



DG DIGIT

Unit.B2 (Interoperability Unit)

Open Source Software Country Intelligence Report

Sweden

2023

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SWEDEN

Executive Summary

In Sweden, the use of open source software (OSS) solutions in public administrations has taken place in the context of decentralised IT decision-making. While civil society, academia and numerous public institutions have increased the use of OSS at various levels (municipal, agency, etc.), there is no national policy explicitly mandating it. However, due to the high standards that Sweden has set for data protection and transparency for the public administration at national level, investments in OSS have been increased to help to fulfil these objectives.

The main actor at the national governmental level coordinating digitalisation efforts and setting the conditions for sharing OSS solutions between public services organisations is the Agency for Digital Government (DIGG). Serving as a hub for the digitalisation of the public sector, it is hoped that the use of OSS solutions will help DIGG achieve its goal of transparent governance that benefits citizens. Since the agency was established, the work towards the use and collaboration around OSS at national and international levels has expanded through different network actions.

This collaborative spirit surrounding the development of digital solutions can be found in the eSam programme, which is jointly researching digital solutions for public administrations. eSam was created to implement the rights protection provisions of the Public Access and Privacy Act. This was due in part to the incompatibility of the American Cloud Act with the said rights protection provisions. In that case, open source became a solution to help administrations to enforce and respect citizens' digital rights.

At the sub-national level, numerous Swedish municipalities have developed user-friendly open source websites for their citizens with the aim of simplifying the use of digital services. This modernisation of public services is also supported by the Swedish Association of Local Authorities and Regions. The scale and variety of these initiatives and projects at the local and municipal levels signal a gradual increase in the use of OSS solutions in 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 Agency for Digital Government¹ (*Myndigheten för digital förvaltning*, abbreviated as DIGG) was founded in September 2018. Its mission is to coordinate and support of

¹ [We digitalise Sweden](#)

digitalisation of public administration. The agency is responsible for the country's digital infrastructure, and it provides the government with analysis and opinions on public services digitalisation. Its OSS development policy aims to standardise and regulate software ownership and to set the conditions for sharing OSS solutions.

- The Swedish Government Agency for Innovation Systems² (*Vinnova*) invests in the development of public e-Services and encourages public agencies and software vendors to use OSS solutions and open standards.
- The Ministry of Finance³ is responsible for public administration, municipalities, and regions as well as public procurement and digital policy. The "IT-minister"⁴ is therefore in charge of the digitalisation policy of Swedish public services.
- The Swedish National Procurement Services⁵ (*Kammarkollegiet*) is the purchasing body for the country's public sector. It promotes a new approach in the acquisition of software for information and communications technology services through its guidelines on the use of open standards and OSS in procurement.
- The Swedish Association of Local Authorities and Regions⁶ (*Sveriges Kommuner och Regioner*) represents all 290 Swedish municipalities and all regional governments. It is active in developing and deploying open source-based solutions for local administrations.

Strategic players

- eSam⁷ is a member-driven programme for collaboration between public authorities, which aims to facilitate and accelerate the digitisation of the Swedish public sector. Its 34 members (public authorities) collaborate to fully benefit from the opportunities offered by digitisation.⁸ eSam was formed in 2015 on the initiative of the members of the e-delegation when their initial work was completed. In 2021, they published a report on collaborative digital cloud solutions, many of them being open source alternatives to solutions currently used in public administrations.⁹
- NOSAD¹⁰ (Network Open Source and Data In the Network Open Source and Data) is a network of organisations initiated in 2020. They gather and share best practices and lessons learned through monthly workshops on subjects concerning innovation, open data and open source. In addition, they collaborate on community initiatives such as updating a catalogue of open source software used and shared by public services.¹¹

² [Vinnova](#)

³ [Ministry of Finance - Government.se](#)

⁴ [Erik Slottner - Government.se](#)

⁵ [Kammarkollegiet](#)

⁶ [SKR](#)

⁷ [eSamverka](#)

⁸ [Medlemmar - eSamverka](#)

⁹ [Digital collaboration plat- form for the public sector](#)

¹⁰ [Nosad](#)

¹¹ <https://nosad.se/katalog#delning>

- Open Source Sweden¹² is a non-profit organisation for suppliers of open technologies with the mandate to promote an open and well-functioning market for development, sales and delivery of open software and related services to both private and public organisations, based on open standards. The association is active both on the national level and within international networks of OSS actors. Open Source Sweden is a member of Europe's Open Source Business Association, or APELL.¹³
- The Swedish Public Employment Service¹⁴ (*Arbetsförmedlingen*) publicly shares around 400 components and systems with a focus on open data and a human-centric data infrastructure. It has created an open source platform for the collaboration on the labour market nationally and internationally.¹⁵ ¹⁶ The agency is also continuously researching innovative and collaborative approaches to data sharing through openness and transparency with the citizens.¹⁷
- The "E-delegationen"¹⁸ was an expert group in e-government established on 26 March 2009 and active until 2015. After their initial work, coordinating the state authorities' IT-based development projects, the authorities whose Directors-General were members of the e-Delegation wanted to continue the cooperation and therefore started the eSam programme to continue to work together on digital development.

Policy and legal framework

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

- In 2023, DIGG published its second report¹⁹ on the mission to promote public administrations' ability to use artificial intelligence.²⁰ The report acts as a guide and promotes openness in the use of AI in public services. It follows a request from the government to the Swedish Companies Registration Office (*Bolagsverket*), the Swedish Employment Service (*Arbetsförmedlingen*), DIGG, and the Swedish Tax Agency (*Skatteverket*) to provide a guide for public administrations on how to use AI. The guide explains how to use AI in a trustworthy manner for automated processes and decisions. Additionally, they were tasked with developing an AI project library for public administration and establishing a shared AI

¹² [Open Source Sweden](#)

¹³ [APELL](#)

¹⁴ [Arbetsförmedlingen](#)

¹⁵ <https://gitlab.com/arbetsformedlingen/documentation>

¹⁶ [Home | Jobtech](#)

¹⁷ [Arbetsförmedlingen Designsystem](#)

¹⁸ [Tilläggsdirektiv till E-delegationen Dir. 2010:32](#)

¹⁹ [Slutrapport: Uppdrag att främja offentlig förvaltnings förmåga att använda artificiell intelligens](#)

²⁰ [Uppdrag att främja offentlig förvaltnings förmåga att använda artificiell intelligens - Regeringen.se](#)

infrastructure. The results of this mission (and related initiatives) can be found on the Dataportal.²¹

- In 2022 DIGG released an extended version²² of their 2019²³ Software Development Policy. This policy decision states that software developed and/or procured for the authority's activities should predominantly be published as open source. The report was revised and extended as a result of the increase in of OSS in public administrations.
- In 2020, the Ministry of Finance instructed the Trusted Service Inquiry committee to report on trusted digital services.²⁴ The investigation was tasked with surveying and analysing the public administration's need for measures to increase and standardise the use of trust services and to submit proposals for such measures. The report also takes open source solutions into account.²⁵
- The Swedish National Procurement Services published a report on open IT-standards in 2016.²⁶ This research found that the use of OSS and related services by public authorities is restricted to specific Swedish framework agreements with mandatory requirements for certain open IT-standards.
- In 2010, Sweden signed a framework agreement for the procurement of OSS at the national level (*Upphandling Öppna programvaror 2010*).²⁷ The central government, the public education sector, twenty county councils, and 225 municipalities signed the agreement.
- In 2003 and 2005, the Swedish Agency for Public Management published two studies on OSS. The 2003 document made general and specific recommendations to the State Office on the use of OSS. These included the provision of cost-effective alternatives (both proprietary and OSS), the promotion of open standards, and the creation of a software directory with information about OSS. In 2005, the Agency recommended that other agencies and municipal administrations “draw up detailed action plans to gain practical experience of open source software”.

Open source software initiatives

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

- FOSS North, 2023²⁸: FOSS North is an annual conference that started in 2016. This open source conference covers both software and hardware topics for the Nordic FOSS

²¹ [Sveriges Dataportal](#)

²² [Riktlinjer för utveckling och publicering av öppen programvara - DIGG](#)

²³ [Policy för anskaffning samt utveckling av programvara - DIGG](#)

²⁴ [Ökad och standardiserad användning av betrodda tjänster i den offentliga förvaltningen - Regeringen.se](#)

²⁵ [Vem kan man lita på? Enkel och ändamålsenlig användning av betrodda tjänster i den offentliga förvaltningen, SOU 2021:9](#)

²⁶ [Open IT-standards](#)

²⁷ [Upphandling Öppna programvaror 2010](#)

²⁸ [foss-north](#)

communities. The community around the conference used to work with a former similar event, the FSCON which was active between 2007 and 2019.²⁹

- Sundsvall, 2022³⁰: Sundsvall municipality has been repeatedly recognised for its digitalisation efforts.³¹ The city has been a pioneer of digitalisation of public services in Sweden with open source solutions.³² The municipality’s IT administration has also shared its practices with the Danish embassy, promoting the concept of collective digitalisation.³³
- Open School Platform, 2021³⁴: *Öppna Skolplattformen* is an initiative that offered an unofficial alternative to a school application for parents that would make it easier to check on their children’s lunch menu, and class schedule and inform the school about absences. The code is open source³⁵ and has been officially accepted by the Stockholm and Gothenburg cities.³⁶
- Open Up!, 2021³⁷: Open Up! is a dashboard that visualises public procurement patterns and features that allow user-friendly analysis of the data, while also automatically publishing the data. It was funded through VINNOVA’s first ever Civic Tech call, a programme to develop an open source platform to make procurement easier, more transparent and more efficient. The source code is open and shared by the Open Knowledge Foundation Sweden.³⁸
- SUDO, 2020³⁹: “Sustainable Digitalisation through strategic involvement with Open source projects implementing IT standards in different domains”, abbreviated as SUDO, is a collaborative research project running over four years. It focuses on developing effective work practices for engagement with open source software projects. The project was initiated by the University of Skövde and is led by Björn Lundell who has extensively researched open source and open innovation in the context of Sweden.⁴⁰
- Dela Digital, 2016⁴¹: Dela Digital is an open source platform which provides a possibility to share knowledge to all Swedish municipalities and regions. An important part of Dela Digital is the opportunity to collaborate around joint solutions and thus contribute to a clearer sharing culture in the public sector.
- Kivos and Open Jämtland, 2016⁴² were two regional organisations coordinating the areas of interoperability and open standards issues for their respective municipalities. Both organisations encouraged public agencies and software vendors to use OSS solutions and

²⁹ [About | FSCONS XII](#)

³⁰ [Sundsvall utsedd till Sveriges digitaliseringskommun](#)

³¹ [Dagens Samhälle hyllar Sundsvalls kommuns arbete med digitalisering – toppar lista](#)

³² [Sundsvalls kommun · GitHub](#)

³³ [Danska ambassaden på besök i Sundsvall för att ta del av kommunens digitaliseringsarbete](#)

³⁴ [Öppna skolplattformen](#)

³⁵ [The source code to the civic tech project Öppna Skolplattformen.](#)

³⁶ [An open school platform | Joinup](#)

³⁷ [Överblick - Open Up!](#)

³⁸ [Open Knowledge Sweden · GitHub](#)

³⁹ [SUDO - University of Skövde](#)

⁴⁰ [Björn Lundell - University of Skövde](#)

⁴¹ [Dela Digitalt - Om](#)

⁴² [Allmän – Kivos](#)

open standards, while enabling the implementation of open source-based solutions in local government.

- KOHA library system, 2016⁴³: In 2016, various libraries across Sweden started developing features for KOHA, an open source library management system, in order to meet the needs of Sweden's public libraries.
- *Försäkringskassan* (the Social Insurance Office), 2016⁴⁴: In 2016, the Social Insurance Office switched from a proprietary operating system to open source Linux, mainly for financial reasons.⁴⁵ Open source experts were hired, and training sessions were provided to current employees in order to ease the transition to the new system. The office has also shared guidelines on open source code and OSS on their GitHub page.⁴⁶
- Open ePlatform, 2016: Various Swedish municipalities such as Härnösand, Sundsvall⁴⁷, Timrå, Kramfors, and Örnsköldsvik began developing and using Open ePlatform in 2016.⁴⁸ The platform is built using OSS on a user-friendly interface, and it aims to simplify the use of eServices for citizens. The initiative is supported by the Swedish Association of Local Authorities and Regions (*Sveriges Kommuner och Regioner*).⁴⁹
- Helsingborg City, 2015: The city maintains an active GitHub account⁵⁰ with various repositories of web and app projects. Citizens can help maintain and contribute to the account in order to keep it up to date. The city also has an open data portal, *Oppna Helsingborg*.⁵¹
- Swedish municipality of Alingsås, 2014: The municipality of Alingsås has turned to open source solutions⁵² by introducing 'Mule', an enterprise service BUS framework in 2014. The municipality is also making use of Apache Solr, an open source search platform.
- IT Solutions for Citizens Project, 2008: With support from the Gender Equality Ministry and Swedish Association of Local Authorities and Regions (SALAR), Sweden's municipalities and county councils implemented various projects to enhance citizens' government participation. Three such projects were based on OSS solutions: the Dialogue Web portal, the Chat web-based dialogue tool,⁵³ and the Budget Simulator. The project operated from 2008 to 2013.
- The Swedish Agency for Public Management (*Statskontoret*) conducts studies and evaluations at the request of the Government. It published a study on the potential use of open source

⁴³ [Koha-bibliotek i Sverige – Svenska Kohanätverket](#)

⁴⁴ [Försäkringskassan](#)

⁴⁵ [Försäkringskassan sänkte it-kostnaderna med 29 miljoner - Voister](#)

⁴⁶ [Försäkringskassan · GitHub](#)

⁴⁷ [Sundsvalls kommun · GitHub](#)

⁴⁸ [Öppen källkod lyfter kommuner - Voister](#)

⁴⁹ [SKR](#)

⁵⁰ [Helsingborg Stad · GitHub](#)

⁵¹ [Helsingborg.io](#)

⁵² [Still more open source in Sweden's Alingsås](#)

⁵³ [Chatt - Dialogguiden](#) (discontinued)

solutions in the administration in 2007. It frequently produces reports on digitalisation of public administrations.⁵⁴

⁵⁴ <https://www.statskontoret.se/fokusomraden/digitalisering-i-forvaltningen/>

