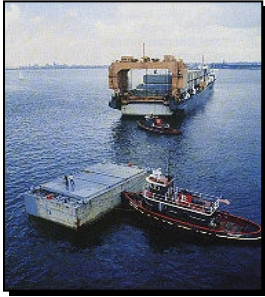




Multimodal Transport Operations

Introduction



The most far reaching impact of containerisation on the role of freight forwarders is their involvement in multimodal transport, i.e. carriage of goods by more than one mode of transport under a single contract. When a freight forwarder acts as a multimodal transport operator, he assumes responsibility for the execution of the multimodal transport contract, and of the carriers participating in the multimodal transport operations. He may enter into separate contracts with individual transport operators and provides of services, but these subcontracts would not affect his obligations to the consignor for the performance of the multimodal transport contract and his liability to him arising under the contract.

When a forwarder acts as multimodal transport operator, it thus involves a major transformation of his role. The carriers for whom he was previously acting as an intermediary become his subcontractors and he becomes the principal.

Multimodal transportation is not a recent invention since any consignment coming from overseas and destined inland will be travelling on multi modes of transport utilizing sea, rail, air or road. What is new is that such a transport can be made without breaking bulk, i.e. without taking it out of the container, vehicle or trailer in which in was loaded at the place of origin, and often under the cover of one transport document.

This is the result of the container “revolution” which has occurred over the last 20-30 years and with the development of Ro-Ro vessels, trailers or sea-ferries creating land-bridge routes.

Heavy loads can also be sent in barges which in turn can be loaded onto vessels in the same manner as containers, in systems known as “lash” or “Aseabee”.

This chapter will provide you with an understanding of multimodal transport operations and the role of a multimodal transport operator (MTO).

Chapter objectives

On completion of this chapter you should be able to:



- Define the term “Multimodal transport”.
- State the advantages of multimodal transport for forwarders.
- Describe the different forms of multimodal transport operations and operators.
- State the relationship of a Multimodal Transport Operator (MTO) with the intervening parties.

- Describe the scope of services covered by an MTO.

Multimodal transport defined

Multimodal transport, as understood by many, refers to a transport system usually operated by one carrier with more than one mode of transport under the control or ownership of one operator. It involves the use of more than one means of transport such as a combination of truck, railcar, aeroplane or ship in succession to each other e.g. a container line which operates both a ship and a rail system of double stack trains.

Advantages of multimodal transport

Minimises time loss at trans-shipment points

Multimodal transport, which is planned and coordinated as a single operation, minimises the loss of time and the risk of loss, pilferage and damage to cargo at trans-shipment points. The multimodal transport operator maintains his own communication links and coordinates interchange and onward carriage smoothly at trans-shipment points.

Provides faster transit of goods

The faster transit of goods made possible under multimodal transport reduces the disadvantages of distance from markets and the tying-up of capital. In an era of Globalization the distance between origin or source materials and consumer is increasing thanks to the development of multimodal transport.

Reduces burden of documentation and formalities

The burden of issuing multiple documentation and other formalities connected with each segmented of the transport chain is reduced to a minimum.

Saves cost

The savings in costs resulting from these advantages are usually reflected in the through freight rates charged by the multimodal transport operator and also in the cost of cargo insurance. As savings are passed onto the consumer demand increases.

Establishes only one agency to deal with

The consignor has to deal with only the multimodal transport operator in all matters relating to the transportation of his goods, including the settlement of claims for loss of goods, or damage to them, or delay in delivery at destination.

Reduces cost of exports

The inherent advantages of multimodal transport system will help to reduce the cost of exports and improve their competitive position in the international market.

Forms of multimodal transport operations

Currently, different types of multimodal transport operations involving different combinations are taking place, such as:

Land-Sea-Land

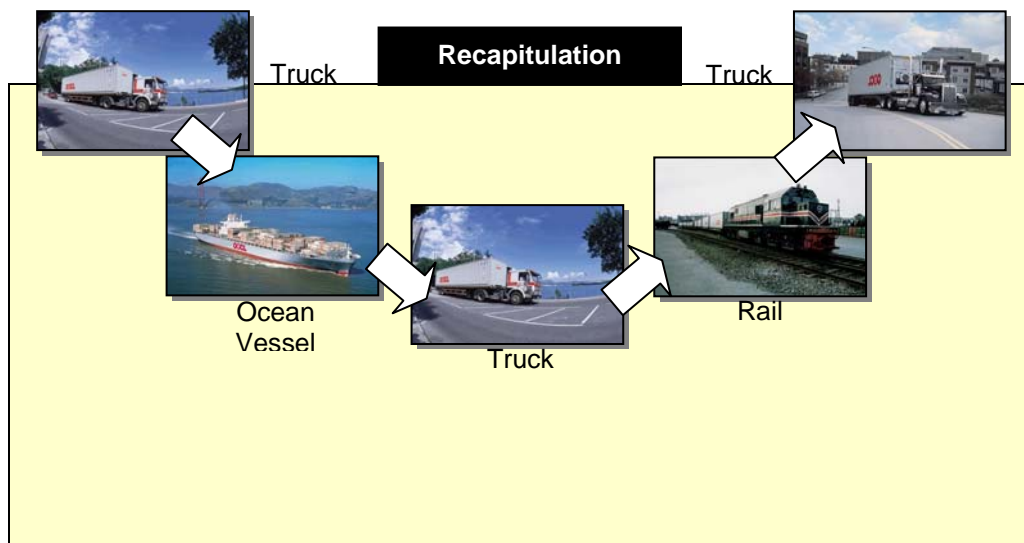
An example of this form of the transport is as follows:

An empty container is picked up from the line's container yard in Singapore and trucked to shipper's factory in Johore (Malaysia) for stuffing, thereafter the FCL is trucked to Singapore and transported by ocean vessel to New York.

Truck from vessel to rail-head New York

Rail from New York to rail-head Chicago

Truck from Chicago rail-head to consignee's warehouse.



There can be several additional links, for instance, if the container was carried by rail from, say, Kuala Lumpur to Singapore.

Where LCL cargo is concerned, the individual shipments would be delivered to the freight forwarder's CFS or the shipping line's CFS and consolidated into a FCL which, in Chicago, is trucked to the CFS, where from it is picked-up by the consignee's truck.

Road/Air/Road

A combination of air carriage with truck transport is a frequent method of multimodal service. Undoubtedly, pick up and delivery services by road transport are usually incidental to air transport. But



apart from this, road transport is now being increasingly used, particularly in Europe and U.S.A., for trucking air freight over long distances, sometimes across national boundaries, to connect with the main bases of airlines operating long haul services such as trans-Pacific, trans-Atlantic and inter-continental. Several airlines are building up a number of trucking hubs in Europe to act as focal points for road-based feeder operations.

Many airlines provide road service to cities which they either find uneconomical to service by air, or to which they do not enjoy landing rights. This road transportation is often effected with their own vehicles, and to and from their own facilities, but on occasion they do also use highway common carriers.

Sea/Air/Sea

This combines the economy of sea transport and the speed of air transport and is becoming increasingly popular in several international trade routes like the Far East Europe route. The economics of this combination mode favour high value items like electronics, electrical goods, computers and photographic equipment as well as goods with high seasonal demand such as fashion wear and toys.

This multimodal operation is particularly applicable where the route to be covered combines large distances via land and water, and where transit time is important.

Frequent sea/air services routes are:

ORIGIN	MODE	VIA	MODE	DESTINATION	OPERATION
Asia	Ocean	Dubai	Air	Europe	Sea/Air
Asia	Ocean	Seattle	Air	Europe	Sea/Air
Europe	Ocean	E. Canada	Air	W. Canada	Sea/Air
Nepal	Air	Singapore	Sea	Europe	Air/Sea

Rail/road/inland waterways/sea

This combination mode is in common use when goods have to be moved by sea from one country to another and one or more inland modes of transport such as rail, road or inland waterways, have to be used for moving the goods from an inland centre to the seaport in the country of origin or from the seaport to an inland centre in the country of destination.



Mini-bridge

This involves the movement of containers, under a through bill of lading issued by an ocean carrier, by a vessel from a port in one country to a port in another country and then by rail to a second port city in the second country, terminating at the rail carrier's terminal in the second port city. The mini-bridge offers the consignor a through container rate inclusive of rail freight up to

the final port city in the country of destination. The railways are paid a flat rate per container by the ocean carrier for the rail transit. This system is in operation on certain routes covering the trade between the United States and the Far East, United States / Europe, United States / Australia, etc.

Land bridge

This system concerns itself with shipment of containers overland as a part of a sea-land or a sea-land-sea route. In this case also, the railways are paid a flat rate by the ocean carrier who issues the through bill of lading. This system is in operation for the movement of containers on certain important international routes such as:

- between Europe or the Middle East and the Far East via the Trans-Siberian land bridge; and
- between Europe and the Far East via the Atlantic and Pacific coasts of the U.S.A., continental U.S.A. being used as a land bridge.

Ro-Ro (Roll-on/Roll-off)

This mode combines different means of transportation (sea and road), and is used most often with new automobiles, which are shipped by sea and then simply driven off the vessel to the importer's warehouse. Heavy and over-dimensional cargo is also suitable for Ro-Ro transport.



L.A.S.H. (Lighter Abroad Ship)



LASH transport is the combination of deep sea and inland waterway transportation. An example is the route from Germany to the Mississippi Ports where the barges sail down the Rhine, Elbe or Weser in Germany, are loaded onto LASH container vessels in Rotterdam, Hamburg or Bremen; are then carried across the Atlantic, only to be unloaded at a Mississippi delta port to sail upstream in the U.S.

It must be noted that LASH vessels are expensive, and furthermore it is necessary to check on the availability of the special handling facilities necessary in the ports of destination.

Piggyback

This is a system of unitised multimodal land transportation, a combination of transport by road and rail. It has become popular in Latin American and European countries because it combines the speed and reliability of rail on long hauls with the door-to-door flexibility of road transport for collection and delivery. The goods are packed in trailers and hauled by tractors to the railway station. At the station, the trailers are moved onto railway flat cars and the transport tractors, which stay behind, are then disconnected. At destination, tractors again haul the trailers to the warehouses of the consignee.



The system has undergone refinements and sophistication by the introduction of the so-called "trailer train" which uses the same trailer as a vehicle on the road and a rail vehicle on the rail. In other words, the trailer moves on its wheels as a truck on the road but the wheels can be retracted by an air suspension system and connected to a rail bogie for movement by rail. At the end of the rail journey, the conversion back to being road vehicle is effected for delivery of the goods to the customers.



Sea train

This is another innovation in the multimodal transport system involving the use of rail and ocean transport. It was originally adopted in the U.S.A. It is similar to the roll-on, roll-off (Ro-Ro) system except that in the place of the Ro-Ro vehicle a rail car is used so that geographically separated rail systems can be connected by the use of an ocean carrier. Typically these vessels are long and thin and consist of one main deck running the length of the ship. They are quicker at loading trains than general cargo vessels since the train's carriages do not need to be detached from one another.



Conclusion

These examples are only illustrative, not exhaustive. In actual practice, several other combination modes may be used depending upon the trade routes, trans-shipment points and the availability, of different modes of transport. New infrastructural developments are being proposed the world over to create a seamless flow of traffic e.g. the channel tunnel linking England and France, the Oresund bridge linking Sweden and Denmark.. As these projects have become reality so the flow of traffic changes. Other changes such as global warming pose the potential for new routes to open up via the northern sea between Russia's northern border and the north pole.

An MTO should have the knowledge and skill to organise the transportation of goods through different modes of transport. He should be aware of what is happening in the areas of technological development, political stability of countries, congestion of routes or mergers of operators. The MTO needs this information because he arranges with the trucking company, railways, shipping lines and other transport operators to transport the goods from one place to another within the shortest time which may not necessary be the most direct. Since the function of the MTO arises out of the needs of the shipper, he must be able to offer a service which covers a wide geographical area, either through an in-house branch network or by means of reputable agency arrangements.

The value added in terms of the services provided by a MTO is significantly greater than that provided by the conventional carrier. The role of the MTO in the transportation of goods door-to-door will continue to increase because of the single carrier liability they undertake and the flexibility with which they function. They can, for example, vary the all-in freight rates according to the complexity of the service provided, taking into account the volume of business provided by their customers.