

Use of Open Standards for Software in the Public Sector

Summary

This report is an overall description of the use of open standards for software in the public sector. The report has been made in connection with parliamentary resolution B 103 on the use of open standards for software as adopted by the Danish Parliament (the Folketing) on 2 June 2006. In the following, the Resolution will be referred to as B 103.

The implementation will be based on the recommendations made by the Committee on Better Interoperability in its report "Measures to Promote Interoperability via Common Open Standards", dated 11 August 2006 (referred to as the Measures Report in the following).

In the report, it is suggested that open standards should be implemented gradually by making it mandatory for the public sector to use a number of open standards when this becomes technically feasible. At the same time, the report identifies initial sets of open standards as candidates for mandatory use from 1 January 2008 if an economic impact assessment shows that this will not involve additional costs to the public sector.

Parliamentary resolution on the use of open standards for software in the public sector

The Folketing directs the Government to ensure that the use of information technology, including software, by the public sector be based on open standards.

By 1 January 2008, or as soon as technically feasible, the Government should introduce and maintain a set of open standards that may serve as inspiration for other public authorities. Following this, open standards should be part of the basis for developing and procuring IT software in the public sector, with the aim of promoting competition.

The Government should ensure that all digital information and data that public authorities exchange with citizens, businesses and institutions are available in formats based on open standards.

It will be a basic condition that the implementation of B 103 should not involve increased costs to the public sector (see the Science Committee's report dated 1 June 2006), and that open standards should be included in the basis for new investments, but it will not be a requirement, as a consequence of B 103, that older systems be converted to open standards.

Another basic condition is that there may be exceptions from the general rule that the basis should be open standards (see comments by the proposing parties on the Parliamentary Resolution), and that these exceptions, if allowed, should be explained. Accordingly, B 103 will not have economic consequences to local and regional authorities.

The most important elements in the implementation are as follows:

- From 1 January 2008, all new public IT solutions should make use of the mandatory open standards relevant to the IT solution in question unless there are significant reasons for not complying with these standards.

- If there are significant reasons for not complying with the relevant mandatory open standards, this must be reported on signing the contract, stating the reasons for applying the exceptional provisions.
- In case of IT solutions where the technical procurement is above the EU tendering limit, the reasons must be reported to the National IT and Telecom Agency for the purpose of publication.
- All ministers must ensure that mandatory standards are drawn up within their respective areas of responsibility where this is relevant. This must be made in cooperation with local/regional administrations in line with the existing common public projects in the area of digitalization.

Open standards in the public sector

Widespread and recognized standards are essential in ensuring:

- that competition and the ability to choose between several manufacturers and providers can exist in an area where several systems and components are to play together,
- that there may be interoperability between a multitude of systems, solutions and organizations, and
- that projects and organizational structures can be modified in a manageable way without the need of replacing IT solutions.

All this will provide a potential for greater efficiency and better ways of solving tasks.

Open standards (in contrast to closed, supplier-dependent standards) are essential in ensuring that everyone will have the right and ability to use the standards, and that they are defined in a process where all relevant views are considered.

But open standards do not solve all problems with regard to competition, interoperability and flexibility. Real competition is also dependent on factors such as established tendering processes and the existence of a market. Interoperability and flexibility rely on the presence of a coherent architecture describing how general processes and functions interact and how they are related to data and technology.

There is a clear potential, but also challenges, in introducing open standards. If the standards are not yet mature or fully integrated in widely adopted solutions, it may lead to increased costs or more time being spent on introducing the solutions concerned, and the benefits will then have to be gained over a certain period of time. There may also be cases in which the first unit introducing the standard will have to pay the initial cost, while other units will gain the benefits. In that case, it may be relevant to decide a joint method of financing. It is presupposed that these aspects should be included in impact assessments prior to decisions on setting mandatory standards.

That a standard is open implies that:

- the standard must be fully documented and publicly available,
- the standard must be freely implementable without economic, political or legal constraints on its implementation and use, now or in the future, and
- the standard should be managed and maintained in an open forum via an open process (standardization organization).

The first set of mandatory open standards

This report suggests that a number of open standards within seven areas may be made mandatory from 1 January 2008 if an economic impact assessment shows that this will not involve additional costs to the public sector. It is suggested that open standards should be made mandatory gradually as it becomes technically feasible - this means that the standard should be technically mature and that there is a market capable of providing solutions at competitive prices. The proposed mandatory standards from 1 January 2008 cover the following areas:

- Standards for data interchange between public authorities
- Standards for electronic file and document handling
- Standards for exchanging documents between public authorities (Open Document Format and Office OpenXML)
- Standards for electronic procurement in the public sector
- Standards for digital signatures
- Standards for public websites / homepages
- Standards for IT security (only within the public sector)

Within certain areas, only one specific standard is involved, while other areas involve several standards, which, in combination, give a set of standards. One example of this is the area of electronic file and document handling, where it is proposed to make a number of standards mandatory.

With regard to standards for exchanging documents between public authorities, the report proposes that it should be mandatory to use at least one of the document standards Open Document Format or Office OpenXML. Since both standards are only used to a limited extent in the public sector today, a study will be conducted in 2007 for the purpose of obtaining the necessary experience with these standards before 1 January 2008. Requirements regarding the use of mandatory open standards will not involve any obligation or incentive to expedite procurement, upgrading or implementation of new or existing IT solutions by public authorities.

Use of mandatory open standards

There are three essential key objectives in using open standards:

- The use of open standards is to promote competition in the Danish software market.
- The use of open standards is to promote coherence (interoperability) between IT systems across the public sector.
- The use of open standards should, as far as possible, give citizens and businesses a wider choice of software.

To ensure the value of open standards to the individual authority, it is important to avoid the authority being compelled to make inappropriate choices. For this reason, a number of exceptions are made to the general rule of using mandatory open standards.

In connection with contracts and development projects, authorities are exempted from the rules of using mandatory open standards if this means that the authority is compelled to adopt a solution which:

- is significantly more expensive in relation to using other standards,
- degrades the security level critically in relation to using other standards,
- involves a significant reduction in functional performance which is a direct result of the solution being based on mandatory open standards,
- increases the implementation time markedly, leads to conflicts with standards applicable within specific areas as a result of international commitments.

Furthermore, public authorities are exempted from the rules of using mandatory open standards if the solution does not involve data interchange with other systems.

In case one or more of the points above are in evidence, the relevant authority may choose to dispense with specific mandatory open standards for the solution concerned.

New solutions where technical procurement involves overall costs exceeding the EU tendering limit must be reported to the National IT and Telecom Agency on signing the contract, stating the reasons for applying the exceptional provisions.

New solutions with overall costs below this limit should also make use of mandatory open standards, unless they fall within the exceptional provisions. However, these solutions are not subject to the reporting requirement.

In this report, public authorities mean local and regional administrations, government departments, agencies and directorates.

Other initiatives

This report describes a number of other initiatives intended to ensure implementation of B 103.

Among these initiatives are:

- Launching information campaigns targeted at authorities and suppliers.
- Drawing up guidelines on mandatory open standards.
- Drawing up guidelines on the "comply or explain" model, including how to use it in connection with the tendering process.
- Planning common public standardization activities to allow mandatory standards to be adopted, including requirements for economic impact assessments in relation to sets of standards that are candidates for mandatory use within the public sector.
- Annual review of the extent to which mandatory open standards are used in the public sector, based on reports filed by public authorities.
- Current updating and further development of standards.

Before any final decision is made, open standards made mandatory after 1 January 2008 must be evaluated according to a number of evaluation criteria specified in the report, including an economic impact assessment. The evaluation must be made with active inclusion of public authorities and relevant suppliers of IT solutions.

The evaluation of possible new mandatory open standards should be subjected to wide public consultation before the Minister for Science, Technology and Innovation takes a final position on making one or more of the relevant open standards mandatory.

In future, when an open standard is made mandatory, such requirement will become effective only after a certain waiting period, which should basically be nine months from the date of publication. The waiting period may be modified if special conditions documented in connection with the evaluation of the specific open standard so indicate.

Implementation initiatives

Chapters 4-8 all conclude with a list of implementation initiatives following from the subjects dealt with in the chapter concerned.

All these initiatives are listed chronologically in the implementation plan, which is reproduced in chapter 3.