libraries organise the gathering, professional processing, and digitisation of contributions provided by citizens. In doing so, libraries act as mediators between professional research standards and community knowledge, enabling local heritage to become a shared research resource and empowering residents as active contributors to knowledge production.

The Seed Library

[The Seed Library](#)⁴ initiative, launched in 2019 at the France Bevk Public Library Nova Gorica, exemplifies how public libraries can support citizen science by fostering environmental awareness, biodiversity conservation, and community participation. The library provides both physical infrastructure (a dedicated seed exchange space) and organisational coordination, enabling citizens to participate in the collection, sharing, and regeneration of locally adapted plant varieties. Currently, it is available in 21 libraries in Slovenia, and in 2025 the project went international with four public libraries in Croatia. Importantly, the library developed a custom digital application to track seed circulation, ensuring transparency, traceability, and data collection relevant to biodiversity monitoring. Librarians curate educational materials, organise workshops, and moderate exchanges, acting as knowledge intermediaries between informal gardening practices and broader sustainability goals. Through this model, the library transforms everyday community practices into a structured citizen science activity with long-term societal and environmental impact.

2 KAMRA | Mreža občanske znanosti

3 Zbiranje spominov o tovarni Rog - Mestna knjižnica Ljubljana

4 SEED LIBRARY | Mreža občanske znanosti

SiDock@home

CTK offered to help the project "covid.si" with setting up the website and promotion of the project. Following discussions with the research team, the site was translated into English within two days, significantly increasing its international visibility and accessibility. CTK also promoted the project through its communication channels, extending its reach to a broader public audience. The participation grew and the project soon evolved into [SiDock@home](#)⁵. Beyond digital support, the library contributed tangible infrastructure and resources. Library computers were made available for integration into the project's distributed computing efforts, enabling members of the public to contribute computing power to scientific research. Simultaneously, CTK's newly established makerspace was mobilised to produce "wuhobrani": 3D-printed straps designed to make prolonged mask-wearing more comfortable. These were produced using the library's 3D printers and distributed during the pandemic, illustrating how citizen science, makerspace activities, and community support can intersect within a library setting. CTK remains involved in the SiDock@home project.

From Manuscript to the Word

The citizen science project [From Manuscript to the Word](#)⁶, coordinated by the National and University Library (NUK), highlights the role of libraries in digital humanities and cultural heritage preservation. The project invites volunteers to transcribe handwritten manuscripts of the poet Srečko Kosovel, thereby improving the accessibility and usability of digitised materials in the Digital Library of Slovenia.

The library provides digitised source material, transcription guidelines, reference editions, and quality-control mechanisms, ensuring that citizen contributions meet scholarly standards. Librarians manage the workflow, coordinate peer verification among volunteers, and integrate the corrected texts into institutional repositories. In this way, the library serves as both a technical platform and an epistemic authority, enabling meaningful public participation while safeguarding academic quality and long-term preservation.

5 SIDOCK | Mreža občanske znanosti

6 FROM MANUSCRIPT TO THE WORD | Mreža občanske znanosti

From the Library to the City 2.0 Changing City Spaces

The project [From the Library to the City 2.0 Changing City Spaces](#)⁷ was developed by the University Library of Maribor and demonstrates how academic libraries can facilitate citizen science focused on urban studies, memory, and spatial change. Building on a long-standing series of guided walks, the library transformed the initiative into a structured citizen research project, engaging participants in investigating changing urban spaces through ethnographic and interdisciplinary methods.

The library provides methodological guidance, access to archival and contemporary sources, coordination of fieldwork, and dissemination of results. By hosting meetings, workshops, and public presentations, the library creates a sustained learning community and ensures continuity across project cycles. This example illustrates how libraries can support citizen science not only by providing access to information, but also by structuring research processes and fostering dialogue between academia and local communities.

A Collaborative Journey from Fiction to Facts

The project [A Collaborative Journey from Fiction to Facts](#)⁸ underscores the role of libraries as inclusive spaces for science communication, critical thinking, and intergenerational learning. It addresses the persistence of folk wisdom, myths, and misinformation by engaging citizens in the systematic collection, analysis, and verification of commonly held beliefs.

Libraries served as primary sites for recruitment, workshops, and public engagement, offering trusted and neutral environments where participants could reflect on how knowledge is formed and validated. Librarians supported logistics, outreach, and facilitation, and contributed to the project's emphasis on information literacy and responsible knowledge sharing. By embedding the project within library spaces, the initiative reached diverse audiences and strengthened the library's role as a mediator between scientific evidence and everyday knowledge practices.

7 FROM THE LIBRARY TO THE CITY 2.0 – CHANGING URBAN SPACES |
Mreža občanske znanosti

8 WISDOM UNDER THE MAGNIFYING GLASS | Mreža občanske znanosti

The Strategic Importance of Libraries in Citizen Science

Across citizen science projects, libraries contribute far more than space or promotion. They provide infrastructure, professional expertise, ethical oversight, continuity, and community trust, all of which are essential for sustainable citizen science. By integrating citizen science into their core missions – education, access to knowledge, cultural preservation, and community development – Slovenian libraries demonstrate their potential to act as long-term anchors of participatory research ecosystems.

In Slovenia, the coordinated efforts of CTK and its library partners show how libraries can move beyond supportive roles to become drivers of citizen science ecosystems. As new projects continue to emerge in public, academic, and special libraries, this model provides a transferable framework for integrating citizen science into library services and national research strategies.

References

- V. Iskrić, Mitja. 2024. "Mreža občanske znanosti v Sloveniji". Knjižnica: Revija Za področje Bibliotekarstva in Informacijske Znanosti 68 (2–3), pp. 123–43.
<https://doi.org/10.55741/knj.68.2-3.7>
- Vovk Iskrić, Andreja. 2024. "Občanska znanost v splošnih knjižnicah". Knjižnica: Revija Za področje Bibliotekarstva in Informacijske Znanosti 68 (2–3), pp. 107–22.
<https://doi.org/10.55741/knj.68.2-3.6>