



DG DIGIT

Unit.D2 (Interoperability Unit)

Open Source Software Country Intelligence Report

Ukraine

2021

This research was carried out for the ISA2 Programme by Wavestone’s European Services team. This report was enriched with the kind contribution of experts from the Ministry of Digital Transformation of Ukraine.



Authors

Vivien Devenyi (vivien.devenyi@wavestone.com)

Debora Di Giacomo (debora.digiacomio@wavestone.com)

Corinna Vetter

Contact us



EU-OSOR@ec.europa.eu



<https://joinup.ec.europa.eu/collection/open-source-observatory-osor>



@OSOReu

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Updated in August 2021

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Ukraine

Executive Summary

The Ministry of Digital Transformation of Ukraine (*Міністерство цифрової трансформації України*) is the central executive government body in Ukraine responsible for digital transformation both at national and local levels. It was founded in 2019 with the explicit goal to digitalise government services. The responsibility for Ukraine's eGovernment strategy/policy also lies within the Ministry of Digital Transformation. The relevant parliamentary committee, the Vekhovna Rada Committee of Digital Transformation (*Комітет з питань цифрової трансформації*) is responsible for similar issues on parliamentary level. It must be noted that there are no explicit references to open source software (OSS) made by either body. The Ministry of Digital Transformation of Ukraine is responsible for the national digitalisation programme that covers the procurement of software for central and municipal levels of government, including OSS. In the past five years, Ukraine has completely overhauled its legal framework regarding digitalisation and eGovernment. However, it appears that there is no overarching policy in place to encourage the specific uptake of OSS adoption in Ukrainian public administrations.

Actors

This section presents the key governmental bodies that are responsible for setting OSS policies and the main strategic players that work together with the government at all levels to raise awareness on OSS.

Policy makers

- The Ministry of Digital Transformation of Ukraine (MDT)¹ (*Міністерство цифрової трансформації України*) was founded in 2019. It is the government body closest to policymaking in areas related to OSS, however, there are no explicit references to OSS on its website. The ministry is the central authority in Ukraine responsible for digital transformation of Ukraine both at national and local levels. The responsibility for Ukraine's eGovernment strategy/policy also lies within the Ministry of Digital Transformation. Additionally, it formulates and implements state policies in the sphere of digital economy, digital innovation, eDemocracy, development of information society, development of digital skills and rights of citizens, open data, eCommerce and eBusiness, smart infrastructure of cities and communities, information protection, development of IT industry. According to the Cabinet of Ministers of Ukraine, as stated in Resolution No. 856 Questions on the Ministry of Digital Transformation of Ukraine, the

¹ <https://thedigital.gov.ua/>

Ministry is responsible for the national digitalisation programme that covers procurement of software for both central and local governmental levels.

- The relevant parliamentary committee, the Vekhovna Rada Committee of Digital Transformation (*Комітет з питань цифрової трансформації*)² was created to advocate for furthering the legislative framework in the sphere of eGovernance and digitalisation. The priorities of the Committee include the development of a digital society, driving innovation for digital entrepreneurship, the development of eCommerce, the implementation of eDemocracy, digital identification as well as others.³ Once again it must be noted that no specific reference to OSS has been made on their website.

Strategic players

- It must be noted that there appears to be no strategic players advocating for OSS policies in Ukraine. In general terms, the IT Ukraine Association is a strategic player in generally advocating for a provision of favourable conditions for the sustainable development of the IT-sphere in Ukraine.⁴

Policy and legal framework

This section summarises the main open source software related policies and legal acts of the last ten years, including the first known milestone in this domain. The list is presented in a chronological order, starting from the most recent milestone.

- With regards to specific strategies, policy frameworks and legal acts, there appears to be no overarching policy in place to encourage specifically the uptake of OSS adoption in Ukrainian public administrations. In 2019, Resolution No. 856⁵ was published by the Cabinet of Ministers of Ukraine, on questions of the Ministry of Digital Transformation. It states the government's requirement for the digitalisation and informatisation of national, regional and sectoral programmes. To further illustrate, the 2019 draft concept of the digital infrastructure development⁶, the Action Plan for eServices⁷ and the Digital Agenda for Ukraine⁸ in Ukraine make no explicit reference to OSS. Further research has found that this lack of overarching policy framework extends itself to internal policies within the Ukrainian public administration, many of which have no clear policy on the use of OSS. However, since 2007, Ukraine has a legislative mandate requiring open access (OA) to publicly funded research. There is a strong community of practice for OA and the development of OA repositories by universities and

² http://w1.c1.rada.gov.ua/pls/site2/p_komity?pidid=3024

³ https://joinup.ec.europa.eu/sites/default/files/inline-files/Digital_Public_Administration_Factsheets_Ukraine_vFINAL_0.pdf

⁴ <https://itukraine.org.ua/en/about-us.html>

⁵ <https://zakon.rada.gov.ua/go/856-2019-%D0%BF>

⁶ [https://thedigital.gov.ua/storage/uploads/files/page/Policy_digital_infrastructure_v3%20\(1\).pdf](https://thedigital.gov.ua/storage/uploads/files/page/Policy_digital_infrastructure_v3%20(1).pdf)

⁷ <https://zakon.rada.gov.ua/laws/show/849-2019-%D0%BF#Text>

⁸ https://issuu.com/mineconomdev/docs/digital_agenda_ukraine-v2_1

research organisations and over 40 repositories have been set up in Ukraine, most of which are based at academic institutions.⁹ Furthermore, in 2002 and 2005 an open source software preference bill¹⁰ were submitted, but both bills were defeated.¹¹ The Ministry of Digital Transformation of Ukraine recognises the necessity to develop a legal framework that would regulate the use of OSS, and will develop it in the nearest future.

Open source software initiatives

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

- eHealth healthcare delivery system, 2017¹²: The eHealth system consists of a central component (CDB), responsible for centralised data storage and information processing, and medical information systems (MIS) that provides user registration, automatic placement, reception and transmission of information and documentation for the provision of health services. The central component, managed by the state and medical facilities, is connected via any trusted medical information system. The eHealth open code is available on GitHub.
- ProZorro.Sale, 2017¹³: ProZorro.Sale is an electronic trading system designed for the transparent, quick and efficient sale of state and communal property. Its purpose is to prevent corruption by equal access to data, public control and customer range expansion. The platform consists of a central database and web platforms that provide communication between the system, organisers, and buyers. ProZorro.Sale is based on open source code and OSS, which reduce the development and support costs of the project. It also does not hide the internal working mechanism and allows professionals to check the underlying code at any time. The ProZorro.Sale project actively uses the Open Contracting Data Standard, which improves the structuring, accessibility and disclosure of information related to the sales and contract processes. The ProZorro.Sale open code is available on GitHub¹⁴.
- Rada4you, 2016¹⁵: The Rada4you or "They vote for you" website enables citizens to track how their representatives are performing their duties, for example, how they attend plenary sessions and how they vote for important bills. After analysing these data, it's possible to conclude

⁹ <http://www.unesco.org/new/en/communication-and-information/portals-and-platforms/goap/access-by-region/europe-and-north-america/ukraine/>

¹⁰ <https://www.csis.org/analysis/government-open-source-policies>

¹¹ <http://openprocurement.org/en/>

¹² <https://portal.ehealth.gov.ua/>

¹³ <https://prozorro.sale/>

¹⁴ <https://github.com/openprocurement/openprocurement.auctions.dgf>

¹⁵ <https://rada4you.org/>

whether the political position of the representatives coincides with their election promises. The open code of the project is on GitHub¹⁶.

- ProZorro public procurement platform, 2015¹⁷: The system reform of public procurement in Ukraine was launched in February 2015. The main aim of ProZorro is to transform tender processes into electronic format, as well as to ensure the transparency and openness of these processes. ProZorro is based on a hybrid electronic system, developed using free open source software. All information is stored in a central database and structured in accordance with the Open Contracting Data Standard, enabling cross-country data comparison and analysis. ProZorro’s openly available code is found on GitHub¹⁸.
- Code Club UA, 2015¹⁹: Code Club UA is a network of free programming clubs. Within the framework of this project, volunteers have the opportunity to teach children of 9-11 years old to write computer programmss, create computer games, animations and websites. Lessons in the club are held once a week in schools (or libraries, kids clubs) after classes. Within an hour, children study and implement one project. The open code is available on GitHub²⁰.
- OpenProcurement toolkit, 2014²¹: The toolkit was designed specifically for the procurement of goods and services on behalf of public authorities. The toolkit was developed for the Ukrainian ProZorro public procurement reform, but later was also used in other state and commercial projects in Ukraine, Moldova, and Georgia. OpenProcurement.io is a high-load and multi-platform software. Its components can be used together or separately as a part of procurement solution. The OpenProcurement toolkit is available on GitHub²². The toolkit’s architecture consists of the following modules:
 - Central Database is the main database that stores all information related to the organization of procurement and manages business processes;
 - eAuction module is responsible for conducting auctions;
 - Document service stores documents registered during the procurement process and enables interaction with all the platforms involved;
 - Chronograph is a synchronization instrument that is responsible for tracking when an event ends and launching the next task;

¹⁶ <https://github.com/OPORA/publicwhip>

¹⁷ <https://prozorro.gov.ua/>

¹⁸ <https://github.com/openprocurement/openprocurement.api>

¹⁹ <https://codeclub.com.ua/>

²⁰ <https://github.com/teodorovych/CodeClubUA>

²¹ <https://openprocurement.io/>

²² <https://github.com/openprocurement/openprocurement.auction>

- OCDS API structures data into the OCDS format. The toolkit was developed in cooperation with the Open Contracting Partnership. Their Open Contracting Data Standard was developed to enable data disclosure and increase contracting transparency.
- OpenBudget, 2014²³: The OpenBudget project aims to help local authorities to become more accountable and transparent, and for citizens to understand how public funds are spent. The project's software toolkit allows local authorities to create visualisations based on their financial and statistical information. These include, for example, data on the revenue and expenditure of the local budget, local programs, key indicators of the cities'/regions' activity, budget-forming processes, title lists of construction and repair. The OpenBudget portal is intended to change the quality of reporting on public funds expenses by public authorities. The OpenBudget project combines the use of open source, open data, and e-governance in a set of tools that bring the interaction between citizens and government to a qualitatively new level. All OpenBudget code is open and accessible on GitHub²⁴.
- Scientific Periodicals of Ukraine, 2011^{25,26}: The URAN Publishing Service and its project 'Scientific Periodicals of Ukraine', the nation-wide academic e-publishing platform, is based on the open source software OJS (Open Journal Systems), adapted to the needs of local publishers.

²³ <https://openbudget.in.ua/>

²⁴ <https://github.com/kavaleriy/budget>

²⁵ <https://github.com/ehealth-ua>

²⁶ <https://eufordigital.eu/eapconnect-supporting-academic-publishing-in-ukraine/>

