

DG DIGIT

Unit.D2 (Interoperability Unit)

Open Source Software Country Intelligence Report Latvia 2020

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LATVIA

Executive summary

Latvia has a rich variety of actors and strategic players working to raise awareness on and increase the use of open source software throughout the country. In addition to the work of the Ministry of Environmental Protection and Regional Development of the Republic of Latvia (VARAM) and the State Chancellery of Latvia, prominent strategic players such as the Latvian Open Technology Association¹ and the Linux Centre of the University of Latvia² promote the use of OSS in public administrations and other sectors, advocate for fair procurement processes that actively consider the use of OSS software over proprietary software, and organise awareness-raising activities and events nationwide.

In additional to this diverse scene of actors, there are several policy documents referencing open source software in Latvia. There is a particular focus on the fair treatment of open source software in IT procurement processes in the public sector. Public administrations are mandated to consider open source software on an equal footing with proprietary software, and to make source code available for further development and reuse. Indeed, several state institutions use OpenOffice on their workstations, particularly in the Social Security Agency and the VARAM.

Additionally, there are a wide variety of dynamic open source software related initiatives in Latvia from the last few decades, some of which are particularly notable, such as the winners of LATA's Annual Open Technologies Competition in recent years. The initiatives identified signal a strong willingness among citizens and municipal government staff to move away from proprietary software towards OSS solutions in public administrations.

Actors

This section presents the policy makers who are active in digitalisation efforts and influence the status of OSS in the public sector, as well as the main strategic players that work together with the government at all levels to raise awareness on OSS.

Policy makers

The Ministry of Environmental Protection and Regional Development of the Republic of Latvia³
(VARAM) is responsible for the implementation and coordination of eGovernment policies. They
work to develop effective and modern information and communication technologies in the public

¹ https://www.lata.org.lv/par-lata?lang=en

² http://linuxcentrs.lv/pages/par-mums.html

³ http://www.varam.gov.lv/eng/par_ministriju/

sector in order to improve services, improve internal and inter-institutional cooperation processes, and promote the quality and availability of services offered by the Latvian government.⁴ The Ministry has published several documents recommending the use of open source software within the public sector and listing a set of principles to be considered.⁵

• The State Chancellery of Latvia is a public administration institution reporting directly to the Prime Minister. The Chancellery ensures and controls the compliance of policy documents and legislative initiatives from the Cabinet with current legislation, develops policy action plans, and issues opinions on policy documents and legislative initiatives. While not specifically focussing on open source software, the Chancellery is responsible for the development of the Latvia "Football" mobile application, designed to promote cooperation with citizens in order to reduce administrative burden and bureaucracy. In 2016, the Chancellery opened up the source code and accompanying documentation to the European Commission's Directorate-General for Informatics (DIGIT) to enable them to build a similar application using the same software.

Strategic players

- The Latvian Open Technology Association⁸ (LATA) is a leading and highly influential ICT industry association in Latvia that promotes cooperation between technology suppliers and public sector consumers, including public, municipal authorities, educational and scientific institutions. They promote the openness of technologies, interoperability, reusability, OSS and open standards, along with free and fair competition in procurement processes. Additionally, they carry out awareness-raising activities to educate children about open technologies and open data and promote research and development in these areas. For the last ten years, the have organised an annual conference in January at the University of Latvia, and the event is both popular and influential. Furthermore, LATA successfully lobbied the government to ensure that open source software is placed on an equal footing as proprietary software in government tenders and procurement, and they have played an instrumental role in the promotion of open source software nationwide.
- The Linux Centre of the University of Latvia⁹ is a laboratory in the Department of Programming within the Faculty of Computing which brings together faculty members and OSS enthusiasts from all over Latvia. The mission of the Centre is to promote OSS solutions in Latvia and worldwide by highlighting the convenience and cost-efficiency of such solutions. The Centre

⁴ http://www.varam.gov.lv/eng/darbibas veidi/e gov/

⁵ Confirmed by interviewees. These documents are not publicly available at the time of writing (June 2020).

⁶ https://www.mk.gov.lv/en/content/institution

 $^{^{7}\ \}underline{\text{https://mk.gov.lv/en/aktualitates/latvian-mobile-app-football-be-used-also-other-eu-member-states}}$

⁸ https://www.lata.org.lv/par-lata?lang=en

⁹ http://linuxcentrs.lv/pages/par-mums.html

provides training courses on the design and use of OSS solutions, maintains informative websites, organises open lectures, seminars and competitions, and provides support to other Latvian universities and schools that use or are considering using OSS solutions in the classroom. The Centre predominantly promotes the use of Ubuntu, a specific distribution of Linux, and GNOME, the default desktop environment on Ubuntu.¹⁰

• The Latvian Open Source Association¹¹ (LAKA), founded in 2002, has over 100 members, the majority of which are system administrators and students who are interested in promoting the use of free and OSS solutions. In the past, LAKA has organised events and discussions both independently and in collaboration with the Linux Centre of the University of Latvia.¹² While it appears as though LAKA is still operating, there has been little activity on the official website in recent months.

Policy and legal framework

This section recapitulates 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.

- Latvia's Open Government Partnership National Action Plan 2017-2019, approved by the Cabinet
 of Ministers, outlines Latvia's plans to promote public participation in decision-making, increase
 transparency in public administrations, decrease bureaucracy, and improve procurement
 processes.¹³ While the Action Plan does not directly address the issue of OSS solutions in public
 administrations, it does reference the development of an open source public data portal built
 using open source technology.¹⁴
- The Cabinet of Ministers Regulation No.402¹⁵, introduced in 2017, was introduced to improve public administration services and increase digitalisation. The Regulation ensures that software for digital public services should be licensed as open source software, however, there is room for improvement. The Regulation does not limit vendors from building plug-ins and add-ons to open source software solutions using proprietary software. As a result, situations arise where software pieces are developed in projects not using open source software and are not usable separately, thus resulting in vendor lock-in.

12 http://aigarius.com/blog/category/laka/

¹⁰ https://loco.ubuntu.com/events/venues/Latvia/1125/detail/

¹¹ http://www.laka.lv/

¹³ https://www.mk.gov.lv/en/aktualitates/government-approves-latvias-third-national-action-plan-open-government-partnership

¹⁴ https://joinup.ec.europa.eu/sites/default/files/inline-files/Digital Government Factsheets Latvia 2019.pdf

¹⁵ https://likumi.lv/ta/id/292261-valsts-parvaldes-e-pakalpojumu-noteikumi

• In 2012, LATA and Latvia's Procurement Monitoring Bureau worked on an initiative that advocated for fairer, more competitive IT solution procurement processes that don't prevent bidders from suggesting OSS solutions. ¹⁶ In addition to developing an IT procurement guiding report ¹⁷, a workshop was organised by LATA about the problems associated with public procurement in IT.

Open source software initiatives

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

- Government Platform, 2020¹⁸: At present, the State Chancellery of Latvia is developing a new, centralised platform for government institutions' websites. The project is ongoing, but it is estimated that the first 12 institutions will migrate their websites to the new platform, and that 60 will do so by the end of the year. The platform is built entirely on Drupal, an open source software solution, given the procurement requirement of using open source software for this platform.
- Statistics Portal, 2020¹⁹: A statistics portal built entirely on open source software will be launched in 2020. It was procured as open source software and some of the source code for the Geographic Information System is being reused from a Slovenian prototype. The source code will be adapted for the purpose of the Latvian portal, with the aim of giving the code back to the community to encourage sustainability.
- CareQueue, 2018²⁰: In September 2018, CareQueue won the Open Data Hackathon 2018, an annual Hackathon organised by LATA, which was held in the Latvian State Radio and Television Centre.²¹ CareQueue is an OSS solution built using Ruby on Rails, PostgreSQL and D3.js and was designed to help distribute kindergarten spaces in Riga, process kindergarten application documents, show the availability of childminders and other babysitting services nearby, and provide detailed information about private kindergartens.
- Strenči Municipality, 2017²²: In 2017, Strenči Municipality won an award at LATA's Annual Open
 Technologies Competition in the public sector category for their work with open source
 software. They developed a new municipal portal based on WordPress, which provides a wide

¹⁶ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/latvian-it-procurement-quide

¹⁷ https://www.iub.gov.lv/node/334

¹⁸ Confirmed by interviewees.

¹⁹ Confirmed by interviewees.

²⁰ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/developers-aim-reuse

²¹ https://data.gov.lv/eng/aktualitates/open-data-solution-will-shorten-waiting-lists-kindergartens

²² www.strencunovads.lv

range of functionalities and centralised information from all municipal institutions, thus offering residents structured and easily accessible information.

- Open Data Portal, 2017²³: In September 2017, the Ministry of Environmental Protection and Regional Development²⁴ launched an Open Data Portal designed to act as a single point of access to open government data. The portal was created using an open source technology platform²⁵ and an open source data catalogue, CKAN.²⁶
- Ventspils City Municipality, 2016²⁷: In 2016, Ventspils City Municipality won an award at LATA's Annual Open Technologies Competition in the public sector category for their work with open source software. The municipality developed a system for the provision of municipal operations and services for the municipal administration, related organisations, institutions, and other external customers. The complex solution provides work for more than 6,000 employees in the municipal administration, covering more than 8,000 units of ICT equipment.
- Riga Cycling Week, 2016²⁸: In May 2016, participants in Riga's Cycling Week were encouraged to share GPS data of their cycling routes on a solution that was built using free and OSS solutions that help to clean and visualise data, including CartoDB, Tableau Public, and QGIS. The event is organised by cycling activists and Riga City Council's Pārdaugava Executive to raise awareness of the dangers that cyclists face on the roads, including a lack of road signs, narrow cycling lanes, and a general lack of awareness among drivers.²⁹
- EKA University of Applied Sciences, 2015³⁰: In 2015, the EKA University of Applied Sciences won an award at LATA's Annual Open Technologies Competition in the public sector category for their work on open source software. The university has developed a special computer laboratory class focussed primarily on open source software and a key principle of programme and software development openness. University classrooms are equipped with computers using Linux Mint, LibreOffice, VLC, GIMP and Ganttproject, among other open source software solutions. Additionally, the university has organised an Open Mind Competition, which aims to popularise open technology and open source software.

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²³ https://data.gov.lv/lv

²⁴ http://www.varam.gov.lv/eng/par ministriju/

²⁵ https://www.europeandataportal.eu/en/news/latvia-launches-new-open-data-portal

²⁶ https://ckan.org/

²⁷ Confirmed by interviewees.

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²⁹ https://www.latvia.travel/en/news/50-cyclists-participate-riga-cycling-week-opening-event

³⁰ https://www.augstskola.lv/?lng=eng

- Riga's Children's Hospital, 2014³¹: The Children's Hospital in Riga has been using openSUSE Linux³² and other OSS solutions since 2003 in order to increase cost-effectiveness and use the money that would have been spent on proprietary software for other purposes. Since 2014, the Hospital has been using the Ubuntu Linux distribution in order to increase the efficiency of tasks, with approximately 300 workstations running on Ubuntu.
- Building Information System, 2014³³: The Building Information System is a public portal which ensures information exchange among the persons participating in the construction process and is managed by the State Construction Control Bureau. The development of the system was ordered by the Ministry of Economy and the first development contract was signed in 2011. The system provides access to the registers and e-Services necessary for the construction process and since 2020, a new construction process in Latvia may only be commenced in electronic format, thus increasing the importance and relevance of this system. At present, the Building Information System is being further developed to optimise the service and increase the use of automatization. The system is based on various OSS solutions, including Ruby on Rails, JRuby, Scala, PostgreSQL, CouchDB, and LibreOffice, and it runs on CentOS.
- Smiltene County, 2014³⁴: In 2014, Smiltene Country received an award at LATA's Annual Open Technologies Competition in the public sector category for their widespread use of open source software, both within the Council and various subordinating institutions.
- Kocēni County, 2014³⁵: In 2014, Kocēni Country also received an award at LATA's Annual Open Technologies Competition in the public sector category for their Country Geographic Information System and the general promotion of open standards and open source software in the area.
- Valmiera City Municipality, 2013³⁶: The Valmiera City Municipality has been successfully using OSS solutions for day-to-day operations in municipal office buildings and educational institutions since 2013. The use of OSS solutions is helping the municipality to save money and it allows for greater software customisation as citizens' needs change over time. Additionally, the municipality has made all software developed there available to all citizens, free of charge.
- Latvian National Library, 2013³⁷: The 2013 winner of LATA's Annual Open Technologies Competition in the public sector category was the Latvian National Library. Periodika, a solution

³¹ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/more-and-more-linux-riga-c

³² https://www.susecon.com/doc/2015/sessions/BOV20035.pdf

³³ https://bvkb.gov.lv/en/content/administration-building-information-system

³⁴ Confirmed by interviewees.

³⁵ https://gis.koceni.lv/

 $^{^{36}}$ https://www.delfi.lv/news/versijas/leo-truksans-pasvaldibam-nelegalu-programmu-vieta-butu-jaizmanto-atverta-pirmkoda-programmatura.d?id=43728898

https://www.lnb.lv/lv/latvijas-nacionala-biblioteka-sanemusi-atzinibu-par-izcilu-atvertibas-principu-ieverosanu

of the library for viewing periodicals and articles online in digital format, uses several open source software components.³⁸ The source code is available for other institutions looking to develop similar solutions.

- Carnikava Municipality, 2013³⁹: Another 2013 winner of LATA's Annual Open Technologies
 Competition in the public sector category was Carnikava Municipality. Their e-Services portal
 runs on the open source operating system Ubuntu and the open source Content Management
 System Xwiki. The source code is also available to other municipalities to develop their own
 solutions.
- Ozolnieki High School, 2013⁴⁰: At the high school in the municipality of Ozolnieki, the Linux operating system, the LibreOffice office suite, and other open source application software are used for both teaching and administrative purposes.
- Open Source Seminar, 2009⁴¹: In 2009, the Latvian Ministry of Regional Development and Municipalities hosted a seminar featuring speakers from LATA to examine the possibility of using OSS solutions for all government mail and groupware servers. Latvian government IT departments historically have underestimated the support that is available to them on the topic of OSS solutions, and it remains unknown as to whether OSS solutions were indeed implemented in the wake of this seminar.
- Land Registry Website, 2009⁴²: In June 2009, the Ministry of Justice made changes to its Land Registry website by allowing all visitors to use any type of standard compliant Internet browser in order to access the website, including the open source browser Firefox. The Land Registry site offers almost all services online.⁴³
- OSS for schools, 2009⁴⁴: In December 2009, the Ministry of Education announced that OSS applications can be used in computer science classes in secondary schools nationwide. Following a consultation between experts, ministry officials, school representatives and industry associations, it was agreed that OSS applications can be used for the following two classes; informatics, and basics of programming. Teachers were advised to generally increase their knowledge of OSS solutions, however, the decision of whether to use proprietary or OSS is to

³⁸ http://periodika.lv/

³⁹ Confirmed by interviewees.

⁴⁰ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/open-source-can-fix-latvias

⁴¹ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/lv-ministry-studying-open-so

⁴² https://www.zemesgramata.lv/

⁴³ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/lv-ministry-studying-open-so

⁴⁴ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/lv-ministry-education-app

be made individually by schools and municipalities. To this day, text editors and spreadsheets used for education purposes are less likely to be based on proprietary software in Latvia.

- Open Office in Ogre, 2008⁴⁵: In May 2008, the city council of Ogre and the Ogre United Municipality Information System Centre organised a series of training sessions on OpenOffice, an OSS suite of office applications. The training sessions were arranged as part of a policy to support and develop local businesses and were freely available to citizens working in public administrations and local businesses in the Ogre region.⁴⁶
- Austrumi Linux, 2004⁴⁷: Austrumi Linux is a bootable live Linux distribution that is built on Slackware Linux and it is highly suitable for servers and workstations in public administrations. It was created and is maintained by a group of programmers from the Latgale region of Latvia.⁴⁸ Aside from having a modern user interface, it has been translated into several languages, meaning that the OSS solution can be more widely distributed. Furthermore, it claims to be the fastest Linux distribution providing 3D support for a variety of graphics cards.⁴⁹

⁴⁵ https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/lv-city-council-provide-o

⁴⁶ http://www.solidoffice.com/2009/05/

⁴⁷ http://cyti.latgola.lv/ruuni/

⁴⁸ https://www.linuxinsider.com/story/86285.html

⁴⁹ http://cyti.latgola.lv/ruuni/

