

# Bigger ships – the challenges

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ALTHOUGH bigger container vessels reduce transport costs per TEU, they present considerable headaches for the terminal operators. We ought to think about issues such as occupational health and safety, environmental impacts, what happens if these behemoths (which are 400 metres long and 60 metres wide) run into trouble and need to be salvaged.

It has been 60 years since the first recognised container ship 'Ideal X' set sail from Newark, New Jersey destined for Houston, Texas with a total of 58 units on board. The growth of containerisation has been fed by increasing globalisation and trade facilitation efforts, leading to the need for larger ships. Currently 60% of all global cargo movements are shipped in containers.

A single ship berthing by one of these Ultra Large Container Vessels (ULCVs, >14,000 TEU) may well require 10,000 box moves, which causes peaks in operational demands, both in relation to the discharging and loading of the containers, but also on safety, security and the efficient working of the terminal. Thousands of containers being exchanged for each ship call results in increased land transport requirements to and from the port. There is a high likelihood of congestion, particularly impacting road traffic around the port area.

Although safety is the priority of every operation commercial demands, combined with a short port stay, tend



Photo: Glatfason

## BIG SHIPS, BIG DECISIONS: The growth in vessel size is unstoppable.

to put pressure on occupational health and safety requirements. Manual processes (such as twist lock and lashing bar handling) remain hazardous, particularly with deck slows up to 10 high.

Increased automation can negate some of the issues of handling ULCVs as well as terminals operating 24 hours a day, seven days a week for waterside as well as landside operations.

Another consideration is what happens if one of these huge vessels is involved in an incident. Only recently

a dangerous substance? The recent huge explosion at a container depot in Tianjin, China is still fresh in our minds. It would be very difficult, if not impossible, for salvage companies to locate and contain the hazardous situation and would be very costly.

As a consequence of all this up-sizing there are concerns that weak global container growth has caused an oversupply in the market. Currently two of Mediterranean Shipping Company's new 19,000 TEU vessels are idle as well as a number of other large container vessels of other operators. A number of shipping experts, including Drewry Maritime Research and OECD's International Transport Forum, have expressed doubts about the viability of these behemoths in view of the current overcapacity of container vessels, especially on the East-West routes. The drive by shipping companies to a lower unit cost per TEU might have contributed to a glut of ULCVs and depressed freight rates on the Asia/Europe routes have further added to the current malaise. Oversupply combined with difficulties in the efficient handling of these ULCVs at a number of container terminals might mean that the drive to even larger vessels has taken a breather. In Australia we are not likely to see these 20,000 TEU vessels in the near future, if ever. Our markets are simply not big enough to sustain exchanges of 10,000 containers per vessel and maintain a regular service. But no port or terminal is immune from the up-sizing trend owing to the

cascading of vessels. Ships which were only recently considered 'the largest' are deployed on other trade routes as they are displaced by even larger vessels. Introduction of large vessels onto other global trade routes will cause the cascading of 8,000 TEU (and even larger) vessels into Australian trades and ports.

It remains to be seen whether our ports and terminals will be geared up in time to handle these vessels efficiently.

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Photo: Victoria University

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