

DG DIGIT Unit.B2 (Interoperability & Digital Government Unit)

# Open Source Software Country Intelligence Report Hungary 2024

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 Hungary as of November 2024. This report is based on publicly available information that was gathered through desk research.



#### Authors

2024 version	2020 version
Maygane Janin ( <u>may@openforumeurope.org</u> )	Giorgio Cacciaguerra Ranghieri
Axel Thévenet (axel@openforumeurope.org)	Federico Chiarelli
Jan Ainali ( <u>info@openbydefault.se</u> )	Vivien Devenyi
	Debora Di Giacomo
	Eleonora Zoboli

#### **Contact OSOR**



EU-OSOR@ec.europa.eu



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



@InteroperableEU

#### Disclaimer

The information and views set out in this study are those of the author(s) and do not necessarily reflect the official opinion of the European Commission. This study has been carried out for information and consultation purposes only. It has not been adopted and should not be regarded as representative of the views of Commission staff. Neither the European Commission nor any person acting on the European Commission's behalf may be held responsible for the use which may be made of the information contained therein.

© European Union, 2024



The reuse policy of the European Commission is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0)

licence (https://creativecommons.org/licenses/by/4.0/). This means that reuse is allowed provided appropriate credit is given and any changes are indicated. For any use or reproduction of photos or other material that is not owned by the EU, permission must be sought directly from the copyright holders.

Updated in November 2024

# Table of Contents

Executive Summary	3
Actors	3
POLICY AND LEGAL FRAMEWORK	5
OPEN SOURCE SOFTWARE INITIATIVES	6

# Hungary

# Executive Summary

Following the Hungarian government's attempts to promote the use and development of open source software (OSS) in the first half of the 2010's, recent changes in the structure of the country's public administration appear to have led to a slowdown in the use and development of OSS.

The promotion of open source across public administration bodies in Hungary, both at the national and local level, appears to have reached a peak around 2015 and 2016. At that time, the government had recently adopted Decrees 1236/2016 and 1604/2016 on the dissemination of open source software and open standards in the public sector, and had launched the Digital Success Programme to drive the digital transformation of the country including through OSS in the public sector. This programme came under the supervision of the Ministry for Innovation and Technology during the 2018-2022 legislative period and was shut down in 2022.

The shutdown of the Digital Success Programme is characteristic of a number of structural changes in the government bodies responsible for Hungary's digital transformation since 2020. These changes have notably led to the non-renewal of the mandate of the Ministry of Innovation and Technology and to the parallel establishment of the Digital Hungary Agency, as well as the transfer of the Digital Success Programme's responsibilities to KIFÜ – the Hungarian Digitalisation Service. In line with these structural shifts, the latest digitalisation strategy (2020-2030) replaced the previous National Infocommunication Strategy (2014-2020) without keeping the mention of open source.

# Actors

This section presents the key governmental bodies and strategic players influencing awareness and uptake of OSS within Hungary's government and public sector.

### Policymakers

Digital Hungary Agency (Digitális Magyarország Ügynökseg, DMU)<sup>1</sup>: Established in 2020, the Agency is responsible for the entire ICT infrastructure of the Hungarian government and is tasked with leading Hungary into a "well-functioning 21st century". Under the supervision of the Prime Minister's Office, the Agency coordinates the initiatives led by the different ministries and is responsible for all tasks related to IT and eGovernment development. In particular, the Agency is responsible for the creation of Hungary's digital citizenship and its cloud service. The Agency's mandate does not specifically cover open source.

<sup>&</sup>lt;sup>1</sup> Digital Hungary Agency

- National Infocommunications Service Provider (Nemzeti Infokommunikációs Szolgáltató NISZ)<sup>2</sup>: The NISZ provides services mainly to Hungarian public administration bodies and institutions. Its mandate is to strengthen the national ICT infrastructure, to continuously improve the quality of governmental services, and to facilitate users' access to modern eGovernment solutions. Its OSS projects include the Municipality Application Service Provider (ASP), eGovernment central systems and services, and transport IT systems. NIZS reportedly also uses OSS for internal purposes, including LibreOffice.
- The Ministry for Innovation and Technology (Innovációs és Technológiai Minisztérium)<sup>3</sup>: This ministry, mandated for the 2018-2022 legislative cycle, was responsible for policy and strategy-making with regard to the development of IT infrastructure and information society in Hungary. It was also overseeing the Digital Success Programme (see below). Publicly available information about this Ministry indicates that its mandate was not renewed for the 2022 legislative cycle (ongoing), and this timing coincides with the establishment of the aforementioned Digital Hungary Agency in the same year. It can be fairly assumed that the Agency is the successor to the Ministry and has taken over its main responsibilities regarding the digitalisation of the Hungarian government.

#### Strategic players

- KIFÜ The Hungarian Digitalisation Service<sup>4</sup>: KIFÜ provides ICT services to the Hungarian public sector. The service is funded by the European Union, in partnership with the Hungarian government through the Széchenyi 2020 Programme (which supports the management of EU funds in the country). KIFÜ provides a wide range of digital and ICT-related services to the Hungarian public sector, from WiFi access to skills training.
- Digital Success Programme (Digitális Jólét Programme, DJP)<sup>5</sup>: The Hungarian government created the DJP in 2015 following a national consultation about Internet and digital development in the country. Its mandate was renewed in 2017 and it later came under the supervision of the former Ministry for Innovation and Technology. DJP was to drive the digital transformation of Hungary, for the public and private sectors as well as for citizens, especially to support the development of OSS amongst Hungarian SMEs. However, following a restructuring of the Hungarian government agencies and public sector initiatives responsible for digital transformation, the DJP is no longer active and its responsibilities have been absorbed into KIFÜ.<sup>6</sup>
- The Hungarian eGovernment Open Source Software Competence Centre (E-közigazgatási Szabad Szoftver Kompetencia Központ)<sup>7</sup>: The Centre was set up to improve the interoperability of the Hungarian government's IT system through open source. It appears to have reached a peak of activity in 2013 and again in 2016 following national legislation on open source in the public sector (see next section). The Centre had notably made available a number of resources on how to use open source. However, the Centre is no longer active.

<sup>&</sup>lt;sup>2</sup> Nemzeti Infokommunikációs Szolgáltató

<sup>&</sup>lt;sup>3</sup> Innovációs és Technológiai Minisztérium

⁴ <u>KIFÜ</u>

<sup>&</sup>lt;sup>5</sup> Hungary and Open Source: the Digital Success Programme 2030, OSOR

<sup>&</sup>lt;sup>6</sup> A Digitális Jólét NKFT. Megszűnésével Feladatait A KIFÜ Veszi Át

<sup>&</sup>lt;sup>7</sup> EKOP-1.2.15 E-közigazgatási Szabad Szoftver Kompetencia Központ létrehozása, Palyazat.gov.hu; <u>A kormány 200 millió forintot</u> költött a szabad szoftverek elterjesztésére az államigazgatásban, Egov.hu

# Policy and legal framework

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

- Hungary National Digitalisation Strategy 2022-2030<sup>8</sup>: This aligns Hungary's digitalisation efforts with the EU Digital Decade Policy Programme. The Strategy has a strong focus on improving Internet infrastructure and skills in the country and is built around four pillars: digital infrastructure, digital skills, digital economy, and the digital state. The Strategy also emphasises the increased use of eGovernment services, but does not mention open source nor interoperability.
- National Infocommunication Strategy 2014-2020<sup>9</sup>: This document outlined the necessary objectives to achieve a digital state, including "a stable and secure government IT background". The strategy aimed for open source code applications to reach 15% for new software and applications installed in public administrations. This strategy is the predecessor of the National Digitalisation Strategy 2020-2030 mentioned above.
- Decree 1236/2016<sup>10</sup>: This decree, which covers measures to disseminate open standards and open source software to the public,<sup>11</sup> requires the development of provisions towards the use and development of open standards and open source software in the public sector. Under the overall supervision of the Ministry of the Interior, responsible for its monitoring and evaluation, the decree is to be implemented through inter-ministerial cooperation including via the setup of a dedicated forum to disseminate open source. The decree also tasks NISZ to ensure that OSS is installed on workstations in central governmental bodies. A follow-up legislation, 1604/2016,<sup>12</sup> was adopted to ensure that the necessary implementation measures were implemented. The adoption of these two decrees coincides with the last peak of activity of the Hungarian eGovernment Open Source Software Competence Centre. Since 2016, there has been no publicly available information on the decrees and the related implementation measures.
- Decree 1479/2011<sup>13</sup>: This decree covers the format of electronic documents used by public administrations and the use of open source office software, and mandates the standardisation of electronic communication at the national government level (with the exception of the Ministry of Defence and bodies under it). It is based on international standards and recommends OSS for its cost-effectiveness and cooperation efficiency.

<sup>&</sup>lt;sup>8</sup> <u>Hungary 2024 Digital Decade Country Report, European Commission; Hungary Internet: An In-Depth Analysis of Hungary's National Digitalisation Strategy 2021-2030, EUStartup.news;</u>
<sup>9</sup> <u>National Infocommunication Strategy 2014-2020</u>

<sup>&</sup>lt;sup>10</sup> Decree 1236/2016

<sup>&</sup>lt;sup>11</sup> Hungary 2024 Digital Decade Country Report, European Commission; Hungary Internet: An In-Depth Analysis of Hungary's National Digitalisation Strategy 2021-2030, EUStartup.news;

<sup>&</sup>lt;sup>12</sup> Decree 1604/2016

<sup>&</sup>lt;sup>13</sup> Decree 1479/2011

# Open source software initiatives

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

- Budapest City Council's GitHub page (2020-onwards)<sup>14</sup>: Maintained by the municipality of Budapest, this GitHub repository provides insights into the use and development of open source software by the local government in the Hungarian capital and indicates regular updates in 2023-2024. Popular projects listed on the repository include a Covid-19 test booking system (see below) and a tool for local residents to organise and book meetings. However, there is limited information available about Budapest City Council's use of OSS beyond this GitHub repository; this lack of information may be explained by the recent update of the Budapest's municipality website in early 2024.
- Free Software Conference (Szabad Szoftver Konferencia, 2005-2022)<sup>15</sup>: Organised on-and-off since 2005<sup>16</sup>, the Free Software Conference aimed at promoting knowledge of open source software amongst the public and private sectors in Hungary. The last edition was held in Szeged in 2022, in partnership with the DJP.
- Automated Reporting Process (2023)<sup>17</sup>: Developed by Switzerland-based start-up KNIME, this project is
  part of a government initiative to reform the provision of access to public services in Hungary through
  so-called "Government windows". A no-code solution based on KNIME's open source toolkit<sup>18</sup>, this
  project has led to the creation of a new integrated management system for public services across the
  country. This created a unified reporting approach for all government offices in Hungary.
- Szoftver Alaspcsomag (2021)<sup>19</sup>: An open source operating system developed by the Hungarian government, through the DJP and with support from the Ministry of Innovation and Technology. This operating system, said to come with elements including web browser and email, was to support the digitalisation of the country and was available for all Hungarians to use. It also included information about open source. As of October 2024, the website for downloading the system was no longer available.
- Covid-19 Testing-Booking 1-0 (2020)<sup>20</sup>: Developed by the municipality of Budapest, this application aimed to provide local residents with a facilitated system to book Covid-19 rapid testing. The system was released under an MIT licence and the source code was made available via GitHub<sup>21</sup> with additional technical specifications published on a dedicated website.<sup>22</sup>

<sup>&</sup>lt;sup>14</sup> <u>Budapest City Council - GitHub</u>; please note that the indicated start date is approximate and based on information available about popular projects listed on the repository.

<sup>&</sup>lt;sup>15</sup> Free Software Conference 2022

<sup>&</sup>lt;sup>16</sup> Free Software Conference Archive

<sup>&</sup>lt;sup>17</sup> How the Hungarian Government automated reporting processes

<sup>18</sup> KNIME on GitHub

<sup>&</sup>lt;sup>19</sup> Szoftver Alapcsomag, Digitális Jólét Program

<sup>&</sup>lt;sup>20</sup> test-booking 1.0

<sup>&</sup>lt;sup>21</sup> Test-booking 1.0 on GitHub

<sup>&</sup>lt;sup>22</sup> test-booking 1.0

- Municipality Application Service Provider (2017)<sup>23</sup>: The Hungarian central Municipality ASP (Önkormányzati ASP) provides integrated shared management services for local administrations. The ASP aims to ensure a standardised internal operation and common platform for eGovernment services at the local government level. The project uses OSS components, notably the SUSE Linux Enterprise operating system.
- VinGis (2000)<sup>24</sup>: VinGis is the former registry of Hungarian vineyards. The mapping of the Hungarian wine sector was a necessary step for Hungary's accession to the EU in order to manage the allocation of EU subsidies for vineyards. VinGis was developed using open source software by an independent institute. VinGis has now been merged with the central government and been integrated into the State Treasury as the Agricultural Support Cartography Department. There is no publicly available information as to the use of open source following the merger.
- OSS in various Hungarian local administrations (since 2004): A number of local public administrations across Hungary use open source software and have gradually transitioned towards open standards. OSS is primarily used at the local level for operating systems (such as Linux), web browsers (such as Firefox), and productivity software (LibreOffice). Local public administrations using OSS include: Szeged (Hungary's historical university city), Miskolc, Törökbálint,<sup>25</sup> Salgótarján, and several districts of Budapest.<sup>26</sup>
- OSS in Budapest (2012)<sup>27</sup>: The XI. District (Újbuda) signed a cooperation agreement with the Ministry of Justice in 2012 to enable hundreds of employees to participate in the training on open source software.

<sup>&</sup>lt;sup>23</sup> Önkormányzati ASP

<sup>&</sup>lt;sup>24</sup> VINGIS

<sup>&</sup>lt;sup>25</sup> E-közigazgatás szabad szoftverekkel, Újbuda XI kerület

<sup>&</sup>lt;sup>26</sup> E-közigazgatás szabad szoftverekkel, Újbuda XI kerület

<sup>&</sup>lt;sup>27</sup> Nyílt szoftverek a közigazgatásban Az átállás eredményei Törökbálinton 2008/2

