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Open Source Software Country Intelligence Report

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DENMARK

Executive summary

The Danish Agency for Digitisation (AFD)¹, though not explicitly stated in its work programme, is the governmental body that is listed as main point of contact for open source matters on the Open Government Partnership's website.

Currently, 'A Stronger and more Secure Digital Denmark' (2016-2020)² is the main reference policy in the country for the development of digital policies. Denmark also has a dedicated strategy for fostering digitalisation at local administrations in the country.³

In Denmark, there are no OSS initiatives in the central government, rather at the municipality level. For example, procurement for services at the sub-national level often take into account the use of open source software solutions.

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 maker

- The Danish Agency for Digitisation (AFD)⁴ is the key institution responsible for all the digital matters and developments in the country. In this regard, the institution plays an important role for the implementation of open source software in the public sector, even if not explicitly stated. This is primarily suggested through the Open Government Partnership's website, which indicates the Agency as the key contact point for open source matters.⁵

Strategic player

- The OS2 community⁶ has the mission to increase the use of open source software in Denmark's public administration. In their own words, OS2 is a 'Danish public community that specify, develop and govern digital solutions by municipalities and for municipalities'. More specifically, OS2 is a network of Danish public organisations and private suppliers who collaborate on the creation of innovative digital solutions. The community focuses on the use of IP ownership and open source licences so as to prevent vendor lock-in and to reduce costs.

¹ <https://en.digst.dk/>

² <http://www.digst.dk/ServiceMenu/English/Policy-and-Strategy/Digital-Strategy-2016to2020>

³ https://www.kl.dk/ImageVaultFiles/id_78679/cf_202/Lokal_og_Digital_-_et_sammenh-ngende_Danmark.PDF/

⁴ <https://en.digst.dk/>

⁵ <https://www.opengovpartnership.org/members/denmark/commitments/DK0010/>

⁶ <https://os2.eu/node/332>

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 digitally coherent public sector White Paper on a common public-sector digital architecture⁷ dates to 2017 and was published by the Steering committee for data and architecture with support from the Agency for Digitisation. It calls on public organisations, when relevant, to use sustainable and open source components.
- The Aarhus Municipality Open Source Action Plan of 14 January 2014⁸ aims to increase the use of open source software, so as to avoid IT vendor lock in. The municipality of Aarhus has been a long-time open source software enthusiast. This strategy was adopted as a continuation of the municipality's efforts to develop its open source policy. In 2011, the Aarhus city council adopted a decision which requires the municipality to consider the use of open source every time new IT solutions are acquired.⁹
- The Danish National Open Government Partnership Action Plan for 2013-2014¹⁰ details the Danish government's commitment on the reuse of open source software in the public sector. More specifically, its commitment was related to the public portal Software Exchange. The Public portal, "Software Exchange", where authorities can publish, share and re-use open source software, was put in place to expand co-operation with the ICT industry associations so to stimulate the development of open source software through the "Software Exchange" principle and support the re-use of existing open source software in the public sector. However, according to the previous Danish Progress Report (2012-2013)¹¹, the level of the project's completion was limited, and the priority of the open source-related commitment was low. The report concluded that the 'Government should take steps to ensure that the knowledge of the Software Exchange is given broader exposure'.
- The following political milestones date back to over ten years, however were important in the shaping of the use of open source software in the Danish public sector. The adoption of policy initiatives by the Danish authorities started much earlier. In 2002, the Danish Government adopted a 'Software Strategy'¹², which emphasised the value for money, competition, freedom of choice, and interoperability as important deciding factors when choosing software for government. With regard to open source, the strategy claimed that open source software can

⁷ https://arkitektur.digst.dk/sites/default/files/white_paper_on_a_common_public-sector_digital_architecture_pdfa.pdf

⁸ <https://libreofficedk.blogspot.com/2014/09/budgetforlig-i-med-open-source.html>

⁹ <https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/denmarks-aarhus-insists-o>

¹⁰ <https://www.opengovpartnership.org/members/denmark/commitments/DK0010/>

¹¹ https://www.opengovpartnership.org/wp-content/uploads/2019/06/Denmark_OGP_IRM_Public_Comment_Eng.pdf

¹² http://www.softwarechoice.org/download_files/Danish.Policy.pdf

contribute to coherence and continued digital development across the public sector.¹³ Later, in June 2006, the Danish Parliament adopted a resolution on the use of open standards for software in the public sector¹⁴. This parliamentary resolution was followed eight months later by an open standard policy developed and implemented by the Ministry of Sciences, Technology and Innovation in order to mandate the use of open standards at national, regional and local levels of administration.¹⁵ The main motivation behind this policy was to foster competition between Danish IT software companies and gradually implement the use of open standards across the Danish administration. In this regard, also in 2007 the Danish Government approved a one-year pilot programme during which governmental agencies are required to use Open Document Format (ODF) and Microsoft's Open XML format on all operating workstations.¹⁶

Open source software initiatives

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

- NemHandel, 2016¹⁷: Based on open standards and open source components, NemHandel is the Danish national digital framework for eInvoicing. For Danish suppliers of goods and services to public authorities and public institutions eInvoicing is mandatory by law. Its development was taken over by the Danish Agency for Digitisation when the National IT and Telecom Agency was abolished.
- Municipality of Syddjurs, 2014¹⁸: In 2014, the Municipality of Syddjurs published a tender for an e-health telemedicine project. The most important aspect of the tender was the requirement for the potential supplier to deliver the project using open source HL7, an open standard for healthcare.
- Kitos system, 2012¹⁹: The Danish Municipality of Roskilde's central IT project management system, Kitos, was made using open source in 2012. Apart from Roskilde, around 48 other municipalities are using the system. In 2014, the municipality announced a tender looking for IT specialists, who could help improve Kitos.²⁰ They also stated that any updates made to Kitos would be made available as open source.
- "Code During the Holidays", 2011²¹: In 2011, the Ministry of Science, Technology and Innovation launched a summer initiative targeting students in Denmark. Under the initiative 15

¹³ <https://joinup.ec.europa.eu/collection/open-source-observatory-osor/document/danish-municipality-aarhus-aims-free-itself-it-vendor-lock-aarhus-open-source-action-plan>

¹⁴ https://www.ft.dk/samling/20051/beslutningsforslag/b103/20051_b103_som_vedtaget.htm

¹⁵ <https://joinup.ec.europa.eu/collection/ehealth/news/dk-open-standards-made-manda>

¹⁶ Kirk, Jeremy. —Denmark to Test Open XML, ODF. IDG News Service. 5 July 2007. <http://www.pcworld.com/article/id,134168-c.opensource/article.html>

¹⁷ <https://en.digst.dk/news/news-archive/2016/februar/information-in-english-on-key-policies-initiatives-and-solutions/>

¹⁸ <https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/open-source-central-e-heal>

¹⁹ <https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/roskilde-seeks-open-source-se>

²⁰ <https://ted.europa.eu/TED/notice/udl?uri=TED:NOTICE:443686-2015:TEXT:EN:HTML&src=0&tabId=1>

²¹ <https://www.digitaliser.dk/group/1264319>

chosen students were paid to develop or improve upon open source software for the public sector²². The initiative 'Code During the Holidays' still has an active user page. However, the initiative itself was discontinued after 2012²³.

- Land survey organisations cooperation, 2009²⁴: Denmark, Finland, Iceland, Norway and Sweden have improved their cooperation thanks to open source. The land survey organisations started cooperating on GitHub since April 2009 with a common goal of co-developing software for a visualisation editor for web map layers (styled layer descriptor, SLD). The joint GitHub page contains 21 solutions, with latest updates made in December 2019.
- Library resources, 2012²⁵: In 2012 almost a half of Denmark's municipalities committed to make the most of the library resources in Denmark available through web services. The project Ting²⁶ harnessed open source to bring the content of Danish libraries online. The Ting project was initiated in 2008 by the Copenhagen and Aarhus libraries.
- Danish citizen portal, 2008²⁷: In 2008 the Danish citizen portal was updated using open source components. The portal was updated with a personal page of any logged-in citizens, which was developed using the open source web page tool Pageflakes²⁸. Pageflakes runs on Microsoft servers. A second open source component that was used in the portal was Open Layers²⁹, which was used to make an interactive map on the portal.

²² <https://www.digitaliser.dk/news/1473843>

²³ https://www.digitaliser.dk/forum/2503200#comment_2825016

²⁴ <https://github.com/nlsfi>

²⁵ <https://joinup.ec.europa.eu/collection/open-source-observatory-osor/news/danish-municipalities-jointly>

²⁶ <http://www.ting.dk/>

²⁷ borger.dk

²⁸ <https://www.crunchbase.com/organization/pageflakes#section-overview>

²⁹ <https://openlayers.org/>

