

Liner Shipping Operations

Liner service: a fleet of container ships sailing between specified ports on a regular schedule.

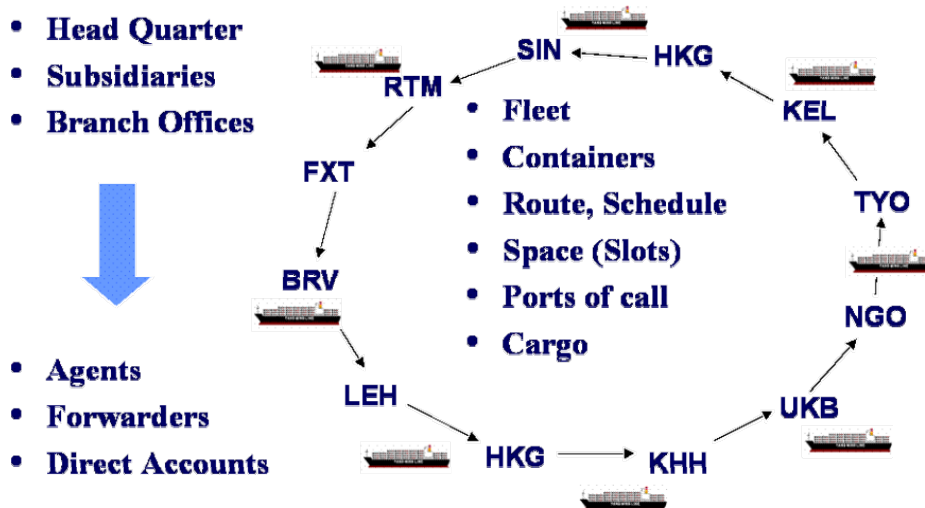


Figure 1. Liner Services

Containers move along a network of nodes and links (see Figure 2). The nodes are physical locations where container movement is interrupted and/or containers are handled. Many of these concern multimodal transfer points where containers are transferred from one mode to another. The links between nodes are characterized both by a mode of transport (road, rail, inland waterway) and a supporting infrastructure (roadway, canal/river, railroad track, rail marshalling yard, etc.). As containers move along this network they can either be empty, loaded with a single consignment (Full Container Load, FCL, i.e. CY) or loaded with multiple consignments (Less-than Container Load, LCL, i.e. CFS).

CY/CFS

CY and CFS are the abbreviations for container yard and container freight station, respectively. CY is the place where container carriers store containers and chassis, accept or deliver loaded containers and lend out empty containers or receive returned empty containers. CFS is the designated facility at which a shipping company accepts and stores small-lot cargoes, assorts and consolidates cargo into containers by destination, and also devans small-lot consolidated cargo out of the containers for sorting and delivery to consignees. When receiving or

delivering small-lot consolidated cargo at a CFS, the shipping company imposes a CFS charge, separate from the freight rate, to cover various costs incurred in handling cargo at the CFS.

FCL/LCL

These are the abbreviations for full container load and less than container load. FCL cargo is large enough to completely fill a container's volume, while LCL cargo is usually smaller-lot cargo not sufficient enough to load a full container. Normally, FCL export cargoes are brought to a carrier's container yard (CY) after being put in a container at the shipper's factory or warehouse. At the destination port, FCL cargoes remain in the container when being handed over to a consignee at a CY. On the other hand, LCL cargoes are brought to a carrier's container freight station (CFS) where they are consolidated by the carrier together with other LCL cargoes bound for the same destination. At the port of landing, the cargoes are removed from the container by the carrier at a CFS, sorted out and then handed over to each consignee.

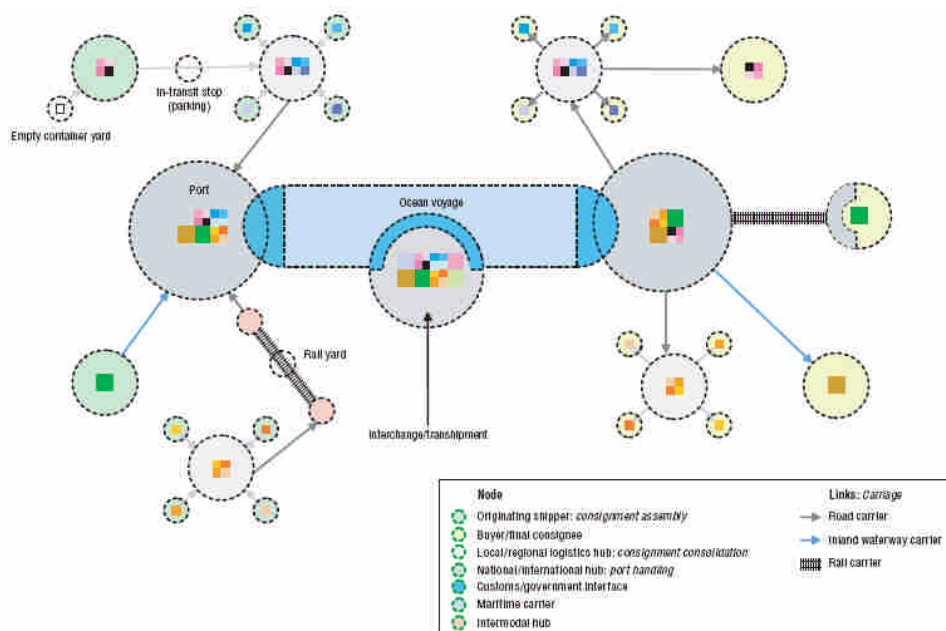


Figure 2. Container Transport Chain

The Containerized cargo moves from inland point to inland point via a multi-modal network linking vessels, port terminals, trucks and trains. At the heart of this service network is the planning, tracking and delivery of cargo and state-of-the-art information systems needed to provide certainty and reliability to

shippers.

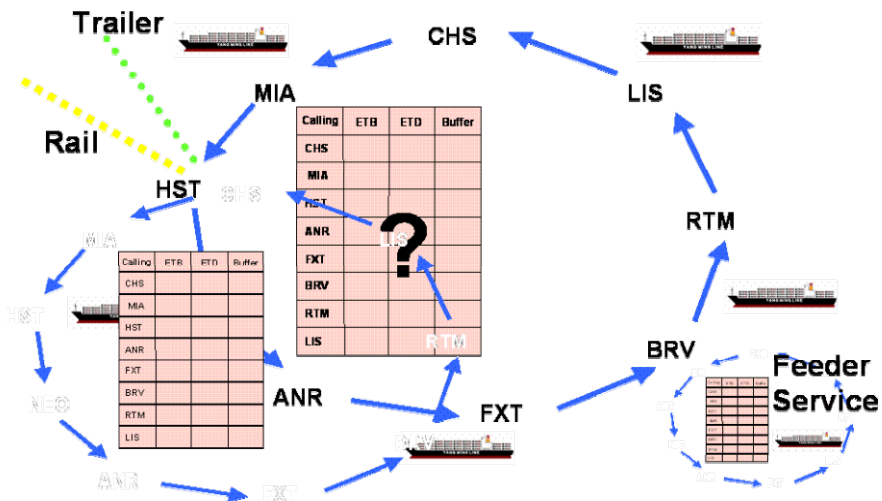


Figure 3. Liner Service Network

Transshipment

A distribution method whereby containers or cargo are transferred from one vessel to another to reach their final destination, compared to a direct service from the load port of origin to the discharge port of destination. This method is often used to gain better vessel utilization and thereby economies of scale by consolidating cargo onto larger vessels while transiting in the direction of main trade routes.

Feeder service

Transport service whereby loaded or empty containers in a regional area are transferred to a “mother ship” for a long-haul ocean voyage.

Intermodal

Movement of cargo containers interchangeably between transport modes where the equipment is compatible within the multiple systems.

Service Routes

Currently, shipping lines operate three general types of deep-sea itineraries: end to end, pendulum and round the world service routes, which are shown in Figure 4. End to end services schedule vessels back and forth between two continents. Pendulum services schedule vessels back and forth between three continents with one of these continents as a fulcrum, with the points at either end

of the pendulum swing linked only through the fulcrum. This type of service offers a way to fill container slots four times on the same voyage and to eliminate certain overlapping port calls in the fulcrum area. The merging of separate end-to-end services into a pendulum or round the world service serves the two main purposes of broadening the range of through services and reducing the number of ships required to provide the same coverage. This gives a major cost saving by merging the previously duplicated port calls in the central region of the pendulum. Also round the world services can overcome the problems of end-to-end operations, by accommodating the needs of global corporations. The world's three principal trade corridors are tied together into one and this type of service can move in either direction, moving westward or eastward or in both directions.

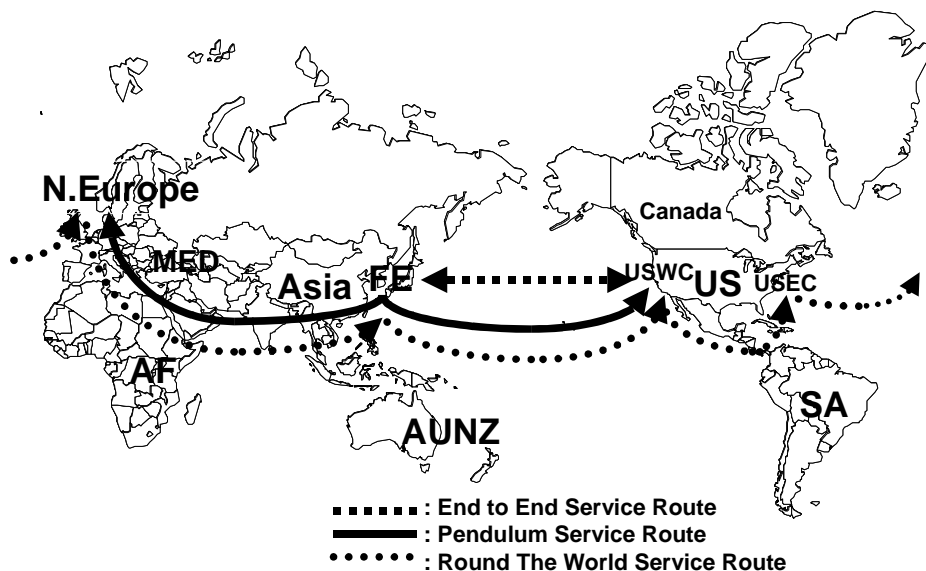


Figure 4. Three Types of Liner Service Routes

Intense competition in container markets not only makes it necessary for ship owners to offer high quality services between major trading regions but also makes it imperative for them to optimize fleet utilization. Such pressures have led to the development of multi-route operating patterns, notably 'Round-the-World' and 'Pendulum' services, enabling carriers to maximize vessel employment and slot utilization.

North America-Europe-Asia, with vessels continually circling the globe in an eastbound or westbound direction. 'Pendulum' services, operated by a large number of carriers including Hanjin and Yang Ming, typically operate over all or

some portion of the route linking the East Coast of North America, via Europe and Asia to the West Coast of North America, returning via the same route. Since vessels employed on 'Pendulum' services, unlike those employed in RTW services, are not required to transit the Panama Canal, post-Panamax vessels may be used.

Agents

The duties of the Agent, which are either those customarily performed by the general agents or to be performed as the result of specific instructions from shipping line, shall include the following items:

- 1.1 Obtain all licenses, permits and approvals, which are necessary or advisable for the provision of the services in the agent's territory and for the performance of its duties hereunder;
- 1.2 Provide office premises equipped with suitable office and telecommunication facilities and install necessary computer system of both software and hardware as well as maintain all systems of shipping line within the territory at the Agent's expenses for business running and electronic data exchange with shipping line, its agents, and third parties relating to shipping industry. Any special programs (which are not routine and pre-defined tasks) required and authorized by shipping line to be for Owner's account;
- 1.3 Provide enough qualified staff for carrying out all shipping line services and business activities;
- 1.4 Exercise shipping line marketing policy and activities, such as making marketing research, providing periodical market analysis and report in accordance with requirement of shipping line, soliciting cargo, placing advertisement in the local media generally used by major shipping lines and offering necessary selling materials to promote shipping line service and or others as may be requested by shipping line;
- 1.5 Arrange container traffic and provide good customer service, such as receiving cargo booking, issuing Bill of Lading, keeping shipping line customers advised of vessel schedule, cargo status, coordinating delivering of inward shipments and receiving of outward shipments and cargo, rendering enough information and assistance for customers request;
- 1.6 Receive, process and settle claims in accordance with shipping line's instruction;
- 1.7 Keep operation smooth and schedule punctual, including preparing all necessary shipping documents correctly in time for meeting the operation and

customs/authorities formalities needs, arranging quick dispatch of the vessel, coordinating and supervising the terminal, port and other service vendors and cooperating with shipping line partners in accordance with the joint service working procedures to ensure efficient operation, keeping close contact with shipping line, other colleague agents, feeder carriers, truck, railroads or other transport operators to ensure smooth receiving, delivering, shipping and transshipping of cargoes;

- 1.8 Liaise with parties concerned to arrange adequate supply of containers seals, labels and documents and arrange the matters such as bunkering, repairs, crew changes, ship's stores, spare parts, technical, nautical, medical assistance and consular requirements;
- 1.9 Prepare equipment interchange documents, submit same with vouchers to shipping line as per "Agency Accounting Procedure", arrange for on-hire, off-hire for container and equipment leases authorized by shipping line, and arrange for repair, maintenance and refurbishment of containers and equipment as authorized or instructed by shipping line;
- 1.10 Report & provide revisions on the Exchange Control Regulation, official tariff, other local tariff and shipping circulars & practice to shipping line in an accurate and timely manner;
- 1.11 Collect freight and effect disbursements on behalf of shipping line, check vouchers, pay disbursements, and render correct statements to shipping line.

Freight forwarders

Person or company who arranges for the carriage of goods and associated formalities on behalf of a shipper. The duties of a forwarder include booking space on a ship, providing all the necessary documentation, and arranging customs clearance.

Non-vessel operating common carrier (NVOCC)

A cargo consolidator in ocean trades who buys space from a carrier and resells it to smaller shippers. The NVOCC issues bills of lading, publishes tariffs, and otherwise conducts itself as an ocean common carrier, except that it does not provide the actual ocean or intermodal service.

NVOCC was first defined in the U.S. Shipping Act of 1984, according to which "NVOCC means a common carrier that does not operate the vessels by which the ocean transportation is provided, and is a shipper in its relationship with

an ocean common carrier." Under the Act, the NVOCC, as a common carrier, is subject to supervision by the U.S. Federal Maritime Commission (FMC). This means that the NVOCC must file its tariffs with the FMC and that it must deposit US\$50,000 with the commission as proof of its financial soundness. Today, a commonly used definition for NVOCC is "a cargo consolidator in ocean trades who will buy space from a carrier and sub-sell it to smaller shippers." The NVOCC issues bills of lading, publishes tariffs and otherwise conducts itself as an ocean carrier, except that it will not provide the actual ocean or intermodal service. Meanwhile, in trades other than U.S.-related ones, the NVOCC does not necessarily operate under a strict interpretation of the law. In many cases, it seems regarded as an international intermodal transport service provider who uses the services of common carriers, including shipping companies, and issues its own combined transport B/Ls (house B/Ls).

Bill of lading (B/L)

A document that establishes the terms of contract between a shipper and a transportation company. It serves as a document of title, a contract of carriage, and a receipt for goods.