Open Source Observatory Policy Factsheet
Estonia

OSOR

1 General Information

Estonia, one of the world's most digitally advanced countries whose public services have been fully available online since 2024, has increasingly turned towards open source software (OSS). In a digitalisation plan published in 2021, the government introduced the principle that all taxpayer-funded software should be released under an open source licence. Through X-Road, open source is also a core element of Estonia's digital diplomacy efforts to encourage the development of reusable and interoperable 'Govstack' modules.

2 Actors

POLICY MAKERS

The Information System Authority (RIA) is the national competence centre responsible for managing the technological infrastructure underpinning Estonia's e-government system, arising from the merger and evolution of different institutions including the Estonian Informatics Fund. Core to RIA's responsibilities are X-Road / X-tee (see below), eID and eVoting, which are all partially or fully based on OSS.

STRATEGIC PLAYER

Nordic Institute for Interoperability Solutions (NISS): NISS was founded jointly by the governments of Estonia and Finland to collaborate on the development and management of X-Road, the interoperable data exchange system initially developed by Estonia. NIIS is responsible for the technical maintenance of X-Road and is also a "network and cooperation platform" for the different governments using it.

3 Policy and Legal Framework

Amendments to the Estonian State Property Act, 2021

Aligning with the Digital Agenda 2030 objectives outlined above, this amendment lays out the rules for open source software development by the public sector.

Digital Agenda 2030, 2021

Estonia's digital agenda lays out a plan to achieve the objectives of the broader Estonia 2035 strategy. The Digital Agenda states that software developed with taxpayers' money under the public sector's intellectual property should be published under an OS licence.

2021

4 Open Source Software Initiatives

X-Road / X-tee

X-Road is an open source data exchange launched by the Estonian government in 2001 to provide the public sector with a standardised and secure way to exchange information between its various departments and systems. As such, X-Road is maintained by NIIS, but has been developed as X-tee in Estonia where it is maintained by RIA.

Bürokratt

Bürokratt is an open source AI chatbot developed by RIA and the Ministry of Economic Affairs and Communications, among other agencies, to facilitate access to and smooth communications with Estonia's digital public services. Bürokratt aims to offer a user-friendly experience of engaging with digital public services and to provide 24/7 information on and access to public services.

Koodivaramu

The Estonian code repository for open source software, providing access to all the open source solutions developed by the public sector, Koodivaramu includes a publicly accessible repository as well as a protected one that is for now only accessible to individuals with an Estonian eID. As part of continuous shifts towards open source and reusable modules, the Estonian government plans to further develop Koodivaramu to provide full public access to all OSS.

TartuNLP Neurotõlge

A natural language processing (NLP) translation tool, Neurotõlge is designed to improve the translation of Estonian and all Baltic languages. It supports 30 languages, including several small ones from the Finno-Ugric family. The tool is available online but can also be placed into a specific environment.