

FriKomPort: Sharing code, costs, and benefits

In 2006 the Norwegian region of Kongsberg launched a portal to coordinate and administrate courses and trainings for municipality staff. The solution was developed with open source tools, as a common effort of all seven municipalities of the Kongsberg region. Once the project was working successfully, other municipalities and organisations became interested and wanted to use the portal as well. The Kongsberg region eventually published FriKomPort, as the portal was called, as a free software application under the GPL. The portal today is used by more than 50 organisations, and practically all users are very confident about the solution. For the future the FriKomPort leaders hope to share the portal with even more municipalities by publishing an English version.

Introduction

Norway is a country with vast landscapes and long distances in between its 431 municipalities. The municipality plays an important role, since it provides the framework for primary education, unemployment, health, and other social services. As most municipalities are rather small however, budget restraints are evident in most communities. An example of this can be seen in the Kongsberg region, which is one of 19 Norwegian administrative regions, and which includes seven municipalities near the town of Kongsberg.

It was in 2005 that Britt Inger Kolset, the region's ICT program coordinator, came up with the idea for a project to solve a problem that all the municipalities shared. They all offer courses for their staff concerning issues such as information about the municipality's ICT system, public law, or public health, which every employee has to attend at some point. To administer and coordinate these

Quick facts	
Name	FriKomPort
Sector	eGovernment
Start date	December 2006
End date	ongoing
Objectives	Municipality staff course administration
Target group	Municipalities, other sectors
Scope	National
Budget	Starting budget 250.000 Kroner (€ 29.000). Currently approx. 230.000 Kroner (€ 26.000)
Funding	Initially funded by the Kongsberg region. Now funded by all participating regions and municipalities
Achievements	58 organisations are using the platform daily (50 of which are municipalities)

courses, Kolset recognised that there was a need for a system that would make it easier for people to register for courses, and for the organisers to inform participants about changes. “We searched the market, but we didn't find any solution that would just work. So we realized that we had to develop a portal by ourselves. For this we wanted to focus on a solution that other municipalities could re-use”, Kolset explains. This was the starting point for the development of the Fri KompetansePortal (Free Competence Portal), FriKomPort. The portal was developed using open source tools, and its code is freely available for reuse under the GPL. After initially being used only by the seven municipalities in the Kongsberg region, the number of organizations and municipalities that use it today has risen to 58.

Organisation and political background

Initially the FriKomPort project was only intended to serve the seven municipalities of the Kongsberg region: Flesberg, Kongsberg, Nore and Uvdal, Notodden, Rollag, Tinn and Øvre Eiker.

All seven municipalities had the same troubles in the administration of their courses, and sharing this development was going to simplify their internal processes substantially. Although their courses were mostly aimed at one municipality at a time, FriKomPort



has also made it much easier to organise courses for

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staff from several of the municipalities. This helps to save time and money, e.g. by making sure that courses are fully booked, even if a single town does not have enough staff to fill the ranks.

After about half a year of successfully running the platform, other municipalities started to hear about FriKomPort and the interest for the project grew all across Norway. Step by step, the number of regions and municipalities increased from the initial seven to 58 public bodies, 50 of which were municipalities and eight other organisations from the educational and the political sector. Among them are the municipality of Arendal, and the University of Agder. Both came across FriKomPort after being in contact with Kolset, the alleged “mother of the system”, as described by Brit Maria Marcussen from the municipality of Arendal, which makes use of FriKomPort.

Budget and Funding

The initial investment for the FriKomPort project was made entirely by the region of Kongsberg. Getting the funding approved by the region was easy, says Kolset. The need for such a platform was clearly there and easy to demonstrate, and the sums required were not very large.

For the development of the platform, a call for tender was published. About six companies presented their idea of a course administration platform. At the end “the one we chose was the cheapest, and the only one relying on open software”, as Kolset remembers the process. Know IT Objectnet was the ideal partner for the region. The budget for the first phase of the project was 150.000 Norwegian Kroner (approximately € 17.000) and for the second phase another 100.000 Kroner (approximately € 11.000). “The second phase [which followed shortly after the first] was basically just an update”, Kolset adds. The initial investment of 250.000 Kroner was thus borne by the Kongsberg region.

After about half a year of successfully running the project in Kongsberg, the number of municipalities interested in using the platform increased by the day. Eventually, the national government also realized the potential of sharing such a project,

and provided about 500.000 Kroner (approximately € 51.000) for the establishment of a platform where the application could be shared, and for the publication of the source code. Thereafter the number of users increased rapidly. Already at the start of the project, the Kongsberg region made a contract with an application service provider, stating that new users could make use of their services for a fee of 6000 Kroner (approximately € 620) per year. Kolset explains proudly that “this was a very smart thing to do, because there are no difficulties for new members to use the solution. They don't have to download the solution or update their infrastructure. They can just buy this as a service [...], which is very cheap”. For Terje Sagstad, chief engineer at the IT department of the University of Agder, this was the best and cheapest solution he could possibly find for the administration of staff courses at his university.

In addition to the 6000 Kroner for the application hosting service, the member organisations also have the option to pay a voluntary fee of 8000 Kroner (approximately € 900), which is used to improve the portal according to the wishes of the users. To determine key points which need



Britt Inger Kolset, director of FriKomPort and ICT coordinator at the Kongsberg region

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improvements or future functionalities, all users, including the non-paying users, have the chance to meet annually at a conference in Oslo to discuss these issues. After several brainstorming sessions, a group of representatives of all participants makes a list of all new suggestions, on which the paying members can vote in the course of the year. Sagstad, Marcussen and Kolset explain the system jokingly: “It's like in the Eurovision song contest. Someone gets the points”. Out of the 58 organisations and municipalities that use FriKomPort, “29 municipalities have bought this kind of service”, Kolset says. After the voting process, those points that have been ranked highest will be reported to Know IT Objectnet, which adds them to the software.

The organisations that use FriKomPort find the solution ideal because of the low cost and the easy and cheap maintenance through the application service provider. With regard to the financial resources invested in the project at the University of Agder, Sagstad sums it up: “So far the university has invested about 20.000 Kroner [approximately € 2300) in the project, which would be tenfold this amount with proprietary software. So the board of the university was quite impressed”.

Technical issues

As the ICT direction at the Kongsberg region itself did not have the expertise in-house to develop such a platform “we talked to Know IT, and they showed us which free software we should use for the development. We didn't know much about this, but I think they did a good job”, Kolset explains.

FriKomPort was developed with Java and PHP. This kept the costs to a minimum, while at the same time ensuring functionality and sustainability of software. The content management system behind FriKomPort is eZ Publish, which is also freely available under GPL license. For the database functionalities, Know IT relied on MySQL, which allows multi-user access to all databases on the system. This core element of FriKomPort is also available under the GPL.

The development work itself only took about three month until the project was out of its beta phase. At first, Know IT presented a demo of the platform to the ICT department of the Kongsberg region. Then, after discussing the software, additional functions were added and bugs resolved, until the software was fully functional in mid-2006.

One of the key aspects in the development was the usability of the solution, as it would be used on a daily basis by a broad variety of people employed by the municipalities and the other organisations. Especially Sagstad, who has a background in software development, is amazed by the platforms usability: “It's a simple system, it's quite easy to use, it's not rocket science, but it just works!”, he concludes. Even though the platform was originally not intended for the use in the educational

sector, it only needed a few changes in the wording of buttons and tables for the use at Sagstad's university. "The basics of how to administrate courses are the same for a municipality or a higher education organisation, and so 80 per cent of the software was ready to run from the beginning", Sagstad explains.

Change management

Before the introduction of FriKomPort to the municipalities in the region of Kongsberg, there was no system for the administration of staff courses. They were organised mostly by using a pen and a paper, which clearly did not allow for the same functionality as a computer-based system. This explains why users at the municipalities were happy to have a system, which kept them updated about any changes, and where they could easily register and de-register for a course. With regard to the implementation Kolset recalls: "There was a project plan, which consisted of implementing the software and giving the necessary training. For this we also cooperated with Know IT". The training however was done in a few minutes, as the software is very easy to use and almost self-explanatory.

Basically the same happened at the University of Agder. Sagstad remembers the introduction as follows: "One of the key success factors is that it is easy to use. I introduced the system to several people and let them try it out. In less than 5 to 10 minutes they had learned the system and were registering courses". In his eyes, "it's a software made for humans", and in this respect "quite a success story really", as he says enthusiastically.

At the municipality of Arendal, although the courses were already coordinated with the help of a computer, "we needed something more elegant and secure", Marcussen explains. Here, lists were previously send around via email and participants would just add their name to a list. This was often problematic, as list would get lost along the way, or names would be deleted accidentally. Getting access to FriKomPort was easy: "I just made a phone call, they sent us a contract, we signed, and then it was taken care of", Marcussen says. For the registration thereafter, "all we did was to change the link [to the courses]. It was really not necessary to tell everyone how it worked", as using the platform turned out to be so easy. "Only a few people called and asked, but most people found it quite OK and did not have any problems".

Effect on government services

For the municipalities and organisations that use FriKomPort, the administration and coordination of internal courses and trainings has improved substantially with the platform. As the hosted solution is quite cost effective and requires virtually no maintenance, even municipalities with smaller budgets and fewer resources can employ it in their system.

The number of people using FriKomPort on a daily basis probably goes well in the thousands. In the municipality of Arendal alone “there are about 1500 to 2000 people using it frequently”, as Marcussen says. There, since the start of FriKomPort in early 2007, 421 courses have been registered on the platform.

For Sagstad another important factor for the success of the platform, and also for Open Source Software in general, is the need for a sharing model or “Delingsmodell”, as he calls it in Norwegian. In his eyes, this is the most important point where Open Source Software often lacks in attractiveness to government services and the public sector. “Today, free software is not part of



Terje Sagstad, Chief Engineer at the IT-Department of the University of Agder

a value chain like commercial software, because you have this piece of software that you can download for free, but what's next? With proprietary software there is support, and a whole life cycle, and often this is not the case for free software”, as he explains the need for a Delingsmodell. Especially for smaller organisations and municipalities, the resources to dive into the Open Source ecosystem for support are simply not there, which leaves them only with proprietary solutions. “The free software has to be cost effective, it has to add value, it should lead to a sharing of code and development, as well as the sharing of knowledge and experience. If it can meet all those points, then it can be a real alternative to proprietary software” Sagstad highlights. With FriKomPort, he sees that all these conditions are met, which makes the platform as successful as it is: the initial code if freely accessible, it can be improved and developed with the input with all users, the experience can be shared, which represents some form of support. It stands in a life cycle that goes beyond the development and the initial publication of its code.

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Cooperation with other public bodies

For the FriKomPort project cooperation was very important from the start on, as the first phase of the project was already a cooperation of all municipalities of the Kongsberg region. With regard to the initial idea, Kolset recalls: “The idea to share the project with other municipalities [outside of Kongsberg] was there, but we wanted to wait a bit. As the project became more and more popular, we travelled the country and presented FriKomPort to other municipalities and regions”. In July 2007, after the portal had been up and running for seven months “there was the [...] the region of Grenland [consisting of six municipalities] that wanted to use FriKomPort. Together we were then 13 municipalities using the portal”. Step by step the number of using organisations grew, until it reached 20 municipalities by the end of 2007, and eventually 58 organisations by the end of 2008, 50 of which were municipalities.



*Brit Maria Marcussen, ICT coordinator
at the municipality of Arendal*

Through the annual conferences, where all users are invited, there is a good exchange of ideas and experiences. Together with representatives of all users, be they from municipalities, political parties, or educational facilities, they work on finding ideas on how to improve the portal for their needs. These meetings are an ideal platform to exchange experiences and suggestions for improvements. Through the voting system, where those users that pay the voluntary fee of 8000 Kroner can vote on suggestions, all users can at least indirectly take part in shaping the future course of the solution.

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The code for the software is freely available for download to anyone at <http://projects.unified.no>, which is hosted by Know IT. Unfortunately “the solution is only available in Norwegian, but I talked to Know IT and they say that it would be rather simple to make this available in English”, Kolset says. After all, she says that they “have genuine interest in sharing and spreading this to as many municipalities as possible”. In this respect, they see it as an option to publish FriKomPort on the OSOR platform and repository in the near future, once the language barrier is removed. This would clearly extend their user group tremendously, as a product like this is likely to be in demand at municipalities and other organisations all over Europe.

Evaluation

Achievements / Lessons learned

The general tone of all users interviewed for this study is that the software just works. As Sagstad puts it, “there are basically no problems with the system, which is how it should always be”. In contrast to many other software solutions, be they proprietary or open source, FriKomPort appears to be working at very low costs and with very little problems. In addition, the fact that hardly any training is required to understand the system equally underlines the success of the portal. The developers were thus making sure that the software may be as easily usable as possible, which contributed to the portal's success tremendously. “And if there's something you need to be fixed” Sagstad says “Know IT will help you via the free phone support.”

Another important aspect for the success in the eyes of Kolset is the application service provider, which enables even small communities with very limited resources to use the system. As there is no maintenance necessary, and no new hardware required, the solution is ideal for most municipalities. According to Sagstad the portal is successful, “because we are taking FriKomPort beyond the initial free software code and embed it in a chain of value added services in the organizations”. It is thus not only a free piece of software with no support, but instead a growing product with a healthy community that develops the software continuously.

Future plans

For the future Kolset and Sagstad have very ambitious aims with regard to the promotion of free software in the public sector. Sagstad says: “We have huge expectations, because we want to see that even very small organisations will be able to use free software”. In order to establish some kind of framework in which especially projects in the early phase can turn to for advice, Kolset is working together with [FriProg](#), the Norwegian Open Source Competence Centre. These plans are however still in an early phase, though Kolset and Sagstad are excited about the future.

Conclusion

FriKomPort appears to be a very successful project, as basically all participants are very glad about the solution. The factors that make this portal so successful are the user interface, the low cost of the product, its relative universal applicability, and the fact that the system is running without bugs and

other issues.

The approach of offering FriKomPort as a service rather than a locally installed solution makes it easy for different organisations to start using the service. There is no need for maintenance or hardware upgrades, or for integration with local systems. All this substantially lowers the barriers to entry. At the same time, the fact that users can discuss the further development of the software lets the solution continually adapt to the needs of the people who use it on a daily basis, providing a much closer feedback loop than what is available for most programs.

Compared to other software solutions of a similar scale, FriKomPort has had the advantage that the system filled a space where hardly any software was in use before. In this respect it certainly brought benefits to most users, as basically all options related to the coordination and administration were improved. In addition, FriKomPort offers a simple solution for a task that is rather simple and clearly delimited.

FriKomport was allowed to mature step by step. It was first developed and tested in regular use in the Kongsberg region. New users were only added once the solution was stable and functional, avoiding numerous frustrations on the way.

Making FriKomPort available in English and other languages would likely boost the number of users substantially. Offering the software on multiple online platforms and repositories, such as OSOR, will be of great help, as this those are central meeting points for relevant users.

Links

- [FriKomPort summary \(Norwegian\)](#)
 - [FriKomPort page at KnowIT \(Norwegian\)](#)
 - [Short project description from KnowIT References](#)
 - [The Kongsberg region \(Wikipedia\)](#)
 - [The University of Agder \(Norwegian\)](#)
 - [The municipality of Arendal](#)
 - [Friprog - The Norwegian Open Source Competence Centre](#)
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This case study is brought to you by the [Open Source Observatory and Repository \(OSOR\)](#), a project of the European Commission's [iDABC project](#).

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This study is based on interviews with Britt Inger Kolset, FriKomPort project director, Terje Sagstad, chief engineer at the University of Agder's IT-Department, and Brit Maria Marcussen, ICT coordinator at the municipality of Arendal.