Building a market for FLOSS: The OSOSS project in the Netherlands

Urging public administrations to use Free/Libre/Open Source Software (FLOSS) and open standards is one thing. Getting them to really take the jump is quite another. In the Netherlands, the OSOSS programme is helping ministries and municipalities to make their IT strategies more open. Its goal is to create a level playing field for FLOSS solutions, and to boost the local economy and the Netherlands' capability for IT innovation.

The OSOSS programme's acronym is its mission. The letters stand for "Open Source als Onderdeel van de Software Strategie" - "open source as a part of the software strategy". The origins of the programme are political. In 2002, the Dutch parliament adopted "Vendrik's motion" [full text - pdf]. It stated that public administrations in the Netherlands should use open standards exclusively from 2006. It also asked the government to promote the use of FLOSS in the public sector, by setting "concrete and ambitious goals".

The OSOSS project was set up to help public administrations put these demands from parliament into practice. Jan Willem Broukema, OSOSS' programme manager, says that the reasoning behind this motion was largely to create a level playing field within the software supplier market. "The government sees that governments themselves are subject to oligopolies or monopolies, and that they should do something about that by selectively buying specific solutions."

Map and flag of the Netherlands

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As there are no sanctions attached to the motion, its practical effect depends on how effective OSOSS is in convincing public administrations to use FLOSS and open standards.

The OSOSS area of work concerns all levels of public administration in the entire country. Located in Western Europe, the Netherlands is a constitutional monarchy with a population of 16.5 million. With an area of 41,526 km², it is quite densely populated. It is divided into 12 provinces and more than 450 municipalities.

Focusing on openness, not on software

OSOSS is run by the ICTU foundation, at the request of the Dutch ministries of the Interior and the Economic ministry. ICTU was set up in 2001 by the Dutch interior ministry and the Association of Dutch municipalities, to help public administrations better achieve their ICT and e-government goals by working together.

Logo of the ICTU foundation

The current OSOSS project is actually the second programme under this acronym. The first one was called "Open Standards and Open Source Software". Running from 2003-2005, it was rather more technical in nature, as Jan Willem Broukema explains. Bouke Koelstra, working with OSOSS as an advisor for municipalities, says: "The first three years were about 'what is open source, and why is it important to use it?'"

Koelstra considers that by now, these things are common knowledge in the public administrations. In its present incarnation, OSOSS (Open Source Onderdeel Software Strategie - Open Source as a part of the software strategy) has become more practical. The programme now focuses much more on openness and interaction with the commercial sector.

Small budget, big effects

There are five people working in the OSOSS project. This includes Broukema as the programme manager, a project manager for the work regarding the ministries' ICT strategies, and three consultants working on different subjects, of which Koelstra is one.

Logo of the OSOSS programme

OSOSS' budget of 700 000 EUR per year comes from two sources. Through the ICTU foundation, the Economic Ministry and the Ministry of the Interior jointly fund the programme in order to support and initiate cooperation between public sector bodies on FLOSS. The advisory work for the ICT strategy of the Dutch ministries is funded by all ministries together.

Advising the public sector

According to its website, OSOSS "informs and advises the Dutch public sector about the possibilities of open source software and stimulates the use of open source software in their information systems", by providing research, information and infrastructure.

Currently, OSOSS concentrates on working with ministries and municipalities. But its remit includes all of the public sector: central government, ministries, departments, national bodies, provinces, water boards (administrative bodies for local water management), municipalities - and if necessary and requested, also with schools and the health care sector.

To quote from the official mission on the OSOSS website once again: "The activities of the programme

are primarily aimed at governors and ICT management in all of the public sector and their suppliers. The results of these efforts are open to anyone so that the private sector and citizens may take advantage as well."

In addition to advising ministries and municipalities directly, OSOSS organises workshops, publishes books and, in Broukema's words, acts as "a kind of help desk" for administrations. OSOSS also runs uitwisselplatform.nl, a platform where Dutch public bodies can develop software together.

Ministries: Preparing the ground where a market can grow

In the Dutch ministries, the OSOSS consultants help to integrate FLOSS into their general IT strategy, and point out opportunities to implement FLOSS within the next six to twelve months. By the end of this year, the group will have gone through more than half of all ministries. However, OSOSS neither provides technical support, nor does it assist in implementation. "For that, we tell our clients to go to the market", says Broukema, who describes this part of OSOSS' work as "pre-consultancy".

The OSOSS project does not compete with the private sector in providing consultancy. It works to build a market, which the private sector can then join. Broukema makes this quite clear: "Since we're also set up by the ministry of Economic Affairs, one of our main concerns is that we do not compete with the market. The opposite, in fact: we're trying to get the public sector so interested in the subject that they're willing to go for a full consultancy session. And then, if they want to, we will provide them with a selection of companies that might do that job for them."

Seeking the industry's input

The current OSOSS programme is actively seeking businesses' input and cooperation. OSOSS frequently organises so-called "whetting stone sessions" with companies, where government and industry representatives discuss their plans and ideas. There are also "lunch sessions" at ICTU, where industry representatives talk to an audience of about 25 people. This gives the industry the opportunity to build a business case around the government's plans, and helps the public sector to better understand the industries' way of working.

The OSOSS consultants concentrate on the advantages of FLOSS, rather than on the technology. Broukema explains: "Choosing open source software is not choosing software, but choosing 'open': in terms of technology, in the choice of interfaces, in the choice of procurement, of suppliers, of support, of maintenance, and more."

Although the ministries of course have different remits, their IT structures are quite similar: "Public servants sitting behind a desk and writing documents - where's the difference in that?" asks Broukema. OSOSS brings their IT managers together to discuss common issues and strategies. According to the OSOSS programme manager, this approach is very successful. "People are very enthusiastic, because often they're not aware that someone in another ministry has already implemented the solution for the problem they're wrestling with."

Talking to municipalities about FLOSS

The second focus of OSOSS' activities are the country's more than 450 municipalities. Similar to its work in the central ministries, OSOSS helps them to make FLOSS a part of their IT strategy. This task is mostly handled by Bouke Koelstra. He says: "In the first place, we have to appeal to their [the municipalities'] own initiative and interest. We tell them that it is important to escape from vendor lock-in, that it is important to change the market; and don't say it doesn't work, because here are the examples where it does." He claims that now, about 70% of the municipalities which have FLOSS in their IT strategy say they will consider FLOSS the next time they replace software.

"The municipalities all work with the same laws and are handling the same processes. So if one municipality can do it, the others can too", says Koelstra. During eight months, he personally called all municipal administrations administrations, talked with them about FLOSS, and told them what OSOSS has to offer: information and connections to municipalities with similar experiences. Visiting many of these towns, he prepared case studies about their experiences with FLOSS, which are published on the OSOSS website. This way, interested local administrations can easily learn about solutions that other cities and villages might have found for problems similar to their own. A book containing descriptions of 50 municipalities' work with FLOSS is currently being published.

FLOSS in local government? Depends on the IT manager

Municipalities rely on their IT managers to determine their software strategy. It largely depends on these managers which path the administration chooses. According to Koelstra, young people around the age of 20 are the ones who are most afraid of working with FLOSS. "In school, they have only used Microsoft products. They have only learned to work with the mouse, but open source sometimes is text-based. They're afraid of GNU/Linux. Towns with young IT managers are the most conservative when it comes to open source. Older people have still used DOS or even remember the mainframe era; they're happy that the command line works as well as it does."

According to Koelstra, the most important reason today for FLOSS use in municipalities is cost. "Licence costs are a very substantial share of the TCO", he says. A reform in tax distribution that took place in 2006 put most municipal administrations in a tight spot, prompting many to see their IT department as a cost centre. When asked to lower expenses by, say, 20%, many IT administrators now opt to save on licence fees, says Koelstra. "Especially for small municipalities, OpenOffice can bring substantial savings, even after the costs for the migration. And now that we've managed to raise demand, suppliers are starting to support it."

Creating customer pressure

In order to help administrations find reliable service providers, the project maintains a list of such companies on its web page. These companies call OSOSS asking to be listed; the OSOSS team then checks back with the administration that the firm has worked with. If the feedback is positive, the firm is added to the list, together with the reference person in that town or city.

According to Koelstra, partnership agreements between software companies often pose problems for municipalities that want to select their software freely. "People should know what it means if a company is, for example, a 'Microsoft Gold Certified Partner'. It means that their solution is very likely going to be based on Microsoft. It's the same for a Red Hat partner", he says. "Some companies support OpenOffice, and others decide not to - not on technical grounds, but for financial reasons, because they may have an agreement with Microsoft or Oracle." "If you don't pro-actively request FLOSS, many companies are not going to provide it, because they won't earn anything from the licence."

The Dutch market for the special software used by public administrations is essentially a duopoly. Koelstra says that there are many examples of municipalities which have not migrated to FLOSS because of the difficulties of interfacing with the proprietary administrative software. But municipalities are starting to put pressure on the suppliers. From his inventory, Koelstra learned that 10-20% of municipalities wanted to use OpenOffice, but their special administrative software didn't allow it. "I told them that there are others who want the same, and gave them the contacts. Now, there are 20 or 30 who demand this, and the suppliers are starting to react. It took us only eight months to change this market."

Some 70% of municipalities in the Netherlands now have an IT plan that considers open source in some form. This includes 10% who are "Microsoft only", which mention open source only to reject it. Many of this group didn't know that it was even possible to use open source in a professional administrative environment.

OSOSS is now holding an "Open Source Roadshow". Municipalities in a region are invited for a get-together, where regional municipalities that work with FLOSS talk about their infrastructure.

Bouke Koelstra at a seaside stop between visits to municipalities

The inventory effort was also a way to bring administrations together and help them to form communities. "Now they know that it is important to work together not only on the technical level, but also when buying software", says Koelstra. Municipalities are starting to form communities around certain programs, such as OpenOffice, or the content management systems Typo3 and MMBase.

To help public administrations in developing software together, OSOSS has created the "Uitwisselplatform" ("Exchange platform"), a repository and a forge for the public sector. It currently hosts some 70 projects, with DigiD being perhaps the prime example.

FLOSS for the local economy

Broukema is very clear about the role of open standards in the public sector: "They are a prerequisite. If

you're a public sector body, you should focus on selecting solutions with open standards on your interfaces." FLOSS, in his view, has a different role: "Open source software is not a prerequisite; it's the end result of a selection, which might turn out differently. We don't want [the public sector] to choose open source software; we want them to consider open source software as an option."

Broukema sees a lack of knowledge about FLOSS as the public sector's main handicap: "The majority [of administrations] is well aware of the options that open source software offers; but they're unfamiliar with the subject, and they're unfamiliar with the fact that it's a full-grown industry."

By using FLOSS, administrations can give a push to the local economy. "We see that cities and municipalities, when looking for open source solutions, tend to select local suppliers to provide the solutions, and to build on that for specific purposes", says Broukema. "That is something that cannot be done on closed-source software."

Exemplifying this trend, Amsterdam's administration has decided to buy software and ICT-related services from Dutch companies only, and if possible from the Amsterdam area. The Dutch capital is now developing its own GNU/Linux-based desktop, with pilots to start in two city districts later this year.

FLOSS thus provides an opportunity for innovation. Broukema: "IT innovation is one of the problems of Europe in general. That is because most of our basic software is being built by others across the ocean, in a closed version. And you cannot innovate on top of something that is closed; you can only build around it." FLOSS, on the other hand, lets administrations take advantage of their region's creative and economic potential, he says: "With open source software, you can. Cities can work together and build a new solution that is specific to municipalities. That's a major difference."

The public sector needs transparency

Transparency is another major reason why Broukema prefers the public sector to use FLOSS. The EU data protection act states that there needs to be transparency whenever personal data is processed by an organisation, government or not. "Of course, governments process enormous amounts of personal information. They can in fact only comply to the Data Protection Act if they're able to provide insight into how the data is being processed. That's not very interesting when you're talking about a word processor, but it's very important if you're talking about big solutions that provide you with social security funding."

In eGovernment, a lot of new solutions are being built on top of FLOSS, with governments developing solutions together and using FLOSS licensing as a tool to handle copyright matters. An example where transparent processes are very important is DigiD, the Dutch digital ID system. "DigiD is something where everybody has to be able to see how it works, and that's why they chose open source software", says Koelstra.

Jan Willem Broukema making his point during a meeting on theimportance of digital communication between the government and its citizens

Currently an even bigger project is under way, with transparency concerns to match. The Dutch administrations are building a citizen's registry as FLOSS. This means building an individual web page for each citizen, as a personal portal that shows everything that the public sector knows about a person, "whether it's medical, fines, social security, building permits", says Broukema. Since the whole public sector is involved, all administrations are cooperating on this project.

Procurement: levelling the playing field

An important step in getting public administrations to use FLOSS is to help them to adapt their procurement processes, so that companies offering FLOSS compete on a level playing field with proprietary vendors. According to Broukema, the problem is that administrations are often locked into proprietary standards, preventing them from moving to FLOSS solutions.

Another big issues is that public sector bodies who are looking for offers need to learn how to structure their calls for tender in order to give equal opportunities to FLOSS. Later this year, OSOSS will publish a manual for public sector procurement. This will not be aimed at lawyers, but at buyers in the public sector, providing a practical guideline.

Together with a number of municipalities, OSOSS in January 2007 published an "Open Government Manifesto" (pdf), demanding from their suppliers vendor independence, transparency, interoperability and digital durability. The manifesto came out of the municipalities' own initiative. It has so far been signed by 12 municipalities, representing 3 mio inhabitants.

Competing examples instead of legal complaints

Have there ever been any legal problems for OSOSS, for example complaints that the government is exercising undue influence over the software market? Broukema makes it clear that such complaints have never arisen, and would indeed be unfounded: "We're not pushing open source software; we're pushing for people to create a level playing field in their procurement." He is unequivocal about the limits of the OSOSS programme: "We want to get out of the way. We want the public sector to be able to help itself."

Koelstra points out that "of course there are some software companies that are not happy about our work." But these companies do not resort to legal action: "When we publish a study saying 'Valkenburg uses open source, and they're doing fine', they publish one saying 'this other municipality only uses Microsoft and Oracle products, and they're doing fine as well'. That's ok, it's healthy competition."

Dealing with resistance

What have been OSOSS' biggest problems so far? "Opposition and resistance", says Broukema, mainly from IT directors and managers: "They say, 'don't interfere with my work, I've got enough headaches as it is.' And they're right! We are an executionary body, a change management programme, based on economic considerations about the IT industry. Most people who have to run the IT for their departments or their city don't want to be bothered."

The programmes' more practical approach since 2005 helps, though word of this has yet to get around to everyone. In its earlier incarnation (2003-2005), OSOSS focused primarily on FLOSS, rather than on the aspect of openness. "We changed that in 2006, and it makes the discussion a lot easier. That's a message that is rather recent and has not reached a lot of people."

Strategic approach is key to success

Its approach has allowed the OSOSS programme to make a very significant impact. Rather than discussing the properties of this or that application, OSOSS takes the discussion to a level where strategy and policies are being discussed. Here, as Broukema emphasises, the matter is openness, rather than software. This way, each public body gains a greater understanding of the advantages of FLOSS and open standards, and can come to its own informed decision.

The success of the OSOSS programme is also due to its concentration on only a part of the public sector. Koelstra is sure that whether OSOSS achieves any progress depends on very much on the person working on the topic. To be successful in the education and health sectors, he says, OSOSS will need someone who knows both FLOSS and the sector in question well.

The future of the OSOSS programme

The Dutch government will decide about OSOSS' future at the end of 2007. The ministries behind the current OSOSS have presented an action plan which includes a new edition of the programme, and reactions in the Dutch Lower House have been positive. If extended, Koelstra thinks that it might become

less of an information platform and more of a competence centre, providing individualised advice to those administrations that need it. It would also do the same work that it did for municipalities for provincial bodies and water boards.

Two additional focus areas would be the health and educational sectors, both areas where the state plays a large role. In the health sector, it is primarily about using open standards. In education, the programme might take use different approaches. One is to use FLOSS to teach pupils and students how a computer works, and how to program one; Broukema thinks that this would give a boost to IT competence in the Netherlands.

The other is to get schools to use existing FLOSS programs to replace proprietary software, teaching children to use a certain type of program rather than a certain (proprietary) product. Koelstra points out that there is indeed demand for such skills: "We are seeing a growing trend that employers ask the educational sector to provide young people with skills for open source software."

Cooperating across Europe

OSOSS is now looking into exchanging experiences and cooperating with similar organisations in other European countries. As an example, Koelstra mentions the recently started OSS Observatory of Italy's CNIPA agency (Centro Nazionale per l'Informatica nella Pubblica Amministrazione — National Centre for IT in the public administraton).

According to Broukema and Koelstra, the OSOR project that is currently being developed has the potential to make such cooperation a lot easier. Broukema says: "It's a very wise move to have an organisation like IDABC running. And it would be wise to focus also in Brussels on coordination between the different European countries on the opportunities for innovation and economic growth based on open source solutions." Koelstra also thinks that the EU should think about a system to certify FLOSS suppliers and service companies.

A thumbs-up for OSOSS

Broukema sees the OSOSS programme as a success. "We're getting results, though not everywhere and not as fast as we would like; but that's true for every programme. People's minds are changing. We're teaching them to look at the world in a different way."

Broukema proudly points out that in a recent survey by HollandOpen, a Dutch body to promote FLOSS, respondents considered OSOSS to be a success; though results are limited due to budget and staff constraints, they were found to be quite visible. Another indication of the growth of the market is the number of job offers for FLOSS on the job site monsterboard.nl. Koelstra says that the number of job offers related to GNU/Linux, PHP and other free software has gone up by 60% in the past two years. He also mentions that by now there are IT companies that call him and ask how they can make FLOSS part of their business.

Koelstra considers OSOSS' work at the municipal level almost done. "We have reached a critical point, where the municipalities say: 'now we know what open source can do, and now we are good purchasers: we know what we can do with open source and open standards'. The market is maturing."

Links

- The OSOSS website (English version)
- OSOSS example cases
- The Open Government Manifesto (pdf)
- Vendrik's motion (pdf)
- The ICTU foundation
- The Uitwisselplatform
- The "Open Source Roadshow"
- DigiD, the Dutch digital ID system

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This study is based on interviews with Jan-Willem Broukema, OSOSS programme leader, and Bouke Koelstra, OSOSS consultant.