

# Offshore transshipment terminals: a valid alternative to port infrastructure

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In the present world economic scenario, characterised by high uncertainty and market instability, the port sector is holding back expansion plans. These projects provide for huge investments, which are necessary for upgrading and building the new facilities required to accommodate the ocean going vessels trading worldwide, whose cargo carrying capacity has augmented to minimise the ocean freight impact.

In such a risky framework, offshore transshipment terminals represent a valid alternative to fixed port infrastructures. Among their other advantages, offshore transshipment terminals have the peculiarity of being used “on demand”. The ability to relocate the facility and secure alternative employment limits the economic exposure to unforeseen business disruption.

## Logistics solutions

Coeclerici Group commenced its logistics activity in early 20th century. In recent years the logistic activity has been further developed through Coeclerici Logistics which now has more than 29 years of experience in the designing and management of “state of the art” and highly customised logistic solutions.

Coeclerici Logistics has a proven track record of projects in countries such as Venezuela, Bulgaria, Italy, Indonesia, Bahrain, Ukraine and India, and these days, is considered to be one of the world’s leading bulk commodities transshipment companies. Coeclerici Logistics has engineered and promoted the use of floating terminals throughout the world.

### Bulk Prosperity

One of the latest projects involving Coeclerici Logistics was the “Bulk Prosperity”. This Floating Transfer Station (FTS), jointly

owned by Coeclerici Logistics, United Shippers Limited and Great Eastern Shipping, was delivered in 2008 and is employed in India to provide cost effective solution to the industries importing and exporting cargo.

The Bulk Prosperity, which is built to the highest technological and safety standards, has been designed and equipped for both loading and discharging from simple coastal barges up to Cape size vessels. It can handle various kinds of dry bulk cargos such as coal, iron ore, limestone, bauxite and even agribulk.

The Bulk Prosperity has a storage capacity of 10,500 tonnes, which can be used if barges are not regularly alongside guaranteeing continuity in operation, thus avoiding delays to ocean going vessels.

The facility is presently at Bedi, in the Indian state of Gujarat, catering to the requirements of industries located in the immediate hinterland. Since the FTS is self-propelled, it can also handle cargo at other ports in the Gulf of Kutch, such as Navlakhi and Okha.

The ports in the Gulf of Kutch are well connected through the state highway and the rail network to the rest of the country. Industry has grown at a fast pace in the hinterland and future prospects look promising. In addition, the cargo operations can be carried out all year round whereas in many ports on the Indian West coast operations cannot be performed during the monsoon season.

### Bulk Pioneer

Another example of a FTS specifically designed by Coeclerici Logistics for the Asian market is the “Bulk Pioneer” which has



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Figure 1. FTS Bulk Prosperity operating in India.

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Figure 2. FTS Bulk Pioneer operating in Indonesia.

been operating in Kalimantan, Indonesia since September 2005. In 2008 the Bulk Pioneer handled almost six million tonnes of coal, and since the commencement of operation, the facility has loaded more than 16 million tonnes of cargo.

The FTS is equipped with two 25 tonnes cranes and two swiveling shiploaders, along with a combination of hoppers and conveyors. The FTS is utilised for direct transshipment of coal, which is brought alongside in open top barges. The coal is transferred from the barges by the cranes into strategically situated hoppers, which transfer it to the conveyors by belt feeders, leading to the two shiploaders. Thanks to the availability of two shiploaders, coal can be delivered into the five holds of a Panamax vessel without the need of shifting alongside. The availability of buffer storage on board ensures continuous loading of coal even in time of non-availability of barges.

## Floating terminals

The “FTS concept”, as developed by Coeclerici Logistics, has been in operation for many years and has effectively enhanced trading activities also in the Black Sea and in Italy.

While the FTS has many advantages, in the case of greater coal production, longer barging distance or blending requirements, the “floating terminal” is more appropriate, as it offers almost the same advantages as a shore base facility but at a lower cost and negligible environmental impact.

The Coeclerici owned, designed, and operated Floating Storage Transfer Station (FSTS) “Bulk Wayuù” is the largest coal floating terminal worldwide; it is located in Venezuela in the Maracaibo Lake to serve Carbones del Guasare since 1998.

Thanks to Bulk Wayuù, Carbones del Guasare has been able to increase drastically the quantity of coal exported, when compared with the previous years when floating cranes were employed.

In July 2008 the FSTS Bulk Wayuù has loaded vessel n. 1,300 and has achieved the total quantity of 59,000 million tonnes of coal loaded.

### ABOUT THE COMPANY

Since 1985, Coeclerici has been sourcing, marketing and transporting raw materials (primarily coal) from mines to final end-users, serving the power and steel industries internationally. The Logistics division has promoted and patented the use of floating terminals and transfer stations throughout the world with far smaller investments, lower management costs and environmental impact for port terminals.



Figure 3. FSTS Bulk Wayuù operating in Venezuela.

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Bulk Wayuù has also improved drastically vessels loading time thereby reducing overall freight costs for Carbones del Guasare.

Moreover, the availability of an additional 64,000 tonnes of floating storage by the Bulk Wayuù provides a buffer capacity that allows for uninterrupted and smooth coal loading operations. Coal is moved continuously and smoothly, independently of whether the ocean export vessels are ready to load or not, the barge transport capacity has been optimised.

The FSTS is also compliant to IMO Blue Code to ensure great safety for seafarers and the environment.

## Alternative

All the previously described offshore logistics facilities provide an excellent alternative to large scale port development which is cost prohibitive, often unjustifiable as an investment and requires long decision making procedures.

Besides being an alternative to port development, offshore facilities can be employed to integrate lacking port infrastructures, with the following additional advantages:

- Pay for use (the operator will pay for a facility only if such facility is really used)
- Dedicated system (while port facilities have to satisfy different users, an offshore logistic facility can be tailor made to satisfy the requirements of only one operator)

Coeclerici Logistics continues developing new innovative solutions to keep up with market requirements, and is dedicated to provide the best transshipment solutions for solving logistic bottlenecks, such as port restrictions, draught limitations or lack of port infrastructures.

Technical innovation, well programmed maintenance with a special focus on the environmental impact of a project and its long experience have made Coeclerici Logistics a worldwide leader in this specialised segment with an yearly average of 17 million tonnes of different dry bulk cargos handled.

### ENQUIRIES

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