

# Landside operations: The next frontier for container-shipping alliances

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# Landside operations: The next frontier for container-shipping alliances

Container lines have successfully used alliances to increase scope and reduce cost on the ocean. Industry pressures are now making cooperation in landside operations the next logical step for capturing economies of scale.

## Alliances help on the oceanside . . .

All the major container shipping lines are now allied in four large groups: the G6 (APL, Hapag-Lloyd, Hyundai Merchant Marine Company, Mitsui O.S.K. Lines, Orient Overseas Container Line, and NYK Line), CKYHE (China Ocean Shipping (Group) Company, Evergreen Marine Corporation, Hanjin Shipping Company, “K” Line Ship Management Company, and Yang Ming Group), Ocean Three (China Shipping Container Lines Company, CMA CGM, and United Arab Shipping Company), and 2M (Maersk Group and MSC).

The alliances have allowed the larger lines to achieve some further measure of resource rationalization, but the main beneficiaries have been the smaller lines. The allied smaller lines have been able to serve more destinations without spending billions on a larger fleet of ships. They can furthermore enjoy the advantages of using larger ships on the main trades. Given that a vessel with 14,000 twenty-foot equivalent units (TEUs) can be 30 percent more fuel efficient per box than a 7,000-TEU vessel, the savings quickly add up.

## . . . But not on the landside

The operational alliances are in effect for assets at sea but come to an end once the boxes are unloaded. On land, the lines separate one from the other: each has its own terminal agreements, trucking contracts and dispatching arrangements, railroad agreements, and operations management. The scale advantage realized at sea likewise comes to an end. To take one important example, CKYHE is the largest alliance in the Asia-to-North America

trade, despite the fact that most of its constituents are smaller than the average size for the major lines (Exhibit 1). Operating separately on land, the lines lose the scale advantage.

## Why expand alliances to landside operations?

There are two reasons to expand alliances to landside operations—one financial, the other operational. On the financial side, the benefits of scale in oceanside alliances have not significantly enabled better financial performance by the constituents. The latest financials show that the industry’s winners remain the largest lines (Exhibit 2). By extending their reach to landside operations, the alliances will be able to capture real savings from economies of scale, a move that will benefit all members.

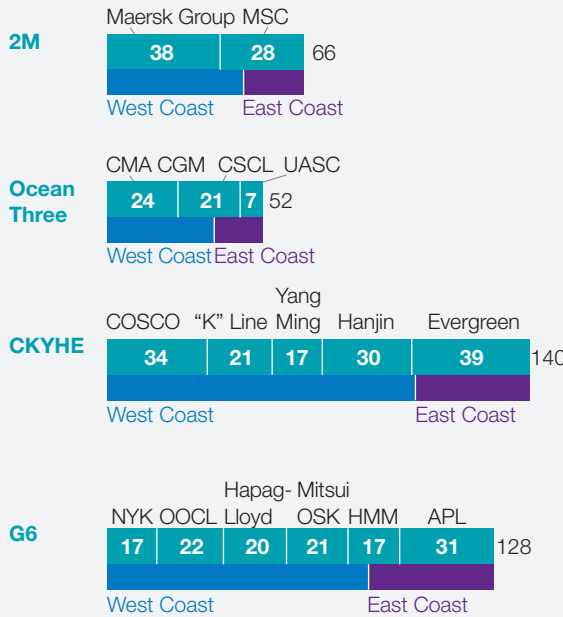
Another reason to extend alliance reach to landside operations is to reduce operational complexity, especially at US West Coast ports. Alliances began by sharing ships on the Asia-to-Europe trades. Gradually, they expanded in scope, but they still avoided the US West Coast because of operational difficulties at the subscale, fragmented terminal facilities there.

As scale became an increasing imperative, however, the alliances did extend service to the US West Coast over the past year. The prevailing conditions were not optimal. By February 2015, Southern California ports were seeing the worst delays in ten years, as up to 20 ships at any one time waited outside the facilities for space. While some of the most pressing issues are now being resolved as the International Longshore and Warehouse Union labor agreements take hold,

**Exhibit 1 Alliances allow carriers scale advantages for assets at sea, but these come to an end landside.**

**Oceanside: Far East–North America**

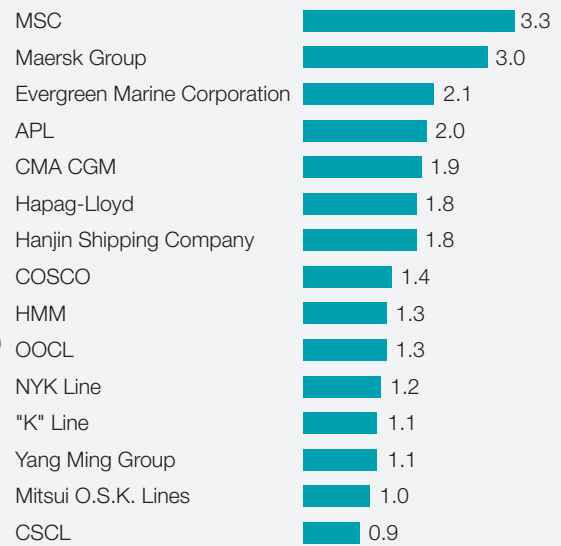
Weekly capacity, thousand TEUs,<sup>2</sup> Jan 1, 2015



**Little difference in scale as lines can compete on cost**

**Landside: Volumes at US ports<sup>1</sup>**

Million TEUs, 2013



**Major difference in scale as lines operate alone**

<sup>1</sup>Includes both import and export volumes in the United States.

<sup>2</sup>Twenty-foot equivalent units.

Source: Alphaliner; company annual reports; PIERS

many issues driving operational complexity for the alliances will likely remain:

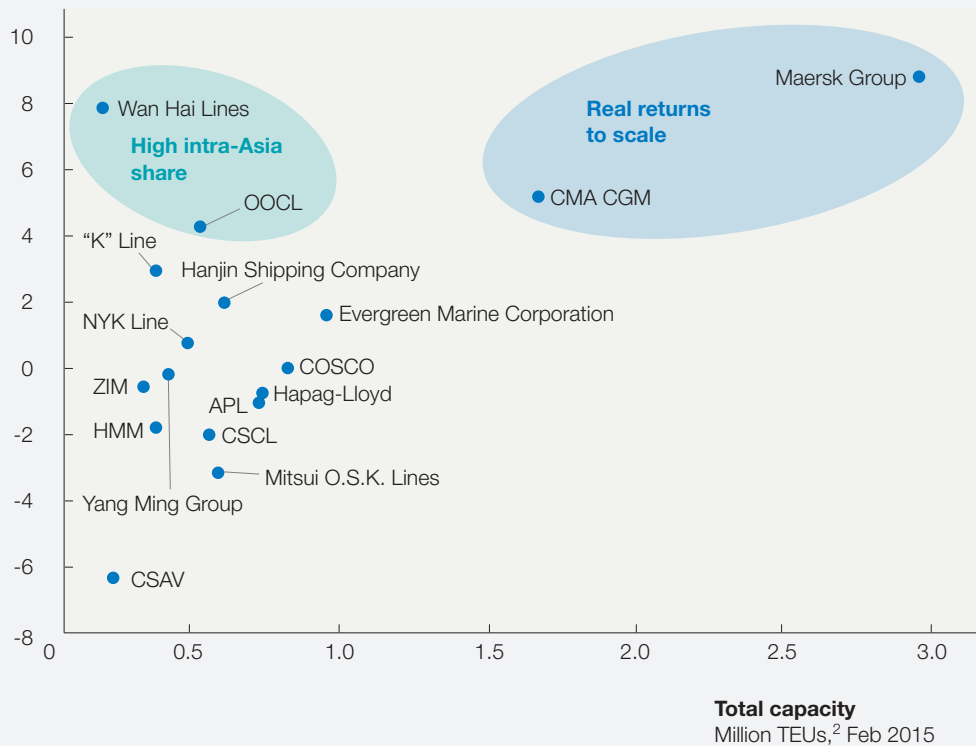
- *Use of up to seven different terminals* for a single alliance in Los Angeles and Long Beach causes planning complexity and an increased need for trucking between the terminals.
- *Use of larger vessels* delivering more boxes to the terminals has substantially increased peak volumes; terminals consequently must operate close to their full capacity.

- *Insufficient supply of chassis* causes needless congestion. Shipping lines once controlled their own truck chassis in and around the port. Recent drives for cost reduction have led the lines to sell off the chassis to truckers and leasing companies. The lines no longer have control of the chassis flow. Much of the congestion at terminals is attributable to the lack of chassis, and this is hurting operations.

A US federal maritime commissioner recently pointed to inadequate alliance operations as a possible

**Exhibit 2 Economies of scale are becoming increasingly visible in driving shipping-line profitability.**

**Operating profit margin,**  
%, FY 2014<sup>1</sup>



<sup>1</sup>Operating profit margin for first half 2014 for China Ocean Shipping (Group) Company, Orient Overseas Container Line, and SITC International Holdings Company; operating profit margin for 9 months 2014 for China Shipping Container Lines Company, CMA CGM, CSAV, Evergreen Marine Corporation, Hapag-Lloyd, Hyundai Merchant Marine Company, Wan Hai Lines, Yang Ming Group, and ZIM Integrated Shipping Services; for MSC, profit margin is unknown.

<sup>2</sup>Twenty-foot equivalent units.

Source: Alphaliner; company annual reports

“contributing factor in the chronic congestion at the west coast ports, and perhaps at other port facilities.”<sup>1</sup> At the same time, the Global Shippers’ Forum, recognizing that large alliances represent the future of ocean shipping, has called on the four main alliances to adopt key performance indicators to monitor operations and improve performance. Clearly, the extension of cooperation to landside operations would be an important lever for addressing these inefficiencies and reducing port congestion.

**How to work together**

The idea for closer collaboration is not new. Shipping alliances have already begun jointly to negotiate and procure new ship and box purchases. The further integration of operations becomes more difficult, however, giving alliance members pause.

The objective of combined operations would be to reduce the overall cost base and resolve the operational complexity. To achieve the objectives,

allied lines will need to overcome barriers and act as much as possible as a single entity in their landside operations. While short of a full merger—which would importantly involve compliance with all applicable rules and the surmounting of significant political and ownership complexities—joint operations will capture real value for the lines:

- *Terminals.* Alliance members today call at multiple container terminals within the same port. The alliances need to manage the multiple-terminal environment as if it were a single terminal. This would mean adhering to one operating system led by one management team. This team would schedule volumes and ship calls in the most efficient manner. Multiple terminals would be treated, as nearly as possible, like a single large terminal.
- *Intermodal rail.* Alliances could manage the combined flow of intermodal rail volumes through a single intermodal company. This organization would provide the operational interface with US rail lines. Savings are likely to result from improved flow and logistics.
- *Trucking.* Alliances can combine volumes to procure trucking at lower rates. Each alliance could establish a centralized truck planning and dispatching unit to reduce “empty legs” and improve balance further to lower costs.
- *Terminal contract complexity.* Member lines have separate contracts with port authorities and with labor. Some lines run their terminals as profit centers, some as cost centers. Some have sold stakes and made ongoing volume commitments to private equity.
- *Regulatory.* When shipping lines work closely together, shippers and regulators (such as the Federal Maritime Commission) sometimes raise concerns. Alliances considering combined operations would need to get legal advice on how to set up enabling structures and on complying with all applicable rules.
- *Differing priorities of member lines.* Some shipping lines see the value of joint operations and want to act accordingly. Others, however, face competing priorities, and not all alliance members will necessarily want to pursue joint operations right away. It is possible that a subset of willing lines within an alliance can pioneer deeper integration, as has been done many times by airline alliances. Proposed first steps, however, will require careful consultation with all.
- *Termination clauses.* Alliances are not stable. Carriers leave alliances occasionally, or pull services out of the alliance. The agreements need to be robust against future shifts, with clear termination plans.

We believe that by taking these steps the allied lines would secure significant cost savings. Based on experience with shipping-line synergies and mergers, we would expect that a midsize alliance member could save about \$100 million on US landside spending (Exhibit 3).

### Barriers

To implement the recommended steps, the alliances will have to surmount a number of barriers:

### Getting started

To each set of barriers, we believe practical solutions exist. Oceanside alliances are now an industry fact of life, but real savings can likely be attained only by extending cooperation to the landside. The entire alliance need not be convinced for landside cooperation to begin. Much of the savings can be achieved by two or three carriers working together. For the willing lines, the next step is to set up an agreed-upon “clean” team to collect from each line

**Exhibit 3 Combining landside operations would allow cost reductions in numerous areas totaling about \$100 million for a midsize carrier.**

Levers	Potential savings, \$ million, annual	Key assumptions
<b>Terminals</b>		
Lower terminal management cost	20	• 10% of terminal cost is management; 30% reduction based on synergies typically seen in mergers
Reduction in total space needed	20	• Can reduce total terminal space leased in key locations (eg, Los Angeles and Long Beach)
More efficient crewing	10	• 5% labor productivity improvement from better gang planning
<b>Rail</b>		
Savings from improved balance from railroads	10	• Improved density and car balance
Rail negotiation savings	0	• None assumed, given current separate contracts with railroads
<b>Trucking</b>		
Reduction in interterminal and railhead drays	10	• 50% fewer interterminal moves • 10% fewer railhead dray moves
Increase in back-haul utilization (eg, to/from rail)	5	• Assume 20% savings because of more back-haul utilization on remaining moves
More efficient use of chassis	2	• Slight impact only, given shift toward chassis pools
Lower store-door trucking rates from combined volumes	10	• 5% reduction in rates for each carrier based on efficiencies from larger combined volume
<b>Overhead</b>		
Combined operations teams	10	• 30% reduction in operations overhead needed (based on typical savings seen in mergers)
<b>Other</b>		
Smaller container fleet	10	• 2% reduction in containers needed in pooled fleet • Joint procurement
<b>Total ~\$100 million</b>		

Source: McKinsey analysis

information on terminals and intermodal volumes, costs, financials, and contract terms. The team can then assess the opportunity holistically and without confidentiality concerns. Once the potential savings are made clear, lines can start to renegotiate contracts and set up the enabling new terminal operations and intermodal companies.

With industry cost pressures mounting, the commitment in time and resources needed to address the barriers to landside cooperation become

more justified. The complexities are many, but the prize is worth the effort. ■

<sup>1</sup> Damian Brett, "US questions alliance role in congestion," Lloyd's Loading List, March 24, 2015, lloydsloadinglist.com.

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