

# Moving to a modern software system

**Dampskibsselskabet NORDEN is preparing to migrate its software infrastructure, moving from a set-up that was rapidly becoming obsolete to a modern maritime platform. Sture Freudenreich, Dampskibsselskabet NORDEN, told *Digital Ship* about this process**

**D**anish shipping company Dampskibsselskabet NORDEN A/S has recently agreed a deal to implement Veson Nautical's Integrated Maritime Operations System (IMOS) to manage its fleet of 210 dry cargo and product tanker vessels.

IMOS includes a set of ten core modules for fleet and operations management, with NORDEN deciding to install the Chartering, Operations, Financials, Demurrage, Trading, Pooling, Cargo Matching, and Bunker Planning applications.

IMOS will also be used to assist in management of operations of Norient Product Pool ApS, owned 50/50 by founding partners NORDEN and Interiorient Navigation Company of Cyprus.

Norient Product Pool manages approximately 75 product tankers from its head office in Denmark and its offices in Singapore, USA and Cyprus.

The new contract was agreed following a trial of the system by NORDEN, part of a 'gap analysis' phase which examined the company's business processes that were not totally covered by the standard IMOS system.



*'We are expanding our fleet, and our existing software was not flexible enough' – Sture Freudenreich, DS NORDEN A/S*

The company was given access to a test system, which Veson provided as a 'blank' set-up that could be used to mimic NORDEN's own operations.

Users from each of the shipping company's departments were recruited to take part, and workshops were set up. Then a number of the company's voyages and other business processes were simulated to test the software.

This process continued for three of four weeks, and this helped NORDEN to identify the areas where it needed some specific customisation. Veson Nautical is now in the process of finalising those tweaks to the system, and the companies to begin the roll-out of the new applications at the beginning of November.

One specific customisation involves key functionalities from the company's own operations system MOEPS (Master's Operations Environmental Performance System), which was developed by Norient Product Pool and has resulted in considerable fuel savings due to better planning

of voyages.

This needed to be ported into the new IMOS system, and a version of MOEPS has recently been introduced in NORDEN's Dry Cargo department.

NORDEN's decision to move to this new set-up was borne out of the realisation that it had reached a stage in its development where the applications it had been using for a number of years were simply no longer fit for purpose, as Sture Freudenreich, director - head of IT at Dampskibsselskabet NORDEN A/S explains.

"We have a strategy of business growth that will, over the next years, mean that we are expanding our fleet of owned vessels," he told us. "For that, we could see that our existing software system was not flexible enough and not the best tool available to support the future business strategy."

"It is an older system, which we've had for about seven years, but it's about ten years old. Mostly it was performance of the system that was the biggest issue. In recent years we have grown the business and the organisation and we found that the system became more and more 'heavy' to work with."

"We also wanted to challenge ourselves and see if the processes we had were good enough, or whether there were systems out there that could give us better workflows, and cross-departmental workflows."

## Software functions

Having decided to move forward with an overhaul of its business processes, as well as the applications used to support them, NORDEN proceeded to evaluate a number of different software options. The company finally settled on IMOS as the best fit for its organisation, and not only for technical reasons, as Mr Freudenreich notes.

"One of our key criteria was that we wanted a new and modern platform, with the latest technical specifications, but what was also important was the kind of users they already had - what kind of customers does the company have already using this software?" he said.

"Veson had quite a big portfolio but also many were new, they got a lot of new customers over the past few years. The fact that some of these were in Denmark was good too, as we were able to talk to them about how they used the system. They were all quite positive."

"We also went to the IMOS user conference before we signed the contract, again to talk to a bigger selection of international customers. That was of great benefit to us."

While NORDEN is looking at IMOS as a complete software package to integrate various aspects of its operations, there are a couple of modules which Mr Freudenreich believes may be particularly useful in adding new capabilities that were previously unavailable.

"We could see how the whole suite of modules could create some benefits, but to mention one module that was new to us I

would say the Trading Module was something that we could use to create an even better overview of risk and exposure. We didn't have that in our old system," he said.

"There's another function called Cargo Matching, which is something we didn't have before, that will be useful. So there were a few modules which are new for us and we think will make it easier for us to operate."

"We weren't looking for these particular functions at the start, we just wanted to introduce a modern software platform. We had these things semi-covered before by our Business Intelligence systems, but it's more useful for the users if that information is directly there inside the application, instead of in a separate product."

## Implementation

NORDEN has outlined an ambitious implementation schedule for the new system, which Mr Freudenreich has described as a 'big bang' rather than a slow, phased process.

"Our computer systems are centralised in Denmark, so all our international offices will connect via Citrix to our central systems," said Mr Freudenreich.

"The vessels will not be connected in the same way, they won't have the same interface, but they will use what Veson calls Veslink and our own developed MOEPS client to report data to our system on shore. On the vessels where we have an internet connection it will be a direct push of data, and on the vessels without internet it will be sent by e-mail."

"It will not be real-time data transfer; it will be done manually with people typing information into a form and then sending it by e-mail or via the application installed on the vessel. That would be done a few times a day."

This implementation process will involve an extensive amount of integration work, as NORDEN moves from its previous software system to IMOS, while also putting processes in place to allow surviving external applications to share data with the new package.

"The old system we are replacing is based on the Microsoft Navision platform, with the shipping applications built on top of that," said Mr Freudenreich. "That will be separated in the future, the IMOS product is only to be used for shipping and then we will build up a totally new Navision platform for our financial and accounting departments. These will then have to be integrated."

"We have chosen to use Microsoft CRM to be our data management base, for clients and customers. These will all have to integrate with IMOS and share data, and they will also have to connect to DA Desk and Q88 to pull data."

"We will do quite a lot of it ourselves, especially in terms of the Microsoft CRM and Navision where we will use a standard software called 'Scribe' to do the data integration. The IT department consists of eight people now with different profiles. For the

Navision part we have brought in a Navision specialist that will work on this."

Managing the transition between the different versions of software systems will create its own difficulties, with Mr Freudenreich noting that the company will run this slightly differently of different vessels, depending on the type of voyages those ships undertake.

"We will probably have some overlap on the vessels, time where we will have to run in parallel on two systems while we introduce the new software," he told us. "We can't make a clean 'cut' and just move straight to the new system, we have an action plan in place to manage this."

"We will have a few of our longer voyages where they will have to run on two systems, and give them time to wind down with one system as they start up with the new one. This is mostly to make sure that we have all of the financial data in place in the new system as well."

Aside from building these integration modules one of the biggest challenges that NORDEN has identified in managing a successful implementation is making sure that the company employees, at sea and ashore, are properly trained to take advantage of the new capabilities.

"You need to have that training as close as possible to the 'go-live' date as you can, though that can be difficult when you have 275 people, worldwide, that need to be trained. We are looking now at how we can facilitate that," said Mr Freudenreich.

"We will do training in all of the worldwide locations separately. Veson may be involved in that, but we will manage most of it ourselves. We will have a set schedule of dates for all of these things in the implementation."

## Future expansion

Though still left with a lot of work to do in successfully introducing this new software system across the company, NORDEN is already looking at the next phase of development of its infrastructure and expanding the reach of its systems to mobile devices.

"We are using iPhones today, and with the iPhone we are only able to push private e-mails for each user," said Mr Freudenreich.

"We want to also be able to give them access to our group business mail folders as well. That's not something that you can get out of the box so we will build it ourselves, to improve communications while people are out of the office."

"We will start with the communication on the mobile devices, and after that we will have to see if we can give them better access to data for IMOS and whatever other business systems we have, via the mobile device. That is something we will focus on in the future."

As it continues with these developments NORDEN will certainly be moving ever closer to its original goal - having a state-of-the-art IT infrastructure supporting a modern and efficient shipping operation. **DS**