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Republic of North Macedonia

Executive Summary

In the Republic of North Macedonia, the Ministry of Information Society and Administration (MISA) is the main governmental body responsible for the development of information society, including the drafting of national policies on digitalisation. The coordination and drafting of future strategies on open source software (OSS) will fall under the responsibility of MISA.

The draft National Policy for OSS (2011)[1] was developed by the Free Software Macedonia non-profit organisation, with the support of Metamorphosis and Foundation Open Society Institute Macedonia (FOSIM), in cooperation with MISA. In the 2005 National Information Society Policy (NISP), it is mentioned that free software and software with open source code is necessary to be supported, as it is considered as a public good.

The Republic of North Macedonia introduced migrations to OSS in 2006, upon launching the Computer for Every Child initiative. As part of this governmental initiative, it was decided that school computers would migrate to the Linux operating system, more specifically, Edubuntu[2].

Actors

This section presents the policy makers who are active in digitalisation efforts and influence the status of open source in public sector, as well as the main strategic players that work together with the government at all levels to raise awareness on OSS. In North Macedonia, there is no governmental body that is specifically responsible for OSS policies.

Policy maker

- The Ministry of Information Society and Administration[3] is responsible for various activities related to the development and promotion of the information society, including oversight on ICT, infrastructure development, policy coordination and public administration reform.

Strategic players

- Free Software Macedonia[4] (*Слободен софтвер Македонија*, Sloboden softver Makedonija) is a non-profit organisation that is dedicated to the promotion of free software in order to create awareness and contextualise its use from an economic and socio-ethical perspective. Free Software Macedonia organises events and is actively involved in projects dealing with the adoption of free software in the public sector such as software migrations, open data initiatives,

[1] The National Policy for OSS (2011) is not adopted, as reported in March 2021.
[2] Since Edubuntu's last version's end-of-life date of 2019, the operating system has not received any further updates.
[3] https://mioa.gov.mk/?q=en
[4] https://slobodensoftver.org.mk/about_free_software_macedonia

free culture initiatives and generally information education in various IT skills using free software tools. One initiative of the group is the KIKA Hacklab[5], founded in 2009, where regular weekly activities are organised.

- The Metamorphosis Foundation[6] (*Метаморфозис)* strengthens the awareness and capacity of citizens and civil society and encourages them to actively use innovative tools to exercise their civil rights and liabilities. The Foundation aims to become a leading advocate of supporting and enabling civic engagement, and calling for accountability of public authorities, with a particular emphasis on the use of information technology and knowledge sharing. The Foundation has shared guides on the use of the Ubuntu Linux operating system[7] and OpenOffice.org[8].

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.

- The draft National Free Software Policy (NPSS)[9] of 2011, proposes to regulate the recommendations for the use, procurement and support of free and OSS, based on the assumption that this type of software is a public good. It was developed by the Free Software Macedonia non-profit organisation, with the support of Metamorphosis and Foundation Open Society Institute Macedonia (FOSIM), in cooperation with MISA.
- The Recommendations for ICT Standards in the State Administration[10] were published in 2007 by the Open Society Institute Foundation, together with the Government of the Republic of North Macedonia and the Metamorphosis Foundation.[11] Prior to its publication, the document received inputs from the Chamber of Commerce, Association of Chambers of Commerce, Free Software Macedonia, Institute for Standardisation of the Republic of Macedonia and other relevant state institutions. The document aims to improve the capacity and adequacy of the use of OSS.
- The National Information Society Policy (NISP) of the Republic of North Macedonia[12] was published in 2005. To complement the NISP, the National Strategy for Information Society Development[13] was adopted by the Macedonian Parliament in 2005. The Strategy detailed the actions necessary to achieve the vision and mission as defined in the NISP. Free Software Macedonia collaborated with the Government Task Force on the e-Citizens pillar of the Strategy,

[5] https://kika.spodeli.org/
[6] https://metamorphosis.org.mk/en/
[7] https://metamorphosis.org.mk/izdanija_arhiva/prirachnik-za-edubuntu-linuks-kako-da-go-napravite-kompjuterot-polesen-za-upotreba/
[8] https://metamorphosis.org.mk/izdanija_arhiva/upatstvo-za-upotreba-na-openoffice-org-2/
[9] https://www.slobodensoftver.org.mk/files/npss.pdf
[10] https://dzlp.mk/sites/default/files/preporaki_za_ikt.pdf
[11] The writers of this document have not uncovered information about the implementation of the recommendations set out.
[12] https://wbc-rti.info/object/document/7939/attach/1386_ICT-policy_Macedonia.pdf
[13] http://arhiva.mioa.gov.mk/?q=node/218

within which it was established that free and open source software is a public good. Furthermore, Objective 6.03 calls for the enablement of accessible e-services using open standardised formats of documentation and exchange of information.

- The National Programme for Development of Education (2005-2015)[14], highlighted in the National E-Content Development Strategy (2010-2015)[15], established the governmental initiative called Computer for Every Child that was launched in late 2006[16]. The initiative is a framework for the government to install the open source Edubuntu distribution of GNU/Linux on all school computer workstations.

Open source software initiatives

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

- Governmental websites: Currently[17], all major government ministries run Drupal[18] or Wordpress for their websites, such as the Covid-19 vaccine registration website[19].

- Lectures on OSS, 2005-2014[20]: Free Software Macedonia held a series of lectures on free software at the technical campus and the social sciences campus of the SS. Cyril and Methodius University of Skopje (UKIM). These lectures focussed on the history of free software, licences, contributing to free software projects software, and the communities around open source projects.

- RuralSchoolCloud, 2013[21]: The RuralSchoolCloud, or RSC project, was led by an EU-funded consortium of research institutes and public administrations which developed and trialled software for rural schools between 2013 and 2015. A total of 15 schools took part in the project from Denmark, Italy, Greece, the Republic of North Macedonia, Spain, and the United Kingdom. The RSC solutions were based on various open source applications including Linux and Apache, and the project also used open source cloud solutions. The tools facilitated better collaboration between teachers in rural areas.

- ICT Guide (no. 7) on Open Educational Resources, 2012[22]: The Metamorphosis Foundation published the ICT Guide in 2012. It is a document intended for sharing knowledge that is accessible and widespread. A dedicated chapter explores open source codes and OSS, as well as the influence that OSS has had on education, such as successful open educational projects,

[14] http://fvm.ukim.edu.mk/documents/Nacionalna-programa-za-razvoj-na-obrazovanieto-vo-Republika-Makedonija-2005-2015.pdf
[15] https://www.mioa.gov.mk/sites/default/files/pbl_files/documents/strategies/strategija_e-sodrzini_2.pdf
[16] More information in section 'OSS initiatives.
[17] As reported in March 2021.
[18] https://groups.drupal.org/government-sites#Macedonia
[19] https://vakcinacija.mk/
[20] https://www.slobodensoftver.org.mk/node/259
[21] https://www.slideshare.net/elearningcesga/rsc-libre-con-2015-54297941
[22] https://metamorphosis.org.mk/izdanija_arhiva/ikt-vodich-br-7-otvoreni-obrazovni-resursi/

some of which contribute to the promotion of formal, others to non-formal education, some in the form of learning resources, others in the form of tools that help the learning process in different ways.

- State Statistical Office analysis, 2011[23]: The State Statistical Office published an analysis of the use of ICT in the public sector. It was found that in 2011, 25% of the public sector entities' computers ran on an open source operating system, such as Linux. The open source Internet browser Mozilla was found to be used on 91.5% of computers and the use of OpenOffice was reports on 63.6% of all public administration workstations.

- Public events to promote the draft National Free Software Policy, 2011[24]: Throughout North Macedonia, in Skopje, Tetovo, Stip and Bitola, public events were held to promote and debate the publication of the National Free Software Policy, currently in draft form. Citizens, academia, local government representatives among others attended the event, and discussed benefits and potential challenges of the use of OSS.

- Municipality of Makedonska Kamenica's OSS migration, 2007[25]: Following a training session provided by the Metamorphosis Foundation and the United States Agency for International Development (USAID) as part of the Make Decentralisation Work three-year programme[26], the Municipality of Makedonska Kamenica migrated to the use of Open Office.

- Computer for Every Child initiative, 2007[27]: As part of the Computer for Every Child initiative, launched by the Ministry of Education and Science and the Ministry for the Information Society, almost all primary and secondary schools were provided with desktops using GNU/Linux and other OSS. The teachers were also trained to use the desktop and its various applications. A budget of €9 million was allocated to the project by the government.[28] Free Software Macedonia also provided support to teachers in becoming acquainted with the new technology.

- Internet access points, 2007[29]: The National Operational Broadband Plan was published in 2007 by MISA[30], which set the national broadband targets. As part of the Computer for Every Child initiative, access points were installed throughout North Macedonia to provide rural and urban areas with Internet access.

- United Nations Development Programme (UNDP) goals implementation, 2006[31]: North Macedonia aims to develop the ICT infrastructure and the technological capacities of the municipalities. OSS was found to be a cost-effective and transparent tool. Several municipalities

[23] https://www.stat.gov.mk/PrethodniSoopstenijaOblast.aspx?id=97&rbrObl=27
[24] http://npss.slobodensoftver.org.mk/2011/04/blog-post.html
[25] https://www.linuxtoday.com/infrastructure/2007022300126osdppb
[26] https://rmportal.net/projects/content/macedonia-make-decentralization-work-program
[27] https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/macedonia-supply-all-schoo
[28] https://www.dw.com/mk/
[29] https://www.dw.com/mk/
[30] https://mioa.gov.mk/sites/default/files/pbl_files/documents/reports/north_macedonia_national_operational_broadband_plan_final_en.pdf
[31] https://joinup.ec.europa.eu/collection/open-source-observatory-osor/document/support-freeopen-source-software-local-level-foss-project

piloted project activities which involved training activities, awareness raising on OSS, and desktop migrations from proprietary software to OSS operating systems and applications.