## Filling shipping's **billion-dollar** hole

**Empty containers are expensive** | Every year Maersk Line spends nearly USD 1 billion related to the shipping of more than 4 million empty dry and reefer containers back to where customers need them. Through more strategic use of its equipment, Maersk Line is reducing the costs of this imbalance.

BY JOHN CHURCHILL

hat do glass bottles shipped from the Middle East to Europe, used cars from Japan to New Zealand and fertiliser from Russia to Brazil all have in common? They are all examples of cargo previously not worth the cost of transport that are now part of the solution to one of Maersk Line's largest logistical problems.

"Most countries either export refrigerated cargo and import dry cargo or the other way around. That's the nature of global trade, but it means our equipment often goes one way full and the other way empty," says Maersk Line's Moshe Loberant. "It is an inefficiency the industry has typically accepted, and it is very costly."

Every year Maersk Line spends nearly USD 1 billion related to the shipping of more than 4 million empty dry and reefer containers back to where customers need them. But through more strategic use of its equipment, Maersk Line is sharply reducing the costs of this imbalance, raising the efficiency of its operations and even finding new business.

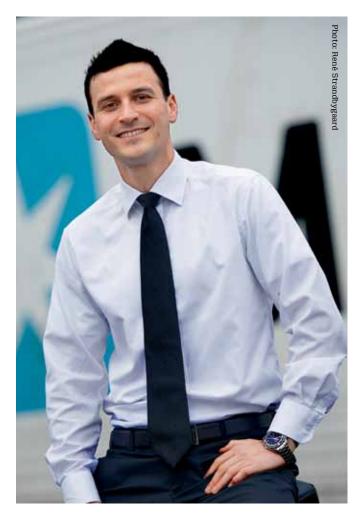
## The basic magic of 'NORs'

Leading this effort in Maersk Line is Moshe Loberant. He is the head of a project that is simply called 'NOR' for 'Non-Operating Reefers.' A NOR is a reefer container that is used to ship dry cargo.

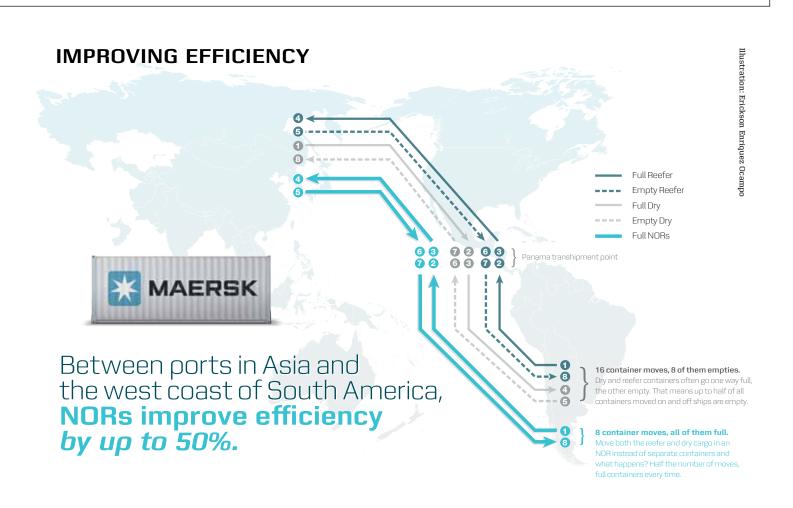
That simple versatility is proving quite powerful in reeferheavy trading corridors (see chart). For instance, Brazil exports thousands of tonnes of fresh produce and meat all over the world. And because of its rapidly growing economy, it also imports a lot of dry commodities for infrastructure and development, leaving Brazil with too many dry containers and too few reefers.

## Under way for two years

If a customer shipping dry cargo to Brazil uses a NOR instead of a dry container, the balance is corrected. Brazil receives the reefer it needs, and Maersk Line removes the cost and time of moving two empty containers – one empty dry container out of Brazil and one empty reefer back into Brazil.



"We're still learning what a strategic approach to NORs can do for our business. It's only two years in, so I think we're just starting to realise the possibilities and potential efficiency gains we can achieve," says Maersk Line's Moshe Loberant.



The NOR project has been under way for two years and has been studying this and other possible benefits of using NORs in the trading corridors where there is a surplus of dry containers and a shortage of reefer containers. The success so far is encouraging.

In 2011, Loberant says approximately 85,000 NORs were utilised by customers, up 30% from 60,000 in 2009 when the strategy was put in place. The associated cost savings were approximately USD 50 million in 2011. He expects both figures to jump again this year.

## More than just a cost reduction

Empty containers take up precious space on ships and they also suck up valuable time for vessels which must stay longer in port, as well as for terminals that must load and unload them.

In Santos, Brazil, where reefer containers facilitate the country's massive reefer commodity exports, NORs help improve port productivity. The port of Santos averages roughly 40 container moves per hour, which is a fairly low rate compared to other major ports. Using NORs reduces the total number of moves required, raising productivity.

"By using just 20 NORs to carry dry cargo into Santos, we can replace 40 dry container moves – 20 full dry containers coming in and the 20 empties that eventually go out," says Michael Hansen, Portfolio Manager for Maersk Line's Europe - Latin America services. "That is one hour's worth of improved efficiency we can put into South America's largest port," he says. biggest imbalances, we give them equipment and space prioritisation which helps them smooth out their supply chain. And in many cases they can receive a discount on the dry ocean freight rate," says Loberant.

So far customers have showed an eagerness to use NORs and the opportunities to expand the project show no signs of slowing down. Maersk Line is even finding that NORs are enabling them to make incremental revenue on cargo that normally would not cover the cost of transport. Examples include Japanese used car exporters using NORs to reach markets in New Zealand and glass bottle manufacturers in the Middle East finding new markets in Europe and the southern hemisphere.

In Russia, Maersk Line's Dennis Caro has used NORs to break into Russia's three million-tonne market in organic fertiliser shipped to Latin America each year, a business Maersk Line was never interested in before, due to the lack of profit.

"Using NORs enables us to enter into new markets which we wouldn't have cared to enter before, and also to send a reefer where it's needed, earning money and saving on container repositioning costs," says Caro, who is a trade analyst for North and South America and in charge of finding break-bulk conversion opportunities in the region.

In 2011, NORs out of Russia jumped to 6,500, up from only 300 in 2009. Expectations for next year are even better: Caro says Maersk Line's entry into the fertiliser business has led to enquiries on NORs from other fertiliser shippers in the Baltic and Black Sea.

"If a customer uses an NOR in the corridors where we have the