European Commission

DG DIGIT

Unit.B2 (Interoperability and Digital Government)

# Open Source Software Country Intelligence Report

## Croatia

## 2025

This research by OpenForum Europe, was carried out for the Interoperable Europe initiative of the Digital Europe Programme under the Specific Contract 300097569 FWC DI 07929-00 BEACON Lot 2 with the consortium DELOITTE CONSULTING & ADVISORY, WAVESTONE. The report provides an overview of open source software (OSS) in Croatia as of March 2025 and is based on publicly available information that was gathered through desk research. This report was enriched with the kind contribution of Kristian Ravić, Senior Advisor of Information System and Technical Service at City of Zagreb, Hrvoje Kalčiček, assistant head for EU digitalisation projects & business processes at City of Zagreb, Andrei Zvonimir Crnkovic and Svebor Prstačić, vice-president and president of the Croatian Society for Open Systems and Internet, Permanent Representation of the Republic of Croatia to the EU.

## Authors

### 2025 version

Álvaro Vilas (alvaro@openforumeurope.org)

Axel Thévenet (axel@openforumeurope.org)

### 2020 version

Federico Chiarelli (federico.chiarelli@wavestone.com)

Vivien Devenyi (vivien.devenyi@wavestone.com)

Chloé Dussutour (chloe.dussutour@wavestone.com)

Clare O'Donohoe (clare.odonohoe@wavestone.com)

Eleonora Zoboli (eleonora.zoboli@wavestone.com)

## Disclaimer

*Updated in May 2025*

# Table of Contents

# Croatia

## Executive Summary

Since 2020, the use and development of open source software (OSS) has increased in certain areas in Croatia, including open data portals, open science, blockchain, and environment. While there is no national policy for the public sector to use open source software, the government has generally supported its use in order to implement digitalisation and transparency projects. The Ministry of Justice, Public Administration and Digital Transformation oversees digital transformation efforts, ICT projects, and policies related to open source software. The Central State Office for the Development of Digital Society, which was integrated into the ministry in 2024, supports digital policies and e-government services.

To promote digital transformation and open source adoption, the National Roadmap for the Digital Decade Policy Programme 2030 sets out goals including the use of an open source blockchain solution for public sector applications. The Digital Croatia Strategy for the period until 2032 prioritises the development of an open source platform integrating AI analytics to support both private and public sector innovations. However, the Croatian government has neither updated nor promoted its 2015 Linux guidance document, nor continued the work of the dedicated open source working group set up in 2013.

Municipalities including Zagreb and Rijeka have implemented their own open source-related initiatives. Zagreb's city hall shows a prominent activity with dedicated projects and an open data portal. Similarly, the city of Rijeka has developed its own open data portal using the open source CKAN solution.

In civil society, the Croatian Society for Open Systems and Internet (HrOpen) and Code4Croatia have developed open source communities by organising events, collaborating with the public sector on open source applications, and mapping and communicating about open source projects. Open science, AI language models, blockchain and environmental tools have all benefited from open source applications.

## Actors

This section presents the key governmental bodies and strategic players influencing awareness and uptake of open source software within Croatia's government and public sector.

*Policy makers*

- Ministry of Justice, Public Administration and Digital Transformation:[1] Established in May 2024[2], the Ministry is responsible for the planning, implementing and monitoring digitalisation projects; interconnecting and coordinating ICT projects within state and public administration bodies; developing a secure, competitive and sustainable digital economy; trust services; and measures

---

[1] [Ministry of Justice and Public Administration - Pravosuđe dostupno svima bez razlike.](#)
[2] [https://mpudt.gov.hr/about-the-ministry/21171](#)

related to the use of digital service infrastructure and digital innovations. The Ministry also defines guidelines and methodology for monitoring progress and assesses the impact of policies for the development of the Digital Strategy of the Republic of Croatia and coordinates the work of the National Council for Digital Transformation.

- Central State Office for the Development of Digital Society: In 2024, the Ministry integrated this previously autonomous office into its structure. It supports the Croatian government in developing digital policies and services for Croatian citizens and public administrations.

- University Computing Centre (SRCE)[3]: Founded in 1971 to promote ICT in academia, the SRCE also serves as the national competence centre for information and communication technologies. In 2021, the SRCE launched the Croatian Open Science Cloud Initiative (HR OOZ), which brought together leading institutions in the implementation and promotion of open science.

- National Council for Digital Transformation[4]: Created in February 2023 by the national government, the Council is in charge of monitoring the implementation of the strategic goals of the Digital Croatia Strategy for the period until 2032.

- Information Systems and Information Technology Support Agency (APIS IT)[5]: This agency develops and monitors the implementation of e-government policy, supports the public administration in developing its IT strategies, develops common ICT infrastructure, and promotes best practices in developing information systems.

- Shared Service Centre (CDU): Established in November 2023[6] and co-funded by the Croatian government and European Regional Development Fund, the CDU is tasked with enabling the use of reliable and scalable ICT infrastructure and shared services through a cloud in the Croatian public sector. It partners with APIS IT, which designed and implemented the system.

*Strategic players*

- The Croatian Society for Open Systems and Internet (HrOpen)[7]: Founded in 1992, HrOpen promotes the development of open computer systems and open source software in Croatia. Together with the Croatian Linux Users' Association, it organises the Dani otvorenih računarskih sustava / Croatian Linux Users' Conference (DORS/CLUC), which for the last 27 years has brought together professionals, public institutions and companies from the free and open source software community.

- Code4Croatia[8]: This NGO, founded in 2015, provides a platform for volunteer software developers and the tech community in Croatia to discuss and address open source. They run accessible forums

---

[3] https://www.srce.unizg.hr/en/about-srce
[4] https://narodne-novine.nn.hr/eli/sluzbeni/2023/22/374/pdf
[5] https://www.apis-it.hr/web/naslovnica
[6] https://www.tportal.hr/tehno/clanak/predstavljen-centar-dijeljenih-usluga-prva-drzavna-it-infrastruktura-za-digitalizaciju-uprave-20231129
[7] https://www.open.hr/
[8] https://codeforcroatia.org/

where they share open source licensing guidance, promote open source projects and events, discuss open data and open knowledge, and facilitate networking and community discussion. Their codes and initiatives are all available on GitHub[9].

## Policy and legal framework

This section summarises the main digital and public services policies relating to open source software in Croatia, including landmark strategy documents and implementation frameworks. The list is presented in chronological order, starting from the most recent milestone.

- National Roadmap for the Digital Decade Policy Programme 2030, 2024[10]: This document sets out the goals to be achieved by 2030 in the areas of digital transition of the economy, digitalisation of public administration, development of broadband electronic communications networks, and digital competences and jobs. With regard to the economy, the roadmap stipulates the creation of a shared services centre (CDU) as a cloud-based platform to connect the state information infrastructure using an open source blockchain application.

- Digital Croatia Strategy for the period until 2032, 2022[11]: This strategy was adopted by the national Parliament in December 2022 and set as a priority objective the digitalisation of public administration. Under its first objective, 'Developed and innovative digital economy', the strategy stipulates the creation of an open source platform, including AI analytical tools, available to the private and public sectors to develop new, innovative services. This objective has an estimated budget of EUR 20 million (HRK 150 million) coming from the National Recovery and Resilience Plan and the national budget.

- Action Plan for the Implementation of the Open Government Partnership Initiative, 2022[12]: Adopted in 2022 after a Covid-related delay, this plan sits within the global Open Government Partnership initiative[13] and is intended to ensure citizens' access to information and public sector accountability, increase the quantity of open data, contribute to the increased reuse of open data, and improve the e-Consultation system and Open Data Portal at national and local levels. The Open Data Portal utilises the CKAN open source application programming interface.

---

[9] https://github.com/codeforcroatia
[10] https://mpudt.gov.hr/UserDocsImages//RDD/dokumenti//National%20Roadmap%20for%20Digital%20Decade%20Policy%20Programme%202030.pdf?lang=bg
[11] https://digital-skills-jobs.europa.eu/en/actions/national-initiatives/national-strategies/croatia-digital-croatia-strategy-period-until-2032
[12] https://udruge.gov.hr/UserDocsImages/dokumenti/POV/Croatia_Action-Plan_2022-2024_June_EN.pdf
[13] https://www.opengovpartnership.org/

- Research Infrastructure Development roadmap 2023-2027, 2021[14]: This is a framework for the development of research infrastructure in Croatia, following open science principles[15], aiming to improve existing research processes by investing in areas such as health, environment, energy, digitalisation, and space. It includes measures to establish a national system for monitoring and evaluating research infrastructure; guiding principles for Croatian research infrastructure to promote findable, accessible, interoperable and reusable data; and measures in support of open source research data management (FAIR principles). The plan advocates the development of a national system for the management and sharing of research data and the implementation of the open science principle of open access to scientific software.

- Linux and LibreOffice Manual, 2015[16]: The Ministry of Veterans published this manual[17], addressed to public administration officers, on how to use Linux and LibreOffice. The manual contains a definition of free and open source software, an explanation of its benefits, and an introduction to the LibreOffice package of word processing and spreadsheet programmes.

- Free and Open Source Software Policy, 2006[18]: In July 2006, the Croatian government launched this policy and issued guidelines to foster the development and use of open source solutions within public administrations. However, the policy document is still not available online and there has been no publication of actions or initiatives implemented in the framework Furthermore, representatives of the Croatian Linux Users Group Association have expressed disappointment regarding the lack of implementation of the policy.

## Open source software initiatives

This section presents an overview of the main open source software-related initiatives in Croatia. The list is presented in chronological order, starting with the most recent initiative.

- Open Data Editor, 2024: The Open Knowledge Foundation (OKFN) launched the Open Data Editor (ODE) in December 2024[19], consisting of an open source desktop application for data practitioners to explore tables and identify errors. In 2025, the City of Zagreb was chosen for a four-month pilot project to standardise open data processes and data management procedures, by improving data transformation and data validation processes for publishing on multiple data platforms. The project is expected to be completed by June 2025.

---

14
https://mzom.gov.hr/UserDocsImages/dokumenti/Znanost/ZnanstvenaInfrastruktura/ZnanstvenaOprema/znan-oprema-29-12-2023/Research-Infrastructure-Development-Roadmap-of-the-Republic-of-Croatia-2023-2027.pdf
15 https://research-and-innovation.ec.europa.eu/strategy/strategy-research-and-innovation/our-digital-future/open-science_en
16 https://branitelji.gov.hr/vijesti/ministarstvo-branitelja-objavljuje-prirucnik-za-uporabu-programa-otvorenog-koda-u-uredskom-poslovanju-linux-i-libreoffice/1241/doc/1435
17 https://branitelji.gov.hr/UserDocsImages//OS//MBRH_prirucnik.pdf
18 https://www.linux.com/news/croatian-government-adopts-open-source-software-policy/
19 https://blog.okfn.org/2025/01/29/call-for-organisations-working-with-data-but-dont-know-coding-the-open-data-editor-pilot-is-for-you/

- Public Money, Public Code, 2024[20]: In December 2024, HrOpen joined the 'Public Money, Public Code' initiative, led by the Free Software Foundation Europe, by signing its open letter[21]. The initiative's key premise is that all source code generated with public funding should be freely available and open for use, modification, and distribution. This project proposes the adoption of a legal framework that obliges authorities to consider open source solutions for public procurement, ensures that public funding for IT projects results in a publicly available code, defines standards and guidelines for implementation, and establishes a national platform for sharing code among institutions and education programmes for IT staff in the public sector. In January 2025, HrOpen joined the newly established Working Group on Digital Innovation and Open Technologies that develops recommendations and guidelines for the public sector digital transformation and implementation of open technologies.

- Croatian Research Information System (CroRIS), 2023[22]: CroRIS integrates bibliographic data on scientific and professional publications from the Croatian science community and higher education institutions. The initial version of CroRIS was created as part of a forecasting project led by the Ministry of Science and Education, while the SRCE University Computing Centre was the partner in charge of the construction of CroRIS. At the end of 2021, the Centre for Scientific Information of the Rudjer Boskovic Institute joined the system construction activities. The implementation period lasted from December 2017 to July 2023. Nowadays, CroRIS constitutes an essential tool for the open science ecosystem and involves 48,420 people, 867,485 publications and 12,295 projects whose source code is open by default. The open source tools for uploading publication entries to its database[23], and an application programming interface for gathering data on university publications[24], are available on GitHub.

- City of Zagreb's HACKL hackathon, 2023[25]: The City of Zagreb and the Zagreb Innovation Centre (ZICER) organise this competition on yearly basis to programme software for a more transparent city. All entries are accessible under MIT-compatible open source licences and are available on GitHub[26].

- HRVOJKA National Language Technology Platform (NLTP), 2023[27]: Created in June 2023, HRVOJKA provides free translation services (machine translation, machine-assisted translation and a web translator) to and from Croatian language and the other 23 official languages of the EU. It consists of a Croatian multilingual operational public communication tool, developed as part of a multi-country project, National Language Technology Platform (NLTP), supported by the EU programme Connecting Europe Facility (CEF), the platform is accessible to all citizens and used for public

---

[20] https://www.open.hr/2024/12/public-money-public-code-incijativa/
[21] https://publiccode.eu/en/openletter/
[22] https://www.croris.hr/
[23] https://github.com/ferencek/CroRIS
[24] https://github.com/AceTep/croris---CROSBI-api
[25] https://hackl.zicer.hr/
[26] https://github.com/GradZagreb
[27] https://hrvojka.gov.hr/

administration to ensure secure, accessible and quality translation of public services. NTLP tools are available on GitHub[28], and the data used to develop them is published in the European Language Resource Coordination SHARE Repository.

- Blockchain platform, 2023[29]: In 2023, the CDU introduced a blockchain platform to enable state administration bodies, public authorities and local self-government to join public or private networks using open source blockchain solutions. This platform is part of the Croatian interoperability system and enables connection to projects planned by the European Union. As part of the Recovery and Resilience Facility Investment Plan (C2.3. R2-I2)[30], this platform was expanded to include a unified data lake and data warehouse platform. These additions allow for the data collection in standardised formats (structured and unstructured data), easy access to data, advanced analytics, and data visualisation, among other applications.

- Global Biodiversity Information Facility (GBIF), 2022[31]: GBIF is an international network and data infrastructure funded by national governments that aims to collect global open datasets about wildlife. Croatia became a voting participant in 2022 and has created 1,088 datasets and 399 publishers. This initiative infrastructure relies on open source software and all of them are available in GitHub[32].

- Open Data Portal, 2015[33]: This portal was established in March 2015. It provides access to data published by public authorities for reuse for commercial and non-commercial purposes. It was developed by the Ministry of Administration, and since 2017 has been maintained by the Central State Office for the Development of the Digital Society. The portal is based on a combination of two systems, both open source. Drupal forms the basis of the Content Management System, while the open source application programming interface CKAN helps to manage the data and the metadata of the portal. In May 2021 a new application for the Open Data Portal was published to provide a technological, process-related and functional upgrade to the previous version of the portal. The source code is available on GitHub[34].

- Croatian Institute for Pension Insurance (HZMO) — Lana, 2014[35]: Developed under GNU GPL licence, the open source system known as Lana allows users to track and modify their pension insurance online and access various related documents. Lana was presented at the DORS/CLUC – Dani otvorenih računarskih sustava / Croatian Linux Users' Conference 2014[36], and received the

---

[28] https://github.com/nltp-project
[29] https://mpudt.gov.hr/ostalo/arhiva-rdd/glavni-izbornik/vijesti-28393/nove-funkcionalnosti-u-centru-dijeljenih-usluga/29208?lang=en
[30] https://planoporavka.gov.hr/UserDocsImages/dokumenti/Plan%20oporavka%20i%20otpornosti%2C%20srpanj%202021..pdf?vel=13435491
[31] https://www.gbif.org/country/HR/summary
[32] https://github.com/gbif/ipt
[33] https://data.gov.hr/
[34] https://github.com/codeforcroatia/open-data/tree/master
[35] https://lana.mirovinsko.hr/
[36] https://2014.dorscluc.org/

"Certificate of Merit" at the International Social Security Association Regional Social Security Forum for Europe in 2016[37].

- Open Data Portal of Zagreb, 2014[38]; and Open Data Portal of Rijeka, 2016[39]: Zagreb's portal was launched in June 2014 as part of the global initiative CityNext. It provides a central place to collect, categorise and distribute open data of the City of Zagreb and companies owned or managed by the city. It works with the open source application programming interface CKAN and contains 193 open datasets published by Zagreb's administration. Rijeka's portal, created two years later, serves to collect, categorise and distribute open data of the City of Rijeka, utilities and institutions. It works with the open source application programming interface CKAN. Nowadays, the portal contains 182 open datasets published by Rijeka's administration.

- Geospatial Laboratory, 2014[40]: Croatia's first open source geospatial laboratory was established in January 2014 and is located within the Faculty of Geodesy at the University of Zagreb. Its mission is to support the development of open source geospatial software technologies, training, and expertise. The OSGeo/ICA Memorandum aims to develop global open source GIS software and data collaborations for academic, industry, and government organisations. The laboratory is run by members of the Institute for Geomatics and the Institute for Cartography and Photogrammetry.

- The Central Registry of Affiliates (REGOS) — ENA, 2013[41]: The REGOS system is used for delivering electronic insurance documents online. This open source programme allows its users to both apply for and receive electronic documents, and to create digitally signed PDF documents that can be used by citizens to apply for loans. ENA was nominated for the 2015 United Nations Public Service Award[42], presented at the DORS/CLUC – Dani otvorenih računarskih sustava / Croatian Linux Users' Conference 2014[43], and promoted in OSOR's news[44].

- Open source working Groups, 2013[45]: In 2013, the Croatian government established working groups on open source solutions and the use of open standards in order to give consulting services to ministries and other public administration bodies aiming to adopt open source software. The group was hosted by the Ministry of Public Administration and the Directorate for e-Croatia. With the

---

[37] https://www.issa.int/gp/162309
[38] https://data.zagreb.hr/
[39] https://data.rijeka.hr/ The city of Virovitica set up the Open Data portal, as announced in the 'Action Plan for the Implementation of the Open Government Partnership Initiative', but the website does not allow its access. Link: http://opendata.virovitica.hr/
[40] http://science.geof.unizg.hr/osgl/index.php/about/
[41] https://ena.regos.hr/
[42] https://publicadministration.un.org/en/Research/Case-Studies/unpsacases/ctl/NominationProfilev2014/mid/1170/id/3203
[43] https://2014.dorscluc.org/
[44] https://interoperable-europe.ec.europa.eu/collection/open-source-observatory-osor/news/open-source-streamlines-pensi
[45] https://interoperable-europe.ec.europa.eu/collection/open-government/news/croatian-government-creates-w

change in the structure of the Croatian government, there is no evidence that these working groups are still active, nor has HrOpen mentioned their existence.

- Croatian Scientific Bibliography (CROSBI), 1996[46]: This project was started in 1996 as a project approved by the Ministry of Science and Technology (now the Ministry of Science and Education), and the first version was launched in 1997. It is an information system that integrates and interconnects a large amount of information on scientific research in Croatia: about scientists, institutions, projects, research, publications, products, patents, equipment, services, and so on. Its application programming interface is available on GitHub[47].

---

[46] https://www.bib.irb.hr:8443/  - https://wiki.srce.hr/display/CRORIS/O+CroRIS-u
[47] https://github.com/AceTep/croris---CROSBI-api