

Policy on Free and Open-source Software

Government Policy
of Iceland

Prime Minister's Office
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Introduction

Free and open-source software is software based on a source code which the authors choose to make public and accessible to everyone. Not only is it permissible to use and distribute such software as desired, but also to adapt and improve it. Proprietary software, on the other hand, is subject to restrictions on use, distribution and modification, besides its building on a source code that has not been made public. Giving access to the source code expands the opportunities for adapting and examining security aspects of the software, in addition to allowing for its further development if the producers discontinue it for some reason.

Free and open-source software usually follows open standards, and it is important that governmental authorities support and encourage their increased application. Not being contingent on any particular hardware or suppliers, nor being controlled by any single party, open standards are accessible to everyone. They can, for instance, facilitate the interaction of different software systems and contribute to a greater lifespan for electronic data.

Free and open-source software is expanding rapidly all over the world, having already earned recognition as a realistic option when selecting information technology solutions. Such software has brought competition to a market previously dominated by a relatively small number of suppliers. Rather than hindering this trend, it is important for governmental authorities to support it and allow for its continued development, since the use of free and open-source software can reduce the ties of businesses, the authorities and the public to individual suppliers or service providers, thereby cultivating greater choice.

There are numerous factors, particularly the expense of proprietary software, which call for noting the possibilities involved in using free and open-source software. These possibilities add weight to recommendations stemming from cooperative projects and international organisations, such as the European Union and Nordic Council, that free competition be promoted in these matters. Public bodies are at the same time encouraged to utilise the power of their size to push for the use of free and open-source software. In fact, most of Iceland's neighbouring countries have already formed policies on such software.

Icelandic government policy on the use of free and open-source software by state bodies is based on the compliance of software procurement with rules appearing in the Public Procurement Act, No. 94/2001; the Act on Tender Procedures, No. 65/1993; and other laws in effect on government procurement, in addition to the current *Government Procurement Policy*. Since the *Policy on Free and Open-source Software* is intended to follow all of the above guidelines, it must be reviewed whenever the above Acts or *Policy* are amended.

The present *Policy* also applies to all state institutions and organisations that are operated with public funds.

A 2005 report on open-source software,¹ the policies of other nations, and various materials from the European Union helped serve as a basis for preparing this *Policy*.

¹ *Opinn hugbúnaður* (Open-source Software) was a report compiled by ParX, the IBM Business Consulting Service, for a task group which the Prime Minister's Office sponsored on e-government, cf. the website http://www.forsaetisraduneyti.is/upplýsingasamfelagid/Utgefid_efni/nr/1835.

Icelandic government policy regarding free and open-source software

1. When purchasing new software, free and open-source software and proprietary software are to be considered on an equal footing, with the object of always selecting the most favourable purchase.
2. Every endeavour shall be made to choose software based on open standards, regardless of whether the software in question is standard or bespoke (custom-designed). Generally, software which is free for anyone to use is also typified by open standards.
3. Public bodies shall endeavour to avoid any undue dependence on particular software manufacturers or service providers. The utilisation of free and open-source software is one means of this.
4. One goal for bespoke (custom-designed) software financed by public bodies, including software for research and development projects, should be its reusability. Keeping the software free and open-source is one way to achieve reusability. Strategies shall be devised at the outset of such projects for ensuring reuse of the software.
5. Students in Icelandic educational institutions shall be given the opportunity of learning about and using free and open-source software on a par with proprietary software.

Explanatory comments on this *Policy*

1. *When purchasing new software, free and open-source software and proprietary software are to be considered on an equal footing, with the object of always selecting the most favourable purchase.*
 - It is imperative that public bodies evaluate free and open-source software on the basis of the same standards and qualities as apply when selecting other software and supplies. Among other things, this involves basing the choice of software on the total cost of ownership in relation to benefits. It is also important for administrators and other individuals responsible for purchasing to realise that in the case of free and open-source software they may themselves have to take the initiative in obtaining adequate information.
2. *Every endeavour shall be made to choose software based on open standards, regardless of whether the software in question is standard or bespoke (custom-designed). Generally, software which is free for anyone to use is also typified by open standards.*
 - The ever-increasing demand for online government services, for both Iceland's legal entities and the general public, raises requirements for system compatibility and data transferability. Thus it is important to apply open standards, increase collaboration among public bodies and consider a long-term policy for data communication. The use of open standards increases the compatibility potential of a software system, thereby contributing to a longer lifespan for the software.
3. *Public bodies shall endeavour to avoid any undue dependence on particular software manufacturers or service providers. The utilisation of free and open-source software is one means of this.*
 - It is important for public bodies to minimise vendor lock-in. Lock-in implies a customer becoming dependent on a certain vendor for products and services and being unable to switch to any other vendor without undergoing substantial inconvenience and opportunity costs. These circumstances render it worthwhile to assess the potential impact of a provider ceasing to develop the software, of a service provider discontinuing product support, or of the business relationships with such providers terminating for some other reason. Free and open-source software adds to the options and encourages competition.
4. *One goal for bespoke (custom-designed) software financed by public bodies, including software for research and development projects, should be its reusability. Ensuring that software is free and open-source is one way to achieve reusability. Strategies shall be devised at the outset of such projects that will allow for reuse of the software.*
 - There is a great need to increase the return on public body investments in software design. Once software has been prepared, it is important that it has the potential of being reused, whether by the institution involved or a third party. Reusability can be achieved by marketing the software or ensuring that it is free and open-source. Reuse of the software may possibly be subjected to copyright provisions, though this does not imply that public bodies should themselves reserve any software copyright.
5. *Students in Icelandic educational institutions shall be given the opportunity of learning about and using free and open-source software on a par with proprietary software.*
 - By familiarising students with free and open-source software and by providing opportunities to work with it as well as with proprietary software, educational institutions can play a valuable role in increasing the proportion of free and open-source software that is available. Furthermore, free and open-source software provides teaching opportunities that do not exist with proprietary software, since the background functions of free and open-source software, including its characteristics and programming, can be revealed to students. In these respects, free and open-source software is better suited to arousing interest in computer programming and information technology than proprietary software, where its use is all that can be taught.

Future steps

The policy above cannot be implemented without a systematic follow-up by government bodies. Proposals for the most important follow-up measures are described below.

Policy item	Description	Responsibility
General aspects	<ul style="list-style-type: none"> The government should provide a platform for communicating information on free and open-source software and related topics. Both free and open-source software communities and professionals in this field shall be approached for collaboration, in Iceland as well as overseas. 	PMO, MESC
Purchases	<ul style="list-style-type: none"> The government shall endeavour to remove barriers in purchasing procedures which favour the buying of proprietary software on the market. 	MFin
Standards	<ul style="list-style-type: none"> The government shall issue directives on using standards and on intercommunication among state government systems, ensuring that consideration is paid to its <i>Policy on Free and Open-source Software</i>. 	PMO
Self-sufficiency	<ul style="list-style-type: none"> The government shall maintain a summary of projects in which public bodies have adopted or are adopting free and open-source software, so that project experience can be utilised during subsequent projects rather than being lost. 	PMO
Reusability	<ul style="list-style-type: none"> Institutions shall be encouraged to make provisions for reusing any software that is being designed. Grant applications shall call for a plan towards the reuse of any software that is created. Reusability shall also be one of the subjects to address in negotiations with vendors. 	MFin, MESC
Educational institutions	<ul style="list-style-type: none"> The option of free and open-source software shall be introduced to students as fully as the option of proprietary software. Advantage must be taken of the teaching options inherent in free and open-source software. 	MESC