



Evangelos L. Efstathiou

Bunker Planning or Bust

Evangelos L. Efstathiou, Director of Oil & Gas Transportation Solutions, Veson Nautical looks at how companies can use software to fuel up and stay financially fit

The global economic downward spiral and its effect on the shipping industry affect bunker planning and management dramatically. Volatile bunker prices, increasingly stringent environmental regulations and frequent run-outs or limited availability of low sulphur and other higher specification fuels create a challenging environment for shippers, to say the least. Although oil and bunker fuel costs are substantially lower than they were last summer, purchasers still need to constantly plan and manage fuel consumption and expenses, given the share of a voyage's expense that fuel represents.

The long-term outlook is not nearly as negative, however, which bodes well for the industry. Despite the deep recession, Lloyd's Register – Fairplay is projecting a long-term transport increase. "Investing in even smaller ports and short-sea shipping will be impor-

tant in the future," explained Christopher Pålsson, Manager and Senior Consultant, Lloyd's Register – Fairplay Research, at the Baltic Shipping Days in Sundsvall, Sweden.

- Bunker planning has to be effectively managed throughout the market cycle. As world markets struggle and then begin to recover, how do shipowners and managers find cost effective yet cutting edge methods to manage their businesses? What are the current tactics in fuel management and how can companies use them to sustain competitiveness and assure profitability?

Bunker Planning or Bust: Software is the Solution

Since the scope of dealing with bunker fuels is so vast, a robust, proven software solution for managing highly complex voyages can be vital to getting the job done. A good software solution should:

- Project bunker consumption and arrival/ departure levels remaining on board for each scheduled voyage.
- Incorporate functionality for competitive sourcing, bidding and procuring bunkers.
- Detail bunker consumption and performance versus charterparty agreements.
- Generate reports and budget projections on exposure to bunkers.

Who needs software? – a case study

Take the case of a well known Singapore-based maritime business group with interests in dry bulk shipping, offshore services, and shipping services. The company's Dry Bulk Shipping Group owns and operates, through separate subsidiary companies, 43 general cargo vessels and bulk carriers between 16,000 and 54,000 dwt. It also charters-in approximately 10 vessels per month. The organisation's liner and tramp

services transport dry bulk cargos between South East Asia and China into the Arabian Gulf, Red Sea and the Mediterranean.

The ship operators needed a solution that would allow them to manage multiple grades of bunker fuel for different types of vessels; calculate the distance a vessel sails within SECA zones for any given voyage; and automatically estimate the amount of low-sulphur fuel required onboard. The company utilises its total software solution for bunker planning which enables them to effectively manage all of these bunkering activities, rather than simply react to market fluctuations.

This company chose a multi-grade bunkers software solution that enables it to manage the entire scope of its fuelling activities. In addition to Intermediate Fuel Oil (IFO) and Marine Diesel Oil (MDO), the technology also supports tracking of non-fuel vessel liquids, such as hydraulic fluid and lubricating oils, providing them with a total solution. The company uses a number of grades of IFO, as well as low-sulphur fuels; the company's handysize and handy-max bulkers burn IFO 380, IFO 180 and IFO 30, and MDO.

Estimating & Managing Voyages

Using the software, the staff can project accurate cost estimates based on the consumption of low-sulphur and/or full-sulphur fuels and the operator's planned voyages. When the staff estimates the cost of a given voyage, they can specify prices for different fuels to use in the calculations. The software automatically recognises when a vessel transits a low-sulphur zone and calculates fuel consumption accordingly.

After a voyage is scheduled, the costs for various types of fuel are included in the software's profit & loss reports and are tracked throughout the voyage. The system tracks the difference between bunker inventory price and sale price. Then it automatically adjusts the profit & loss for money made or lost on the purchase and sale of bunkers in their timecharter division.



The software enables the company to plan and track the use of low-sulphur fuels in environmentally restricted regions, such as ECA zones. Plus, a sophisticated database includes an accurate geographic representation of low-sulphur regions. The system also tracks the company's liner business as well as bulkers; provides quick access to fuel consumption data; and allows the company to accurately manage fuelling activities.

As bunker prices migrate up or down, shipowners and managers need fleet-level visibility and up-to-date information that will allow them to monitor bunkering activities and evaluate bunker performance. Each voyage must be planned and executed carefully, not only to sustain services, but also to maintain profitability. Despite volatile fuel costs and stringent regulatory issues, commercial shipping companies can find a way to plan for and reduce bunker costs. As long as shippers have a good understanding of the practical, commercial, technical and legal aspects of bunkers – and utilise a proven software solution like our case study example does – they are in a good position to make intelligent decisions.