

SPECIAL REPORT

Managing information flow at Helios terminal

Managing tonnes of documentation and waves of information flow at Singapore's Helios's bunker terminal can be made easy, provided one can choose the right management tool to handle the process efficiently.

When McConnell Dowell secured the role of head contractor on the Helios Terminal bunker project in Singapore, the company's engineers realized that managing information over the procurement process was going to be a considerable challenge.

The 45,000 cubic metres (m³) bunker terminal is located on Singapore's Jurong Island petroleum hub and comprises 18 oil tanks. McConnell Dowell's section of the development is valued at approximately \$95 million, with the total development valued at \$150 million.

'Tens of thousands' of documents

At an early stage it was clear that there would be hundreds of internal and external project team members, and that suppliers would be located across Asia and

Europe. From previous experience McConnell Dowell estimated that tens of thousands of documents would be exchanged over the duration of the project.

To handle this process efficiently, McConnell Dowell wanted an information management tool that could support global collaboration and control the flow of files and communication during the tendering and procurement processes - particularly for the high value orders that involve a large volume of documentation.

Aconex, an online document management tool, was chosen to handle the process. Its web-based system enables team members to manage their documents and project mail using one central platform. The system also allows all project participants to view, distribute and track their files electronically in real-time, from

any location and at any time.

The system was used by the 70 companies involved in constructing the terminal. Over the project's first 15 months more than 400 internal and external team members used the system to manage more than 46,000 documents and 24,000 project mails.

Procurement work made easy

Jonathan Scott, an engineering manager at McConnell Dowell, found that the system reduced the time needed to manage vendor documents and streamlined submission procedures for suppliers.

"The main use of Aconex was during procurement, where we needed to control a huge amount of documentation. About \$55 million was spent purchasing equipment and materials and we had to manage

drawings, data sheets, specifications, maintenance manuals, quality documents, certificates and records for each item. The system handled this perfectly," said Scott.

When documents are stored on Aconex, team members can quickly retrieve them by searching on criteria such as date ranges, sender and recipient details, document types, status and keywords. Files can then be distributed using the system which then maintains an audit trail of each transaction. McConnell Dowell found that this helped minimize the impact when people left the project and made it easier for newcomers to understand the history of the project.

"In the past we've had issues losing information and knowing which document is the latest version. These things are always a risk, but with Aconex we can be sure that when we look at a document, it's



bunkerworld



The terminal is located on Singapore's Jurong Island.

the current version. In this buoyant market, there's a big turnover of staff, so it's a big benefit that everything is easy to find," Scott added.

Companies working on the Helios project found that a key advantage of using Aconex was that the system automated time-consuming manual processes such as updating document registers and entering data in spreadsheets. In doing this, it helped reduce the amount of administra-

tive hours required on the project.

"There's a lot less double up in work," said Scott. "With the old systems, it would take someone to type in all the information then when it was transmitted it would have to be entered again at the other end."

To ensure the product was effectively implemented, Aconex provided training to all participants. Scott felt that this was crucial in getting everyone comfortable using the system, saying: "We've got new

people coming onboard all the time so Aconex has run session after session to get everyone up to speed."

Following the training sessions, round the clock phone and online support was available.

Web-based system suits global reach

Using a web-based system to manage and track vendor documents was particularly

beneficial when working with international organizations, something which is becoming increasingly common among bunker projects.

"We primarily used Aconex for collaborating with our subcontractors and suppliers," said Scott. "If the purchase order was in excess of about \$50,000, we'd insist they use Aconex. We have suppliers in France, Germany, the UK, Korea, Australia and Singapore, so managing this online sped up the submission and approval process by cutting paper transmittals. The result is much less work at our end and, because everything is traceable. It's fool proof."

Aconex has seen global uptake of its system double each year for the past five years. The company now services \$210 billion worth of projects that are located across 63 countries.

Leigh Jasper, the company's CEO, believes that the challenges faced on the Helios Terminal project are becoming typical in the industry.

"On today's bunker projects, team members are often based in different countries, even across different continents," said Jasper.

"The fact is that traditional tools for managing information are not sophisticated enough for projects of this scale and, as a result, can leave projects open to risks caused by late, lost or inaccurate data. Because of this, it seems certain that projects will continue to move towards using new technologies like web-based document management systems." ■