



**THE NATIONAL FREE AND OPEN SOURCE SOFTWARE (FOSS), AND
OPEN STANDARDS POLICY**

DRAFT

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**NATIONAL INFORMATION TECHNOLOGY AUTHORITY, UGANDA
(NITA-U)**

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1. Introduction

1.1 Purpose

The purpose of this policy is to provide guidance to Government Ministries, Departments, Agencies and Local Governments (MDA/LGs) as they consider Open Source Software and the use of Open Standards, when making decisions about procurement (including replacement) of software, IT solutions/Services.

1.2 Scope

This Policy is applicable to all Government Ministries, Departments, Agencies and Local Governments (MDA/LGs).

2. The Policy

Open Source Software

Open Source Software often has a lower initial cost as compared with proprietary software solutions, primarily because there is usually no direct charge for licences. However, there may be additional costs related to the selection of an Open Source Software solution. Therefore;

- (a) Government Ministries, Departments, Agencies and Local Governments decisions on whether to utilize Open Source Software shall actively and fairly consider all types of available software (including but not limited to Open Source Software and proprietary software) and be made within the context of total cost of ownership and on a value-for-money basis. The total cost of ownership will include but not be limited to fixed costs (direct purchases, licensing, etc.), operational costs (support, testing, upgrades, maintenance, training, etc.), exit and transition costs. Where a “perpetual license” has previously been purchased from a proprietary vendor (and therefore often giving the appearance of a zero cost to a project), a shadow license cost shall be applied to ensure a fair comparison of total cost of ownership. The shadow license cost will be equivalent to the published list price of the product (no discounts can be factored in).
- (b) Where there is no significant overall cost difference between open and non-open source products, open source will be selected on the basis of its additional inherent flexibility.
- (c) The selection of any software solution, whether open source or proprietary, shall be based on whether the proposed solution meets the business objectives of the MDA/LG and the e-Government Master plan

- (d) The selection of any software solution, whether open source or proprietary, shall align and be in conformance with the Government Enterprise Architecture and e-Government Interoperability Framework
- (e) Government Ministries, Departments, Agencies and Local Governments decisions on whether to utilize Open Source Software shall be taken after ensuring that solutions fulfill minimum and essential capability, security, scalability, transferability, support, compatibility and manageability requirements.
- (f) Government Ministries, Departments, Agencies and Local Governments Agencies shall provide a brief analysis of the purchasing decision, including Total Cost of Ownership, as part of the procurement/contracting process. The analysis is evidence that open source software has been considered.
- (g) The Government will expect those putting forward IT solutions to develop a suitable mix of open source and proprietary products to ensure that the best possible Value mix is obtained. Vendors will be required to provide evidence of this during a procurement exercise. Where no evidence exists in a bid that full consideration has been given to open source products, the bid will be considered non-compliant and is likely to be removed from the procurement process.

Non-Open Source Software

- (h) The Government will, wherever possible, avoid becoming locked in to proprietary software. In particular it will take exit, rebid and rebuild costs into account in procurement decisions and will require those proposing proprietary software to specify how exit would be achieved.
- (i) Where non open source products need to be purchased, Government will expect licences to be available for all public sector use and for licences already purchased to be transferable within the public sector – including into cloud based service environments - without further cost or limitation. The Government will where appropriate seek all-of-government agreements with software suppliers which ensure that government is treated as a single entity for the purposes of volume discounts and transferability of licences.

Open Standards

Open systems and specifications are often less costly to acquire, develop, and maintain and do not result in dependence upon a specific product or vendor. Component-based software development based on Open Standards allows for a more cost-effective "build once, use many times" approach. The

use of Open Standards facilitate the interoperability of Government systems, avoid vendor “lock-in,” and support transparency in government. Therefore;

- (j) All IT investments shall comply with Open Standard unless specific project requirements preclude use of an Open Standard or if the Open Standards are not appropriate. The Government will support the development of open standards and specifications.
- (k) The Existing IT systems shall be reviewed for Open Standards compatibility where appropriate.
- (l) Open Standards solutions shall be reviewed and selected when existing systems are to be retired or replaced, where appropriate.

Re-Use

- (m) The Government will look to secure full rights to bespoke software code or customizations of commercial off the shelf products it procures, so as to enable straightforward re-use elsewhere in the public sector. General purpose software developed for government will be released on an open source basis.
- (n) Where the public sector already owns a system, design or architecture the Government will expect it to be reused and that commercial arrangements will recognize this. Where new development is proposed, suppliers will be required to warrant that they have not developed or produced something comparable, in whole or in part, for the public sector in the past, or where they have, to show how this is reflected in reduced costs, risks and timescale.
- (o) When suppliers are proposing a third party product there should be full price transparency. If there is an all-of-Government agreement there should be the option to source through this where doing so would maximize overall public sector value. The Government will expect to be charged only the cost the supplier incurs unless the supplier can clearly and transparently provide evidence of the additional value created.

3. Guidelines

- (p) Because participation in the ongoing development and improvement of FOSS is the underlying basis for the promotion of FOSS solutions, MDAs/LGS should consider the extent to which they may wish to actively participate in the development of FOSS solutions that fall short of the project requirements for which the solution is used
- (q) Requests for Proposals (RFPs) should require that software vendors clearly identify whether their solutions are fully functional using open standards and, if not, to specifically identify and proprietary or closed specification standards for which they do not support a fully functional open

alternative. MDAs/LGs may give preference to proprietary software solutions that implement open standards over proprietary solutions that do not and may include the degree to which a proprietary software solution utilizes open standards as part of the Request for Proposal evaluation criteria

- (r) When scheduling the implementation of any new software solution, MDAs/LGs need to be careful not to interfere with or diminish the effective use of software solutions that have already been adopted.
- (s) While the adoption of most open source solutions usually does not involve payments for licenses, there are a number of different types of open source licenses that control how open source solutions may be used. MDAs/LGs are advised to be aware of both of the types of open source licences and any requirements or restrictions that may be incorporated as part of the licence. Since the licensing requirements can directly impact MDA/LG operations, consulting with the National IT Authority prior to executing a licence agreement for open source solutions is advisable.
- (t) The acquisition of open source solutions, as with any proprietary software, is subject to normal contracting requirements.

Appendices

Appendix A: Definition of Open Source Software

Free and Open source software (FOSS) is computer software with its source code made available and licensed with a license in which the copyright holder provides the rights to access, study, modify, and redistribute the software to anyone and for any purpose.

FOSS must comply with the following principles;

- 1 Free Redistribution:** The licence shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The licence shall not require a royalty or other fee for such sale.
- 2 Source Code:** The program must include source code, and must allow distribution in source code as well as compiled form. Where some form of a product is not distributed with source code, there must be a well-publicized means of obtaining the source code for no more than a reasonable reproduction cost preferably, downloading via the Internet without charge. The source code must be the preferred form in which a programmer would modify the program. Deliberately obscured source code is not allowed. Intermediate forms such as the output of a preprocessor or translator are not allowed.

- 3 **Derived Works:** The licence must allow modifications and derived works, and must allow them to be distributed under the same terms as the licence of the original software.
- 4 **Integrity of The Author's Source Code:** The licence may restrict source-code from being distributed in modified form only if the licence allows the distribution of "patch files" with the source code for the purpose of modifying the program at build time. The licence must explicitly permit distribution of software built from modified source code. The licence may require derived works to carry a different name or version number from the original software.
- 5 **No Discrimination against Persons or Groups:** The licence must not discriminate against any person or group of persons.
- 6 **No Discrimination against Fields of Endeavour:** The licence must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research.
- 7 **Distribution of Licence:** The rights attached to the program must apply to all to whom the program is redistributed without the need for execution of an additional licence by those parties.
- 8 **Licence Must Not Be Specific to a Product:** The rights attached to the program must not depend on the program's being part of a particular software distribution. If the program is extracted from that distribution and used or distributed within the terms of the program's licence, all parties to whom the program is redistributed should have the same rights as those that are granted in conjunction with the original software distribution.
- 9 **Licence Must Not Restrict Other Software:** The licence must not place restrictions on other software that is distributed along with the licensed software. For example, the licence must not insist that all other programs distributed on the same medium must be open-source software.
- 10 **Licence Must Be Technology-Neutral:** No provision of the licence may be predicated on any individual technology or style of interface.

Appendix B: Definition of Open Standards

An open standard is a standard that is publicly available and has various rights to use associated with it, and may also have various properties of how it was designed (e.g. open process).

Open Standards must comply with the following principles;

- Result from and are maintained through and open, independent process

- Are approved by a recognized specification or standardization organization, (e.g. W3C or ISO or equivalent)
- Are thoroughly documented and publicly available at zero or low cost
- Have intellectual property made irrevocably available on a royalty free basis, and
- As a whole can be implemented and shared under different development approaches and on a number of platforms.

References

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