



SIK checklist for the procurement of open source software

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This checklist serves as a tool for procurement bodies that ensure the legally compliant procurement of open source software and strive to facilitate offers from open source providers. This checklist contains questions with corresponding explanations, which can be taken into consideration when preparing an ICT tender.

1. Preliminary analysis/Concept development

- Is the open source development model sufficiently understood?**
Unlike with proprietary software, with open source software one does not acquire licences, but rather services and/or subscriptions for specific open source solutions. The business models of open source vendors and service providers are therefore designed to offer specific services such as support (service-level agreements), maintenance, warranty, guarantee(s), adaptations, integration, operation, training, and so forth, for open source solutions. This factor should be taken into account right from the preparatory stage of the tender.
- Have existing open source solutions been tested?**
Under procurement law, the use of open source software without any services from a company is not relevant and can therefore not take place without a public tender. Directories such as the OSS Directory or alternativeTo can be used to research which open source solutions are available for which area of application (CMS, DMS, application server, specialist application, etc.).
- Which scope of functionality is actually required?**
There is a tendency towards procuring a larger scope than is actually required. Instead of a specific proprietary database, MariaDB or PostgreSQL, for example, could also be deployed. If a software solution with too much functionality is acquired, one ends up paying for costs of functions that are not even required.

2. Criteria that prevent open source from being excluded

- Are the procurement documents functional without specifying any proprietary products?**
Specifying certain proprietary products (e.g. Microsoft Sharepoint), platforms (SAP), Internet browsers or interfaces by certain providers may lead to open source providers being excluded from the outset. This strengthens existing dependencies, promotes monopolies and ultimately limits competition and innovation, which results in higher IT costs in the long term. Conversely, there may be good reasons to restrict a tender to a certain publicly available open source solution. By definition, any provider of such open source systems may offer their services, which would not impede competition but, on the contrary, promote it. It is important to be able to justify a restriction to a specified open source solution.
- Is any information provided specifying that open source software can also be offered?**
The terms and conditions of the federal government and SIK do not impede the procurement of open source solutions. To make sure that all open source providers are aware of this, it is recommended to include a note in the tender documents to indicate that open source solutions can also be offered.

Can contractors and consortia take part in the tender process?

Many of the skilled open source software developers are self-employed or work in small companies. For this reason, tenders should allow open source providers to join forces and submit their tender as sub-contractors for a larger provider (e.g. a general contractor) or as a consortium. One of the providers could, for example, be nominated as a single point of contact to ensure that everything is coordinated coherently.

Are the specified company size and reference requirements not unnecessarily high?

Open source providers tend to be smaller than manufacturers of proprietary software. Furthermore, for reasons of dependency on proprietary products, open source solutions are often not very widespread. To avoid indirectly excluding open source providers, the selection criteria should therefore not stipulate unnecessarily stringent requirements in regard to company size, number of employees, references, installed versions, etc. Even in large companies, only a small group of employees is ultimately in charge of a project. In addition, large companies have higher employee turnover rates, while their employees tend to identify less with their work and customers than those of smaller businesses. These aspects speak in favour of smaller providers; hence, it makes no sense to exclude them.

3. Criteria taking into account the properties of open source

Is the provision of the software under an open source licence predetermined in the technical specifications (TS) or is open source assessed as an award criterion (AC)?

Through its licence provisions, open source software grants users significant use and development options, which are excluded in proprietary software. On the one hand, open source solutions may be used and copied free of charge and without restrictions. Legally, the use of open source software has no financial consequences, irrespective of how many workstations of servers run the software. On the other hand, open source licences grant full access to the source code and the right to modify it. This gives users the option to audit, revise, adapt and further develop the software, either themselves or by commissioning third parties. For these reasons, it makes sense and is permissible to assess the positive aspects of open source software as an AC or even to require utilisation properties under an open source licence as a technical specification.

Are the provider's "open source competencies" specified as a selection criterion?

If a service consumer deliberately wants to acquire an open source solution or already owns one and is looking for corresponding services, it may make sense to specify the provider's "open source competencies" as a selection criterion or – in the case of a selective process – evaluate them.

Is access given to the entire source code of the offered software solution?

For security and data protection reasons, it is important that the provider makes the full source code available to the service consumer for audit purposes. This allows software developers to examine the source code for potential backdoors to the NSA, etc. For reasons of software quality, it also makes sense to guarantee access to the source code in order, for example, to assess the code quality or the documentation of the source code. With open source software, full access to source code is guaranteed by definition; this is usually not – or not entirely – the case with proprietary software.

Does the tender assess the costs of the IT solution over its entire service life? (Total Cost of Ownership – TCO)

It is often more expensive to newly implement open source software than to upgrade the existing proprietary software because this requires technical and personnel changes (migration, adaptations, retraining, etc.). If, however, the entire service life of an IT solution is taken into consideration, operating and maintenance costs are significantly higher than procurement and implementation costs. On average, the service life of IT solutions is around three times longer than the duration of the project. Open source-based solutions are usually cheaper in the long term because open source software does not incur any recurring licence costs, the provider can be switched relatively quickly, and, thanks to open standards, there are hardly any exit costs. A tender should therefore always take the entire service life of an IT solution into consideration.

Is the risk of bankruptcy assessed for proprietary solutions?

If a manufacturer of proprietary software files for bankruptcy, the rights to the source code go back to the bankruptcy estate. Users of the proprietary software are faced with an uncertain future. With open source software, another service provider can be commissioned with the development of the system because the service consumer has full rights of use.

Are reference installations of open source solutions considered that have not been implemented by the provider itself?

It may be stipulated as an award criterion that the tender must detail how many publicly known instances of the offered open source solutions are already in use. Although this does not assess the provider's competence, it still indicates how widely the offered open source solution is used because it could equally have been implemented in-house.

Is the activity of an open source community taken into account?

An open source solution can have a more or less active community of software developers and service providers. For the sustainable development of an open source project, it is therefore crucial that there is a community that is as active and heterogeneous as possible. The information platform Open HUB (www.openhub.net) is updated daily and provides information on the activity of around 700,000 open source providers.

Is the availability of providers of an open source solution assessed?

For the long-term development and a possible change of providers, an extensive community of service providers is important. The number of commercial service providers available for a particular open source solution should therefore be considered as an award criterion.

Further information

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OSS Directory

Directory of open source providers, users, products and references: www.ossdirectory.ch