



## GL backs higher quality fuels

Germanischer Lloyd has thrown its weight behind calls to cut vessel emissions by making the use of higher quality fuels such as distillates mandatory.

"Sole use of distillate fuels is a win-win situation from an environmental, safety and operational point of view," Hans Payer, a consultant for the German classification society, argued in a paper distributed at last month's Green Ship Technology conference in Antwerp, Belgium.

This would automatically cut sulphur (SO<sub>x</sub>) emissions from shipping by "60% to 80% and particulate matter by 80% to 90%", he said.

"The use of distillate fuels (MDO) with a global sulphur cap should be phased in with a maximum sulphur content of 1% from 2010 and 0.5% for engines installed in or after 2015."

Mr Payer said Intertanko's proposed revision of Marpol Annex VI would cut a swathe through current "fragmented" efforts designed to reduce ship pollution. This could be achieved by creating a global Sulphur Emission Control Area (SECA) rather than a series of variable pollution limits governing operations in different parts of the world – a system which is difficult to monitor, could be dangerous and relies on "untested" technology to curb other pollutants such as nitrogen (NO<sub>x</sub>) and carbon dioxide (CO<sub>2</sub>).

"IMO plans a 20% reduction of NO<sub>x</sub> emissions by 2010," he said. "This could be easily achieved through the use of only distillate fuels. The use of distillate fuels in any engines, including existing engines, would have an immediate benefit in reducing NO<sub>x</sub> by approximately 10% to 15% at all speeds."



Simple in-engine modifications would allow further NO<sub>x</sub> reductions, he added.

Although MDO is expensive now, the alternative of targeting each specific pollutant by fitting abatement technologies which are "yet to be proven as efficient and reliable in maritime operations" was nonsensical, he argued.

"When looking at possible reductions of the environmental impact of ships, we must refrain from looking at specific facets in an isolated way. Most aspects are inter-related and we need to take a total view.

"Using distillate fuels might be more expensive but at least it is a reliable and safe solution, which if unilaterally used, would create a level playing field and create sufficient demand for marine distillates such that the oil industry has the necessary certainty to invest in meeting the demand.

"Additional production of distillate fuels is far less harmful to the environment than desulphurisation of residual fuels or manufacturing and operating abatement technologies onboard."

### IN BRIEF

#### China overtakes Japan in yard race

Japan has been surpassed by China as the most powerful shipbuilding nation in the world. According to Bloomberg, orders at Chinese yards reached a record 24.32m gt in 2006. Japanese yards received orders for 21.25m gt.

#### New Vietnam yard

Vietnam Shipbuilding Industry Group has joined with Damen Shipyards to set up the Damen Vinashin Shipyard in Haiphong, in the north of Vietnam. The €30m joint venture will see the construction of a 42 hectare yard with 500 m of waterfront at an estimated cost of €30m. Vessel construction is due to start in two years' time.

#### DNV milestone

DNV Navigator is now in use onboard over 1,000 vessels. The computer-based tool was launched by the class society in 2005 and gives crew access to regulations and information about safely entering more than 2,300 individual ports.

#### Europe yards full

The Community of European Union Shipyards Association has reported that many of Europe's yards are fully booked up to 2010. Orders were up 10% last year compared with 2005. CESA said the biggest problem for many yards was finding adequate labour.

## NYK orders 'Wozmax' ore carriers

NYK has ordered two innovative new ore carriers from Namura Shipbuilding in Japan.

The 250,000 tonnes capacity vessels are the first designed specifically for load-

ing ore in Western Australia where conventional carriers have been limited to a maximum load capacity of 230,000 tonnes due to draught limitations. Tagged 'Wozmax' bulk-

ers by NYK – the 'W' stands for Western Australia and, the company kindly informs, 'Oz' is common slang for Australia. The ships will be delivered by 2010 and 2011.

# Gothenburg shoreside power cuts emissions

Using shoreside electricity while in port, allowing a ship's auxiliary engine to be turned down, dramatically cuts emissions of nitrogen, sulphur and particulate matters, according to the port of Gothenburg, one of

the technology's pioneers.

Susann Dutt, the port's environmental controller, said Gothenburg has been successfully 'cold-ironing' at its ro-ro terminal since 2000, resulting in emission reductions of "94-97%"

as well as noise reduction benefits.

Ms Dutt said that using one high voltage terminal to supply all the power a vessel needs while in port works best at terminals that have frequent calls, such as ro-ro and ferry operations.

Cruise and containerships would utilise the same technology more readily in the future, she predicted, particularly in the US and Europe where ports are investing in shoreside electricity supply systems. "There are about 70 containerships built or to be delivered with equipment for shore side electricity," she told delegates at last month's Green Ship Technology in Belgium. "[In the US] the driving force is high requirements from the California Resources Board, whose goal is that 20% of all port calls should be connected to shore-side electricity by 2010, 80% by 2015 and 80% by 2020.

"The technology for shoreside electricity is today available at a reasonable cost and the external cost of not using it is very high."

However, the high cost of electricity compared to heavy fuel oil was discouraging ports and owners from using such systems in many European Union countries, she added.

"If there was no tax on the electricity, the cost would be about the same as using heavy fuel oil."

## Veson upgrades IMOS

Veson Nautical has launched an updated version of its Integrated Maritime Operations System (IMOS).

IMOS v5, claims the company, now offers shipping businesses a more efficient system for automating critical chartering, operations and accounting functions, including a new trading module for Forward Freight Agreements as reviewed in *LSM* last year (see December 2006, page 19).

Enhancements to IMOS in its latest edition include support for lightering, inland barges, approvals processes, periodic bunker tracking and demurrage management. IMOS also now supports Microsoft's .Net 2.0 framework.

Corpora recently agreed to supply Dredging International



# Corpora extols training function

Corpora iOra is trying to persuade ship managers to use its mobile data transfer software to help train and retain seafarers.

The company's patent-pending Epsilon Technology compresses data sent to and from ships. Paul Jolley, sales director, commercial maritime, told *LSM* that owners and managers could conduct onboard training and supply crew with more leisure material by deploying Corpora's software solutions.

"Crew welfare issues are a big thing because manning shortages are not getting better," he said. "If you can give crew better access to information it helps.

"We are now talking to two of the largest crew management companies in the world who are interested in using iOra for this.

"We are also talking to educational establishments who are considering delivering content to the vessel. This means you could do training from Mumbai onboard instead of in Mumbai. That is the kind of application that is interesting people. This offers a much reduced cost to managers so they are less likely to balk at the cost."

iOra software automates data synchronisation

relieving personnel of the need to manually distribute, update and manage information. By optimising bandwidth usage across a fleet, the amount of information sent over satellite is also reduced, yielding data transfer savings of "up to 90%".

Companies that have signed up to use the system include Alaska Oil Tankers, Shell, Wallenius Lines, Olympic Springfield Tankers, Fuji Trading, Univan and Dolphin Drilling and Dredging International (as featured in last month's *LSM*, page 31).

Mr Jolley said the software can save up to \$3,000 per annum per vessel on data costs and "typically costs \$3,000 per vessel" to install.

"The return on investment (ROI) is no more than 18 months and normally it is 10-11 months," he added. "We calculate this on air time and administration and labour savings because staff do not need to send CDs and chase data. If the ROI is more than 18 months we will bring the price down to match 18 months.

"I was talking to a company recently who were looking at hiring someone just to do data updates. They would not have to consider that if they used us."

## IN BRIEF

### VoyageMaster II approved by BSH

Northrop Grumman has won type approval for its Sperry Marine VoyageMaster II Voyage Data Recorder (VDR) from Bundesamt für Seeschifffahrt und Hydrographie (BSH), the German certification authority. The BSH approval certifies that the company's VDR meets the International Electrotechnical Commission (IEC) performance standards for shipboard 'black box' data recorders. International Maritime Organization (IMO) regulations require all new ships over 3,000 gt to be equipped with an approved VDR to assist investigators in reconstructing the events leading up to and following an incident at sea.

### BASS in demand

Norway's BASS saw rising demand for integrated fleet management boost software sales last year, according to managing director Per Steinar Upsaker. BASS, recently the subject of aggressive overtures from national rival Star Information Services (see *LSM* March 2007, page 30), saw 2006 revenues grow 42% year-on-year, generating a profit margin of "about 26%". Mr Upsaker claimed growth had been driven by the company's future-proof software platforms. "No one likes to implement old technology across a fleet and then later discover that they need another implementation project to replace it," he said. "BASSnet is built on a future proof platform, Microsoft.NET, and it is fully compliant with Microsoft's latest operating system, Vista, which often comes as standard with new PCs nowadays."