

DG DIGIT Unit.B2 (Interoperability Unit)

# Open Source Software Country Intelligence Report Bulgaria 2023

The initial research was carried out for the ISA2 Programme by Wavestone's European Services team. This is an updated version of the report by OpenForum Europe, written for the Interoperable Europe initiative under the Digital Europe Programme. The report provides an overview of the state of open source software (OSS) in Bulgaria as of July 2023 and was enriched with the kind contribution of Bozhidar Bozhanov, Chairman of the Committee on Electronic Governance and Information Technologies, Bulgarian Parliament.





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



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# Bulgaria

# Executive Summary

Bulgaria has taken significant steps to make open source software compulsory for all new government software as part of implementing the June 2016 amendment to the Law on Electronic Governance (or "the eGovernment Act"). There have been no new landmark pieces of legislation since then, but Bulgaria is now consolidating its approach towards open source. While the law's implementation has stayed on track with its earlier objectives, it lacks coordinated enforcement.

As part of the 2016 legislation, the Bulgarian Parliament also approved plans to create a repository for software developed by and for the government. The repository is now online and mirrored on the government's GitHub account. However, there are only a few projects in the repository, and the number of contributors and activity remains low. Open source software is indirectly managed by the Ministry of e-Governance, created in 2021, which replaced the State eGovernment Agency (SEGA) and is in charge of digitising the administration.

While there were some active groups in Bulgaria promoting the use of open source software in the government, they now seem to be less active. This can be partly attributed to the complex political climate. Open source was pushed to the forefront of public policy but the government–faced with many fast changes–was unable to maintain this push.

## Actors

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

## Policy makers

- The current Ministry of e-Governance was created in 2021<sup>1</sup> and is now in charge of activities related to free flow of data, data economy, and information society.
- Until 2021, free flow of data, data economy, and information society were competences of the Ministry of Transport, Information Technology and Communications<sup>2</sup> through the Information Technologies Directorate. Within the Directorate, the State eGovernment Agency (SEGA)<sup>3</sup> was established in 2016 as an executive agency for "electronic governance". It performed activities relating to the field of electronic governanc (including electronic certification services), electronic

<sup>&</sup>lt;sup>1</sup> <u>https://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=166549</u>

<sup>&</sup>lt;sup>2</sup> https://web.archive.org/web/20220822081050/https://www.mtc.government.bg/en (Or alternatively, Ministry of Transport,

Information Technology and Communications )

<sup>&</sup>lt;sup>3</sup> About Us - State e-Government Agency

identification, network and information security, spatial information infrastructure and public-sector-related information in machine-processable open source code.

#### Strategic players

Obshtestvo.bg Foundation ("Society")<sup>4</sup> is a group of volunteers composed of software experts, programmers, developers, designers, and lawyers who describe themselves as independent creators of electronic tools for fast and convenient state-citizen communication. With campaigns on transparency in policy and government, they promote the use of open source as a tool to achieve a more democratic public administration. They also develop and publish their own software as open source, hosted on a public repository.<sup>5</sup>

# Policy and legal framework

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

- Agreement On Joint Management Of The Republic Of Bulgaria In The Period 2021 2025<sup>6</sup>: In its 8th annex on Digital Policy, the coalition agreement is engaging on wider digitalisation. It also focuses respecting regulatory requirements for open source software development.
- The Strategy for the Development of Electronic Government in the Republic of Bulgaria 2019 2025<sup>7</sup> calls for all e-government initiatives undertaken to respect the following basic principles: Using common standards, modular architectures and open source software (OSS) in the public sector and providing diverse and highly configurable and interoperable services. It also requires that software, data, and tools generated by the public sector be reused and openly accessible.<sup>8</sup>
- The Ordinance on the General Requirements for Information Systems, Registers, and Electronic Administrative Services, adopted by the Order No 3 of 09.01.2017 regulates the conditions for the release of public software source code.<sup>9</sup> Among other things, it defines the conditions for sharing data, the use of open formats and the recognised open source licences to be used by the administration when sharing source code.
- The 2016 amendment to Article 18 of the 2007 eGovernment Act<sup>10</sup> requires the government to "implement and maintain a public, national source repository and revision control system for source code and technical documentation of information systems in public administrations".

<sup>&</sup>lt;sup>4</sup> <u>Софтуерът, изработван за държавата и плащан от данъкоплатците, трябва да е публична собственост, с отворен код и да се разработва прозрачно и по гъвкава методология.</u>

<sup>&</sup>lt;sup>5</sup> obshtestvo - Общество · GitHub

<sup>&</sup>lt;sup>6</sup> <u>СПОРАЗУМЕНИЕ за съвместно управление на Република България в период 2021 г. – 2025 г. - Продължаваме</u> <u>Промяната</u>

<sup>7</sup> Актуализирана стратегия за развитие на електронното управление в Република България 2019-2025 г.

<sup>&</sup>lt;sup>8</sup> Ibid, p.33

<sup>&</sup>lt;sup>9</sup> Наредба за общите изисквания към информационните системи, регистрите и електронните административни услуги

<sup>&</sup>lt;sup>10</sup> Законопроекти - Народно събрание на Република България.

Furthermore, Article 58 of the eGovernment Act states that administrative authorities must include the following requirement: "When the subject of the contract includes the development of computer programs, computer programs must meet the criteria for open-source software; all copyright and related rights on the relevant computer programs, their source code, the design of interfaces, and databases which are subject to the order should arise for the principal in full, without limitations in the use, modification, and distribution; and development should be done in the repository maintained by the agency in accordance with Art 7c pt. 18." This signifies that Bulgaria has instructed its public administrations to develop their IT solutions as free and open source software. This amendment applies to newly created code.

- The eGovernment Development Strategy implementation road map for the Republic of Bulgaria for the period 2016 – 2020<sup>11</sup> outlines the use of open source software in the government and adds it as a requirement to the preliminary criteria for the eligibility of eGovernment projects. The Strategy states that:
  - all rights with regard to the interface design and the source code of the project must be transferred from the contractor to the contracting party;
  - the source code developed for the project must be made publicly available in an online Revision Control System during development;
  - for all projects, it should be explored whether the whole or part (i.e. libraries, packages, and modules) of the software can be based on existing open source software; If it is financially justified, using open source is the preferred approach;
  - to facilitate the use of the online Revision Control System and to guarantee the real time availability of the latest version of the source code. The system should function as the central and original repository.
- Bulgarian Operational Programme "Good Governance" for 2014 2020 outlined the priorities and objectives to invest nearly €336 million to help modernise the public administration of Bulgaria. With an important focus on openness of government, the program had strong recommendations on open data.<sup>12</sup> It also recommended creating the Developers Portal where public software source code is being distributed today.<sup>13</sup>

# Open source software initiatives

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

<sup>&</sup>lt;sup>11</sup> Стратегически документи - Държавна агенция "Електронно управление"

<sup>&</sup>lt;sup>12</sup> Operational Programme Good Governance.

<sup>&</sup>lt;sup>13</sup> Портал за разработчици

- Budibase, 2022<sup>14</sup>: When faced with the sudden need for a strong infrastructure after the invasion of Ukraine and the first arrivals of refugees, the Bulgarian government partnered with an open source software project Budibase to handle registering thousands of people. This allowed the Bulgarian government to satisfy urgent humanitarian relief needs.
- eDelivery, 2022<sup>15</sup>: Updated in 2022, this Bulgarian government system was released as open source following the European Commission specifications. It allows a safe exchange of electronic documents between citizens and administrations.
- OpenFest 2003 –2023<sup>16</sup>: it is the biggest Bulgarian conference dedicated to free culture, free knowledge sharing, and free and open source software. It is held annually in Sofia and features talks and panels on open innovation and open source.
- Sofia's Vision Plan "Measures for The Long-Term Development of the Metropolitan Municipality", 2019:<sup>17</sup> Among others, the plan sets up the appointment of a Chief Information Officer reporting directly to the Mayor of Sofia. This CIO is given responsibility for establishing requirements for products to be produced and procured as well as respecting the standards established by regulations on open source.<sup>18</sup>
- Portal for vacancies in the administration, 2019<sup>19</sup>: In accordance with the Civil Servants Act, notices of competitions for civil servants are published in the Administrative Register at the same time as they are published on a specialised job search website or portal which was developed as open source.<sup>20</sup>
- Portal for access to software systems, 2019<sup>21</sup>: The State eGovernment Agency developed a portal that gives access to software systems and development resources. This repository is mirrored on the government's GitHub account.<sup>22</sup> The account was officially created in 2017 by the Administration of the Council of Ministers and is administered by the State eGovernment Agency. The source code of government-commissioned projects is published there. Despite several efforts, the repository lacks participation.
- EUPL, 2017<sup>23</sup>: The government of Bulgaria has made the European Union Public Licence (EUPL) the preferred licence to be used for governmental software development projects. A 2017 ordinance now lists eight popular free and open source software licences approved by the Open Source Initiative (OSI)<sup>24</sup>

<sup>&</sup>lt;sup>14</sup> Why the Bulgarian Goverment chose Budibase

<sup>15</sup> Система за сигурно електронно връчване

<sup>&</sup>lt;sup>16</sup> About OpenFest

<sup>17</sup> МЕРКИ ЗА ДЪЛГОСРОЧНО РАЗВИТИЕ НА СТОЛИЧНА ОБЩИНА

<sup>&</sup>lt;sup>18</sup> Ibid, page 423 and 424.

<sup>&</sup>lt;sup>19</sup> Портал за работа в държавната администрация

<sup>&</sup>lt;sup>20</sup> <u>https://dev.egov.bg/PDev/responseSubjectsView.jsf</u>

<sup>&</sup>lt;sup>21</sup> Портал за разработчици

<sup>&</sup>lt;sup>22</sup> e-Government Ministry, Republic of Bulgaria · GitHub

<sup>&</sup>lt;sup>23</sup> https://joinup.ec.europa.eu/sites/default/files/custom-page/attachment/eupl\_v1.2\_bg.pdf

<sup>&</sup>lt;sup>24</sup> Licenses – Open Source Initiative

- Open source in the state", 2014<sup>25</sup>: This campaign by the association "Society"<sup>26</sup>, aimed at reforming the way digital services were being created in Bulgaria. It explains how software is made in the country and how it can be done in a transparent and efficient way, with all development being open.
- AISKAO, 2013<sup>27</sup>: The Automated Information System for Complex Administrative Services, is a
  portal for requesting administrative services electronically. Users can also check the status of an
  already requested service, regardless of the channel it was requested through (even at the
  counter). The code for this service is published on GitHub.<sup>28</sup>
- Open data portal<sup>29</sup>: This Bulgarian portal represents a central, public, web-based database where governmental institutions publish information they collect. It allows easy processing and display in a more understandable form. The information is in machine-readable format. First developed by the Obshtestvo.bg Foundation, the portal is powered by the open source platform CKAN, which has been developed by the Open Knowledge Foundation.<sup>30</sup>
- OpenProjects Foundation, 2007<sup>31</sup>: Now discontinued, it was an open source advocacy group with the mission to distribute and promote the use of free and open source software. The foundation previously organised OpenFest.
- Internet Society Bulgaria, 1995<sup>32</sup>: This is a non-governmental organisation, founded on 4 December 1995 in Sofia by a group of Bulgarian Internet professionals.<sup>33</sup> It was instrumental in the initial digitalisation of the country. Nowadays, the association has a more limited number of projects but publishes documents occasionally on initiatives or campaigns related to data protection and democratic questions.

<sup>&</sup>lt;sup>25</sup> <u>Софтуерът, изработван за държавата и плашан от данъкоплатците, трябва да е публична собственост, с отворен код и да се разработва прозрачно и по гъвкава методология.</u>
<sup>26</sup> Общество, бг

<sup>&</sup>lt;sup>27</sup> governmentbg/AISKAO: АИСКАО - Автоматизирана информационна система за комплексно административно обслужване

<sup>&</sup>lt;sup>28</sup> governmentbg/AISKAO: АИСКАО - Автоматизирана информационна система за комплексно административно обслужване обслужване

<sup>&</sup>lt;sup>29</sup> Портал за отворени данни

<sup>&</sup>lt;sup>30</sup> Bulgarian open data portal driven by Council of Ministers and civil society (Open Data Bulgaria) | Joinup

<sup>&</sup>lt;sup>31</sup> Фондация "Отворени проекти"

<sup>32</sup> Интернет общество

<sup>&</sup>lt;sup>33</sup> A Brief History of the Internet and Related Networks

