

Operational Aspects of Multimodal Transport



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Chapter 1: Freight forwarder and its roles

Introduction

Some 30 to 40 years ago, a freight forwarder was a middle man in a transport operation or functioned as a broker for consignors or consignees of services related to international transport collected service charges. This is the traditional freight forwarder business.

Since then, the role of a freight forwarder has been transformed to provide more and new services, including extending logistics services in the supply chain.

Chapter objectives

On completion of this chapter, the reader should be able to do the following:

- Identify a freight forwarder;
- Understand the role of a freight forwarder;
- Identify activities that fall under the scope of a freight forwarders' operations and services;
- Know the difference between a principal and an agent, including, their responsibility and liability

What is a freight forwarder and its major roles?

A freight forward, in its traditional role, is the party that provides to exporters or importers assistance in the shipment of the goods internationally through common carriers.

The roles the freight forwarder has gradually evolved from just being an agent. In some cases, freight forwarders provide trucking services using their own trucks. An air freight forwarder is the carrier after it issues an air waybill. When a freight forwarder issues a bill of lading, it is classified as a non-vessel operating common carrier (NVOCC). The role of a freight forwarder has been transformed to a logistics service provider.

What are the qualifications to be a freight forwarder?

Any entity can become a freight forwarder. It is matter of how the entity fulfils its role as a principal, agent, contractor or subcontractor.

In some countries, a freight forwarder is required to register with competent authorities, such as, in the United State of America, based on the 49 U.S. Code § 13903 — the registration of freight forwarders. Under the code, a party that applies to become freight a forwarder is determined by the secretary of the authorizing authority if he or she has sufficient experience and is fit, willing, and able to provide the services and to comply with the applicable regulations of the secretary.

In Malaysia, since 1 April 2021, a potential freight forwarded must submit a house cargo manifest to register with Customs, while in the Philippines, freight forwarders need to be accredited under the Fair Trade Enforcement Bureau of the Department of Trade and Industry.

The roles of the freight forwarder in international transportation and logistics can be categorized as followed

- An agent
- A principal
- A contractor
- A subcontractor¹

Agent:

Acting as an agent in legal terminology means a person who has been legally empowered to act on behalf of another person or an entity. An agent may be employed and authorized to represent a client in negotiations and other dealings with third parties or may have decision-making authority. The roles of an agent in local and international transport can be broken down, as follows:

Customs broker

A freight forwarder performs export/import customs formalities on behalf of the consignor/ consignee, including hiring trucks for pick up or delivery of the cargo.

Moreover, the freight forwarder may also perform transit customs formalities on behalf of the principal to move freight to the next destination.

• Traditional international forwarding service

A freight forwarder assists the importer/exporter in finding common carriers for international transport using the common carrier's transport document and means of transport for that purpose. A freight forwarder charges only a service fee to the importer or exporter. The actual international transportation cost is paid directly to the common carrier, either by the consignor or consignee, or most likely, the freight forwarder may make an advance payment on the transportation cost (freight charge) and recover the charge together with the service fee.

Under traditional practices, the freight forwarder may bill the consignor or consignee a one-time all-in-rate (the combination of the actual freight rate and the service fee). This enables the freight forwarder to attain more revenue. The consignor or consignee views this fee as the international freight charge, which includes some profit for the freight forwarder, not a service fee.

It should be noted that in some countries' laws, this type of service treats the freight forwarders as the carrier even though the freight forwarder does not issue any transport documents, but receives the total revenue as the transportation cost and only carries out work required of an international freight forwarder.

Insurance broker

A freight forwarder may help the importer/exporter purchase insurance and as a result, obtain a commission from the insurance broker or directly from the insurance company.

¹ Subcontractor can be referred as an "Agent" or the Contractor of an Agent

In some countries the freight forwarder can function as an insurance broker, but, in others, it is not permitted. Many freight forwarders generate very good income from the insurance commission if they have many customers.

• Transit agent

A freight forwarder may act as an agent of a principal that is a multimodal transport operator in the transit country in order to move the freight to the next station or the final destination. Freight forwarders mostly carry out the customs transit procedures, arrange the next leg of transport on behalf of the principal and charges the principal a service fee for the operation.

• Delivery agent or breakbulk agent

A freight forwarder at the destination may act as an agent of the principal for delivery of the goods to the receiver of the cargo, breakbulk agent² or the delivery agent. In some companies, the freight forwarder issues the "delivery order"³ and releases this document in exchange for the bill of lading for shipments involving sea transport. In other countries, a freight forwarder is not allowed to issue its own delivery order, but, instead, must use the carrier's delivery order, which is released against the principal's bill of lading. This, however, is not the procedure for air cargo, as an air waybill is a non-negotiable document, Accordingly, a delivery order can be released to the cargo owner without the original air waybill. It should be noted, however, that an air cargo delivery order can be issued by the freight forwarder or terminal operator, depending on the practice of that particular country.

Carrier/principal:

A carrier is the party that concludes the contract of the carriage with the consignor and assumes liability for the loss of and damage to the cargo and delay in delivery. The carrier is the principal whose operations are guided by the transportation laws or rules.

• NVOCC – Non-vessel operating common carrier and sea transport operator

A NVOCC mostly is the freight forwarder who enters into a contract for international carriage of goods by sea to a consignor or exporter. A NVOCC that acts as a carrier or principal is fully responsible for the loss of or damage to the cargo, and delay in delivery. To become a NVOCC, in some countries, interested parties must register with the government (See chapter 2 for further information)

• Consolidator who performs several types of consolidation

A consolidator is actually a freight forwarder who receives and gathers small lots of shipments from various consignors and stuffs them into the containers bound for the same port of destination. A consolidator enters into a contract for international carriage of goods by sea with several consignors at the same time. There are three types of the consolidators: common consolidator; buyer consolidator; and seller consolidator (see chapter 3 for more information).

² Breakbulk agent refers to a delivery agent in sea air and multimodal transport.

³ Delivery order is the document required to release cargo from the terminal.

• Courier service

A courier service traditionally involves sending documents and very small parcels from one location to another within a country or overseas. Recently, courier services have expanded to send larger packages or even larger shipments, as well as e-commerce goods to and from foreign countries, including carrying out the last mile delivery⁴

Shippers have the option of having their parcels picked up by a courier or dropping off their parcels at a nearby location for later pickup by the courier.

The cost of the service is higher than normal post, but the shipment time is quicker.

• Local trucking operator

Many freight forwarders own trucks, trailers and prime movers (tractors) to pick up goods for export and deliver them for marine and air transport. Especially for air transport, most freight forwarders own their trucks. Local trucking services also includes pick-up and delivery and shuttle services between the vendor's factory and the buyer's factory locally.

If freight forwarders use their own trucks, they become the carrier. If the freight forwarders use other parties' trucks for such purposes, they may become an agent on behalf of the exporters or importers.

• Air freight forwarder

There are two categories of air freight forwarders:

- **Appointed agent:** an air freight forwarder who is appointed by the airline and is allowed to hold the stock of the master air waybill of the airline. This agent carries out this service on behalf of the airlines by, for example, selling the freight rate and receiving the booking directly from customers or other air freight forwarders that are non-appointed agents to carry out the air transportation.
- **Non-appointed agent:** an air freight forwarder that has not been appointed by the airline due to lack of the appropriate qualifications to meet the airline's requirements. This air freight forwarder operates similar an appointed agent who acts as a carrier. However, a non-appointed agent must liaise with an appointed agent of the airline to get the freight charge and reserve space on the airline. In other words, a non-appointed agent cannot deal directly with an airline in general.

• Cross-border transport operator

International transport using a road vehicle has become more popular for traders, especially in South East-Asia, while in the European Union, cross-border transport is a very common practice among its members.

As a result of the Covid-19 pandemic, a shortage of containers has hindered trade within the different regions and alternative transport maritime transport is required. The Association of Southeast Asian Nations (ASEAN) has two framework agreements to facilitate the movement of goods by road vehicles, namely the ASEAN Framework

⁴ The last mile refers to the short geographical distance that must be spanned to provide services to end-user customers.

Agreement on the Facilitation of Goods in Transit and the ASEAN Framework Agreement on the Facilitation of Inter-State Transport, while the Greater Mekong Subregion has the Greater Mekong Subregion Cross-Border Transport Facilitation Agreement.

A cross-border transport operator can be a common carrier (trucking company) that has been granted a permit, such as the ASEAN Goods Vehicle Cross Border Permit for its trucks to transit and carry out interstate transport in ASEAN member States. In this case, the trucking company is referred to as a licensed truck operator".

A cross-border transport operator can also be a non-truck operating common carrier who hires a licensed truck operator to carry out cross-border transport and enters the ASEAN Customs Transit System (ACTS) as a principal⁵. A declarant provides transport service to exporters or importers as a carrier.

Under ACTS, the principal /declarant can also be a trader (exporter). However, the exporter must hire either a licensed truck operator or a NTOCC to carry out the cross-border transport.

• Multimodal transport operator

A multimodal transport operator is a type of freight forwarder who provides a transport service through the entire route of a shipment using various modes of transport under a single contract and under its sole responsibility and liability. The multimodal transport operator is the principal or carrier according to the contract of carriage. The operator is required to carry out the required registrations with the authorities in different countries. (See chapter 5 for more detailed information)

• Rail transport operator

Freight forwarders do not own railways and locomotives, but instead use the services of State-owned or privately owned railways to carry containers or goods from a station in one country to a station in another country for international transport. A freight forwarder acts as a principal while a railway company is a subcontractor that assumes the role of a common carrier.

Rail transport operations are more rapid than maritime transport in some corridors, but they are also more expensive for long -haul transportation.

The new Eurasia Land Bridge in China, built under the Belt and Road Initiative, connects Lianyungang, China with Rotterdam, Netherlands, passing through Kazakhstan, the Russia Federation, Belarus and Poland. When following this route, shipments are made using multimodal transport from Asia to Europe.

• Project cargo operator

A freight forwarder who agrees to a project cargo needs to have a full understanding of the nature of the goods being transported in order to determine the equipment required and the best way to handle such goods, including suitable modes of transportation.

Some freight forwarders provide turnkey as part of the project cargo transportation, namely from picking up the cargo at the origin country using special trailers to carrying the project cargo loaded onto a special type of vessel for heavy bulk and project cargo. After being discharged, the goods are carried to a site and are installed by the

⁵ Principal/declarant is the party responsible for customs debt along a truck's journey and is the party that enters the Transit Transport Customs Declaration.

freight forwarder or subcontractors. The full range of this service entails multimodal transport plus installation or fabrication of the goods at the final site.

For cargo project, the handling of the goods must be faultless because if the goods get damaged, the whole project may face long delays that could exceed six months, as some items may need to reproduced. This includes the repairing lead time as well.

• Removal service provider

Expatriates who have to move their personal effects to another country may contact a freight forwarder to move their belongings. The service may start by collecting the items, and include packing, shipping and clearance and extend to delivery at the destination, including placing all items according to the layout provided by the customer at the residence.

Similar to the project cargo handling, the freight forwarder must be sensitive to items with sentimental value, which if lost or damaged causes much distress. The best way to prevent this is to separate these items and pack them in a wooden box with bubble protection. If the size of a sentimental item is small, the customer should hand carry itself.

• Exhibition service provider

International trade fairs or motor shows require professional freight forwarders to move the merchandise or vehicles from the origin country to the venue at the destination country and vice versa without delay and damages. Freight forwarder may perform customs clearance service under ATA Carnet⁶. This service may include packing, shipping, clearance, unpacking, placing the shipment at the location in the exhibition hall and returning all the merchandise to the home country.

• Motorsport logistics provider

Motorsport logistics services offers more than just transport of a racecar. They also provide spare parts, bodywork, garage equipment and other equipment associated with the motorsport industry. This type of service is typically used on a," between factory and circuit" or "vice versa" basis. It includes all types of racing vehicles, such as motorbikes and jet skis.

The modes of transport for these operations are predominantly sea or air transport.

The management of the transportation is similar to project cargo. A consolidating point is necessary to collect all spare parts and equipment, which usually comes from a different origin and needs to be gathered and forwarded to the race field at the same time.

• Cold chain and pharmaceutical logistics service provider

The cold chain business is growing steadily, so the appropriate logistics activities related to it are essential to serve this type of business. Many freight forwarders have built cold chain warehouses to store fresh meat, fish and fruit

⁶ The ATA Carnet, often referred to as the "Passport for goods", is an international customs document that permits the tax-free and duty-free temporary export and import of nonperishable goods for up to one year.

in particular countries and distribute them nationwide. Some of them also provide services covering the international supply.

The scope of the service can begin with processing overseas shipments by air or sea, then storing the products in a cold storage facility, sorting them and ending with the final delivery.

Cold supply chains and pharmaceutical supply chains require in-time delivery, which only can be done by a freight forwarder who has a facility for handling purposes.

• Third-party logistics service provider

A third-party logistics service provider is defined by the Council of Supply Chain Management Professionals as "a firm that provides multiple logistics services for use by customers. Preferably, these services are integrated, or 'bundled' together, by the provider."

Logistics for international movement of the goods entails freight forwarders functioning as a third-party logistics service provider that may start planning, implementing and controlling the movement of the goods to arrive on time, as required by the traders. The third-party logistics service provider plays a vital role in freight logistics. Typically, they specialize in providing integrated operations of warehousing, distribution and transportation services that can be scaled and customized to a customer's requirements based on market conditions to meet the demands and delivery service requirements for their products, including the value-added services related to the procurement of goods in the supply chain.

• Fourth-party logistics provider

The Council of Supply Chain Management Professionals defines a fourth-party logistics provider as "an integrator that assembles the resources, capabilities and technology of its own organization and other organizations to design, build and run comprehensive supply chain solutions".

The scope of the work of a fourth-party logistics provider covers research, site visits, interviews of relevant parties related to the client's operation and a list of recommendations or suggestions, including strategic plans and solutions for supply chains and logistics.

Fourth-party logistics providers mainly provide the solutions for supply chains and review the operations of the third-party logistics service providers.

• E-commerce service and last mile delivery

E-commerce has become more popular in trading of B2B⁷ B2C⁸ or D2C⁹. To do this, a freight forwarder becomes involved with the collection of goods, consolidation, dispatching to destination warehouses, sorting, and delivery to the buyers' premises through what is referred to as "door delivery".

It should be noted that in the origin country, a freight forwarder is the principal and at the destination country, the freight forwarder is an agent of the principal for freight dispatching and the last mile delivery.

⁷ Business to business is a transaction that is conducted between companies.

⁸ Business to consumer is a transaction that is conducted between a company and individual.

⁹ Direct to consumers is a marketing strategy of a product owner deals directly with individual consumers.

Contractors

• Warehouse service as common warehouse, in-house warehouse service, free zone/bonded warehouse

Serving as a warehouse operator who receives, stores, and delivers goods for a trader is a very common freight forwarder service. A freight forwarder may own or lease the warehouse for its activities or even contract out to the operator of the third-party warehouse.

In-house warehouse service is the provision of warehouse operation activities at a manufacturers' warehouse in which the manufacturer wishes to concentrate more on the core business rather than carry out warehouse operations; often the manufacturer lacks the skills or know-how to do this. So, instead, the manufacturers rely on freight forwarders, who, in turn, must invest in the equipment and systems necessary to operate a warehouse. Contracts for this service are usually three to five years. This type of service is a long-run business for freight forwarders.

A free zone and bonded warehouse can be used as a value-added service or VMI (vendor managed inventory) provided by freight forwarders that may lease or own the facilities.

• VMI operator (vendor managed inventory)

Originally, VMI is an inventory management practice in which a supplier of goods, usually the manufacturer, is responsible for optimizing the inventory held by a distributor.

However, for international trade, VMI is a logistics tool that provides more rapid supply from a vendor to clients by keeping the stock at the buyer's country in a warehouse operated by the freight forwarder. The goods are imported and stored at a bonded warehouse or in a free zone, and when the buyer places an order, the vendor instructs the freight forwarder to clear the goods from customs according to the volume required by the buyer and deliver them. The advantage of VMI is the reduction in the lead time of the transportation from the overseas vendors' premises to the buyer's premises.

For VMI service, the status of the freight forwarder can be a principal as the carrier who transports the goods from the origin country to the destination country, a contractor for warehouse storage and an agent for customs clearance on behalf of the buyer.

• Distribution service and cross docking

The distribution service and cross docking function can be carried out locally and internationally by a freight forwarder who uses his warehouse to provide this service. A successful example of using the cross docking involves Walmart. The retail company does not only apply VMI at its warehouse, but it also engages in cross docking in its operation. As a result, the company saves a lot of money in terms of logistics.

Cross-docking is a logistics practice used by Walmart to replenish inventory efficiently. It entails the direct transfer of products from inbound to outbound trucks without the need for storage, by unloading items from an incoming truck or railroad car and loading the merchandise directly onto outbound trucks, trailers or rail cars with no storage in between.

In Japan, the truck terminals under the operation of the Japan Motor Terminal Company perform day in day out cross docking for delivery of goods throughout the country. This company applied cross docking before Walmart adopted it.

Buyer consolidation carried out by freight forwarders is a similar practice to overseas cross docking. It entails goods from various vendors being sent to a freight forwarder's warehouse, and then sorted according to the instructions of the overseas buyer, and stuffed into containers with other goods going to the same location before being shipped to the final destination (see chapter 3 for more detailed information)

• Dangerous goods common warehouse

One activity of freight forwarders is common warehouse for dangerous goods. The freight forwarder must have full knowledge of the class of the dangerous goods and skill in handling, storing, and segregating this type of goods in a warehouse. It also should fully understand all details in MSDS¹⁰ especially preventive measures and first-aid measures.

• Stevedore supply service

In many countries, the freight forwarder provides labour for manufacturers to perform some special tasks at the factory. For example, a monosodium glutamate factory may request a freight forwarder to provide labour for pouring tapioca starch into the stirring pond. The scope of work also includes the unstuffing of the container and the storage of bags of tapioca starch in the warehouse.

Some freight forwarders also provide stevedore loading on, or unloading of the goods from conventional vessels, including a stevedore for driving and stowing the vehicles in a RO/RO vessel. These services are extended to shipping lines or boat charterers.

• In-house customer service

This service is similar to manning services or labour supply services.

A freight forwarder can provide staff to work at a customer's factory or premises to perform daily work involving documentation and import and export procedures. This can be done for fee or free of charge, depending on the agreement between the freight forwarder and the customer. Mostly, it is done free of charge under the condition that the client will use the freight forwarder's services for international transport.

• Container depot/depot operator

Some freight forwarders offer container depots to shipping lines for empty container storage service, which, includes other services, such as cleaning, maintenance and repairing the containers. The depot operation receives the empty containers returned by the importer, lifts the containers off the trailers, checks the condition of the container, issues an EIR¹¹, stores the container and releases the empty containers to exporters who, then, hire a freight forwarder or trucking company to pick up the containers for their export shipments.

¹⁰ MSDS – material safety data sheet or in other word is called as SDS – Safety Data Sheet

¹¹ Equipment interchange receipt is a form generated every time a container goes from one interchange point to another. Interchange points are at terminals, container yards or at any intermodal interchange point.

• Self-storage service

In addition to general cargo storage service, freight forwarders offer storage services for personal belongings. For this purpose, a special warehouse is built with storage rooms with varying sizes for customers to rent to store their belongings.

The warehouse has security and is open 24 hours. This service is gradually becoming more popular in the freight forwarder industry. The only labour involved to operate the warehouses is security personnel.

• Packaging

Packaging is also a service provided by freight forwarders. It requires specialists and expertise with full knowledge on packaging, including the materials to be used that is appropriate for each type of transportation. This includes packing of dangerous goods and perishable goods. Freight forwarders need to consider the size of the packaging, whether it is suited for the designated transportation mode and type of packaging that is appropriate to the goods being shipped.

Others:

Business consultant

Due to their international network, in-depth understanding of traditional trade practices, rules, regulations and incentives related to the importing and exporting goods and market knowledge, freight forwarders are in a strong position to impart this information through consulting services. This service is mostly given for free. It supports the growth of the international trade for exporters and importers. Specific areas covered by this service include expanding operations in new country and logistics.

• Documentation and permit or FTA form

All documents related to imports and export permits or certificates of certificates of origin can be taken care of through freight forwarder services.

• Training centre

Some freight forwarder companies provide training courses related to international trade and transport. Training centres are being established as a new business.

What is the difference between a principal's and an agent's responsibility in a carriage contract?

The principal in transportation is the party that assumes responsibility for the performance of the contract of carriage, commencing from when the goods are handed over and accepted for carriage until delivery at the place of destination.

Accordingly, the responsibility of the principal is to carry the goods from the point of origin to the destination point, as specified in the contract of carriage, in good order and condition. **The principal in the role of a carrier is the party issuing the transport document.**¹²

The responsibility of the principal also includes the acts and omissions of its staff or agents, when any such staff member is acting within the scope of his or employment, or of any other person of whose services is used for the performance of the contract.¹³

Principal liability, which is based on international conventions or rules for unimodal transport

Several international conventions or rules govern the liability of the principal or carrier according to each mode of transport. They are as follows:

Transport by sea:

- International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading, 1924 (Hague Rules);

- The Protocol to Amend the International Convention for the Unification of Certain Rules Relating to Bills of Lading 1924, (Hague/Visby Rules), 1968;

- The Protocol Amending the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading, 1924, as Amended by the Protocol of 1968, 1979;

- United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules).

- The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (The Rotterdam Rules 2008 – not yet in force)

Transport by road:

- Convention on the Contract for the International Carriage of Goods by Road (CMR), 1956.

Transport by rail:

- Uniform Rules Concerning the Contract for International Carriage of Goods by Rail (CIM), Appendix B to the Convention Concerning International Carriage by Rail (COTIF), May 1980.

- Protocol to amend CIM-COTIF, 1999.

¹² Details of the type of sea transport document are given in chapter 2

¹³ Appears in some rules such as the ASEAN Framework Agreement on Multimodal Transport 2005

Transport by air:

- Convention for the Unification of Certain Rules Relating to International Carriage by Air (Warsaw Convention), 1929;

- The Hague Protocol, 1955;
- Montreal Protocol No. 4, 1975;
- The Montreal Convention, 1999.

Standard trading conditions

Standard trading conditions is not an international convention or rules, but it has been implemented by individuals, national freight forwarder associations and federations of forwarder associations. It is general contract terms between two parties to the contract of carriage or storage of the goods, which is separate from international conventions or domestic laws.

Standard trading conditions may be applied when a contract between a shipper and a carrier is signed. It is the carrier's choice as to whether to stipulate the standard contract terms and provide them to the cargo owner upon request.

The terms govern the commercial outcome in case of loss, damage or delay. They are of great importance to the contractual relationship between the cargo owner and the carrier. In ASEAN, the AFFA standard trading conditions is provided to the ASEAN Federation of Forwarders Associations members.

Standard trading conditions are predominantly used when no domestics rules, regulations and laws/acts cover transportation and freight forwarder services.

In most countries, when local applicable laws and regulations or overseas applicable laws and regulations are in place, including tort, they are applied to the principal liability, not the standard trading conditions.

Principal liability when providing transportation

The principal is liable for loss, damage and delay in delivery of the goods after have taken charge of them until the time of delivery and/or any tort done by it or its agent, subcontractors or other persons whose services are involved in the performance of the contract.¹⁴

Agent liability may be based on the following:

Against consignor – Tort/wrongful act, infringement of a right, error and omission when it acts as agent for consignor.

Against consignee – Tort/wrongful act, infringement of a right, error and omission when it acts as agent for Consignee.

¹⁴ Appears in several rules and conventions.

Against consignee - Liability according to COGSA (The Carriage of Goods by Sea Acts) or multimodal transport laws of some countries

Against principal – Tort/wrongful act, infringement of a right, error and omission when it acts as agent for the non-vessel operating common carriers, non-aircraft operating common carriers and, multimodal transport operators. Against any third party – Tort or any applicable laws.

Contractor in logistics services

The contractor is the person or business entity that agrees to conduct work for another entity as specified under the terms of a contract. Unlike employees, contractors are independent entities that undertake to do the work for a company or corporation on a large scale, at a certain fixed price and mostly at the fixed period according to the scope of work in the contract. The contract could be extended time to time upon the agreement of both parties. This is applicable to the subcontractor.

Contractor liability

The contractor liability is based on the conditions stipulated in the contract and scope of work that both parties agree to, such as bodily injury, property damage, tort, third party liability.

The applicable laws governing commercial transactions in each country are different. For example, in the United State, the Uniform Commercial Code (UCC) may be applied. It identifies the duty of care imposed upon the third-party logistics service provider's warehouse, which is often referred to as the "reasonable care" standard. As such, a third-party logistics service provider's warehouse liability for loss and/or damage to the goods in its possession is limited to that which is attributable to its negligence subject to a negotiated limitation.

Another example is that the standard of operation between a third-party logistics service provider and merchant may be different in terms of understanding. In the cold chain business, merchant's standard of the temperature, humidity, movement and storage time may be higher or lower than that for a third-party logistics service provider. Accordingly, the standard should be clearly stated in the contract, including respective damages, liability and responsibility.

The contractor should also be liable and responsible for the work that its staff and /or subcontractor performs on his behalf in the contractual agreement.

In conclusion, a freight forwarder can perform many activities related to transport and logistics for the traders in several aspects. Freight forwarders acting as agents are responsible for the result of tortious conduct, error and omission, but while performing as principals or carriers, the responsibilities of freight forwarders are based on the relevant laws, acts or international conventions related to mode of transportation being deployed.



1. The role of the freight forwarder can be divided into how many categories?

2. How many parties can a freight forwarder act as an agent for?

3. When a freight forwarder invoices an ocean freight together with a service charge without separating these charges to the consignor and uses a shipping line bill of lading for the carriage of goods, what activity is being carried out?

4. Under which circumstances is a freight forwarder acting as a principal?

5. What is a common service extended for free by a freight forwarder to customers?

6. What are the consequences if project cargo is damaged while being transported?

- 7. Can an air freight forwarder, acting as a non-appointed agent book directly with an airline to reserve space on an airplane?
- 8. How can a principal/carrier himself, in terms of responsibility and liability, if a country has no rules in place or has agreed to comply with conventions on sea transport and the carriage of goods by sea?
- 9. Which party acts as a principal gathering small-lot shipments of various shippers into one container and ships them to the same final port of destination?

10. Which document is required from the cargo owner to perform dangerous goods common warehouse?

11. On which basis should the contractor be liable and responsible for his duties and performance?

- 12. In most cases, what is the liability of the principal when carrying out the duties of a carrier for the carriage of goods?
- 13. What is the status of a freight forwarder when performing a full range of VMI services for a consignor, including pick up; international transport storage, and delivering to the buyer?
- 14. When a freight Forwarder acts as a customs broker and makes an incorrect import declaration for the consignee, which rules or conventions are applicable for this mistake?
- 15. When a freight forwarder performs a multimodal transport operation, what is his status in this operation?

Introduction

Non-vessel operating common carrier (NVOCC) in this chapter refers to an "actual NVOCC" that performs the carriage of goods by sea transport from port to port, similar to a shipping line service. The only difference is that the NVOCC does not own any vessels to transport the goods.

The NVOCC is a party (mostly a freight forwarder) that operates as a principal or a common carrier for a regularly scheduled consolidation or groupage service, the assembly of small consignments, from several consignors in one locality intended for several consignees at another locality, and dispatches the consolidated containers to its agent at the destination for the delivery of the consignment to the respective consignees.

Such services are operated on a regular basis, for instance with weekly departures, in principle. They are similar to the services offered by several shipping lines (liner operators) for LCL (less than container loaded) cargo. NVOCCs, in this case, issues the house bill of lading from the place of receipt to the place of delivery under the shipping term CFS/CFS (container freight station). The type of shipment may be indicated in the bill of lading in description column as LCL/LCL.

Moreover, NVOCC also performs FCL (full container loaded) shipments upon request of exporters, and issue its own house bill of lading from the place of receipt under the terms of the CY/CFS (container yard/container freight station), which may indicate in the bill of lading an FCL/FCL in a port-to-port shipment.

The performance of NVOCC can also be based on CY/CFS or CFS/CY terms depending on the contract of carriage or requirements of the consignor.

This chapter contains a discussion of the scope of NVOCC operations, including the documents used by NVOCCs, and the type of containers used in sea transport.

The responsibility and liability of NVOCCs is also briefly covered in the chapter.

Chapter objectives

On completion of this chapter, the reader should:

- Understand the activities that fall within the scope of NVOCC operations;
- Know the type of containers used in sea transport;
- Understand how to select shipping lines and the quality of NVOCC services;
- Know the list of documents used in NVOCC operations;
- Understand the responsibility and liability of the NVOCC (extent of liability);

Non-vessel operating common carrier operations and activities

As mentioned in the chapter 1, some countries, registration or obtaining a license is required to operate as a NVOCC. In the United States, a U.S.-based NVOCC must obtain an ocean transport intermediary (OTI) license from

the Federal Maritime Commission and non-US-based NVOCCs must register with the commission. In China, NVOCCs must register with Ministry of Transport. Meanwhile, in other countries, registration is not required. For example, in Thailand, NVOCCs used to have to register with national competent authority but this is no longer required.

The freight forwarder becomes a NVOCC when it agrees to carry the goods as a carrier while issuing its own bill of lading or other sea transport documents. The operation for a FCL shipment may appear to be similar to the function of a broker that hands over the goods to the shipping line, but the different is the requirement to issue the bill of lading.

The freight forwarder pays the freight charge to the shipping line and collects a fee from clients (either a consignor or consignee), the freight charge paid to the shipping line plus its service fee.

In fact, the NVOCC operation is involved with various entities and must be backed up by partners in the transport chain, such as liner operators/shipping lines, CFS operator, customs brokers, trucking companies and the agent at destination.

The NVOCC operation in sea transport basically involves the selection of carriers, shipping schedules that match the customer's requirements and securing the container from the shipping lines in the general case of FCL. For a less than full container load, NVOCC becomes a common consolidator, providing the regular shipping schedule, the container space for stuffing the goods of various exporters and delivering the goods at the destination to the consignees.

Additional operations may include booking of space on different modes of transport (if the NVOCC becomes a multimodal transport operator), supervision of packing, weighing and measuring the cargo, warehousing, stuffing, unstuffing the containers and interchanging the containers at trans-shipment points, issuing transport documents, furnishing guarantees to the customs administration of transit countries (in the case of performing as a subcontractor for a multimodal transport operator [principal] at transit countries), provision of insurance coverage for liability and settlement of claims for damage or loss.

When a NVOCC performs a groupage shipment, it is customary that the container freight station or freight terminal becomes a place where the shipments are received. The freight rate is quoted, and the responsibility of the consolidator begins from this point.

The facility or container freight station must be equipped with experienced handling personnel to ensure proper and safe stowage and must have in place an efficient documentation system to attain evidence of the quantity and conditions of all shipments received.

The non-vessel operating common carrier must also have an efficient marketing and sales department to ensure that the containers are filled, unfilled, and used to the maximum capacity for the groupage shipments.

Consolidation service

There are several types of consolidation served by NVOCCs, among them are the following:

1. Common consolidation

A non-vessel operating common carrier can act as a carrier/principal that collects LCL shipments from several consignors and packs the freight into the same container at the CFS in the origin country for delivery at the CFS in the destination country by issuing a house bill of lading for each consignor under the terms of carriage CFS/CFS. The responsibility and liability of NVOCCs are at CFS at origin to CFS at destination.

Common consolidation is not only carried out between one port of origin and one destination port. It can be a service provided at multiple ports of destination, which is referred to "multi-country consolidation". The consignments of several destinations are gathered in the origin country, stuffed into the same container and shipped to one main port of destination where the container is break-bulked. The LCL shipments designated for that particular port of destination is then delivered locally to the consignees and the consignments bound for other destinations are reconsolidated into other containers bound for their actual final destinations. For example, a consolidation box from Thailand to Singapore may contain shipments from India, Pakistan and Singapore. When the container arrives in Singapore, the shipment bound for Singapore is delivered locally and the shipments bound for India and Pakistan are separately stuffed into a consolidation box of a Singapore consolidator and shipped to their final destinations. On the other hand, for example, the consolidation shipments from Japan or other countries bound for Singapore may contain shipments for Singapore, India and Pakistan. This is the combination of the shipments for same final destination, but different origin ports.

2. Buyer consolidation

A buyer at a destination purchases merchandise from several sellers at the origin country mostly under INCOMTERMS¹⁵: FCA terms (free carrier at the named place of delivery) and appoints a NVOCC to act as consolidator and collects the merchandise at CFS (named place of delivery) and sorts the merchandise of each seller to consolidate them into the same container according to the buyer's instructions. A NVOCC may perform services to this end (acts as agent of buyer), or also provide sea transport (acts as principal) and issue a house bill of lading under the term of CFS/CY (acts as NVOCC) or under the term of CFS/door (acts as a multimodal transport operator).

Buyer consolidation helps the buyer save on transportation and handling costs, considering that the buyer has to distribute parts of the goods of each container to each premises, such as a department store.

Shipping just one individual container for each seller to the buyer distribution centre, and then arranging cross docking, or sorting and consolidating with other shippers' merchandise on the same truck for final delivery at each store, results in higher costs because the buyer has to pay the transportation costs for the activities at the port to the distribution centre, cross docking costs and last mile delivery costs to each store.

Buyer consolidation includes the consolidation of the goods of various sellers into to the same container according to the volume and kind of merchandise required by each store. Upon arrival at the port of destination, the container is delivered to each store directly without any additional cost, such as transport and cross docking costs.

Again, if each seller ships the FCL container directly to buyer at each final store, it is likely that the buyer may not require all the merchandise in that FCL container. Handing the surplus volume of the merchandise requires further management activities.

In conclusion, buyer consolidation makes it possible to ship the right volume and goods to each store at the destination by sorting and consolidating the goods into one container at the origin country.

¹⁵ International Commercial Terms by ICC (International Chamber of Commerce)

3. Seller consolidation

When the seller sells small lot of its goods to various buyers at the same country and opts not to use common consolidation, possibly because the merchandise is sensitive and should not be mixed with other unknown commodities, seller consolidation is performed. The consolidator collects all of the goods from the seller, packs them into the same container and ships the goods to the port of destination and break bulks¹⁶ the container for delivery at the CFS destination. In most cases, this type of consolidation is under the term CFS/CFS. It also can be under term CY/CFS if the seller packs the goods at the factory and hands over the container at the port. A NVOCC that acts as consolidator issues a house bill of lading for each particular shipment. The advantage of shipper consolidation is that it prevents and protects the goods from being contaminated in a common consolidated container. On the contrary, if the freight forwarder only stuffs the goods into the container without issuance of a house bill of lading, then he acts as an agent of the seller/shipper.

Common consolidation cannot be performed by all NVOCCs. Many NVOCCs are not able to perform consolidation because the number and volume of the shipments are too small to make the consolidation box. In such cases, the NVOCCs need to deal with a common consolidator that regularly organizes a consolidation box. They are referred to as "co-loaders" while the common consolidator is referred to as a "master loader", whose duties are to issue the house bill of lading to the co-loader, who, in turn, issues the bill of lading to the consignor.

For a consolidation operation, shipping lines may only select bona fide consolidators in order to benefit from advantageous rate tariffs under the services or set up some rules for the consolidators such as the following;

- Provide a special freight rate for a consolidator that is cheaper than for general FCL containers;
- Rush to carry out the unstuffing of the containers at the CFS destination to free the container for next export shipment.
- Insist on specific origin and destination points for consolidation.

FCL service – full container load service

Full container load is a traditional service offered by NVOCCs. It entails selecting shipping lines (liner service), matching vessel schedules with cargo readiness, offering the freight rate to the consignor and concluding the contract and issuing the house bill of lading to the consignor.

This operation can be done under several shipping terms depending on the place of receipt where a NVOCC takes charge of the goods and place of delivery where the goods are delivered, as indicated in the house bill of lading. For example, it could be under the following shipping term: CY/CY, CY/CFS, CFS/CY¹⁷.

For FCLs, shipping lines provide a special freight rate, which is cheaper than the general market rate to NVOCCs compared with the actual consignor's rate. The rate varies based on the volume of the shipments the NVOCC receives from the various consignors.

In some cases, a shipping line may provide a special tariff rate for destination ports that require a certain type of empty containers for export. For example, India may import more 20' containers than 40' containers, but more exports are in a 40' container. Thus, there is shortage and empty container positioning of laden 40' containers bound for India are required. In this case, a special freight rate is provided by the shipping line for the shipment of

¹⁶ Break bulk is the process of unpacking the container and then sorting the goods for each individual consignee to make it ready for delivery at the container freight station.

¹⁷ These shipping terms are elaborated in chapter 3

40' containers bound for India. On the other hand, the shipping line may set a higher rate for 20'container bound for India as the volume of 20'container is in surplus in the country, resulting in a cost burden for the shipping line due to the extra cost to carry empty 20' containers to other destinations where there is demand for these containers. This situation is referred to as "container imbalance".

In some cases, shipping lines dealing with NVOCCs provide a rebate rather than charge the freight cost to encourage them to secure the shipments bound for destinations where there are container shortages due to a container imbalance. For example, if Singapore needs 20' containers and Thailand has a surplus of 20' containers, the shipping line might offer a Thai NVOCC free-carriage plus a rebate of \$50 per 20'container, if the NVOCC uses those 20'containers bound for Singapore. The Thai NVOCC would benefit from the rebate and might offer the consignor a special freight rate of \$50 per container. Under this scenario, the Thai NVOCC would gain \$100 per container without cost, while the shipping line would save on port charges for those containers as the consignor and consignee are the parties required to pay the terminal handling charge. If the shipping line carries empty containers to Singapore, it must pay the port charges. In this case, the shipping line could collect the terminal handling charge from the consignor and consignee. The terminal handling charge could offset the cost of the port charge and the rebate, and it remains part of the margin.

Container shortage is very common in the shipping industry. It may result when one country has a surplus of imported containers and no export shipments require that particular size or when a country requires more containers of a certain size for export, but containers are not available.

Container shortage also occurs when there is an unforeseen event, such as the Covid-19 pandemic, which obstructs trade, the global supply chain, operations at ports and inland transport.

For example, in the consignor above case involving India, container imbalance may occur if India were to imports more 20'containers while the 40' containers are more in demand for exports. In this situation, shipping lines may encourage NVOCCs in India to ship out 20' container with rebates or at low freight rates in order to avoid empty containers positioning in the areas where 20' containers are not needed.

On the other hand, shipping lines may encourage NVOCCs in some countries where 40' containers are in surplus to ship 40' containers to India in order to reduce the cost of empty containers positioning. When shipping lines ship empty containers, they have to keep in mind the cost a carriage with empty containers and both-end port charges.

In this sense, NVOCCs are vulnerable in cases in which there is a shortage of equipment as shipping lines tend to give preference to direct clients, or charge the premium freight rate rather than provide lower freight rates to NVOCCs.

Types of containers

In most cases, a NVOCC uses the containers of the shipping lines. These containers are referred as "COC" (carrier-owned container).

In some cases, NVOCCs operate leased containers and, in a few cases, they have their own containers. In this circumstance, shipping lines refer to these containers as "SOC" (shipper-owned container), as the containers are used by and belong to the NVOCCs whether the containers are leased or are actually owned.

Again, in the same sense, ultimate shippers may have their own or leased containers. Such containers when handed over to shipping lines or NVOCCs are called SOC.

Using a shipping line's equipment gives NVOCCs high flexibility, as they can choose and use equipment of several shipping lines and be selective about the type of containers. The usage of SOCs belonging to the consignors or NVOCCs helps in retaining high flexibility when selecting and using shipping lines, and the freight charge is cheaper than using shipping lines' containers.

This is because the lift-on and lift-off containers fee will be paid by the NVOCC or the consignor and consignee for their SOCs and the shipping lines do not pay the container rental charge when a SOC is used for transportation. Therefore, shipping lines can offer lower freight charge

Most common type of containers

General purpose container

A general purpose container, also known as a "dry container", is available in several sizes, 20', 40' and 45' and includes 20' and 40' high cube containers.¹⁸ These shipping containers are fully enclosed, protected from the elements and weatherproof, and have a rigid roof, side walls and floor.

These containers are used mostly for general cargo, however, they can be adapted to be flexitanks¹⁹ for shipping certain types of liquid bulk cargo or even other forms of dry general cargo, such as hanging garments.

Special equipment

Special equipment refers to a special type of containers that can be adjusted to accommodate commodities that cannot be put in general purpose containers, such as oversize cargo.

The flat rack container is a specialized container that has walls only at the short end of the container. It is used when the cargo needs to be loaded from the top or sides due to different dimensions or abnormal loads. It is also suitable for out-of-gauge cargo (OOG) or oversized cargo.

The flatform container is similar to a flat rack container. It is a container without sides, ends or a roof and is used for odd-sized cargo that does not fit on or in any other types of containers.

The reefer container is equipped with a refrigerator to keep the content cool. The cooling gets done during shipping and in storage. Mostly, it carries food (fruit, meat, fish, vegetables, dairy) and such non-food products as flowers and pharmaceuticals. It also contains frozen products.

The tank container is basically cylindrical vessels held within a standard 20ft ISO frame. It is used to deliver hazardous and non-hazardous products, including food-grade products. There are various types of tank containers. The contents of the container dictate the type of unit required. In most cases, a tank container is used for liquid cargo, while some carry gasses and powders as bulk cargo.

The double door container is used to ship all types of general dry cargo, bulk cargo, or special cargo. They are especially used for cargos that can be loaded from one end and unloaded from the other end easily. These

¹⁸ High cube container is 9'6" height container and the general container is 20' x 8' x 8' or 40' x 8' x 8'.

¹⁹ A flexitank, also known as a flexi bag, fits into a 20' container for the carriage of liquid cargoes.

containers can also be partitioned in the middle to give space to two different shippers simultaneously without mixing the cargo.

The open top container has an open top covered by a tarpaulin instead of a solid roof. This enables oversized cargo, such as timber and scrap metal, to be loaded from the top. Open top containers normally have end doors, similar to closed containers, to give flexibility for loading and unloading.

The hard top container is similar to an open top container, but it has a removable roof made of corrugated steel, which makes it easier to move cargo inside the container. This type of container can be used as a general purpose container. The majority of them are used for shipping heavy to very heavy cargo, which needs to be loaded through the roof opening.

The side door container has doors on the longer side of the container. Unlike containers with doors only at the shorter end, these containers have two pairs of doors: normal doors along the width and specialized doors along the length.

The bulk container may be used for general cargo, but, in particular, they are used for transporting bulk cargo, such as malt, grain, foodstuff and spices. It has three loading hatches (manholes) in the roof and on the door and two discharge hatches, which can be installed on demand, with short discharge tubes to guide the bulk cargo. Alternatively, two unloading hatches can be mounted in the doorways for emptying the containers.



Sample of types of containers:

First row: general purpose dry container; hanging garment using a general purpose dry container; bulk container. Second row: flat rack container; platform; tank container. Third row: reefer container; flexi-tank; open top container.

Selection of shipping Lines

To operate a NVOCC service, selecting the most appropriate shipping line is essential to ensure that the services offered will be completed:

- Direct service without trans-shipment
- Regular and frequent departure/arrival
- Quick transit time
- Professional stowage and handling
- Availability of the equipment
- Good freight rate level
- Within alliance or consortium of shipping lines
- Good customer service level and quick response

One result of the collaboration between liner operators and shipping lines is the establishment of "alliances", which involves sharing the ships and space on board on the same route of transport provided in the shipping schedule in order to reduce the operating expenses of each liner operator.

The first collaboration of shipping lines involved the merger of three big Japanese shipping lines: NYK; MOL; and K Line. The merger led to the establishment of ONE" (Ocean Network Express) to perform liner business, while the other businesses such as, conventional, RO/RO (roll on/roll off), tankers of these shipping lines remained unchanged and operate individually.

A non-vessel operating common carrier NVOCC may chose a liner operator/shipping line that is a member of an alliance in order to ensure that the shipping line to which a booking is made provides space on the intended ship. The NVOCC may alternatively deal with other shipping lines in the alliance to secure the space and serve the clients same schedule if the first booking with the prior selected shipping line could not provide the space and transport the goods due to overbooking.

Quality of non-vessel operating common carrier services

Although NVOCCs do not have their own vessels and generally uses containers belonging to shipping lines, a first class NVOCC operation can only function with good management and professional staff. Understanding customers' requirements is essential, such as if a customer requests a container grade "A". After making a booking, the NVOCC should ensure that the customers will get a container grade A, and it should not be a rollover²⁰ of the containers. Consequently, the NVOCC must maintain very good relationships with the shipping lines to avoid rollover of the containers.

A considerable investment of NVOCCs is required in facilities, such as CFS, terminal, offices and computers. Furthermore, it must have sufficient cash flow to meet the costs of staffing, communications, marketing, travel and freight-outlays.

²⁰ Rollover: A container fails to get loaded onto its scheduled vessel and is accommodated on a subsequent ship with following reasons but not limited to: a) Overbooking of cargo by the carrier, b) Vessel skipping the port of loading, c) Mechanical problems with vessel, d) Container exceeding the weight limit for a carrier, e) Incorrect documentation f) Customs dispute etc.

NVOCCs must have insurance coverage for its liabilities and be able to provide careful handling of the cargo, as well as expertise in handling claims. They must be knowledgeable about the shipping industry, regulations, customary practices in various countries and customs formalities.

Documentation

The documents involved in the operation of a NVOCC are, in principle, the same as those required for shipping lines:

- House bill of lading²¹
- Delivery order (in some countries, a NVOCC cannot issue this document, and it is issued by a shipping line or local authority)
- Pre-alert or shipping advice or freight manifest
- Outturn report
- Receipt (mate's receipt –used for the bulk shipment)
- Arrival notice
- Statement of account

Transport document of a NVOCC

House bill of lading

The house bill of lading is an important document for a NVOCC that wishes to perform the contract of carriage by sea as a principal or carrier. The parties that conclude a contract of carriage are the NVOCC and consignor, even though consignee or buyer purchase under Incoterms FCA, FAS, or FOB. This condition appears in several rules and conventions related to the contract of carriage.

The house bill of lading is issued to the consignor as a set of three negotiable original bills of lading with the number of copies. To release the cargo at the destination, the consignee must present one endorsed²² negotiable original bill of lading to the NVOCC's agent in exchange for the delivery order. The consignee submits a delivery order to the terminal, the port or customs to get the cargo released after completion of the customs formality.

Note: The individual consignors/consignees do not deal directly with the shipping lines if the NVOCC enters into the contract of carriage with them.

The Non-vessel operating common carrier is the shipper according to the shipping line bill of lading, which is called the "master bill of lading". The agent of the NVOCC at the destination is the consignee. The shipping line issues the NVOCC ocean bill of lading against the latter's payment of freight charges for the transportation.

For the NVOCC, the consignor is the shipper according to the NVOCC house bill of lading. The consignee can be any party involved with the trade transaction, such as a bank, or appear as "to order" or "to bearer", or actual buyer or receiver.

²¹ In case of shipping line, the marine or ocean bill of lading is issued.

²² The consignee must sign his name and rubber stamp the back of the bill of lading. Several endorsements can be added according to string sales in Incoterms.

Most important for the consignor or consignee is that the bill of lading, whether they deal with a NVOCC or shipping lines directly, does not get lost. If it gets lost, either the consignor or consignee needs to provide a bank guarantee to the NVOCC or shipping line or their agents at 1.5 times the cargo's value. The bank guarantee may be retained by them for at least two years, or depending on the policy of the NVOCC or shipping line. Previously, the deposit was retained for 10 years.

FIATA multimodal transport bill of lading

A FIATA multimodal transport bill of lading is recognized by the International Chamber of Commerce and widely used for sea transport and multimodal transport by many NVOCCs that are members of the national freight forwarder association, which is a member of the International Federation of Freight Forwarders Association (FIATA).

Similarly, the multimodal transport bill of lading, the through bill of lading or combined transport bill of lading or intermodal transport bill of lading are used for multimodal transport from one country to another. The difference between these types of bills of lading is the liability and limitation of liability of the issuer/carrier, including handling or without handling the cargo during the journey.

Forwarder certificate of receipt - FCR

A forward certificate of receipt or forwarder cargo receipt - FCR is issued by the freight forwarder or NVOCC to the consignor. It is not the transport document, but is merely a cargo receipt used when the trade term between the seller and the buyer is EXW (Ex works). Upon pick-up the goods in his custody, the freight forwarder or NVOCC issues this document as the evidence of receipt the freight.

In some cases, as a customary practice in some countries, even though the Incoterms stipulates FCA term in which the sellers must provide the proof of delivery to the buyer or buyer's nominated agent and the buyer's nominated agent may issue FCR to the seller, especially, when the buyer performs the buyer's own consolidation (see discussion on buyer's consolidation for more details).

Bill of lading function (UNCTAD 1971)

The bill of lading has three functions according to UNCTAD 1971, as follows:

- a) **Evidence of contract** The buyer in EXW, FCA, FOB or FAS terms can deal with the carrier in terms of cost and transportation condition, which can be determined when the contract of carriage is issued prior to the issuance of the bill of lading and signed by the carrier. Accordingly, issuing the bill of lading indicates that the contract of carriage was done and bill of lading is the evidence of the contract. The party that concludes the contract of carriage with the carrier is the consignor (by several rules and conventions).
- b) **Document of title** -This represents a document of ownership of the goods, which enables the consignee to take delivery of the goods at the destination or to dispose of them by the endorsement and delivery of the bill of lading. As the bill of lading is a negotiable document, it can be transferred to the next party by the consignee whose name appears in the bill of lading through an endorsement.
- c) **Cargo receipt** A receipt signed by the freight forwarder or on behalf of the carrier and issued to the shipper acknowledges that the goods, as described in it, has been shipped on a particular vessel to a specified destination or has been received in the shipowner's custody for shipment. This reflects that the carrier has taken charge of the cargoes.

d) Financial instrument - According to the International Chamber of Commerce, "string sales" refers to the sale of commodities, as opposed to the sale of manufactured goods. Cargo is frequently sold several times during transit "down a string". When this happens, a seller in the middle of the string does not "ship" the goods because it has already been shipped by the first seller in the string. The seller in the middle of the string, therefore, performs his obligations to the buyer, not by shipping the goods, but by "procuring" goods that have been shipped (or procuring the goods for delivery). A negotiable bill of lading authorizes this activity through an endorsement, and transfers it to the next parties. Accordingly, a negotiable bill of lading can be considered as a financial instrument.

To reflect the Bill of Lading function according to item d) Financial instrument, the United Nations Conference on Trade and Development (UNCTAD) notes the following: "the use of transport documents in international trade 2003" in another sense which mentioned that "by the same token, the document can be pledged to a bank and thus may be used as a security to raise finance".

Switched bill of lading

An example of a cross-trade business or triangle trade is as follows:

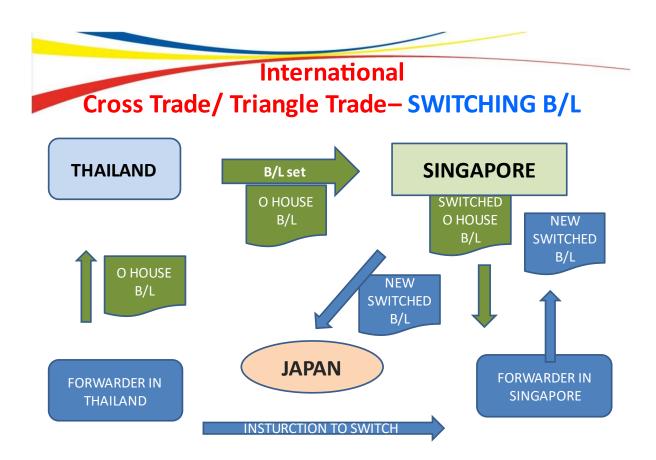
A buyer in country B (for example: Singapore) who purchases merchandise from the original seller in country A (Thailand) may resell this merchandise to the third party (final buyer) in country C (Japan). The first set of bills of lading is issued in the origin country A (Thailand) and final destination or place of delivery is shown in final buyer country C (Japan) but the consignee is shown as a buyer in country B (Singapore). The buyer in country B (Singapore) may be a trading firm that needs to keep the trade secret hidden from the actual seller (Thailand) and also not disclose the actual final buyer (Japan), preventing both parties from getting to know each other and conduct business directly.

The first set of the bill of lading is sent to buyer in country B (Singapore) from the seller in country A (Thailand). Upon receipt of the bills of lading, the buyer in country B (Singapore) returns the full set of the original bill of lading to the agent of the NVOCC (in Singapore) who is the agent of the NVOCC in Thailand, and requests for a new set of the bills of lading, which the final buyer in country C (Japan) is shown in the consignee column and the shipper column shows the buyer in country B (Singapore) as a shipper.

Actually, the buyer in country B (Singapore) may deal with the agent of the NVOCC in Singapore for the contract of carriage and requests a switched bill of lading arrangement. The agent of the NVOCC' in Singapore informs the NVOCC who acts as a principal in Thailand that this particular shipment is done under a switched bill of lading. On the contrary, the buyer in country B (Singapore) may deal directly with the NVOCC in Thailand, informing its requirement and upon release of the full set of bills of lading to the shipper in country A (Thailand), the instruction of switching the bill of lading needs to be sent to Singapore for the arrangement to be completed.

This type of operation can only mostly be completed through a NVOCC service; shipping lines do not provide this type of service, except if the customer is a global customer.²³

²³ Global customer refers to a large or multinational company that has a very large volume of goods produced in plants in every corner of the world. These companies have high bargaining power against shipping lines and mostly use shipping lines rather than NVOCCs. Sometime is known as "global account".



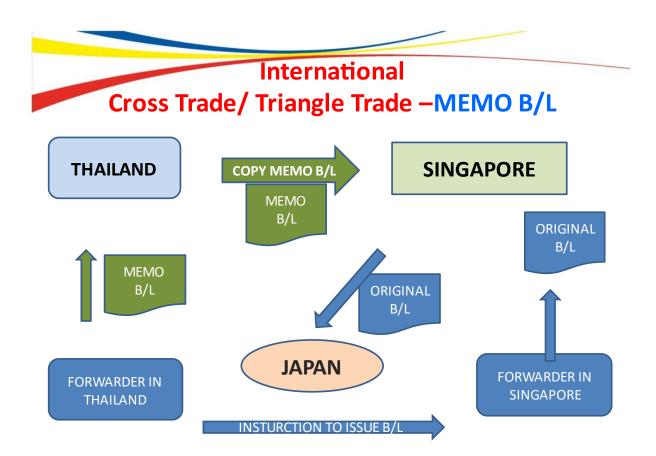
Memo bill of lading

A memo bill of lading is also used for cross-trade business, but it is a non-negotiable transport document. Instead of issuing a set of original bills of lading as the switched bill of lading for the original seller in a country A, a memo bill of lading is issued.

This is done to prevent the loss of the bill of lading, which is required to send to the buyer in country B for switching the bill of lading. The memo bill of lading is actually just a copy of original bill of lading. In the consignee column of the bill of lading shows the buyer as the consignee, the shipper as the seller in country A and the final destination as country C.

The NVOCC in Thailand sends the instruction to its agent in Singapore issuing the original set of bills of lading under which Singapore is the shipper and Japan is the consignee, while the shipment departs from Thailand to Japan.

No shipping lines provide the memo bills of lading.



Sea waybill

A sea waybill is a sea transport document. Its content is similar to that of a bill of lading. The main function of a sea waybill is to furnish evidence of a contract of carriage and cargo receipt. It is non-negotiable. Accordingly, the title of the goods cannot be transferred to a third party. The named person appears in consignee column and the name on the sea waybill is the only party entitled to receive the goods.

The usefulness of a sea waybill is the protection it provides against the loss of the original bill of lading. As mentioned, if the original bill of lading is lost, either the consignor or the consignee must give the carrier a bank guarantee to attain delivery order. If the sea waybill is lost, there is no problem, as the cargo receiver whose name appears as the consignee in the sea waybill is entitled to receive the goods and will automatically receive the delivery order from the carrier.

Using a sea waybill is convenient for traders in terms of the protection of the loss of the transport document, unlike the original bill of lading. A copy of the sea waybill can be used in exchange for the delivery order without the original bill of lading. A sea waybill is mostly used when a trade transaction does not involve a bank It is also used when a NVOCC hires a shipping line to carry shipments. In such circumstances, the NVOCC requests the shipping line to provide a sea waybill instead of a bill of lading in order to prevent the loss of the bill of lading.

A sea waybill is not flexible unlike an air waybill. Traditionally, a bank can be named in the consignee column in the air waybill and the actual consignee may request the bank to issue a letter to transfer the cargo owner title from the bank to it for delivery of the goods after the arrival of the shipment. This is customary practice in air transport business.

A sea waybill can be used FCL shipments and LCL shipments. Many shipping lines do not issue sea waybills. **Express released bill of lading or telex released bill of lading**

A telex release is not a type of bill of lading, but is simply a telex message (telexes no longer exist) or email sent by the carrier or the NVOCC at the loading port to the office or agent at the discharge port informing that the shipper has surrendered all of the original bills of lading that have been issued to it. Based on this, the discharge port agent can release the cargo to the named consignee shown in the bill of lading without presentation of any original bills of lading.

An express release bill of lading is similar to a telex release. However, it can be digitized. There are no hard copies of the bill of lading, including the original bill of lading. The express release offers many advantages, similar to a sea waybill, but it can only be used under very specific circumstances.

A surrendered bill of lading is a method used to prevent the loss of the bill of lading from the seller to the buyer. The seller returns the full set of the original bill of lading to the carrier while requesting for the goods to be "surrendered". The carrier then informs its agent at the destination to release the cargo without presenting the original bill of lading by the consignee. The carrier in this context is either the shipping line or the NVOCC. These types of bills of lading are under the same conditions for the release of a delivery order without showing the original bill of lading. Some shipping lines may agree to provide the above-mentioned bill of ladings.

Compared to a sea waybill, the document fee for a surrendered bill of lading is more expensive because it is a onetime charge. If the original bill of lading is issued and needs to be surrendered or telex released, the NVOCC or shipping line collects a bill of lading and then surrenders or telex releases the shipment. This creates a double document fee.

Direct bill of lading (master direct B/L)

A direct bill of lading is not the bill of lading issued by a NVOCC. In fact, it is issued by the shipping line. The freight forwarder provides the service of securing the shipping lines' container space and picks up the shipping line's bill of lading, then hands over the bill of lading to the consignor carrying out the traditional freight forwarding business.

There are two concepts associated with the billing system under this scheme:

- 1. The freight forwarder invoices the consignor the actual freight charge according to the shipping line charge (back-to-back basis) and the service charge or handling charge separately. The freight forwarder is merely an agent of the consignor.
- 2. The freight forwarder invoices the consignor a "freight charge", which includes the actual freight charge of the shipping lines and the profit or service fee. In some countries' commercial laws stipulate that the freight forwarder is a carrier if it receives the freight charge as remuneration for the transportation service. This is applicable even if the freight forwarder does not issue the bill of lading. However, in some countries, this is treated as traditional freight forwarding business and the freight forwarder is deemed to be an agent of the consignor.

How a non-vessel operating common carrier generates income from its operation

FCL case

It simply adds a margin on the freight offered to the consignor or consignee.

LCL case

The consolidator pays the shipping line freight charge at the box rate and receives the freight revenue based on per revenue ton ²⁴or freight ton multiplied by the selling freight rate.

The consolidator may incur a loss rather than a profit because the volume of the goods (revenue ton or freight ton) is too small to break even.

For example:

- If the buying rate from the shipping lines is \$500 per 20' container,
- If the total freight volume received in revenue ton is 10 CBM
- If the offered freight charge to the consignors is \$20 per revenue ton, then the cost is F500 and revenue (income) of the freight is \$10 x 20 = \$200 and the consolidator loses \$300 on the consolidation box.

In addition to the freight charge, a NVOCC as a principal, may have to pay the agent of the following:

- An agency fee, commission or handling charge per shipment or per container;
- Profit sharing in the agreed portion, such as 50/50 or 70/30;
- Possibly profit-sharing based on the end used in which the revenue generated by both parties and all expenses are paid by both parties (principal and agent), calculated and shared according to the agreed portion whether there is a loss or profit.

This depends on the agreement between the parties.

Merchant's advantages

The advantages for a merchant, in accepting a NVOCC house bill of lading or a FIATA bill of lading, are discussed below:

Is cases of loss, damage or delay in delivery, the merchant only has to deal with one party, namely the NVOCC, who, in turn, must deal with the subcontractor, namely the carrier (shipping line).

The merchant may be offered a freight rate from NVOCCs that may be even lower that the rate offered by shipping lines because most NVOCCs have an adequate volume of the cargo in hand and have bargaining power to attain a freight rate from the shipping lines that is below the market rate.

After picking up the container at the container depot of the shipping line and hauling it to the factory, the merchant may find that the container is not in good condition due to, for example, a leak or dent in the container. If the booking was made directly with the shipping line, the container may have to be repicked up at the depot.

²⁴ Revenue ton or freight ton is the method of calculation whichever is greater between the dimension and the weight of the goods. (1x1x1 meter equals to 1 cubic meter = 1 metric ton)

The merchant may have to absorb the double cost of trucking and cannot submit a claim to the shipping line or even the container depot.

However, if the merchant makes a booking with a NVOCC, the responsibility of the condition of the containers lies with the NVOCC, who then, in most cases, must pay for the transportation to repick up the container, even though the fault may be the result of neglect of the container inspection conducted by the container depot. Under no uncertain terms, the NVOCC cannot charge these costs to the shipping line or container depot, and instead absorb them.

Value added services provided by a NVOCC is an advantage for the merchant. The NVOCC provides delivery of the bill of lading to a merchant's premises, unlike shipping lines in which the merchant has to pick it up and pay all charges in cash at the shipping line office. A NVOCC also extends credit terms to the merchant and does not require cash at deliver.

Communication with the agent at the destination

Pre-alert/shipping advice/manifest sheet

The most efficient and effective communication about the shipment from a NVOCC at the origin the agent at the destination is done via a pre-alert, shipping advice or a statement of account. Some NVOCCs may prepare an additional document known as a manifest sheet.

Often, NVOCCs prepare only the shipping advice on each shipment involving consolidation or FCL. The shipping advice can contain more detailed information than the manifest.

A shipping advice can be prepared in several formats, depending on the NVOCC (often as part of a "set", which includes a copy of the NVOCC bill of lading) and may be used for several purposes, including, among others, documentation control or billing or accounting between the NVOCC and its agent.

The shipping advice is created after the shipment has left the port and a copy may accompany the manifest to the destination.

Sometimes a shipping advice includes a statement of account, which shows the revenue and costs, including any handling fees, commissions or profit-sharing of such FCL shipments or consolidation shipments.

The information in the set of documents should provide details concerning the following:

a) The container and its movement:

- Container number
- Origin/destination
- Ocean bill of lading number
- Vessel name, shipping line or master loader
- Departure and arrival dates (ETD/ETA)
- Seal number and other security information
- Control or reference numbers

b) The contents:

- House bill of lading number
- Shipper/consignor

- Consignee
- Goods description, including pieces/weight volume

c) Charges against the contents:

- Rates
- Special agreements
- Freight prepaid/collection
- Additional charges
- Statement of account: commission, agency fee or profit sharing

d) Disposal instructions:

- On-forwarding
- Delivery address

Notes:

ETA: estimated time of arrival ATA: actual time of arrival ETD: estimated time of departure ATD: actual time of departure

Responsibility and liability of the non-vessel operating common carrier

The extent of liability

In the absence of domestic legislation pertaining to NVOCCs, by issuing its own bill of lading, or FBL, the NVOCC assumes the role as a carrier and is, therefore, responsible for the entire performance of the carriage, from when the goods are taken in charge until the time of delivery at the destination, according to the back clauses of the bill of lading.

The limitations of liability vary according to the back clauses of the bill of lading and the applicable international convention or rules, including standard trading conditions, where applicable.

Listed below are typical terms of the FIATA bill of lading:

- NVOCC shall be liable for loss of, or damage to, the goods occurring between the time when he takes the goods into his charge and the time of delivery.
- NVOCC shall, however, be relieved of liability for any loss or damage if such loss or damage was caused by the following:
 - Act or omission of the merchant, or person other than the NVOCC acting on behalf of the merchant, or from whom, NVOCC took the goods in charge;
 - Insufficiency, or defective condition, of the packaging or marks and/or numbers;
 - Handling, loading, stowage or unloading of the goods by the merchant, or any person acting on behalf of the merchant;
 - Inherent vice of the goods;
 - Strike, lockout, stoppage or restraint of labour,
 - Defences for carriage by sea or inland waterways;

- Act, neglect or default of the master, mariner, pilot or the servants of the carrier in the navigation or in the management of the ship;
- Fire, unless caused by the actual fault or privity of the carrier, however, always provided that whenever loss or damage has resulted from unseaworthiness of the ship, NVOCC can prove that due diligence has been exercised to make the ship seaworthy at the commencement of the voyage.

The NVOCC not only assumes responsibility for delivery of the goods at the destination, but also for the agent or subcontractor used by it, in the performance of the entire carriage.

Note: For the carriage of goods by sea in some countries, the agent might be the party that receives a claim from or is issued by the consignee for loss, damage or delay in delivery. However, some countries may not treat the agents of the NVOCC as carrier. As a result, they are not obligated to settle any claims filed against it, for example Thailand COGSA (Carriage of the Goods by Sea Act).

Which convention is applicable to unimodal transport?

The traditional carriage of goods, by a single mode of transport, is usually governed by international conventions, or national laws, applicable to that mode of transport.

(In the bracket, the maximum compensation for which the carrier is liable: SDR is Special drawing right²⁵)

Road: The Convention for the Contract for the International Carriage of Goods By Road (CMR), (SDR8.33 per kilogram of gross weight).

Rail: The International Convention for the Carriage of Goods by Rail (CIM), (SDR17.00 per kilogram of gross weight).

Sea:

- The Hague Rules (100 pounds sterling per package or unit)
- The Hague-Visby Rules (SDR2.00 per kilogram. of gross weight, maximum SDR666.67 per package)
- The Hamburg Rules (SDR2.50 per kg. of gross weight, maximum SDR835.00 per package)

Air:

- Warsaw Convention, (250 gold francs per kilogram of gross weight)
- Montreal Convention: SDR 22.00 per kilogram).

Loss, damage and delay in delivery

A non-vessel operating common carrier that performs the sea transport service, namely port to port, is liable for loss, damage and delay in delivery based on the International Convention for the Carriage of Goods by Sea the origin country or destination country or by domestic laws.

²⁵ Special drawing rights are supplementary foreign exchange reserve assets defined and maintained by the International Monetary Fund (IMF). They are units of account for IMF, and not a currency per se. and represent a claim to currency held by member countries IMF for which they may be exchanged.

In addition to liability for loss of, or damage to cargo, the NVOCC is also liable to pay compensation for delay in delivery. The compensation is, however, not based on per kilogram or per package, but instead on the freight amount. Regarding the NVOCC liability for delay in delivery. For example; the FIATA bill of lading stipulates the limitation of liability at two times the freight payable.

For NVOCCs involved in transport using different modes that acts as a multimodal transport operator, loss or damage may occur on any mode, or at any stage of the carriage, which may not be performed by it. As the goods are carried along planned routes using several modes of transport, it is often difficult to identify the stage at which the loss or damage occurred. When the stage in which the damage occurred is known, the multimodal transport operator's liability may be governed by the applicable international convention or national law that applies to that particular mode of transport under what is referred to as "localized damage."

If, however, the stage in which the damage occurred is not known, then the liability of the multimodal transport operator is limited, as stated in the house bill of lading, or to an amount not exceeding SDR2.00 per kilogram of gross weight or SDR 666.67 per package according to the FIATA bill of lading and MT Convention or ASEAN Framework Agreement on Multimodal Transport (AFAMT) and not exceeding \$500 per package according to US COGSA.

Legal requirements, rules and regulations

In summary, the applicable legal, rules or laws for sea transport depends on each country Below is a list of legislation concerned with the responsibility and liability of the carriers and shipper engaged in sea transport.

- National domestic laws COGSA and Civil law (TORT)
- Hague Rules
- Hague Visby Rules
- Hamburg Rules
- Rotterdam Rules
- Back clause of the bill of lading
- Standard trading condition

In conclusion, a NVOCC provides FCL and LCL services to its clients and takes on the responsibility and liability as a "carrier". A NVOCC determines which shipping line is suitable for its client's shipment based on transit time, cost and the reliability of the shipping line, including its responsibility and liability. A NVOCC also has to determine which type of container is the most suitable for the carriage of the client's goods by sea transport.

The transport document provided by the NVOCC is more flexible than the one provided by shipping lines in terms of trade transactions. The NVOCC needs to communicate with its agent at the destination and provide the necessary information to ensure smooth delivery. The NVOCC should understand its liability, limitation of liability and exclusion of liability, as well as legal aspects used in sea transportation.



1. What is common consolidation?

2. Why is buyer consolidation useful?

3. Under which shipping term does a NVOCC perform a consolidation?

4. If a NVOCC uses a direct master bill of lading, does it become a "carrier"?

5. Which type of bill of lading is best suited for cross-trade business?

6. When a NVOCC accepts a LCL shipment, which shipping term is it most likely to perform?

7. Provide an advantage of buyer consolidation to the buyer?

8. Which type of transport document is most suitable for releasing a delivery order without submitting the bill of lading?

9. Which type of the container is suitable for out-of-gauge cargo?

10. What kind of liability is a NVOCC responsible for?

11. When should merchants use NVOCC services?

- 12. Who is responsible for the cargo damage resulting from neglect or default of the master or pilot?
- 13. Why are the limitations of liability of each convention different?
- 14. Which convention related to sea transport limits liability of the NVOCC in the same amount as the MT Convention?
- 15. What is localized damage?

Introduction

The freight forwarder's role as a carrier goes back to the start of the last century, when the European forwarders hired complete railcars from Frankfurt, Germany. to Munich, Germany or from Munich to Milan. Italy and accepted less-than-railcar consignments from their shippers and delivered them to the consignees through the forwarder's agent at the destination. The freight forwarder provided the service in its own name and issued a consignment note with reference to standard trading conditions.

As the price of a complete railcar could be negotiated and the railway rates for individual consignments were high, performing consolidation enabled the freight forwarders to earn the difference and yet still offer rates lower than those charged by the railways.

In the United States, truck operators similarly provide what is known as the LTL service (less-than-truck load). The trucker is usually an expert in cargo handling and stowage and more often fills his truck to the optimum limit. The goods are delivered by the operator to the consignee at economical rates.

With the advent of the container, consolidation of cargo by sea has become a natural extension. Small consignments are delivered by shippers and received by freight forwarders at the latter's warehouse or container freight station. These consignments are sorted according to destinations and stowed in containers.

Most of these services operate on a regular basis, as frequently as once a week, and in principle, resemble those offered by shipping companies for LCL cargos.

The freight forwarder issues the shipper with its own bill of lading, commonly known as a house bill of lading. Consolidation activities have enlarged the scope of the services extended by freight forwarders. When a freight forwarder provides consolidation services, it assumes the role of a principal and is no longer an agent of the shipper.

Consolidation services are most popular for sea and air transport, although they are also provided by the railways and truck operators. The "ultimate forwarder" is the NVOCC, who, in practice, combines all the functions of the shipper and carrier.

In this chapter, a fundamental understanding of the concept and practice of cargo consolidation, as discussed in the previous chapter, is elaborated.

Chapter objectives

On completion of this chapter, the reader should be able to do the following

- Define the term "consolidation";
- State the role of a freight forwarder as a consolidator;
- Understand the shipping terms;
- List the advantages of consolidation;
- List the documents involved in consolidation service;
- Describe the essential requisites for consolidation.

Consolidation or groupage definition

Consolidation or groupage means the grouping together of several consignments into a full load groupage.²⁶

The term "groupage" is regularly used in Europe while "consolidation" is mostly used in Asia.

To elaborate more on the definition, consolidation or groupage means the assembly of small parcels of cargo by a consolidator from several consignors at one point of origin intended for several consignees at a point of destination and dispatching the same as one consolidated consignment in one container or more to the consolidator's agent at the destination for delivery of the individual consignments to the respective consignees

In maritime transport, the words, LCL, consolidation and groupage mean the same thing. The shipping lines call it LCL (less than container load) and most ocean carriers offer LCL service to supplement their main business of full container loads (FCL).

Freight forwarders (consolidator) call it consolidation or groupage when they accept small lots and combine them into full loads in the same way the ocean carriers pack LCL shipments into full loads.

However, in many cases a shipping line and a freight forwarder view the business of LCL or consolidation very differently. For many shipping lines, as mentioned earlier, the LCL business is only a supplement to the main business of full loads. In fact, some shipping lines do not accept LCL shipments in some countries for a variety of reasons and some still accept them for only particular destinations where there are no freight forwarders interested in performing consolidation because the cargoes volume is too small.

For a NVOCC²⁷ that acts as a consolidator, this is their main business, which is the major source of profits, replacing full loads. Especially in the air forwarding business, the more cargo volume is consolidated, the lower the freight rate of the airline. Although some shippers and consignees wrongly assume that a NVOCC makes substantial profits from full loads simply because the FCL freight is much higher than LCL freight.

In summary, a NVOCC that acts as a consolidator delivers FCL (full container load) made up of individual LCL consignments to the ocean carrier.

LCL (less than container load) versus FCL (full container load)

LCL – **Less than container load** means that the cargo from an individual shipper is not sufficient to occupy a full container, making it costly to have only that cargo in one container for transport to the final destination, as the freight cost is higher. Accordingly, the container consists of cargo belonging to several consignors, shipping lines and consolidator carry the shipments to final destination at a lower cost of transport.

FCL – Full container load refers to cargo belonging to only one consignor or one consignee.

The general understanding of FCL is that a shipper has enough cargo to fill up the space in a container. It is, therefore, economical to make a FCL shipment whereby the shipper takes an empty container from the shipping

²⁶ As defined in: European Union, European Conference of Ministers of Transport (ECMT) and the Economic Commission for Europe (ECE) (2000), *Terminology in Combined Transport* (United Nations publication, Sales No. GV.E/F/G/R.01.0.20).

²⁷ A freight forwarder that who acts as a principal/carrier is an NVOCC and when a NVOCC performs the consolidation, is known as a consolidator.

line exclusively for its own goods, stuffs the goods at its premises accordingly and then returns the container to the carrier as a FCL shipment,

From the perspective of a shipping line, a consolidated container is a full container load. The consolidator picks up the empty containers and stuffs the freight in the container at its CFS and returns the loaded container to the shipping line at the container yard in the port. Accordingly, a NVOCC that consolidates various small shipments into a container is regarded as a FCL shipper by the shipping line. In this case, the shipper/consignor is the NVOCC and the consignee is its agent at the destination, as indicated on the shipping line's bill of lading.

Shipping terms

The terms used by shipping lines are as follows:

1. **CY/CY** – This term represents that the containers stuffed at the consignor's premises have been handed over to the shipping line, who then, takes charge of the container at the container yard of the origin port. The shipping line delivers the containers at the container yard at the destination port. This is referred to as a "port to port" shipment. It also can be referred as FCL/FCL.

In this case, in most bills of lading, the shipping line, "shipper's load, weight stow and count" including "said to content" is stipulated. This simply reflects that the shipping line does not know precise details about the goods and quantity, including the condition of the goods that are stuffed by the consignor. The shipping line assumes that the commodities and quantity of the goods and that they have been stuffed into the container in good order and condition based on the information attained from the consignor's shipping instruction or shipping order. Accordingly, the bill of lading is only *prima facie* evidence of taking in charge by the shipping line of the goods as described in that bill of lading.

The shipping line transports the goods from container yard at the origin port to the container yard at the destination port. As long as, the container seal, which is sealed by the consignor is still intact, the shipping line is not responsible for any loss of or damage to the goods. This is because the container is packed by a shipper and unpacked by a consignee.

2. **CFS/CY** – This term represents that the container is packed by the shipping line at container freight station (CFS) where the goods are received by the shipping line at the port of origin and the shipping line delivers the container at the container yard of the destination port. The term CFS at the origin port does not reflect the consolidation, but it refers to FCL as the consignor requests the shipping line to stuff the cargos at that CFS. The shipping line may state this in the bill of lading as LCL/FCL.

When a shipping line receives cargo under the term CFS/CY, and if in the bill of lading, FCL container is stipulated, then the shipping line may treat this shipment as FCL, however, some shipping lines may treat it as a LCL shipment when it is received, and as a FCL shipment when it is delivered.

The liability of the shipping line is greater, as it has to prove that the consignee at a later stage finds damage to or loss of cargo and that it was properly stuffed and sealed in the container and sealed the container. In this case, the shipping line may use a third party "tally sheet"²⁸as evidence that it is clean without any remarks of damage and that the requested quantity of the goods is the same as what is indicated on the bill of lading. In general practice, the shipping line may refuse responsibility against claims on the basis that it is not the party that unpacked the

²⁸ A tally sheet is the document issued by the tallyman at the CFS in which the number of quantity and condition of the goods stuffed into the container, are recorded. The tallyman may be an employee of the CFS used by the shipping lines or an employee of the consolidator.

container and damage or loss may have occurred during the unpacking of the container by the consignee or its agent.

From the perspective of the NVOCC, which may be incorrect in theory, the CFS/CY shipment is treated as FCL.

1. **CY/CFS** – This term represents that the consignor or its agent has stuffed the goods into the container at its premises and returned the loaded container to the shipping line at the container yard of the origin port. The shipping line, in turn, delivers the goods by unpacking the container at the CFS of the destination port. This can be referred as FCL/LCL. Nevertheless, the shipping line still treats this container as a FCL shipment.

During the unstuffing of the container, if damage or loss is found, the CFS tallyman records a description of the damage and the total quantity of damage goods on a tally sheet. The shipping line uses the tally sheet as evidence against the claim of the consignee.

2. **CFS/CFS** - In situations in which one consignor and one consignee appear on the bill of lading for a particular shipment, it means that the goods are stuffed into the container at CFS of the origin port and unstuffed for delivering at CFS of the destination port by the shipping line. The terms shown in the bill of lading may stipulate the shipment as LCL/LCL, but in fact, the shipping line is only carrying one FCL shipment.

Under this CFS/CFS term, a shipping line is fully responsible for loss and damage, as it is the party that performs the stuffing and unstuffing of the container.

It should be noted that if shipments of various consignors are consolidated in the same container carried out by a NVOCC or consolidator, it is definitely an LCL/LCL shipment, but it will become a FCL shipment from the shipping line's point of view when the consolidator hands over the container.

A single shipment of one contain may be considered a LCL shipment carried by a consolidator. This occurs when the overflow cargo of LCL shipments in one consolidated container has to be stuffed in another container and no other shipments are packed with it. A consolidator views the shipment in the second contains as a LCL shipment.

The shipping term status can be changed at the destination depending on the shipping lines' policy, and customs regulations. For example, the status can be changed from CY/CY to CY/CFS, or from CY/CFS to CY/CY, however, the shipping lines should inform changes to the status prior the arrival of the vessel to the concerned authorities.

A non-vessel operating common carrier uses the same shipping terms, which is based on how they receive and deliver the cargo and at which place. A NVOCC is treated as the consignor by shipping lines. As a consequence, these shipping terms are applied to NVOCCs by shipping lines.

Procedures for handling the less than container loan shipments and the container freight station function under common consolidation carried out by a consolidator/non-vessel operating common carrier

A container freight station can be located on-dock (within the port) or off-dock (outside the port), depending on the permission of the authority, namely customs. In some countries, the customs formality and inspection can also be done at the off-dock CFS.

Regarding exports, the cargo from several consignors destined to several consignees are received by a consolidator/NVOCC at a CFS designated by the NVOCC, either at an on-dock or off-dock CFS.

The consolidator/NVOCC arranges for packing LCL shipments received from several consignors into the containers at its own cost. Payment for this is given to the CFS operator at a per box rate, while the collecting consignors impose a stuffing charge based on revenue per ton. A CFS operator issues the tally sheet.

The non-vessel operation common carrier or CFS operator then hands over the loaded containers to a shipping line at the container yard inside the port. The shipping line loads the containers on board the ship under the operation of the port.

Upon arrival at the destination, the containers that are unloaded from the vessel, are taken to CFS for unpacking and made ready for delivery. The CFS operator is tasked with recording if the quantity of the goods is different from the cargo manifest received from the shipping line, as well as any damage to the goods. Each individual consignment is then picked up or delivered to each consignee.

Note: CFS can be operated by consolidators, or common CFS operators or by ports or terminals, depending on the regulations of the country.

The role of a freight forwarder as a consolidator that acts as an agent for buyer consolidation

Consolidation services can be provided by a freight forwarder (or a NVOCC that performs the functions of an agent) for the overseas importer that buys small or even large consignments of the merchandise from numerous vendors.

The vendors are instructed by their buyers to deliver the merchandise to the nominated CFS or warehouse where a freight forwarder collects the goods from those vendors and sorts and stuffs the selected quantity of each vendor's merchandise as a consolidated consignment in the same container, according to instructions from the buyer.

Upon receiving the goods from the vendors, a freight forwarder issues a forwarder's cargo receipt (FCR) as evidence that the cargo has been received. Vendors use the FCR to claim payment from the buyer for the goods sold.

Although this practice is in contrast with Incoterms, it has become a common practice in various places.

The buyer normally uses Incoterms – FCA (free carrier at a named place) and instructs the supplier to deliver the goods to the CFS. Under FCA terms, the sellers must submit the evidence of delivery to the buyer or its agent, not the opposite.

The freight forwarder then ships the containers with the carrier (either the shipping line or the NVOCC) nominated by the buyer. It gathers, processes and distributes all documentation required by the buyer, such as a commercial invoice, the packing list, the certificate of origin and the bill of lading.

For this operation, the freight forwarder acts as only an agent of the buyer, not the principal or carrier. The bill of lading is issued by the shipping line or NVOCC and the freight forwarder's name may appear as the "shipper" or "shipper on behalf of the consignee" in the bill of lading. The function or duty of the freight forwarder is not concerned with ocean transport. The freight forwarder only collects, sorts and stuffs the goods as instructed by the buyer, including making the booking with the carrier designated by the buyer.

The role of a freight forwarder as a consolidator that acts as a carrier/principal in buyer consolidation

On the other hand, the freight forwarder, in addition to carrying out tasks in accordance with the instructions from the buyer, gathers, collects, sorts and packs the goods into the containers. It may also enter into the carriage of contract with the buyer. The freight forwarder may issue several house bills of lading to the vendors (consignor) or a FCR, depending on the situation.

If a freight forwarder issues a FCR to the vendors, then it may issue a house bill of lading to cover the entire consolidated cargo. The house bill of lading may stipulate the freight forwarder as the shipper or shipper on behalf of the buyer. In this case, the freight forwarder acts as the NVOCC.

The role of a freight forwarder as a consolidator that acts as an agent in a shipper's own consolidation

Shippers or manufacturers that sell merchandise in small volume to various buyers in the same country and destined at the same port, may perform their own consolidation, which is known as "shipper own consolidation".

Often, a shipper does not want its merchandise to be combined with unknown goods in a common consolidated container out of concern of contamination.

A freight forwarder may be involved in this operation by collecting, sorting and stuffing the goods of various buyers in the same container at the CFS and booking a shipping line to ship the container to the final destination port. This is as activity of an agent. The freight forwarder does not issue any transport documents and the shipper receives the shipping line's bill of lading.

However, if a freight forwarder offers carriage service, it may issue house bills of lading to the shipper to cover the number of the consignments. It means that if there are many consignments, for example four consignments, the freight forwarder will issue four bills of lading that shipper to consigned for 4 consignees. In this case, the freight forwarder becomes a NVOCC. It makes booking to the shipping line, which receives and delivers the goods under the terms of FCL/FCL (CY/CY). At the destination, the freight forwarder's agent carries out break bulk at the designated CFS.

Advantages of common consolidation

- Benefits all parties concerned, such as consignors, consignees, shipping lines and, NVOCCs, that act consolidators and freight forwarders. By providing a means through which small amounts of cargo can be shipped, it helps small and medium enterprises expand their operations.
- The national economy also benefits from increased trade, leading to higher levels of prosperity, The transit country where multi-national consolidation is made also reaps benefits.
- Saves money in terms of logistics, as buyers may instruct freight forwarders or NVOCCs to stuff the cargo required for each particular place of consumption and not at the port, its premises or a distribution centre. For example, instead of delivery to the buyer hub or distribution centre to conduct cross docking²⁹

²⁹ Cross docking is a logistics procedure in which products from a supplier or manufacturing plant in domestics or from overseas are distributed directly to a customer or retail chain with marginal to no handling or storage time.

delivery is made directly to each department store or shopping mall. In other words, the content is delivered directly to the buyer's customers without further handling, cutting the need to use a hub or distribution centre and be stuck with the cost of double transportation.

- Currently, at many trade lanes, the consolidators/NVOCCs do not collect a freight charge for LCL shipments, including local charges on exports, but only impose an inbound local charge to the importer. Consolidation then becomes a free of charge service in the origin country, which brings savings in the cost of exports up to zero dollars in some trade lanes provided by the consolidators and makes exporters more competitive in the international market
- Shippers/consignor find it advantageous to deal through a consolidator/NVOCC that provides consolidation services to a wide range of destinations, instead of approaching several shipping lines that only offer such services on routes where they operate.
- A consolidator can arrange and provide door-to-door and distribution services, which are not usually provided by the shipping lines. In such operations, the consolidator becomes a multimodal transport operator.
- Shippers get the benefit of a rate lower than what they would normally pay if the shipping line provides LCL service. It is particularly beneficial to small shippers that are not well established in their trade and lack bargaining strength in negotiating rates with the shipping lines.
- The shipping line does not have to handle many individual consignments, enabling considerable savings, for example, in documentation, time and sales activities cost.
- The shipping line does not have to face the extensive coverage and risk of freight payments by the many individual shippers as that is the responsibility of the consolidator. In addition, several claim may come from various shippers.
- Consolidators can realize profitability from the payment of the FCL freight charge paid to the shipping
 line and collect the LCL freight charge as revenue from various consignors. In the same sense, an air
 freight forwarder that performs consolidation, collects the consignments from various shippers and/or
 the air freight forwarder (co-loader) that is a non-appointed agent of airlines and may enjoy the benefit
 of a lower buying rate from airlines because of the increased volume.

Documentation

The main transport documents involved in consolidation services provided by the consolidator are the following:

- House bill of lading, house sea waybill or house air waybill (in the case of air transport)
- Forwarder cargo's receipt/forwarder certificate of receipt.

A non-vessel operating common carrier or consolidator issues its own house bill of lading or a FIATA bill of lading for each consignment and the delivery is carried out by its agent at the destination against the production of that bill of lading.

FIATA (The International Federation of Freight Forwarders Associations) has been encouraging freight forwarders that perform as NVOCC to issue the FIATA multimodal transport bill of lading, instead of the freight forwarders' or the NVOCC's own house bill of lading, to be used for either unimodal transport or multimodal transport worldwide.

The ocean bill of lading issued by the shipping line to the consolidator for the consolidated consignment is called the master bill of lading. In other words, a master bill of lading is issued if the consolidator performs the consolidation, issues his own bill of lading to the "co-loader" who, in this case, is an NVOCC acting as a carrier for the consignor LCL shipments and does not perform consolidation.

There are following scenarios of the issuance of the bill of lading, which is referred to as master bill of lading in terms of freight consolidation;

- A) The ocean bill of lading issued by the shipping line to the consolidator for the consolidated consignments
- B) The house bill of lading under the term CFS/CFS is issued by the consolidator to NVOCC co-loads" the shipments with that consolidator.

In this case, the NVOCC is called as "co-loader" and the consolidator is called the "master loader". The NVOCC issues its own house bill of lading to the shipper. The NVOCC may also present the consolidator's house bill of lading to the shipper as well. In this regard, NOVCC acts as an international freight forwarder, not a carrier

Liability of consolidator

By issuing its own bill of lading, the consolidator/NVOCC assumes the role of a carrier and is responsible for carrying out of the entire transport of shipment from the time the goods are picked and delivered to the place of origin until the goods are delivered at the destination. In other words, the consolidator/NVOCC is expected to assume liability for loss of or damage of the goods and delay in delivery that may occur when the cargo is in the custody of the actual carrier or shipping line.

Many NVOCCs, particularly in countries where the standard trading conditions are up-to-date and the carriage of goods by sea acts are not available, accepts such liability and wherever necessary exercise the right of recourse against the responsible shipping line or master loader is possible.

Essential requisites

The essential requisites for consolidator/NVOCCs that provides consolidation services are detailed below:

- a. Access to adequate facilities, such as a container freight station, warehouse, and cargo handling equipment at the loading and discharging ports;
- b. Competent overseas partners or agents to function as break bulk agents or delivery agents at the ports of destination.
- c. The necessary professional expertise and financial standing as well as adequate liability insurance to gain the confidence of the trading community;
- d. Possess sufficient experience and expertise in stuffing and storing goods in containers in order to maximize the use the space and maintain cargo in good order and condition;
- (b) A long-term arrangement with a carrier for regular allocation of container shipping space at an agreed freight rate, which would make consolidation economically viable.

In summary, international freight forwarders that become consolidator/NVOCCs are in a position to consolidate a large part of the goods entrusted to their care into so-called groupage or consolidation shipments, assembled according to the size of the consignments and their stowage factor.

In groupage traffic by rail, road, air or ocean transport improves the use of available space, making it possible to obtain more favourable rates. In particular, container groupage and in air and ocean consolidation, considerable savings may be achieved, especially for small and medium sized shippers. Care should, however, be taken when stuffing containers to ensure that goods are not damaged by the stowage, overstuffing, contamination and other factors.



1. What is consolidation in terms of shipping?

2. Who are consolidators and who can be consolidators?

3. How many types o the consolidation can be performed?

4. What is the role of a freight forwarder when it performs buyer consolidation?

5. Under which shipping term can a NVOCC fully refuse responsibility of loss of and damage to goods?

6. Under which shipping term, is a shipping line or NVOCC not fully responsible for the loss of or damage to goods?

7. What is an advantage to the shipper to use a consolidation service?

8. What is a master bill of lading and how many types of it are available?

9. What is the liability of the consolidator?

10. A consolidator performs its service under which shipping term?

11. What kind e documents are used in a consolidation service?

12. Why is a container freight station necessary to perform the consolidation?

13. What is the benefit of buyer consolidation to the buyer?

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- 14. List two of the essential requisites for performing consolidation.
- 15. How does consolidation help shippers save on transportation costs?

Chapter 4: Shipping line services

Introduction

Shippers, freight forwarders, NVOCCS and multimodal transport operators need to understand how shipping lines are servicing the market, including how shipping lines determine freight rates for transportation, in order to select the type of services that most fit their needs. Also, they should understand the structure of the organization and policies of the shipping lines as one shipping line may determine or consider how to operate its business different from others. This includes how the shipping lines collaborate each other.

To function effectively, a shipping line may not be able to operate alone in the market, so it needs to find partners or join alliances to fill the containers on their vessels to reduce costs and gain more revenue.

Shipping line services can be divided into three categories: container liner service; bulk liner service; and tramp service. Dealing with a shipping line in each category is different. The liner service deals mostly with containerization while bulk cargo can be served in some trade areas under the liner service as well. The tramp service entails chartering, mainly voyage charters or contract of affreightment and not bare boat charters or time charters.

In this chapter, the role of relevant parties involved in maritime transport, including terminal operators and stevedores in cargo handling, are reviewed.

Chapter objectives

On completion of this chapter, the reader should:

- Understand the structure of the market for shipping services;
- Understand the role of liner and tramp shipping agencies;
- State the features of the charter and liner services;
- Understand the difference between bareboat charter, time charter and voyage charter;
- Appreciate the role of stevedoring services in expediting cargo handling operations;
- Describe the various stevedoring contracts;
- Describe the operational aspects of a container terminal.

Shipping conferences in the past

In the past, shipping lines tried to collaborate with each other by implementing "shipping conferences" or "agreements". There are many reasons why the shipping lines offer shipping conferences:

- (a) To avoid the competition in the market and undercut the freight rate level to eliminate price competition among the members;
- (b) To reduce the cost of marketing among members

- (c) To stabilize the market rate;
- (d) To conclude agreement to impose surcharges including, among others, GRI (general rate increase) or a peak season surcharge.
- (e) To reduce outside competition by trying to capture most of the traffic for member lines through loyalty arrangements with shippers. In turn, loyal shippers either get immediate or cash discounts or a deferred rebate on the gross freight rate;
- (f) To control the shipping industry market in terms of the freight rate level and service areas, which is similar to a monopoly in the market by each shipping conference.

According to the UNCTAD Convention on a Code of Conduct for Liner Conferences (chapter 1), a liner conference is defined as "a group of two or more vessel operating carriers, which provides international liner services for the carriage of cargo on a particular route or routes within specified geographical limits and which has an agreement or arrangement, whatever its nature, within the framework of which they operate under uniform or common freight rates and any other agreed conditions concerning the provision of liner service".

Under the agreement, a shipping conference provides a scheduled service with the following:

- A common tariff;
- A fixed itinerary of ports of call.

Shipping conferences are as diverse as the countries and markets they serve. They can completely control a trade route and the level of rates on that route. Alternatively, they can be a little more than an association in name only.

In many countries and regions in the world, a shipping conference is illegal.

Three well-known shipping conferences are the Far Eastern Freight Conference (FEFC) and the Trans-Atlantic Conference Agreement (TACA), which serve Europe and the Far East; the Asia North America Eastbound Rate Agreement (ANERA), which has nine members, APL, Hapag Lloyd, "K" Line, Maersk, Mitsui O.S.K., N.Y.K., OOCL, P&O Nedlloyd and Sea-Land and strong control over the routes between the United States and the Asian market, and the Transpacific Westbound Rate Agreement (TWRA).

To serve the market, ANERA members provide a "service contract" with a tariff freight rate to a particular shipper that wishes to enter into this contract. The service contract includes a minimum quality commitment (MQC) and a penalty on dead freight if the shipper cannot not fulfill such cargo volume according to the MQC. A shipper that files the service contract gets the freight rate, which is fixed over a fixed period of time and the ocean common carrier or the ocean common carrier agreement commits to a certain rate or rate schedule for mostly one year. It is contra to the shipper, if the spot rate in the market is lower than the rate in the service contract (even though this occurs in rare cases) and it is a pro et contra when the spot rate is higher than the rate of the service contract.

Finally, the European Union repealed EC Regulation No. 4056/86 in 2008 through Council Regulation 1419/2006. This ended the anti-trust immunity that liner conferences had long enjoyed and thus ended the liner conference era in Europe.

The effects of the Ocean Shipping Reform Act of 1998 in May have prompted ANERA to notify accounts that it will not be offering new service contracts or extensions to existing ones. In both trades, the shipping lines will assume responsibility for maintaining and making publicly available their individual rate tariffs, and will negotiate and file their own individual contracts, as well as contracts in cooperation with other carriers.

As of now, there is no more liner or shipping conferences. They have been replaced by shipping alliances.

Shipping alliance or consortium

A shipping alliance is the agglomeration of shipping lines with the main objectives to work together to reduce operation costs, including expansion of service coverage.

Based on the agreement of the alliance members, each shipping line must deploy a certain number of the vessels in order to meet the set frequency of services and routes. Each and every member has to agree to the same conditions, and the market demand needs to sufficient to offer all the voyages.

For example, one alliance consists of Hapag-Lloyd, Ocean Network Express, and Yang Ming and Hyundai Merchant Marine, and the 2M Alliance is comprised of Maersk and MSC.

The Ocean Alliance, comprised of CMA CGM/APL, COSCO Shipping and Evergreen Line, is one of three major maritime alliances that enable slot-sharing and vessel-sharing agreements (VSAs)³⁰

Shipping alliances have brought mega ships and mega ports benefits in the form of better allocation of resources, reduced operational costs, expansion of service coverage, and optimization at all levels, which ultimately contributes to more efficient economies of scale and greater revenue.

The fleet of vessels operated by shipping lines may come from time charters or bare boat. The vessels do not have to owned by shipping lines. Moreover, a ship that loads the containers of one shipping line may not be its own ship or its operating ship.

In the shipping business, the shipping lines may work with partners in their group in developing joint fleets, slot charters, slot purchases and slot exchanges.

Shipping/carrier service

The international shipping markets offer three types of services:

- Container liner service
- Bulk liner service
- Tramp (chartering) service

Container liner service

Container liner service actually refers to the shipping liners that provide regular service through the usage of the containerization on their fixed routes.

In principle, the services are offered by ships that operate in accordance with prefixed sailing schedules between fixed ranges of ports on a regular basis. In liner operations, cargo space is offered in accordance with the shippers'

³⁰ A vessel sharing agreement is concluded between various container shipping lines that agree to operate a liner service along a specified route using a specified number of vessels. It is not necessary for each of the partners to have an equal number of vessels. The slot for loading and discharging at the port of calls is shared among the parties.

needs, within some limits. Each shipper/consignor/consignee pays a freight charge in accordance with tariffs based on the volume, weight, or value of the cargo.

The freight charge can be divided into three categories:

- 1. Full (FCL) which can be categorized as:
 - (a) Freight all kinds (FAK) The freight charge is based on the size of the container and is determined for all kinds of commodities for the same origin/destination.
 - (b) Commodity rate The freight charge is based on the size of the container and is determined by the type of commodities; the higher value of merchandise and the greater the freight charges.
 - (c) Cargo NOS (cargo not otherwise specified) The freight charge is based on the size of the container, and is determined by cargo that is not indicated in FAK or the commodity rate. They are mostly found in the service contract for shipments bound for or from the United States.

For FCL containers, the freight charge can also be considered as a

- (i) All in rate The net ocean freight rate without any additional charges (excludes local charges)
- (ii) Rate subject to surcharge –The base freight charge plus any surcharges that shipping lines may impose as a bunker adjustment factor surcharge or a peak season surcharge.

For LCL shipments, shipping lines use the same formula as what a NVOCC offers to the market, namely a revenueton or freight-ton basis.

To calculate revenue ton or freight ton, the size of the cargo is based on cubic meter and transformed to become metric tons in order to compare the good with the actual weight of the cargo or the weight of the cargo is calculated and transformed to cubic meter in order to compare the cargo dimension in cubic meters; whichever is greater is the revenue ton used for calculating the total freight charge.

For Example:

Formula: size WLH 1 x 1 x 1 M = 1 CUBIC METER (CBM) = 1 metric ton (MT)³¹

If the size of the cargo is $1.2 \times 1.5 \times 0.8$ Meter = 1.44 CBM.

The cargo weight is 1,600 kilograms = 1.6 metric ton equals 1.6 CBM.

Accordingly, 1.6 CBM is used for calculation. If the freight rate is 25/RT, then the total freight charge is $1.6 \times 25 = 40$.

The liner shipping company

The structure of a liner shipping company

A) Headquarters/ head office

As a company policymaker, the head office has various departments, which cover the following:

• Shipping routes

³¹ According to the formula: one CBM equals one metric ton.

- Alliance management
- Ship maintenance
- Crew management
- Agency management (including to fix regional headquarters)
- Pricing policy
- Liner department
- Tramp department

B) Regional headquarters

The office that supervises the branches or agents in particular regions. Some of the functions of this office are to allocate space in each country and fix the pricing guidelines or any policies for agents in the region, as well as duties assigned by headquarters.

C) Pricing office

This office sets the guideline for the freight rate from/to any origin/destination for the branches and agents. Many Shipping lines have a pricing office separate from the regional headquarters. The pricing office determines whether branches or agents should accept counteroffers made by consignors or consignees, including NVOCCs for freight rates.

D) Shipping branch acts as an agent or shipping agent

The office performs several services:

- Selling and marketing.
- Bay plan (container stowage) for the ship.
- Deal with container depot or inland container depot for container storage and container in/out, including the port terminal for vessel berthing.
- Preparing the bill of lading and delivery order.
- Arranging cargo manifest.
- Acts as husbanding agent dealing with the terminal, customs, doctors, phytosanitary agencies or any authorities that receives the ship at the port.

The shipping agent usually receives a commission on the freight rate. In general, this amounts to 5 per cent of receivable freight for outward consignments and 2.5 per cent of receivable freight for inward consignments. However, total remuneration per year for agents is granted instead of a commission by small- to medium-sized shipping lines because the receivable commission is less than the cost of administration and operation of an agent. As a result, the agent may wish to stop being an agency because it is not economically viable. On the other hand, the agent generates a lot of the revenue (commission) of the freight and the owner (shipping line, headquarters) may try to save costs by offering the agent remuneration per year in a lump sum.

Other income for an agent comes from serving as a husbanding agent. The shipping agent receives the agency fee based on a per call basis.

In the past, many agents could receive local charges as part of their revenue, however, that has changed; the principal/owner takes all local charges as part of its revenue.

To avoid conflicts of interest, a shipping agent usually represents only one principal (shipping line). If a shipping agent wishes to represent several principals, they will likely establish another company for that purpose.

Many shipping line companies have various departments concerned with their operation. The liner business is considered to be the core business unit. It generates most of the income, however, during economic downturns, most of shipping lines operate in the red, suffering a downturn in the profit and loss statement for years, especially the liner department. Even when there is economic stability, the profit margin of a shipping line was very thin the past.

The growth of the liner business depends on economic growth and trade expansion around the world. A new phenomenon affecting the shipping industry is the COVID-19 pandemic.

During the pandemic, shipping lines suffered from a halt in operation at the ports, resulting in huge containers sitting in many ports, especially in the United States and in Europe. This led to a global container shortage. However, as the economy of China recovered, the need for containers increased. The shipping lines raised their freight rates by five to six times the freight rate prior to the pandemic. Thus, the shortage of containers and limited handling of container enabled the shipping lines to generate large profits. Freight rates reached the highest level in 35 years and shipping lines that were plagued with losses in the past were able to make new high profits. This was a good era for shipping lines.

Bulk liner

Some shipping lines offer liner service and bulk liner services. Bulk liners carry all types of general cargo and bulk shipments. Generally, shipping lines provide general cargo vessels varying in size from 30,000 DWT Handy size to 60,000 DWT Supramax bulk carriers in numerous services from loading ports in the Republic of Korea, China, Taiwan Province of China, Japan and South-East Asia to discharging ports in North and South America, the Middle East and Europe.

Currently, in some trade lanes, RO/RO (roll on/roll off) vessels provide firm regular schedules, especially when they offer pure car carriers³² as a major service that accommodates special heavy cargo or oversized cargoes on a spot basis.

The freight charge of general cargo for a bulk liner service is calculated by the shipping line based on volume and distance. The freight rate is mostly in United States dollars per metric ton basis.

Tramp service (chartering)

In the shipping industry, large shipping companies provide liner service, bulk liner service and tramp service. In general, shipping lines only offer tramp service, especially among the smaller ones. Similar to the liner business, during the economic downturn, shipowners' operations suffered, but, the economic cycle always helps the shipowners who provides tramp service survive according to four stages of the cycle: expansion; peak; contraction' and rough.

A tramp service has no fixed itinerary or schedule and operates on any routes according to supply and demand. Tramp ships are usually chartered at negotiated rates. They are primarily used for bulk cargo, such as coal, grain, timber, ores, sugar, fertilizers, liquid cargo, oil and gas, and are carried as a complete shipload.

³² Pure Car Carriers are vessels, specially designed for the transportation of passenger cars in large quantity. This type of vessel can carry up to 6,000 cars, placed on the 13 decks of the vessel.

Tramp services are available for dry bulk and liquid bulk.

What constitutes a shipload depends on many factors, in addition to the size of the ship. A shipping line with an unused ship may be willing to accept a shipment that would take up a small part of the ship's total carrying capacity, if it would help finance the voyage to a more active market.

A full shipload in a bulk carrier may vary from 3,000 tons up to 500,000 tons. Some products, which previously were carried primarily by liners, are shipped in bulk, because the volume of trade has increased to a level in which the products may be shipped in full loads.

The "neo-bulk^{"33}or minor bulk commodity shipments clearly illustrate the importance of size in the choice of ship type or shipping service, which may be changed to a bulk liner service.

Types of vessels

There are several types of the vessels, as explained below:

1. Container ship

A container ship can be a small-sized the vessel used as feeder service when large vessels cannot enter into the particular ports. It carries mostly non-bulk cargo.

The size of a container ship can be categorized into seven major sizes: small feeder (max 1000 TEUS)³⁴, feeder (1000–2000 TEUS), feedermax (2,000–3,000 TEUS), panamax (3,000–5,100 TEUS), post-panamax (5,100–10,000 TEUS), new panamax (10,000–15,500 TEUS) and the ultra-large (14,500+ TEUS).

2. Dry bulk carrier

A dry bulk vessel can be categorized into the following sizes: handy size $(10,000-30,000 \text{ DWT})^{35}$; handy max (30,000-50000 DWT); panamax (50,000-80,000 DWT); cape size (80,000-199,000 DWT); and very large carrier -VLC (200,000+ DWT).

3. Tanker

A tanker carries liquid chemicals, oil or other liquid commodities. It can be categorized into the following sizes: small tanker (10,000–24999 DWT); intermediate tanker (25,000-34,999 DWT); medium range 1 (35,000–44,999 DWT); medium range 2 (45,000–54999 DWT), large range 1 (55,000–79,999 DWT); large range 2 (80,000–159,999 DWT); very large crude carrier (160,000–319,999 DWT) and ultra large crude carrier (320,000–549,999 DWT).

³³ Neo-Bulk is a type of cargo that is a subcategory of general cargo, alongside the other subcategories of break-bulk cargo and containerized cargo. It comprises goods that are prepackaged, counted as they are loaded and unloaded (as opposed to bulk cargo in which individual items are not counted), not stored in containers, and transferred as units at port. Types of neo-bulk cargo goods include heavy machinery, lumber, bundled steel, steel coils, scrap iron, bananas, waste paper etc.
³⁴ TEUS – Twenty equivalent unit which means twenty- foot container.

³⁵ DWT – Dead weight ton

4. Roll-on/roll-off vessel (RO/RO)

The RO/RO vessel carries wheeled cargo, such as cars, trucks, semi-trailer trucks, buses, trailers, rail cars and general heavy or large-sized vehicles, such as helicopters and bulldozers. RO/RO is referred to as a pure car carrier, which provides carriage for passenger cars and buses.

5. Heavy lift or project cargo ship

This type of ship is used for very large and heavy cargo. There are four types: semi-submersible vessel; dock ship; open deck cargo ship; and project cargo carrier.

6. Multi-purpose vessel (MVP)

This vessel is designed to carry a wide range of cargo, such as timber, steel, wood, bulk cargo and building materials. The larger multi-purpose vessels can carry different kinds of loads on the same voyage.

7. Gas tanker or gas carrier

The type of ship is used to transport of liquified petroleum gas (LPG), liquified natural gas (LNG), compressed natura gas (CNG) and liquefied chemical gases in bulk.

8. Reefer vessel

This is a refrigerated vessel used to carry perishable goods, such as fruits, meat and fish, under temperaturecontrolled conditions.

9. Livestock carrier

This carrier is used to carry animals, mainly sheep and cattle.

Charter parties and bills of lading

A charter party is a contract by which a shipowner agrees to place its ship, or parts of it, at the disposal of a charterer to carry goods from one port to another or for a specific period. The charter services are offered in auction markets and general markets.

The shipper generally puts out a request for a ship with a ship broker, also known as a "chartering agent, who then canvasses the market for the lowest price or hire offer. The shipper can lease a part of or an entire ship. Rates are negotiated for each individual charter on a long- or short-term basis. The basis for the freight rate offered to the charterer by the shipowner is discussed in a later section of this chapter.

The chartering agents work in the charter markets on behalf of shippers, consignees or trading firms to obtain the ships at the cheapest rate, subject to several conditions and the equipment of ships and its suitability for the particular cargo. These conditions must be defined by the charterer. Similarly, shipowners hire brokers to work on their behalf to seek suitable cargo for their vessels. The charter business is handled through shipbrokers offering ships on charter terms in various markets.

Chartering of ships can be categorized into two main groups: voyage based; and time-based contracts. In addition, there is a bareboat (or demise) type of contract. Accordingly, there are three types of charters: voyage charter; time charter; and bareboat (or demise) charter

In addition, there is contract of affreightment³⁶, which is an agreement between a shipper and a shipowner under which the shipowner agrees to move cargo without naming the ships being used. These contracts can be volume, time and/or voyage-based

When the goods are placed on board a ship, the shipper is entitled to receive a bill of lading. The bill of lading, in this case, is a receipt for goods. In addition, it is a document of title, which can be bought, sold or assigned. The ultimate holder of the bill of lading has the absolute right to demand the goods from the shipowner, subject only to payment of freight if this is not prepaid, plus any dues or charges accrued according to the document.

In the case of full cargo on charter terms, the bill of lading may be a very simple document, as it is only a receipt stating that the goods were received in apparent good condition.

In a case in which the operator³⁷ hires a ship on charter terms and sublets the space for part cargo to individual shippers, those shippers are entitled to regard their bills of lading as their only transport contract with the operator of the ship, unless the shipowner makes it absolutely clear that they are governed by the provisions in the overriding charter party. This should be included in the bills of lading.

Voyage charter

A voyage charter is a contract to hire a vessel for a single trip transport between the shipowner and charterer, who may not necessarily be the shipper or cargo owner. This type of charter is used for trading between sellers and buyers and for transportation between the charterer and shipowner.

Under a voyage charter, a ship is hired to carry a specified cargo from one or more specified ports to one or more specified ports or geographical ranges. A voyage charter normally covers full cargo shipments. For part cargo shipments, the shipowner usually has the right to fill the ship with other cargo at the same or other ports for its own benefit,

The shipowner agrees to carry the cargo and the charterer agrees to pay the freight charge. Under a voyage charter, the owner of the ship bears all the costs of owning and operating the ship, in addition to the costs accruing during the voyage. This may include, for example, bunker costs, canal dues and harbour/port dues etc.

The cost of loading and unloading the ship is divided between the shipowner and the charterer, according to the agreement, as specified in the charter party. The loading and unloading terms agreed by the charter party are as follows:

• **FIO or FIOST** (free in free out, stowage and trim): The charterer (or shipper and consignee) must load and unload the goods into or discharge them from the vessel, including to stow and trim the vessel.

³⁶ A contract of affreightment is basically a long-term agreement to carry a certain amount of cargo between two ports. The choice of ship and timing (within limits) is usually at the shipowner's discretion. Alternatively, the contract may specify a certain amount of shipping that must be completed within a specific time period. The ships to be employed need not belong to the shipowner, however, it is the shipowner's responsibility to move the cargo as per the contract.

The differences between the various types of charters revolve around the purpose of the charter, the basis for the calculation of freight and control of the ship.

³⁷ The operator can be a shipping line or NVOCC or any parties that act as a charterer.

- **LIFO** (liner in free out): At the origin port, the owner must load the goods and at the destination port, the charterer or consignee must discharge them.
- **FILO** (free in liner out): At the origin port, the charterer/shipper must load the goods and the shipowner must discharge them at the destination port.
- **FLT** (full liner term or berth term): The shipowner must load and discharge the goods.

These terms are similar to the four Incoterms related to maritime transport:

- **FIO**: The charterer is obligated to load the goods on board the vessel, in line with the Incoterms of FOB, CFR and CIF.
- LIFO: Under this term, the shipper is not obligated to load the goods, in line with the Incoterm of FAS
- **FILO**: Similar to FIO, at the origin port, shippers must load the goods on board, similar to the Incoterms of FOB, CFR, and CIF.
- **FLT**: In line with the Incoterms of FAS.

FIO can be extended to FIOST by adding "stowage in the hold and trim the vessel". Shippers needs to check if this condition is in the charter party, as it can become an obligation that adds additional expenses.

Voyage charter party: This is the most popular form. It is widely used for voyage chartering under the Uniform General Charter Code entitled "GENCON", which is a voyage charter party used globally for most kinds of trades and dry cargo.

Several additional clauses may be inserted to cover eventualities that printed clauses do not cover.

Type of voyage charters

Voyage charters can be divided into the following:

- 1. **Single voyage charter:** The shipowner carries the cargo only for one voyage. At the end of the voyage, the settlement of demurrage/dispatch is calculated and the charter party is terminated.
- 2. **Return voyage charter/round-trip charter:** The charterer's contract ends upon completion of a voyage, then a return cargo shipment of different cargo is carried out.
- 3. **Consecutive (single) voyage charter (CVC)**: This is a special type of a voyage charter in which the vessel is contracted for several voyages, which follow each other consecutively. It is similar to a voyage charter and shares its fundamental features, such as freight, laytime, demurrage provisions and risk of delay on the owners. Each voyage follows directly from the previous one. They may be intermittent voyage charters, or they may be so-called contracts of affreightment or tonnage contracts, for a series of periodic voyages in a vessel or vessels to be nominated thereafter. This type of charter focuses on the number of voyages or the time period during such voyages.

- 4. **Consecutive return voyage charter**: These charters operate under the same concept as return voyage charter but carry return shipments to the origin based on a contract of the consecutive voyage charter basis.
- 5. Voyage charter periods (trip charter on time basis): This means that the charterer hires the vessels on a time charter basis for the period of a specific voyage to carry specific goods. It is similar to a voyage charter, but the charterer intends to employ the vessel for one or two voyages. The duration depends on the trip, not set as a time charter, but the charterer must pay for the charter according to the time spent (similar to time chartering). It can be interpreted as "pay for the hire of the total time using the vessel on a number of voyages done"

Differences between contracts of affreightment (COA) and consecutive (single) voyage charter (CVC):

- (a) COA focuses on the number of months, while CVC focuses on the number of voyages Both terms are based on a strict duration (time);
- (b) COA does not fix a designated specific vessel, as compared to CVC;
- (c) CVC is based on a named vessel and if the named vessel becomes an inoperable, the contract ends and the shipowner is under no obligation to the charterer;
- (d) COA is based on the cargo. The shipowner has the option to use any vessel, and if the vessel is used under this time becomes inoperable or a total loss, the shipowner still is obligated charterer to fulfil the contract/agreement.

Freight calculation

The freight rate reflects the length of the voyage (days spent and distance), the type of cargo and handling method, expected costs of transport from the last port, availability of a suitable ships and market conditions. Shipowners consider the following factors to determine the freight rate;

- Ship hire cost per day.
- Travelling days
- Port-stay days and laydays
- Crew wages
- Fuel/bunker
- Port Charge/channel dues
- Pilot and tug boat
- Ship clearance charge
- Husbanding agency fee
- Stevedoring charge for loading and discharging (subject to the terms)
- Vessel insurance
- Freight taxes
- Commission/brokerage
- Provisions
- Maintenance, repairs,
- Stores and supplies, water

- Cleaning holds
- Possible cargo claims
- Lube oil
- Weather en route

Another factor shipowners may consider is freight charge, that is the Baltic Dry Index (BDI)³⁸, which is the benchmark price of maritime transport traded in London.

The freight charge is usually payable after completion of loading within three days to be remitted to the shipowner's bank account by the charterer. The actual payment is determined by the amount (weight) of cargo that is loaded onto the ship.

If cargo handling or other costs are assigned to the shipowner. The time used on the voyage is primarily the shipowner's responsibility. The shipper only pays for per ton shipped.

The following is essential information for the shipowner to be provided by the charterer:

- **1. Charterer:** Who is the charterer? The shipowner may ask the shipbroker for a credit report on the charterer to ensure that its financial position is sound.
- 2. Commodity: Not all commodities are suited for a particular vessel, so the shipowner must determine if the ship can carry the commodity.
- **3. Volume:** The volume of the commodity is a key factor in determining whether the ship is suitable for the charter. There could be a mismatch if the volume it too large or too small.
- 4. **Option:** This is related to the volume of the commodity. There are three options to be considered by both parties:
 - "Min/Max" (minimum/maximum) This is used for qualifying the contractual quantity in a voyage charter. This term signifies that the freight is payable on that precise quantity, no more no less. On the other hand, the quantity is fixed.
 - **MOLOO** (more or less owner's option) This option provides the shipowner with the discretion to increase or decrease the quantity of cargo by a percentage as agreed in the charter party, such as 10,000 tonnes, 5 per cent more or less in the owner's option, means that the shipowner may load between 9,500 and 10,500 tonnes of cargo at its discretion.
 - **MOLCO** (more or less charterer's option) This option provides the charterer with the discretion to increase or decrease the quantity of cargo by a percentage as agreed in the charter party.
- 5. Loading/discharging port: The charterer designates the loading port and the discharging port and also the number of ports of calls and the number of the berths at the safe port. For example, the charterer needs to specify one safe berth/one safe port Bangkok and/or one safe berth/one safe berth at the port

³⁸ The index provides a benchmark for the price of moving major raw materials by sea. The index is a composite of three subindices that measure different sizes of dry bulk carriers: cape size, which typically transport iron ore or coal cargo of approximately 150,000 tonnes; panamax, which usually carries coal or grain cargo weighing approximately 60,000 to 70,000 tonnes; and supramax, which has a carrying capacity of between 48,000 and 60,000 tonnes.

of Tokyo. The charterer also needs to provide a clear, specific port name or wharf number as well as berth length and berth depth to the shipowner or any restrictions of the port.

- **6.** Lay/can: This stands for "lay days"³⁹ and "canceling" which is the spread of dates that provides for the earliest date for the ship to arrive and for the laytime⁴⁰to commence the work and also gives the last date for the charterer to cancel the charter party if the vessel does not arrive by the specific date. This period is mostly used as information for the charterer or shipper to prepare the goods in advance before the arrival of the ship.
- **7.** Loading /discharging rate: This reflects the term of loading and discharging. If the FIO or FILO term is used, the charterer has to inform the shipowner about the capacity in loading and/or discharging the commodity per day under the working day term, for example:
 - Loading rate: 2000 MT WWDSHEXUU
 - Discharging rate 3,000 MT WWDSHEXIU

The loading rate and discharging rate are used for calculating the laytime in order to define the demurrage or despatch. It is also used to calculate the freight rate.

"WWDSHEXUU" - Weather working day⁴¹ Sunday/holidays excluded (excepted)⁴² unless used

The laytime (in a conventional day) is counted 24 hours consecutive of a working in which bad weather prevents the loading or discharging of cargo exclusive of Sundays and national holidays, however, if loading or discharging is performed on a Sunday of a national holiday, the laytime is counted as a working day.

"WWDSHEXEIU" - Weather working day, Sunday, holidays excluded even if used

The laytime is counted over 24 hours consecutive weather permitted working days to load or discharge cargo. Sundays and national holidays are not counted even though loading or discharging is performed on those days.

"WWDSHINC" - Weather working day Sundays, holidays included

The laytime is counted every day, even on Sundays and national holidays whether loading or discharging is carried out on Sundays or national holidays.

³⁹ Lay day is defined as the number of the days stipulated for the loading or unloading of cargo from a ship.

⁴⁰ Laytime means the period of time agreed between the parties during which the owner will make and keep the vessel available for loading or discharging without payment additional to the freight – BIMCO (Charter parties 2013)

⁴¹ Weather working day means a working day of 24 consecutive hours except for any time when weather prevents the loading or discharging of the vessel or would have prevented it, had work been in progress.

⁴² "Excepted" or "excluded" means that the days specified do not count as laytime even if loading or discharging is carried out on them

[&]quot;Unless used" (UU) means that if laytime has commenced but loading or discharging is carried out during expected non-working days, this time is counted.

Other term with similar meanings following:

- PWWD SSHINC^{43:} Per weather working day, Saturdays, Sundays, holidays included
- PWWD FHINC: Per weather working day, Fridays and holidays included
- PWWD SSHEX EIU: Per weather working day, Saturdays, Sundays, holidays excluded, even if used
- PWWD SHEX EIU: Per weather working day, Sundays, holidays excluded even if used
- PWWD FHEX EIU: Per weather working day, Fridays/holidays excluded, even if used
- PWWD FSHEX EIU: Per weather working day, Fridays/Saturdays/holidays excluded even if used

These terms are used to count the laytime of loading and discharging, which can generate either demurrage or despatch money⁴⁴ to the charterer.

Note: Weather permitting⁴⁵ means any time when weather conditions prevent the loading or discharging of the vessel shall not count as laytime.

Working day: A working day or part of a working day during which it is possible (if the vessel is being loaded or discharged) to load or discharge the cargo without interference due to weather. If such interference occurs (or would have occurred if the work had been in progress), the days should be excluded from laytime, a period calculated based on the ratio denoting interference to the time, in which work would or could have been carried out. However, some types of laytime are calculated,⁴⁶ as shown below:

"Per hatch per day" – The laytime is to be calculated by dividing

(A) The quantity of cargo, by

(B) The result of multiplying the agreed daily rate per hatch by the number of hatches in the vessel.

Quantity of cargo

Laytime = ----- = days

Daily rate X number of hatches

Each pair of parallel twin hatches counts as one hatch. Nevertheless, a hatch that is capable of being worked by two teams of workers simultaneously is counted as two hatches. Or,

"Per working hatch per day" (WHD) or "per workable hatch per day" (WHD) – The laytime is to be calculated by dividing (A), the quantity of cargo in the hold with the largest quantity, by (B), the result of multiplying the agreed daily rate per working or workable hatch by the number of hatches serving that hold.

Largest Quantity in one hold

Laytime = days

Daily Rate per hatch x number of hatches serving that hold.

Each pair of parallel twin hatches are to be counted as one hatch. Nevertheless, a hatch that is capable of being worked by two teams of workers simultaneously is counted as two hatches.

⁴³ It may start with or without "P"

⁴⁴ "Demurrage" means an agreed amount payable to the shipowner in respect of delay to the vessel beyond the laytime, for which the owner is not responsible.

[&]quot;Despatch money" or "despatch" means an agreed amount payable by the shipowner if the vessel completes loading or discharging before the laytime has expired

⁴⁵ Voyage charter party laytime interpretation Rule 1993

⁴⁶ Ibid

- 8. Freight idea: An indication from the charterer or charterer's broker or shipbroker of the owner of the desirable level of freight or the intended level of freight. It is given prior to more serious negotiations for the booking of the ship. Freight idea from either side can be the basis for a voyage estimation. The parties can use this information to determine the most suitable ship to hire.
- **9.** Any other conditions: Any conditions that that the charterer may relay to the shipowners, such as "subject to L/C, subject stem (indicating that the cargo quantity and available dates are still to be decided).

Shipowners use these elements as primary factors to offer the suitable vessel and the freight rate, including demurrage/despatch money based on laytime calculation.

Time charter

A time charter is the hiring of a vessel for a specific period of time; the shipowner still manages the vessel, but the charterer selects the ports and directs the vessel where to go. The charterer pays the fuel costs, port charges, and a daily hire fee to the shipowner of the vessel

Under the time charter, the charterer obtains use of a ship for a set period of time, which may vary from a couple of months to several years. The cargo and the itinerary are basically at the charterer's discretion, although the shipowner may impose limitations in the contract. The shipowner places an operational ship at the charterer's disposal and must bear the costs of providing the ship under this condition.

The cost incurred in the usage of the ship, consumables and cargo-related items, must be borne by the charterer. Rates for time charters vary according to the standard, speed and capacity, and size of the ship, as well as general market conditions. Payments are often made in advance. This arrangement is a rental agreement rather than a fee for a specific service.

Freight can be paid per DWT per time unit, such as per month, or alternatively as a fixed sum per day. For example, a ship may be fixed at a rate of \$5.00 per DWT per month, or alternatively at \$8,000 per day.

Time charters are used only between shipowners or a disponent owner⁴⁷ who hires a ship or several ships in a bareboat charter and leases them to the third-party charterers, and charterers.

Bareboat charter (demise)

A bareboat charter is an arrangement for the hiring of a vessel whereby no administration or technical maintenance is included as part of the agreement. The charterer pays for all operating expenses, including fuel, crew, port expenses and hull insurance. Usually, the charter period (normally years) ends with the charterer obtaining title (ownership) in the hull. Effectively, the shipowner finances the purchase of the vessel.

A demise charter shifts the control and possession of the vessel to the charterer who takes full control of the vessel along with the legal and financial responsibility for it.

⁴⁷ The person who hires a ship (or several ships) in bareboat charter or in time charter is called a disponent owner. If the commercial operation of the ship is entrusted to a managing company, then the manager is referred to as the managing owner.

Bareboat or demise charters are used when the shipowner provides a ship, without crew, for a given period of time. A bareboat charter normally covers a long time period, in some cases the entire life of the ship. The owner of the ship must bear the capital costs, while the charterers are responsible for operating the ship operation and must pay for keeping the ship in a standard condition. The bareboat hire is fixed on a time basis. This type of chartering mostly involves shipowners and shipping lines.

In summary:

- A shipper that intends to move a specified amount of cargo between specified ports or areas, normally prefers a voyage charter arrangement;
- Shippers with large continuous cargo lots in a specified trade, may use contracts of affreightment instead of voyage charters. By doing this, they secure the required service at a fixed price, as the freight rates in the charter markets can fluctuate considerably over time;
- Shipping lines or charterers may engage in a charter party as a time charter for a certain period and intend not to operate the vessel during the voyage but instead designate the route of the vessel.
- Bareboat charter is suitable for a shipowner to lease the vessel to the charterer in the long term. Charterers are mostly shipping lines.

Factors determining the choice of services

The factors determining the choice of the appropriate service for shippers are listed below. NVOCCs or traders should check very carefully the performance record of the carriers concerned.

(a) **Regularity of service** – When shipments are to be made at regular intervals spread over a long period, it may be preferable to choose a liner service that has already determined regular sailing schedules, a fixed range of ports and provides rate tariff.

(b) **Speed of transport** – Speed is important when a shipper has to ship goods within a time-bound schedule to meet the commitment to the foreign consignee. In this case, it is best to use liner services that suit best the requirements, irrespective of cost.

(c) Cost of transport – When regularity of service and speed of transport are not governing factors from the point of view of the shipper, the cost of transport may become important. In this case, the shipper may negotiate with shipping lines or NVOCCs and try to get low freight rates and other favourable terms.

(d) **Reliability of service** – It is advisable to make independent enquiries about the standing and integrity of the carriers before using their services. This would minimize the likelihood of becoming a victim of maritime fraud.

(e) Size and volume of shipment – The size of the goods or the volume of each shipment are factors in determining whether a bulk or liner service should be used. For shipments that are too large, bulk carriers instead of container carriers may be better suited for a large volume of goods.

(f) Status of the carrier - Enquiries should also be made about the status and liability of the shipping line or the owner of the ship with whom the shipper deals:

- A shipowner may formally own the ship, but in reality, it may operate the ship under a management contract with a bank that mortgaged it
- The shipping line may be a charterer under a time charter agreement and the shipowner may have a lien on the cargo booked with that shipping line for the unpaid charter hire.

Checking the status of the carrier should be done when chartering is made. Normally liner services by shippers and NVOCCs are reviewed.

Stevedoring operation – The role of a stevedore

The stevedoring operation is a key element in maritime activity. The shipowner or shipper and or consignee must employ stevedores to load and discharge the cargo from the vessel, including to stuff in or unstuff the goods from the container. A part of the component of the freight is in fact payment for the stevedoring operation.

To properly understand stevedoring, it is necessary to look back many years to an original cargo handling operation across the general waterfront. It took hundreds of men to load or unload an ocean-going vessel. The crew of the vessel, which consisted of only a few dozen workers, would have taken far too long to load the cargo on board or off the vessel. Shore gangs were, therefore, employed to expedite cargo handling, but were controlled by the ship's officers. The shipowner supplied the cargo handling equipment and was fully liable for accidents and damage during the handling of the cargo.

Some may say that an important point to remember is that no matter who is paying the stevedoring cost, the stowage of cargo on board is in general the ship master 's responsibility, as the master has the overall responsibility for cargo operations and the effect of these operations on the vessel's draft, stability, trim, and hull stress. The chief officer is responsible on behalf of the master for the proper stowage and safe loading/discharging of the cargo."

This appears in article III, rule 2 of the Hague Rules 1924, which states that "Subject to the provisions of article IV, the carrier shall properly and carefully load, handle stow, carry, keep, care for and discharge the goods carried."

However, if the terms of the contract of carriage stipulate that the cargo is shipped under the GENCON 1994 Uniform General Charter⁴⁸ in clause 5, the following is applicable:

"The cargo shall be brought into the holds, loaded, stowed and/or trimmed, tallied, lashed and/or secured by the charterers, free of any risk, liability and expense whatsoever to the owners. The charterer shall provide and lay all dunnage material as required for the stowage and protection of the cargo on board, the owners allowing the use of all dunnage available on board."

A study case can be found in the "EEMS Solar"⁴⁹

Accordingly, the charterer and shipowner need to have mutual understanding and consensus before entering into a charter party as to which international rules or conventions or clauses of the charter party are to be applied.

Very little has changed regarding stevedoring except that it has become a very lucrative business, in part because it requires s very specialized operation, such as for project cargo.

⁴⁸ GENCON is a standard voyage charter party. It is a general-purpose agreement for the services of a ship in exchange for freight and can be used in a variety of trades. It is accompanied by its own bill of lading, CONGENBILL 2016. The latest edition of this contract is GENCON 1994.

⁴⁹ See https://www.steamshipmutual.com/publications/Articles/ConsequencesofPoorStowage1113.htm.

However, the sophisticated bulk and container terminals have taken the place of the longshore gangs, and heavy equipment is used for cargo handling, but the practice of stevedoring continues to play a significant role in cargo planning, with the master or chief officer still responsible for the safe stowage of his vessel.

It is important to note that a vessel does not make money in a port; the port-stay should be as short as possible. For a shipment to be profitable, the voyage must be loaded and unloaded as quickly as possible. Often, the commercial requirements of cargo handling conflict with the safety aspects of the vessel. As such, longshoremen should have experience not only in the safe and efficient handling of cargo, but also be versed in the operational requirements of the vessel and the vessel's equipment. Consequently, many supervisors and terminal operators in the stevedoring industry are drawn from the ranks of seafarers.

In the current environment, a stevedore not only handles the cargo on board the vessel at the port, but he also receives, consolidates and dispatches the cargo ashore. He is the intermediary for the transport ashore and the vessel.

The stevedore must work closely with the ship itself and the shipowner through the owner's agent, the port authority or the private port captain, as well as with shipper and consignee of the cargo. However, he is employed directly or indirectly by the owner of the ship. In many chartering cases, the hiring of a stevedore may be the responsibility of the consignor or consignee, according to Incoterms and the terms of loading and unloading in the charter party.

When loading cargo, the supervisor or stevedoring manager must ensure that all cargo is received in a timely manner and is the correct weight and/or size, according to the declaration of the ship's agent and that it is a legitimate export commodity. The supervisor or stevedoring manager should also inform the ship if the cargo constitutes a danger to the ship or to any other cargo.

The supervisor should be notified in a timely manner by the ship's staff or its planner as to how the cargo is to be stowed. He must ensure that an adequate number of men and machines are available to conduct the operation in the safest and most efficient manner possible. This principle is the same for bulk cargo, containers or general cargo operations; the only difference is how the cargo is handled.

For unloading, the supervisor receives the ship's inbound freight plan (or bay plan if it is a container operation). From these plans and the ship's inbound manifest, there should be sufficient information to plan the discharge operation. However, the operation does not stop at this point. The inward cargo must be cleared from the terminal or waterfront to either an inbound container yard or storage area in the case of bulk shipment in order to clear the berth for the next vessel.

Container terminals generally have enough space for many ships, but they can be congested. Upon discharge of the containers, the stevedore needs to shift the containers from the shipside to the inland container yard ready for collection by the consignee. In some cases, the cargo may be trans-shipped on other vessels. Under instruction from the shipping agents, stevedores perform this operation.

Another function of the stevedoring is to serve the common consolidators at the container freight station. A CFS Operator hires stevedores to pack and unpack the container for LCL shipments. These stevedores must have knowledge on how to stuff the freight in the container as the goods come in various sizes, and some are stackable and others are non-stackable. The crates, wooden boxes, paper cartons and even jumbo bags are combined together and need to be stuffed in accordance with a good plan formulated by experienced stevedores who optimize the cargoes stuffing in the container.

Stevedoring contracts

The general concept for hiring stevedoring services in many countries can be divided into (a) **on a ship basis,** which is an agreement between the shipowner and the stevedore company or (b) **onshore basis,** which is an agreement between the terminal operator and stevedore company. It can also be the agreement between a consolidator and stevedore company.

Some terminals provide all the shipping services, including stevedore operations.

The contractual arrangement between stevedores and shipowners are many and varied, although they do fall into one of three categories

(a) Container tariff rate

Most shipowners and terminal operators prefer to operate under a box rate. This tariff is often split for 20 ft., 40 ft. and 45 ft. units plus additional cost for restowing and over dimension units. Empty units, refrigerated boxes and dangerous freight containers can incur different rates. Depending on the amount of labour employed at the terminal, the box rate may include lashing and unlashing costs for on-deck containers. It is common to periodically review the throughput and adjust rates based on the efficiency of the shipping company or type of vessel.

Any other work carried out by a stevedore hired by shipowners, such as the handling of non-containerized cargo or the washing of containers, container repairing and maintenance, is usually carried out on a tariff basis.

It is common practice that the stevedore facilitates the delivery of containers to the consignee. The terminals usually offer a few days free storage at the terminal complex. If the cargo is not claimed within the free time, the consignee has to pay port for storage of the containers in addition to container demurrage for the shipping line. Terminals wish to clear out the inbound containers from their area as quickly as possible, while the shipping lines want to free the containers for the next shipment.

(b) General cargo contracts

There are several options for stevedores and shipowners to agree on costs over the general waterfront. This often depends on the type of cargo handled and the regularity of the trade.

Stevedoring for general cargo is based on either a tonnage or a space rate. This is often reflected in the stevedoring rate. In addition, the cargo may be handled by machines, such as unitized (palletized) cargo, or manhandled as break bulk or hopper with a belt conveyor, and again this is reflected in the costs within the stevedoring contract.

- i) The contract could be negotiated on a tonnage, weight or space tonne basis depending on the type of cargo. The quantity of labour and equipment needed to handle the cargo is then at the discretion of the stevedoring company.
- ii). Some stevedoring contracts are concluded on the basis of cost plus. The shipowner pays for the actual workforce and equipment employed on the vessel plus a percentage (usually not more than 20 percent) to cover overhead and administration of the stevedore company. In this example, the shipowner has direct control over the size of the employees.

iii). A straight contract can be agreed between the shipowner and the stevedore company to complete a specific task. It frequently used for a single operation such, as a heavy lifting exercise or loading or unloading a special cargo. In all these situations, the contracts include penalty clauses in favour of the shipowner if the vessel is delayed by the stevedores. Likewise, against the shipowner, if due to a fault of the ship, the labour is idle, incurring additional costs to the stevedore company.

(c) Bulk handling contracts

These contracts are determined by the terms of transport between the shipowner or charterer and the owner of the cargo, or by the terms of sale between the seller and the buyer.

The Incoterms is the key factor that stipulates which party pays the stevedoring cost. Under the term of FAS – free alongside ship, the shipper or seller just simply delivers the goods alongside the ship designated by the buyer at the named port of shipment. The shipping line has to hire a stevedore to load the goods. Accordingly, the charter party agreed between charterer and shipowner stipulates the LIFO term or the full liner term. On the other hand, the charterer may be the party who hires the stevedore if the agreed charter party stipulates FIO or FILO under the Incoterms "FAS".

Under FOB term, shippers or sellers must load the goods onto the vessel (according to Incoterms). Consequently, the shipper or seller should know the cargo handling, loading rate, including stowage, that has been agreed between the charterer and shipowner.

Under FOB (Incoterms) and FIO term (loading term), the shipper or seller needs to load the goods and stow them in the holds of the ship. The expression "free in and out" means it is the responsibility of the charterer (according to charter party) to load the goods, and to discharge the cargo of its respective accounts, and that is "free of expense to the owners". This expression leaves some doubt as to whether the cost of stowage is for shipper's account, therefore, in order to eliminate any misunderstanding, the clause can be worded as; "Free in and out, stowed and trimmed" (FIOST)

The shipowner or charterer may also be burdened with the stevedoring cost if the shipment is sold under the term FCA (free carrier) at the place of origin or the port of origin where the shipowner agrees to accept the goods and arrange the shipment for the buyer.

Stevedoring contract for project cargo

Stevedoring services can as be hired for project cargo. Without using an experienced stevedoring team, the project cargo operation cannot be completed successfully.

Complexity, safety and the need for high operational productivity are distinctive features of project cargo services, which often requires heavy lifts and over dimensional project cargos A very experienced stevedore team working as an engineering team to handle the large size and overweight cargo is required. The remuneration is mostly based on the scope of work of each project on a lump-sum basis.

Additional costs

In addition to the stevedoring cost, other costs associated with cargo are berth hire costs and port dues for the ship, usually paid by the shipowner or charterer, and a wharfage charge levied by the port authority for cargo moving over their wharf, usually paid by the cargo owner.

The movement of cargo on or off a ship is not always as straight forward as it might appear. It is, after all, only part of a considerably extensive chain of movements from the point of production to the consumer, involving many forms of transportation and interested parties.

The cargo may simply be from the shipper's stockpile at the loading wharf to the consignee's own discharge facility at the factory, as is often the case with coal or iron ore. The shipment of the cargo may also involve other waterborne transport, trucks or rail movement in addition to the main sea-going voyage. The cost, and hence the documentation may be arranged in stages of the cargo movement, or could encompass the entire movement, as with multimodal transport documents.

The cargo documentation may be handled by an agent of the shipowner, a freight forwarder or a NVOCC. It may require quarantine or customs intervention prior to delivery or shipment. The cargo may also be transshipped on another vessel or need to be restowed on the same ship. In some circumstances, the cargo may need to be held at the wharf awaiting renegotiation of the letter of credit or placed into bond awaiting customs release.

On occasion, surveying the cargo is required prior to loading or after discharge, or the cargo has to loaded and stowed under survey. The cargo may be damaged or contaminated and need to be surveyed prior to movement. The variations of cargo and its requirements are endless; so are the different methods used to handle and stow the cargo.

Some standards have been brought into the industry, mostly by the introduction of containerization, however, not all ports, or even terminals, work exactly the same. Knowledge of the overall operation is essential for all players within the operation. This includes the documentation that accompanies the movement of cargo through a port and on or off the ship.

Container terminal operation

While it is fairly simple to understand the cargo handling operation across the general waterfront and at bulk handling terminals, it is not easy to see what is happening in a container terminal. The terminal works similar to an endless chain of containers moving from the ships to the consignees and back from the shippers to the ships. For this to happen, meticulous planning must take place even before the containers enter the terminal. Without meticulous planning, serious stowage problems may emerge, such as vessel skipping, overbooking of cargo, mechanical problems, containers being short shipped or overcarried and delays.

A smooth operation can be achieved under the following circumstances. The container terminal has predesignated stacks for import and export cargo, the export stacks at a container yard is allocated for a particular vessel, and sufficient space for import stacks at the container yard are clearly allocated. Import stacks are divided into areas for road, rail or even trans-shipment cargo.

It is important to note that even before cargo is received into the terminal for export, a rough idea of the ship's final stowage should be known. This overcomes the need to double handle containers to ensure correct stowage on board.

Once the import and export stowage of the ship is known, an order of work is drawn up by the terminal planners or supervisors. After the order of work is known and the terminal has the full list of import containers (from the inward bay plan) plus the greater proportion of export containers received into the terminal, the load/discharge can be sequenced.

The sequence lists are key to a container operation. Every container movement on or off the vessel is planned and noted on the sequence lists. There are three sets of important numbers to remember:

- (a) The container identification number;
- (b) The stowage number on board the vessel;
- (c) The terminal position numbers.

Although a sequence list does have additional information, the three most important columns identify each container moving from the terminal position to the ship stowage position on loading, and visa a versa for discharge, although the terminal position is not inserted until the container is in fact landed. The correct order of the sequence is vital information that the equipment operators need to know to successfully operate the ship.

In the conclusion, shipping lines can provide several services for containerization and bulk cargo transport, including chartering the vessel. A stevedore is an important partner of shipping lines, tasked with loading and unloading the containers while the terminal operator stores the import/export container or the goods and delivers them.



- 1. What is a shipping alliance or consortium?
- 2. Why do shipping lines join alliances?

3. How many categories are related to container freight charges?

4. What is the key to a container operation at the terminal?

5. What is a charter party and when is it used?

6. Which office in a shipping agent gives approval to a counteroffer for a freight rate?

7. Does a bulks shipment need to be categorized under chartering?

- 8. A charter party is normally used for what type of chartering involving a shipowner and shipping line?
- 9. If a shipper has a large volume of goods that cannot be carried by one voyage of the charter, what should it do?

10. Which Incoterms are related to the loading and unloading term "LIFO" in the charter party?

11. What is the different between COA and CVC?

12. List five factors that shipowners consider when calculating the freight rate for a chartering service.

13. List five essential pieces of information that a shipowner should provide for a voyage charter.

14. What is LAY/CAN?

15. Which factors need to be identified to transport cargo?

Chapter 5: Multimodal transport operator

Introduction

Traditionally, a shipping line provides a service from port to port and limits its responsibility for the cargo from the place and time where it takes charge of the cargo until it is delivered to the place of delivery indicated in the bill of lading.

The shipping line also provides extended services, including carriage over land, such as on a United States trade lane, where delivery points are inland and inland points are intermodal. The carriage is the combination of sea and rail or road modes.

The combination of the modes of transport may qualify a vessel-operating common carriers as the multimodal transport operators, however, this is not the case as shipping lines do not own or operate the means of transport of goods by road, rail or air, but only arrange for these types of transport by subcontracting with relevant carriers.

Not just anyone can be a multimodal transport operator, as many countries have in place rules and regulation to control multimodal transport operators and their services.

The role of a NVOCC in multimodal transport is to offer the carriage of goods by more than one mode of transport under a single contract and assume responsibility for the execution of the contract, and of the carriers, its staff and subcontractors participating in the multimodal transport operation chain.

When an NVOCC acts as a multimodal transport operator, it may enter into separate contracts with individual transport operators. These subcontracting arrangements do not affect the obligations of the NVOCC or the consignor for the performance of the multimodal transport contract and the accompanying liabilities arising under the contract.

This involves a major transformation of the roles of NVOCCs, as for these subcontracting arrangements, intermediaries become subcontractors and the NVOCCs become principals.

Multimodal transport is not a recent innovation, as any consignment coming from overseas and destined for an inland delivery point, is transported by a combination of modes of transport using sea, rail, air or road, with or without cargo handling during the journey.

This chapter gives the reader an understanding of what constitutes a multimodal transport operator and multimodal transport operations.

Chapter objectives

On completion of this chapter, the reader should:

- Understand the concept of transportation;
- Define what constitutes a multimodal transport operator and describe the different types of multimodal transport operators;
- State the advantages of multimodal transport;
- State the relationship between a multimodal transport operator and the intervening parties;

• Understand the form of multimodal transport operations and the scope of services provided by a multimodal transport operator.

Concept of transportation

The type and concept of transportation can be divided into the following:

(a) Unimodal transport

This is the carriage of goods by a single mode of transport, namely road, rails, sea, inland waterway, air and space, for the entire route of transport from the origin point to the destination.

Unimodal transport covers the entire route, including trans-shipment when the second leg of transport is the same mode as the other means of transport, such as sea transport using a feeder vessel for a trans-shipment to the mother vessel, or air transport, which entails carrying the goods to one country for trans-shipment to other aircraft bound for the final destination.

(b) Intermodal transport

The Organisation for Economic Co-operation and Development (OECD) and the European Conference of Ministry of Transport provide the following definition:

"The movement of goods (in one and the same loading unit or a vehicle) by successive modes of transport without handling of the goods themselves when changing modes."

In a paper prepared by the UNCTAD secretariat entitled "Implementation of multimodal transport rules" and document issued by the Economic Commission for Europe (TRANS/WP.24/2000/1). similar definitions are given.

It is also defined in the "EU Commission Intermodality 1977" as:

"A characteristic of a transport system that allows at least two different modes to be used in an integrated manner in a door-to-door chain".

Concept of intermodal transport

Based on the above-mentioned definitions, intermodal transport entails the following:

- Being involved in international transport;
- Providing at least two modes of transport;
- Carrying goods in one or the same loading unit or vehicle;
- No handling the goods when changing modes.

However, generally, the contract for each leg of transport with each carrier along the intermodal transport chain is handled by the consignor, which involves several contracts of carriage

In the evolution of intermodal transport, one party, the intermodal transport organizer (ITO)⁵⁰, had increasingly become the party that procures carriage of the goods, often including ancillary services – by unspecified modes of transport. This party may or may not carry out (part of) the transport.

Major problems with intermodal transport are the uncertainty over the time of loss or damage and uncertainty concerning the contract and the identity of the carrier.

For example:

- i) If the ITO is not a carrier, the consignor may find it difficult to identify and pursue the actual carrier responsible for loss or damage of the goods and evidence may be hard to obtain by the time he does so. The consignor may find that the liability of the actual carrier is governed not by an international regime, but by local law with a short limitation period, the content of which is unknown to the consignor.
- ii) The applicable mandatory laws depend not only on whether the stage of transport in which loss or damage occurs can be established, but also on the judicial courts in the country where the proceedings are brought –a matter which can only partly be foreseen at the time of signing the contract.

(c) Combined transport

The Economic Commission for Europe (ECE) in 2003 defined combined transport as:

"Combination of means of transport where one (passive) transport means is carried by another (active) means which provides traction and consumes energy".

According to the European Conference of Ministers of Transport (ECMT) for the transport policy purposes the term of combined transport is restricted to cover:

"Intermodal Transport where a major part of the European journey is by rail, inland waterways or sea and any initial and/or final leg carried out by road are as short as possible"

Consequently, it appears that the definition of combined transport is similar to the definition of intermodal transport, but the combined transport focuses on the long haul by other modes, such as sea transport, rail transport or inland waterway transport and short haul by road transport, especially in Europe.

(d) International multimodal transport

In the Final Act and Convention on International Multimodal Transport of Goods, it is defined as:

"The carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country.

"The operations of pick-up and delivery of goods carried out in the performance of a unimodal transport contract, as defined in such contract, shall not be considered as international multi modal transport."

⁵⁰ Indicated by the Intermodal Transportation and Carrier Liability European Commission, June 1999

However, the Economic and Social Commission for Asia and the Pacific (ESCAP), defines it as

"A transport system operated by one carrier with more than one mode of transport under the control or ownership of one operator."

In essence, characteristics of multimodal transport are the following:

- International transport
- More than one mode of transportation
- One single operator (a multimodal transport operator)
- Single transport document and contract of carriage

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 of a designated carrier. It involves the use of more than one means of transport, such as a combination of truck, rail, airplane or ship, in succession to each other.

Multimodal transport operator

In the definition of the term "multimodal transport operator" provided in article 1 (2) of the MT Convention, it is stipulated that:

"Multimodal transport operator means any person who on his own behalf or through another person acting on his behalf concludes a multimodal transport contract and who acts as a principal, not as an agent or on behalf of the consignor or of the carriers participating in the multimodal transport operations, and who assumes responsibility for the performance of the contract".

Based on this definition, elements of a multimodal transport operator are the following:

- 1. Any person who acts on his behalf;
- 2. Another person who acts on behalf of a multimodal transport Operator;
- 3. Concludes a multimodal transport contract;
- 4. Assumes the responsibility for the performance of the contract.

Under UNCTAD/ICC rules:

A multimodal transport operator is any person who concludes a multimodal transport contract and assumes responsibility for the performance thereof as a carrier.

There are two types of multimodal transport operators, namely:

- 1. Vessel operating multimodal transport operator VOMTO
- 2. Non-vessel operating multimodal transport operator NVOMTO

Vessel operating multimodal transport operator – VO-MTO

According to the above introduction, even though shipping lines prefer to operate port to port shipments, in some case they may perform "place to port", "port to place" and an extreme service "door to door".

A vessel operating multimodal transport operator refers only to a shipping line that performs a multimodal transport operation. In the same sense, an airline or air freight forwarder may extend services to provide

connectivity from air to land transport up to the place where consignee or cargo receiver gets the goods and vice versa. In this regard, an airline or air freight forwarder is not treated as a VOMTO but rather an NVO-MTO, airline or air freight forwarders mostly do not operate any vessels.

A shipping line picks up the containers at an inland container depot and conveys the containers to the port for loading the vessel bound to the final port of destination. If a shipping line intends to provide a unimodal transport service, then this operation is not considered as a multimodal transport operation⁵¹. This same applies to airlines. If an airline receives goods at the origin terminal and transports them to the final airport of destination by connecting road transport at another airport terminal where the goods are discharged, this is note deemed to be multimodal transport according to the definition.

Non-vessel-operating multimodal transport operators – NVO-MTO

They may be classified as follows:

- (a) NAOCC-MTO Non-aircraft operating common carrier (air freight forwarder) who enters into a multimodal transport contract.
- (b) NVOCC-MTO Non-vessel operating common carrier (sea freight forwarder) who acts as carriers, and assumes full responsibility for the execution of transport contracts without owning or operating the vessels used.

Who can be a non-vessel operating common carrier?

- (i) A common consolidator that extends its service to cover the route and modes of transport that extends beyond port to port or terminal to terminal.
- (ii) A freight forwarder that transforms to a NVOCC by taking the role of a carrier that covers the entire route of transport using many modes to carry the goods internationally.
- (iii) In very rare cases, the airline or air freight forwarder may perform a multimodal transport operation, but as they do not operate a vessel, it would be deemed as an NVO-MTO.

It should be noted that NVOCCs or freight forwarders that become a multimodal transport operator's subcontractor or agent to carry out a transit operation at the transit country or acts as a delivery agent at the destination in a multimodal transport contract, is only an agent or subcontractor, not a carrier.

Registration of the multimodal transport operator

The Association of Southeast Asian Nations (ASEAN), through the implementation of the ASEAN Framework Agreement on Multimodal Transport (AFAMT), the Andean Community⁵², and MERCOSUR⁵³ have agreements

⁵¹ As defined in AFAMT: The operations of pick-up and delivery of goods carried out in the performance of a unimodal transport contract, as defined in such contract, shall not be considered as international multimodal transport.

⁵² The Andean Community (Spanish: Comunidad Andina, CAN) is a free trade area with the objective of creating a customs union comprising the South American countries of Bolivia, Colombia, Ecuador, and Peru.

⁵³ Mercado Común del Sur – Southern Common Market. Mercosur is composed of 5 sovereign member states: Argentina; Brazil; Paraguay; Uruguay and Venezuela

covering multimodal transport, which stipulate that any parties that wish to perform a multimodal transport operation is required to register with the competent national authorities and meet some legal requirements.

In many countries, where no registration is required by law, NVOCCS may enter into a multimodal transport contract and become a multimodal transport operator. In this regard, it is highly possible that in such countries, there is no multimodal transport act or law, so no liabilities for a multimodal transport operator have been set.

Liberty of foreign companies to perform multimodal transport – The ASEAN Case

The ability of foreign countries to function as a multimodal transport depends on the policy regarding the limitation to market access of each individual country. Some countries, such as Viet Nam, grants full right for a multimodal transport operator already registered in other ASEAN member states to apply to work in Viet Nam and have liability insurance policy or an equivalent guarantee.

A Thai Act requires a multimodal transport operator registered in a foreign country recognized by Thailand by virtue of a treaty or international agreement, including multimodal transport operators from ASEAN member States, to appoint an agent or set up a branch office in Thailand for their operations within the country. The agent must either be a Thai registered multimodal transport operator or a Thai limited company under Thai laws with objectives to operate a transport business or brokerage, agency or commercial brokerage. If foreign companies wish to operate in Thailand themselves, they need to establish their own companies. However, a constraint is that the establishment of a subsidiary of a foreign company is subject to a rule that foreign equity participation must not exceed 49 percent of the registered capital and the number of foreign shareholders must be less than half of the total number.

Should all the agents of the overseas multimodal transport operators be required to register as multimodal transport operators?

In AFAMT, it is stipulated that a multimodal transport is

"Any person who on his own behalf or through another person acting on his behalf concludes a multimodal transport contract and who acts as a principal".

Accordingly, the scope of the duty of the agent (in the ASEAN context) can be described in two categories as follows:

1. Acts on behalf of the multimodal transport operator and concludes a multimodal transport contract. – refer to the above definition

At this point, long as the agent concludes a multimodal transport contract on behalf of a multimodal transport operator, he should not be regarded as a principal. The agent becomes a principal only when he enters into a multimodal transport contract on his own behalf. The agent is, therefore, required to register with the national competent bodies.⁵⁴

⁵⁴ Under Thai Law, the Thai Agent who acts on behalf of a foreign multimodal transport operator (beyond ASEAN countries) and concludes a multimodal transport contract is required to register. In another meaning, if a foreign multimodal transport operator wishes to operate multimodal transport in Thailand, it must appoint a Thai registered multimodal transport operator to do so. The foreign multimodal transport operator becomes a principal when a Thai multimodal transport operator uses and signs the bill of lading of the designated foreign multimodal transport operator for multimodal transport.

2. Acts as delivery agent of the Multimodal Transport Operator.

In this regard, the agent is not deemed as a multimodal transport operator, but actually his duty is work only as an employee, agent or subcontractor of the multimodal transport operator who is the principal, and the agent only works according to the instruction of the principal, not the party who concludes the multimodal transport contract. Accordingly, the agent does not have to register to become a multimodal transport operator.

There are two types of delivery agents based on the services they provide:

- (a) Exchanges the D/O with the original bill of lading, then the consignee clears the goods and either transports the goods or contracts it out.
- (b) Clears the cargo though customs and delivers the cargo from the port, airport or border crossing to the consignee either by unimodal transport or several modes of transport.

According to a Vietnamese decree, if the delivery agent performs delivery of the goods through more than one mode of transport, the delivery agent must be registered with the national competent body. This is a special case, because the country has a decree covering local multimodal transport.

Qualifications of a multimodal transport operator

Registration of multimodal transport operation under AFAMT (ASEAN case)

To register as a multimodal transport operator, the applicant must submit an application to the respective national competent bodies and establish that he fulfils all requirements as prescribed by national law. The minimum qualifications to be a multimodal transport operator are as follows;

- (a) Possess the legal capacity as required by the provisions of the country where the application is filed;
- (b) Be domiciled in the member country where the application is submitted;
- (c) Have an insurance policy in which the coverage includes a protection and indemnity insurance, which is a form of mutual maritime insurance provided by a P&I club (protection and indemnity club), or sufficient financial holding to cover payments of obligations for loss of, damage to or delay in delivery of goods according to the multimodal transport contracts, as well as contractual risks;
- (d) Maintain minimum assets equivalent to SDR 80,000 or provide an equivalent guarantee.

A multimodal transport operator can attain legal status with a national competent body that is a registrar, but, often with some other authorities, such as customs, under the registration rules in a particular country. In some cases, a multimodal transport operator may have to register with customs or other authorities concerned to attain legal status.

Even though, ASEAN States ratified the Framework Agreement on Multimodal Transport, each member State may have different registration requirement in their national multimodal transport laws. A national law may stipulate more requirements for registration, such as in Viet Nam where a multimodal transport operator must file a multimodal transport document, which differs from requirements imposed by Thailand. On the contrary, a Thai multimodal transport operator must have registered capital equivalent to SDR 80,000 to register. This is not required by the Vietnamese national competent body.

The registration of a multimodal transport operator is a mechanism to ensure that users (consignor/consignee) that operator as a service provider holds a legal status and, is in a position, to compensate any claims against loss of or damage to goods or a delay in delivery based of the operator's assets and liability insurance.

In most ASEAN member States, the domestic law stipulates that any parties who perform a multimodal transport operation without registration is penalized with huge fines.

Advantages of multimodal transport

Reduce complication of intermodal transport

Multimodal transport could help to reduce the complication of the liability of the intermodal transport as the intermodal transport's liability is based on each leg of transport and each operator has different limitations and exclusion of liability and responsibility, which may create confusion. It also may clear up difficulties in understanding which international conventions or national laws are applicable to the contract of carriage.

• Deal with one operator

The consignor deals with one operator for the contract of carriage under one single contract of carriage for the entire route, including one liability regime. Without the complexity of selecting the carriers for the intermodal transport, the multimodal transport enables the cargo interests (the trader can be either the seller or buyer) to deal with only one operator who assumes all responsibility and liability for the entire route of transport.

• Liability of operator is clear

The responsibilities and liabilities are clear with multimodal transport operator's scope of operation, including the limitation of liability and exclusion that are stipulated in the agreements, international conventions and national laws.

• Door-to-door deliverable service

The door-to-door concept is a major operation of multimodal transport, but in fact, it can be performed door to port, port to door, or place to place.

• Reduction in costs and time

The multimodal transport operator helps the consignor/consignee reduce the cost and time related to securing and selecting carriers for each mode of transport for the entire journey from the consignor premises to consignee's premises. This includes a reduction in communication and coordination between various carriers and traders, as compared to intermodal transport.

The multimodal transport can secure that the goods arrive on time when the supply chain of the consignor is broken, and the lead time of unimodal transport is not adequate to make the shipment on time. It also helps to save costs when if, for example, transportation would be directly done by airfreight in order to meet the arrival time required in the supply chain.

• Increased monitoring of shipments from stage to stage

Multimodal transport operators maintain their own communication links and coordinate onward carriage smoothly at trans-shipment points and the final destination.

Better control

As only one party is in charge of meeting the shipment deadline, there is better control of management and less risk of merchandise theft or loss, while responsibility lies with just one entity. The multimodal transport, which is planned and coordinated by a multimodal transport operator and its agents as a single operation, minimizes the loss of time and the risk of loss, pilferage and damage to cargo at the trans-shipment points.

Scheduling routes, costs, staff, and logistics becomes easier

Cargos interests can concentrate on their core business rather than get involved with the complexity of transportation. Through a single contact with a multimodal transport operator, all routes, schedules, costs and time of the shipment can be determined and the workload, including logistics activities, can be reduced.

• Faster transit procedure

When using the FBL document, it preferable to enter and go through customs because the FIATA bill of lading is recognized by customs of some countries, enabling this formality to go more rapidly.

Reduces burden of documentation and formalities

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

• National wealth as hub of transit

To help boost national economies, some countries strive to be trans-shipment or transit hubs. This endeavor is facilitated by multimodal transport, as it creates opportunities to connect with the countries of destination. Improved capacity related to international shipping operations help generate income for the national economy.

Relationship of the multimodal transit operator with intervening parties

To execute transport contracts, the multimodal transport operator needs to engage the services of many parties, including agents at transit points and destinations.

These parties are classified into three broad categories as follows:

Common carriers who become the multimodal transport operator's subcontractors

- (a) Shipowners/shipping lines
- (b) Road transport operators
- (c) Railways

- (d) Airlines
- (e) Inland waterways transport operators

Non-carriers - Facilities and auxiliary service providers

- (a) Container terminals/container yards
- (b) General warehouses
- (c) Container freight stations, or groupage or consolidation warehouses
- (d) Container-leasing organizations
- (e) Organizations attending to packaging, customs brokers, import or export formalities and related documentation

Other parties - Financial institutions and authorities

- (a) Banks
- (b) Insurers cargo insurers and liability insurers
- (c) Ports and terminals
- (d) Customs houses

Forms of multimodal transport operations

The different types of multimodal transport operations involving different combinations are as follows:

Land-sea-land

An example of this form of transport is as follows:

An empty container is picked up from the shipping line's container depot in Singapore and transported to the shipper's factory in Johore (Malaysia) for stuffing. From there, the FCL container is transported back to Singapore and then transported by ocean vessel to a port in New York.

The container is discharged from the vessel at the New York port using a truck to convey the container to the railway in New York. The railroad runs from New York to Chicago. At the Chicago rail ramp, the container is transported to the consignee's warehouse.

If the multimodal transport operator enters into the contract of carriage from the place of receipt, Johore, and the place of delivery, the consignee's warehouse, then this operation becomes door to door delivery.

But if, the multimodal transport operator takes charge of the container at the Singapore port and delivers it to the consignee's warehouse, this becomes a port to door delivery.

For LCL cargo, the individual shipments would be delivered to the CFS (where the consolidator is used for the consolidation operation) or the shipping line's CFS and all consignments are consolidated into a FCL container. Upon arrival at the New York port, the container is continuously conveyed by rail and truck to the CFS in Chicago, where the goods are break bulked and picked up by the several consignees. This kind of operation can be deemed

as a unimodal transport operation, if the consolidator concludes as the contract of carriage as unimodal transport under the term of "CFS/CFS" in the bill of lading⁵⁵.

However, if some shipments need to be delivered to the consignee's doors, then it becomes multimodal transport under the term of "CFS/door".

Road/air/road

A combination of air carriage with truck transport is a frequent method of a multimodal transport service. It is notable that based on the United Nations Convention on International Multimodal Transport of goods (MT Convention), "The operations of pick-up and delivery of goods carried out in the performance of a unimodal transport contract, as defined in such contract, shall not be considered as international multimodal transport".

An airfreight forwarder that enters into the carriage of goods by air, may, intend to provide unimodal transport with and additional pick-up or delivery service.

For example, in the case of a shipment from Suvarnabhumi Airport in Bangkok to Rotterdam airport;

The shipment from Ayutthaya in Thailand is picked up by the airfreight forwarder and loaded on the aircraft at Suvarnabhumi Airport bound for Schiphol Airport, and from there the airline uses a truck to convey the shipment to the Rotterdam airport as a delivery place, which appears in the master and/or house air waybill (airport of departure: Suvarnabhumi Airport and Airport of destination: Rotterdam). This becomes a terminal-to-terminal shipment.

To elaborate more on this scenario;

- 1. The pick-up of the goods by the airfreight forwarder may be under another contract of carriage, for example, is a road transport contract.
- 2. The air waybill issued by the airfreight forwarder and the master airway bill shows "airport of departure: Suvarnabhumi Airport and airport of destination: Rotterdam", This reflects the responsibility of the airfreight forwarder begins in Suvarnabhumi airport and terminates at Rotterdam airport.
- 3. The airline shifts the goods from Schiphol Airport to Rotterdam airport under its own operation or by a subcontractor to fulfil the contract of carriage by air (terminal to terminal)

This type of operation is unimodal transport, as it involves an airline and an airfreight forwarder.

If the airfreight forwarder intentionally wishes to perform a multimodal transport operation, the consignor needs to be informed that he will cover the responsibility and liability of the transportation from Ayutthaya to Rotterdam airport and that his air waybill will be used as the multimodal transport document.

This applies to shipping lines or NVOCCs that carry out pick up or delivery under unimodal transport.

Accordingly, it should be noted in most cases, the intention of an air transport service provider is to provide unimodal transport, even though, in general, it provides land transport combined with air transport.

⁵⁵ AFAMT and MT Convention: See definition of International Multimodal Transport

In Europe and the United States, transporting air cargo over long distances to connect with the main bases of the airlines operating long-haul services, such as trans-Pacific, trans-Atlantic and intercontinental services, is common. Several airlines are building trucking hubs in Europe to serve as focal points for road-based feeder operations.

Many airlines provide road service to cities that are either uneconomical to reach by air, or to which they do not enjoy landing rights. This road transportation is often carried out using their own vehicles, and to and from their own facilities, but, on occasion, they also hire trucking common carriers as subcontractors.

This operation is not considered as multimodal transport because the pick-up operation and delivery of goods is carried out under a unimodal transport contract.

Another example a multimodal transport operation is discussed below:

Women's bags produced in Phnom Penh, are brought to the inland container depot in Poi Pet, Cambodia for export customs clearance. This is where the multimodal transport operator receives the goods. After completion of the customs procedure, the container is conveyed, crossing the border to Suvarnabhumi Airport to connect to air transport bound for Los Angeles, United States. The place of receipt is at the inland container depot at Poi Pet and place of delivery is Los Angeles airport. This constitutes land/air multimodal transport.

An air waybill or a house bill of lading can be used as a transport document for this operation, as no suitable transport document is available if there is a requirement for a negotiable transport document, even though the operation does not involve sea transport.

*Note: Multimodal transportation can be land/sea/land or land/air/land. It also can be land/sea or sea/land and land/air or air/land, as it involves connectivity of two modes of transport operation.

Sea/air mode

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

A multimodal transport operation is particularly applicable when the route involves the combination of sea transport for a long leg of the transportation followed by air transport for the shortest possible route to the final destination. The operation always involves land transport where applicable, at origin, transit points and the final destination.

Air/sea mode

This form of the multimodal transport operation is being used under the same concept as the sea/air mode. It is basically just the opposite operation. The shipment may be affected by air transport and connected to the sea transport at the transit country, a major trans-shipment hub of the shipping lines. It may be used because sea transport carriers are more readily available. The sea/air and air/sea modes reduce the transit time of the sea transport.

From	Mode	Transit	Mode	Destination
Asia	Sea	Dubai	Air	Europe
Asia	Sea	Seattle	Air	Europe
Europe	Sea	East Canada	Air	West Canada
Asia	Sea	West USA	Air	Miami
Nepal	Air	Singapore	Sea	Europe
Cambodia	Sea	Singapore	Air	USA

Example of sea/air and air/sea routes

Sea/rail or road/inland waterways or inland modes/sea

These modes are often used when goods have to be moved by sea from one country to another and by one or more inland modes of transport, such as rail, road or inland waterways. For example, in the United States, sea transport connecting with rail or road is commonly used for shipments bound for inland points in the country.

The term interior point intermodal (IPI) is typically used for a connection involving inbound movement to an inland point containing the consignee's delivery point and an inland rail terminal or container yard, which is referred to as a "mini land bridge"⁵⁶. An IPI movement⁵⁷ is typically accomplished by truck, or, for longer distances, a combination of rail and truck at the discretion of the ocean carrier.

On the other hand, in the United States, reverse inland point intermodal (RIPI) refers to the operation of mode shift from sea connecting to road or rail at the East coast of the United States to inland points. For example, a shipment by all water service⁵⁸ using the carrier' s ocean bill of lading, from Hong Kong, China is first discharged in an East coast port, such as New York, and then transported by truck or rail to an inland point, such as Pittsburgh.

Previously, it was referred to as "containerized rail transport" under intermodal transport terminology. This transport mode includes transporting the goods from the inland location to the seaports in the country of origin or from the seaports to the inland locations in the country of destination.

Mini-bridge

Mini-bridge is a method of transportation that combines sea transport and rail transport. The shipment is transported from the origin country to the first port of another country and then connected by rail transport to the second port of that country before terminating at the rail carrier's terminal. This service is mostly carried out through a bill of lading issued by a shipping line.

⁵⁶ Mini land bridge is a system in which goods are transported to the United States via sea through ships, to the nearest port close to the final destination. Then the goods are transferred by road or rail to the final destination.

⁵⁷ IPI refers to the operation of mode shift from sea mode to road mode or rail mode in the West coast of the United States.
⁵⁸ All water service is one of the most cost-effective ways to ship the cargo, and also one of the most eco-friendly; however, it's also one of the slowest forms of freight transportation. Using all water service, the cargo is shipped from the port of origin to its destination using only water routes. For example, a shipment from Shanghai, China to Newark, United States would go through the Panama Canal to reach its destination.

The mini-bridge offers a through transport rate, covering the combination of the ocean carriage and rail carriage from an origin port to the final port in the country of destination. The railways are subcontractors of the ocean carrier, which pays the rail freight based on a flat rate per container.

This system is used, for example, for trade between the United States and the Far East, United States and Europe and the United States and Australia.

Land bridge

This term refers to the combination of sea transport and rail transport under the containerization system, it is commonly used in the shipping and logistics industry.

It actually refers to the intermodal transport and the land bridge is the term used for the land portion of a journey of a container being carried and generally transported by rail transport.

Suppose the shipment is destined for Chicago, United States, from Jakarta. As Chicago is in the midwest of the United States, no transport firm can make a direct shipment to Jakarta using a single means of transport, such as an ocean vessel. Consequently, the first half of the journey entails transport from Jakarta to the New York port by sea transport. From there, the containers are forwarded to Chicago via a rail network, forming a land bridge in a process referred to as "mini land bridge".

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 United States, with continental United States being used as a land bridge.

Land bridge is also referred to as the new land bridge between Asia and Europe. The Eurasian Land Bridge, also called the New Silk Road, plays an important role in transportation. It is the rail transport route for moving freight and passenger overland between Pacific seaports in China, the dry port of Russian or Far East Ports and the Seaports in Europe.

The Eurasian Land Bridge, which can be for multimodal transport, entails shipments involving Europe-Far East, Europe-China and Europe-South-East Asia that can be transported by rail. During the Covid-19 pandemic, the severe shortage of containers around the world not only obstructed trade transactions, but it pushed the sea freight rate to record highs and the prompted the consideration of alternative transport.

Sea/inland waterways/road

The combination of sea transport and inland waterway transport is mostly used in Europe. At the major ports in Europe, barges are used to carry the containers along rivers to deliver shipments at some cities in order to connect to road or rail transport for movement to the final destination. Similarly, in Viet Nam and Thailand, barges are often used to connect with the ocean-going vessels.

Piggyback

Piggyback is the system of combined transport in Europe. It involves using 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 for the long haul, and offers door-to-door flexibility of road

transport for collection and delivery. The goods are packed onto the trucks or in the container or swap body⁵⁹ on the trailers and conveyed to the railway station at the place of origin. At the railway station, the trucks or trailers are loaded onto railway flat cars. The rail to the final railway station, where the trucks or trailers are offloaded from rail flat cars and are transported to the final destination as required by the consignee, or even to the seaport for further transport to the next country.

The system has undergone refinements and become more sophisticated through the introduction of the so-called "trailer train" in which the same trailer is used as a vehicle on the road and a rail flat car on the rail. In other words, the trailer moves on 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 made for delivery of the goods to the customers.

The combination of these two modes of transport services is cost efficient compared to transport only by trailers or truck from the origin location to the destination. It fits with the concept of long haul by rail and short haul by truck combination, which can be construed as combined transport. The best advantage of piggyback is the punctual arrival time of the rail mode, as it is not hindered by traffic jams.

RO-RO (roll-on/roll-off) vessel

RO/RO refers to a type of vessels that can receive special cargo, heavy, large size or over dimension cargo (ODC) and provide port to port service on a regular or irregular schedule.

RO/RO is also referred to as a "pure car carrier – PCC" when it is used for carriage of new automobiles driven on and off the vessel.

This service can be used for multimodal transport operations. For example, a helicopter is loaded onto a special platform on a low-bed trailer driven by a prime mover into a RO/RO vessel, lashing and store in ship deck whereby a prime mover (a unit at the head of tractor) which connects to or disconnects from the chassis.

If the prime mover is disconnected at the origin port, the prime mover at the destination will connect and dray the trailer off the ship for delivery at the destination. In cases in which the prime mover from the origin is still connected with the trailer, then that prime mover will dray the goods to the final destination.

This type of operation has been discussed among the ASEAN member States. RO/RO can be used to facilitate transportation between the mainland and archipelago countries within ASEAN under the ASEAN Framework Agreement on Facilitation of Inter-State Transport (AFAFIST). Under this framework agreement, the transport vehicle of one country can travel on the designated route in other member states.

Accordingly, this operation is the combination of road/sea/road transport and can also be referred to as "combined transport".

⁵⁹ Swap body is an interchangeable unit. It is equipped with folding legs under the frame and is a standard size, which can be used for road and rail transport.

Legend of multimodal transport – means of transport

L.A.S.H. (lighter abroad ship)

LASH is a barge carrier designed to act as a shuttle between ports, using barges/lighters, which are on board the main ship, to collect cargo from the inland waterway quay or wharf and/or deliver it to the inland waterway quay or wharf, where the main vessel could not enter. However, a LASH had a finite lifespan, and was doomed to obsolescence at the hands of the container carriers. It was an expensive way to move low revenue cargo.

The ship had a massive crane, which was used to load and discharge the lighters over the stern. The lighters each had the capacity of at least 400 tons and were stowed in the holds and on deck. When the ship was at sea, it released one set of lighters to pick up or deliver the goods. Loading and discharge of barges/lighters was completed rapidly, and the lighters could be grouped for pushing or pulling tugs along inland waterways.

Using LASH constituted a combination of transport mode and inland waterway mode. It was also used to ship from one inland waterfront of one country to the seaport of another country.

LASH can be described as an intermodal transport that used barges instead of containers. The barges were towed between the mother vessel and many ports and quays along the river and intracoastal systems. In the Gulf of Mexico, barges were used in the United States at many ports between Brownsville, Texas and St. Joe, Florida.

Another example in which barges were used was the route from Germany to the ports in Mississippi in the United States. The barges moved on the Rhine, Elbe or Weser in Germany, the commodity was loaded onto LASH vessels in Rotterdam, Netherland, Hamburg, Germany or Bremen Germany and then carried across the Atlantic to a Mississippi delta port to sail upstream in the United States.

The LASH vessels were expensive, and required special facilities at the ports of origin and destination.

Seatrain

Combined rail and water carriage can be competitive with, and in many cases cheaper than, carriage completed entirely by rail between the same terminal points.

The seatrain was another innovation in the intermodal transport system involving the usage of rail and ocean transport. It was originally adopted in the United States.

It was operated by seatrain lines, which began intermodal freight transport in December 1928 by transporting entire loaded railroad freight cars between the United States and Cuba on a specially designed ship capable of carrying ⁹⁵ fully loaded rail cars.

The loading system consisted of a cradle, which was used for railcars to be rolled on that fit into a depression on the pier. The locomotive ran on the pier and then continued onto the cradle and passed it. Then the rail cars were rolled onto the cradle and lifted by an overhead crane.

The crane rolled the cradle over the hatch. Once positioned, the railcars were pulled off by steam- driven winches. During the voyage, the cars were secured by chocking the wheels and using jacks and turnbuckles at each corner of the car.

The Seatrain mode of transport ended in 1981.

In conclusion, a multimodal transport operator should have the knowledge, skill and ability to organize the transportation of goods through different modes of transport.

The operator should be able to identify the best way to move the goods through the various modes of transport and how to deal with the common carriers hired as subcontractors and other relevant parties.

Moreover, the operator should be able determine several factors related to an operation in order to ensure that it goes smoothly (this is discussed in the next chapter).

The operator should offer a wide range of services with an all-in rate to cover the complexity of the entire transportation. The number of services on offer should be significantly greater than those provided by conventional common carriers. Multimodal transport, is expected to continue to increase as traders become more comfortable with dealing with a single operator for their shipments.



1. What is the difference between intermodal transport and multimodal transport?

2. How many types of multimodal transport operators are there?

3. Is an airline considered to be a VO-MTO?

4. List the advantages of multimodal transport.

5. What constitutes a multimodal transport operator?

6. Who can be a multimodal transport operator?

7. Is it necessary to register to be a multimodal transport operator?

8. List the forms of multimodal transport operations.

9. What is a land bridge?

10. What is the difference between a mini-bridge and a land bridge?

11. Explain the concept of piggyback with regard to shipping?

12. How can RO/RO facilitate a multimodal transport operation?

13. What is the role of the consignor when the final destination is different from the listing on the sales contract resulting from the multimodal transport operation?

- 14. How does multimodal transport benefit a country?
- 15. What is the most popular multimodal transport mode (form) used to carry goods from the Far East to Europe and vice versa?

Chapter 6: Major Factors to consider for a multimodal transport operation

Introduction

There are several factors a multimodal transport operator needs to consider carefully before carrying out a contract to transport cargo. As all factors affect the operation, performance and service quality of the multimodal transport operator, missteps may result in, for example, higher costs and, late shipment.

Chapter objectives

- Provide a clear explanation of rules, regulations and relevant external factors that affect a multimodal transport operator;
- Point out important issues that could be overlooked.

Many factors related to the operationalization of the multimodal transport that must be considered to comply with national or subregional rules and regulations, including business practices.

Registration of a multimodal transport operator to ease concerns about the reliability of the multimodal transport operator.

As described in the previous chapter, to become a multimodal transport operator, registration with competent authorities is required. To do this, the multimodal transport operator must meet the minimum qualifications as stipulated in national laws. The minimum qualifications serve as a guarantee to the consignors and consignees that use the services that the multimodal transport operator can respond to any claims arising from its operation, subcontractors and any parties that participate in the performance of the operation.

Many NVOCCs that act as a multimodal transport operator are not registered. This results in the risk of the operation being illegal. When engaging with an unregistered NVOCC, a consignor or consignee who signs a carriage contract in good faith assumes that the multimodal transport operator is qualified according to the national laws and has sufficient liability insurance to cover claims against loss, damage, and delay in delivery.

Moreover, under the contract of carriage of those NVOCCs that are not properly registered to work as a multimodal transport operator, their responsibilities and liabilities may not be based on the multimodal transport laws, which could lead to disagreements about claim settlements between consignors and consignor, and NVOCCs

Other factors to consider regarding multimodal transport operations are as follows:

1. Multimodal transport document

In many cases, national legislation requires not only the registration of the multimodal transport operator but also the registration of the multimodal transport document.

The following are examples of multimodal transport documents:

- House bill of lading
- House air waybill
- House sea waybill
- FIATA bill of lading

The multimodal transport operator is required to have a particular transport document in order to carry out transport operations under one single contract/document for the multimodal transport operation. Some NVOCCs may use their own house bill of lading, which may not be suitable for multimodal transport. Notably, a house bill of lading can only be used for sea transportation – port to port only.

The back clauses and format of the house bill of lading should be designed for unimodal and multimodal transport, and clearly indicate the national law or international conventions that are applicable to the bill of lading.

In ASEAN member countries, the following content must in the multimodal transport document:

- (a) The general nature of the goods; the marks necessary for the identification of the goods; and an express statement, if applicable, describing the dangerous or perishable character of the goods; the number of packages or pieces; and the gross weight of the goods or their quantity;
- (b) The apparent condition of the goods;
- (c) The name and principal place of business of the multimodal transport operator;
- (d) The name of the consignor;
- (e) The consignee, if named by the consignor;
- (f) The place and date of taking charge of the goods by the multimodal transport operator;
- (g) The place of delivery of the goods;
- (h) The date or the period of delivery of the goods at the place of delivery, if expressly agreed upon between the parties;
- (i) A statement indicating whether the multimodal transport document is negotiable or non-negotiable;
- (j) The place and date of issue of the multimodal transport document;
- (k) The signature of the multimodal transport operator or of a person having authority from him;
- (I) The freight for each mode of transport, if expressly agreed between the parties, or the freight, including its value in a currency, to the extent payable by the consignee, or other indication that freight is payable by him;
- (m) The intended journey route, modes of transport and places of trans-shipment, if known, at the time the multimodal transport document is issued;
- (n) Any other information that the parties may agree to insert in the multimodal transport document, if not inconsistent with the law of the country where the document is issued.

However, one interesting point related to the above-mentions stipulated in AFAMT is that:

"The absence from the multimodal transport document of one or more of the particulars referred to above content shall not affect the legal character of the document as a multimodal transport document."

This clause can be interpreted that in terms of the contract of carriage, the liability of the multimodal transport operator still exists even though some content related to it have not been inserted in that particular transport document.

The contents listed below may not be inserted in the multimodal transport documents:

• The date or the period of delivery of the goods at the place of delivery, if expressly agreed upon between the parties;

The reasoning behind this is that the multimodal transport operator would be committed to delivering the shipment within a date or period and that it is the operator's risk if it cannot do this.

In some agreements or laws, it is stipulated that if the multimodal transport operator is liable with respect to a loss following a delay in delivery, or consequential loss or damage other than loss of or damage to the goods, he is liable according to the multimodal transport contract.

When the date or period is fixed, in commercial practice. it is understood that the multimodal transport operator promises and commits to deliver the shipment within the specified date and period. For example, if the shipment does not arrive in a timely manner as contracted, the consignee may refuse to receive the goods and, the consignor must bear the risk of any loss, such as reversed transport of the shipment cost (ship back).

The limitation of delay in delivery would be equivalent to or twice of the freight charge payable by the consignor/consignee depending on the back clause of the bill of lading or applicable international conventions or agreement.

If the multimodal transport operator accepts to insert the date or the period of delivery of the goods at the place of delivery in the bill of lading, then the freight charge may become more expensive than usual.

• The freight charge for each mode of transport, if expressly agreed between the parties, includes the currency used.

To mention the freight charge of each mode of transport in the transport document, including the currency would be very burdensome to the multimodal transport operator and consignor or consignee who pay the freight charge, as it would involve calculating various exchange rates of each currency and converting them to local currency. Most multimodal transport operators express the freight charge in one currency, such as U.S. dollars or euros.

• The intended route, modes of transport and places of trans-shipment⁶⁰ if known at the time the multimodal transport document is issued.

Again, this can be determined as the commitment of the multimodal transport operator to transport the good on those particular routes and use those modes of transport, including the transit points without fail when such contents are inserted into the transport document. There is no flexibility to change the route and mode of transport if something happens and may obstruct the intended route and mode of transport, including transit points while transporting the goods

⁶⁰ Trans-shipment in a multimodal transport operation is an actual trans-shipment from one vehicle to another vehicle at the same place or referred at as a transit operation in which the goods are transferred from one vehicle to another vehicle where the place of arrival and departure is different. According to Illustrated Glossary for Transport Statistics - ITF, Eurostat, UN/ECE, fourth edition, Trans-shipment (sometimes also transshipment or transhipment) means the unloading of goods from one ship and loading it into another ship to complete a journey to a further destination, even when the cargo may have to remain ashore some time before it transported onward. The term can also be applied more generally to other transport modes, such as freight transport by road or rail or air, or any combination of them.

When the intended route, modes of transport and places of trans-shipment are inserted in the bill of lading, and a change in the route occurs or the mode of transport or place of trans-shipment are different from what is expressed in the transport document causes a delay, it may be alleged that the multimodal transport operator did not perform the contract of carriage according to the routes, mode and trans-shipment place shown in the transport document. This may subject the operator to the liability of delay in delivery.

The other point that relates to the insertion of the intended journey route, modes of transport and places of transshipment in the transport document is the customs procedure at the transit point. If the document stipulates the trans-shipment country is "A", but actually, the shipment is deviated to be transshipped in country "B", it is highly possible that customs in country "B" may reject the trans-shipment/transit formality.

Further details on these issues are elaborated in the FIATA multimodal transport document:

"Without notice to the merchant, the carrier has the liberty to carry the goods on or under deck and to choose or substitute the means, route and procedure to be followed in the handling, stowage, storage and transportation of the goods"

This clause clearly defines the intention that the route, modes of transport and places of trans-shipment, including means of transport, does not have to be advised to the consignor in order to prevent the above circumstances.

• Other details parties may agree to insert in the multimodal transport documents, such as the value of the goods.

Once the value of the goods is declared, the liability against loss or damage to the full value is without limitation, as provided in international conventions or laws when the assessment of the value of the goods at the destination is higher or equal to declared value. Inserting the value of the goods results in a higher cost of transport charged by the multimodal transport operator, as it may have to purchases a special liability insurance to cover the value of the goods for loss and damage.

1.1 Status of the multimodal transport document and evidentiary effect of the information contained in the multimodal transport document

The rules in AFAMT and UNCTAD/ICC for the provision on the document that "the multimodal transport document shall be *prima facie* evidence of the taking in charge of the shipment by the multimodal transport operator as described in that document unless a contrary indication, such as 'shipper's weight, load and count', 'shipper-packed container' or a similar expression, has been made in the printed text or superimposed on the document" and also states that

"Proof to the contrary shall not be admissible when the multimodal transport document has been transferred, or the equivalent electronic data interchange message has been transmitted to and acknowledged by **the consignee**, who in good faith has relied on and acted thereon^{"61}.

However, in the MT Convention, "a third party" includes consignees:

⁶¹ AFMT, article 6(2).

"Proof to the contrary by the multimodal transport operator shall not be admissible if the multimodal transport document is issued in negotiable form and has been transferred to **a third party⁶², including a consignee**, who has acted in good faith in reliance on the description of the goods therein."

In fact, in the explanation given in the UNCTAD/ICC rules regarding the evidentiary effect of the information contained in the multimodal transport document state that:

"With respect to the responsibility for information in the MT document, the expression in Art. 3.4 of the Hague-Visby Rules, 'third party', has not been used, since the governing factor is whether or not the consignee has relied and acted upon the information and not his position as a 'party' or 'third party' in relation to the multimodal transport operator. In particular, such an expression may be misleading where the seller has handed over the goods to the carrier and the buyer under an FOB or an FCA contract has concluded the contract of carriage. In such a case, the FOB/FCA – buyer – although relying on the information on the MT document – could not be considered a 'third party."

When a multimodal transport operator receives the goods from the consignor who stuffs the goods and provides the description of the goods, weight, measurement and quantity in the shipping order or shipping instruction, he should protect himself by inserting the clause "Shipper's weight, load and count" as a multimodal transport operator never knows exactly what the commodity is, and the number of pieces, including the weight of the goods, that have been stuffed by the consignor. To state this expression, it is *prima facie* evidence that multimodal transport operator believes the consignor's declaration. The place where the goods are received, in this case, may be either the "door" at the consignor premises or "CY" as provided in the shipping terms.

1.2 Limitation in using the FIATA bill of lading

FIATA encourages multimodal transport operators to use the FIATA bill of lading for a multimodal transport operation. This, however, is not easy for NVOCCs located in a country where the national freight forwarders association is not a member of FIATA. As the FIATA bill of lading has the copyright and the organization allows only national freight forwarders associations that are members of FIATA to print documents only for only their members to use for their transport operation. This includes the FIATA waybill⁶³.

The FIATA multimodal transport bill of lading is compatible with UNCTAD/ICC rules with regard to liability and responsibility of the multimodal transport operator, however applying the national Multimodal Transport law still takes precedence in some countries.

Another important point pertaining to the FIATA bill of lading is that not any party can sign this transport document. Only the party whose name appears on the FIATA bill of lading can sign it. Accordingly, even though the multimodal transport operator has his own FIATA bill of lading, he cannot have his agents sign the FIATA bill of lading on his behalf. This is unlike general freight forwarder's house bill of lading or ocean carrier's bill of lading in which the agent can use and sign a transport document indicates "agent for the carrier".

⁶² Hague-Visby Rules Art. 3.4. Such a bill of lading shall be *prima facie* evidence of the receipt by the carrier of the goods as therein described in accordance with paragraph 3 (a), (b) and (c). However, proof to the contrary shall not be admissible when the bill of lading has been transferred to a third party acting in good faith.

⁶³ FIATA also provides FWB (FIATA waybill) as a non-negotiable document for its member to use for unimodal and multimodal transport.

1.3 Issuance of transport documents

As mentioned above, multimodal transport documents are mostly in the following forms:

- House bill of lading
- House air waybill
- House sea waybill
- FIATA bill of lading

Road/air/road shipment: The house air waybill is commonly used for multimodal transport. The scope of a multimodal transport operation can be inserted in the "handling information" column in the air waybill by stating where the cargo had been picked up, for example, if the shipment is door to airport of destination.

If the shipment is airport to door, in the handling information, the named door at the destination should be written, while in the text in the column of airport of departure and airport of destination, the information should match the text on the air transport document.

In the of case of door-to-door shipments, "named door at origin" and "named door at destination" can be stated in the handling information column, and the column of airport of departure and destination can be indicated as usual.

Road/sea/road: This route can be interpreted as door to door (place to place) in which the goods are picked up by the multimodal transport operator, who commences the operation by road transport connected with sea transport, and after discharge at the port of destination, the road transport is used for final delivery.

In the house bill of lading or FIATA bill of lading, the place of receipt and the place of delivery is stipulated as door of receipt and door of delivery, which already indicates the scope of the operation and responsibility of the multimodal transport operator. Accordingly in the document, it is not necessary to indicate or state the scope of multimodal transport operation.

Sea/air shipment: The house bill of lading and sea waybill are mostly used for sea/air shipments without any problems. The place of receipt and place of delivery can be stated in the bill of lading or the sea waybill. The vessel name can be stated in the column "Pre-carriage' or the column "Ocean vessel" can be placed as 'to be nominated "airline/flight". This is also applicable to sea/inland waterways.

Sea/rail shipment: Most bills of lading for most multimodal transport operators and shipping lines do not show the rail mode. They merely indicate "place of receipt" and "place of delivery" (which can be the rail ramp or rail station) and only the name of the ocean-going vessel; the mother vessel appears in the transport document, and there is no mention of the rail operator and its voyage number.

Air/sea shipment: If the house air waybill is used and for a door-to-door shipment, the place of receipt can be stated in the "Airport of departure" column as "door. The place of delivery can be stated as the airport of destination and followed by "door" in the column for the airport of destination.

For example:

Airport of departure: Bangkok door Airport of destination: Los Angeles door This, however, may create confusion. The other alternative of issuance is to state in the handling information the named door at origin and the named door at the destination while the name of the airport of departure and the airport of destination is stated as usual in air transport practice.

If a FIATA bill of lading is used for this kind of shipment, the "door" should be given in the "Place of receipt" column and in the "Ocean vessel column", the airline and a flight number can also be given while the place of delivery is given in the column "Named door at destination". This also can be applied to any house bill of lading.

1.4 Legalization of export Documents

Legalization is the process of authenticating a set of documents so that the foreign country's legal system will recognize it as valid, and it has full legal effect.

Not all countries require legalization, however, multimodal transport operators should understand that some countries of destination require legalization of the export documents, and most likely for bills of ladings. If the documents are not legalized according to a country's requirements, the shipment is held by customs and possibly penalties are assessed.

Shipments are released after legalized documents are produced. Legalization can be done at the embassy or consulate of that particular country.

Some of the countries that require legalized documents are listed below:

- Argentina
- Bahrain
- Dominican Republic
- Egypt
- Guatemala
- Jordan
- Kuwait
- Lebanon
- Nicaragua
- United Arab Emirates
- Yemen

2. Liability insurance

Many countries have a mandatory liability insurance scheme for a multimodal transport operation, such as within MERCOSUR countries and ASEAN countries.

For VO-MTO, shipping lines have no problems with insurance issues, as they have "P&I Club"⁶⁴ to cover their responsibility in maritime transport and multimodal transport.

⁶⁴ Protection and indemnity or better known as P & I Clubs are a compilation of non-profit making organizations controlled by shipowners and operators who communally contribute to certain third-party liability risks related to their businesses, especially their maritime businesses.

The clubs are managed by asset managers who administer the premiums (calls), which are contributed by the members of the club and claims are settled accordingly. These premiums or calls are made on a yearly basis proportionate to the claims in the spotlight, individual member testimony and availability of the capital reserves.

For NVO-MTO, the NVOCCs (or freight forwarders) that perform a multimodal transport operation in certain countries where liability insurance is compulsory, the NVOCC owners must purchase liability insurance from insurers. Unfortunately, the number of insurers in some subregions are limited. The most popular insurer is TT Club⁶⁵.

In general, it is difficult for some NVOCC or freight forwarders to find insurers, and when they do find an insurer, the annual insurance premium⁶⁶ per annual is very high and unaffordable as often the transactions of the NVOCCs are very small.

Consignors and consignee must recognize the importance of the availability of liability insurance held by multimodal transport operators.

Thai International Freight Forwarders Association (TIFFA) provides the best practice for liability insurance. It has offered group liability insurance as a compulsory condition for all members since 1995. All members need to purchase the group liability insurance provided by the association.

When an inclusive insurance policy is offered under one umbrella, the members enjoy a lower insurance premium rate and are very satisfied with the claim handling process provided by the selected insurance company that is chosen by the insurance committee of the association. This scheme brings in many freight forwarders that are unable to find an insurance company.

The minimum insurance coverage for compensation depends on national laws One example is the case of Thailand:

(a) Acting as a principal – minimum two million Thai baht (\$62,000)

Act as principal means that the Thai multimodal transport operator issues is own bill of lading for an export shipment.

(b) Acting as a principal and agent of a foreign multimodal operator – minimum three million Thai baht (\$95,000)

Act as principal and agent means:

i) A Thai multimodal transport operator acts as a principal that issues its own bill of lading for an export shipment,

ii) A Thai multimodal transport operator has been appointed as an agent by the overseas multimodal transport operator, issuing said overseas' bills of lading for export shipments. In this case, the principal of the multimodal transport is the overseas multimodal transport operator, and the agent is the Thai multimodal transport operator that signs the bill of lading on behalf of the carrier, the overseas multimodal transport operator.

⁶⁵ TT Club was founded in 1968, and has expanded to have more than 130 employees worldwide working in more than 20 offices.

Unlike general insurers, TT Club is a specialist in the field. TT stands for 'through transport', reflecting the door-to-door nature of the risks it covers. Club denotes its mutual status, with membership belonging to the members rather than shareholders. ⁶⁶ The insurance premium is based on the number of transactions or shipments available in a transport operation, including risk assessment of an insurance company in term of scope of operation and geography of the transportation.

iii) A Thai multimodal transport operator acts as a break-bulk or delivery agent for an overseas multimodal transport operator for the import shipments.

(c) Under group liability insurance – minimum five million Thai baht (\$155,000)

This group liability insurance covers principal and agents for foreign multimodal transport operators.

3. Rules and regulations – national competent bodies

Registration of a multimodal transport operator needs to be done with the national competent bodies, where the domestic law is applicable. The authority depends on what is stipulated in the law. Often, it is carried out at the department of land transport or the marine department.

Each country may categorize the type of the multimodal transport operators when they are registering. In countries that have not ratified any relevant conventions or agreements, there is no obligation to adhere to the registration agreements made within the community or in the subregion, region.

Registration

In the ASEAN community, Thailand has defined the type of registered multimodal transport operators as follows:

- (a) Domestic or local multimodal transport operator companies;
- (b) Foreign registered multimodal transport operator companies of countries that have signed treaties within the ASEAN community;
- (c) Other foreign registered multimodal transport operator companies, in general.
 - Type (A) a multimodal transport operator can be either a principal or an agent
 - Type (B) a multimodal transport operator can operate a multimodal transport operation in any ASEAN member states by appointing an agent in another member state for the operation or operate under its own offices or branches.
 - Type (C) a multimodal transport operator is required to appoint a local registered multimodal transport operator as an agent to perform the multimodal transport operation.

4. Customs procedure

Customs procedure is a key factor for facilitating or creating barriers for transit (trans-shipment) operations when a shipment is to connect to the next leg of transport. The complexity of the customs process can create tremendous handling and operational costs, including the time loss in the process.

In some countries, such as Singapore, only registered forwarders and cargo agents can submit a trans-shipment permit application if the shipment is covered by a through bill of lading or an air waybill to undertake the customs procedure. However, in some ASEAN member states, the customs transit procedure is not available. The customs

department determines how to facilitate transit operations, which at least must be aligned with Revised Kyoto Convention (RKC)⁶⁷.

In many regions and subregions, there is no one standard customs transit procedure for multimodal transport operations. In each country, the customs department may announce transit procedures that best suits the country.

In ASEAN, the ASEAN Framework Agreement on Facilitation of Goods in Transit, which focuses on land transport transit, provides a standard for customs transit operation for the road (cross border) transport under the ASEAN Customs Transit System – ACTS, which may extend to the rail transport in the future.

There is one concept of using "Two (ASEAN) Countries Transit" under ACTS which shows an interesting point about the combination of multimodal transport and goods in transit transport operation.

A good example would be a shipment from China to the Lao People's Democratic Republic via Viet Nam using the sea/land mode of transport. The Chinese transport operator is a multimodal transport operator who issues a multimodal transport document to the consignor.

A Vietnamese agent acting as a transit agent conveys the shipment through cross-border transport to the Lao People's Democratic Republic. Using ACTS, the Vietnamese agent becomes a "principal" in the transit declaration and performs the transit and transport operation of the shipment through its own licensed truck or hires a truck from licensed truck operator that has attained the ASEAN Goods Vehicle Cross-Border Permit⁶⁸ (AGVCBP) under the ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT).

In short, the (ASEAN) two countries' transit operation commences at Viet Nam and ends at the Lao People's Democratic Republic. The shipment from China arrives in Viet Nam and the Vietnamese Agent enters the transit declaration, prints the transport accompanying document for the driver. The truck carries the goods across the Vietnamese border into the Lao People's Democratic Republic. The driver uses only the transit accompanying document for the Lao People's Democratic Republic. The driver uses only the transit accompanying document for the customs procedure at the Viet Nam exit point and the Lao People's Democratic Republic entry point, without having to deal with any other formalities.

Under this scheme, the customs transit procedure is harmonized and simplified among ASEAN member States and the multimodal transport operation proceeds smoothly. This operation can extend to cover other countries within or beyond the ASEAN Community when it involves cross-border transport for a multimodal transport operation.

Note: this concept is an ongoing process of the agreement among the member States.

⁶⁷ The revised Kyoto Convention (RKC) is the main trade facilitation customs convention. It was developed by the World Customs Organization and entered into force on 3 February 2006. The Convention provides standards and recommended practices for modern customs procedures and techniques.

⁶⁸ 500 permits are available for each ASEAN member State.

Case study

A trial shipment involving a multimodal transport operation by land/air mode has been completed and was monitored by e-Seal to track the time used for the cross-border transport, which is a part of the multimodal transport.

The shipment of ladies' handbags made by Coach in a Phnom Penh factory bound for Los Angles, United States, can be shipped by sea transport from Sihanoukville Port via Busan port connecting to Long Beach port. However, due to high demand in the market and the long transit time by ocean carriage, the buyer decided to use the land/air shipment via the international airport in Bangkok.

The handbags were carried from the factory to the inland container depot in Phnom Penh where they were stuffed into the land-container and the export customs formality was carried out. After clearing Cambodia customs at the Poi Pet checkpoint, the containers were moved, crossing the border to Aranyaprathet in Thailand where the transit customs procedure was done. Thereafter, the containers were moved to Suvarnabhumi Airport for a connecting the flight bound for Los Angles. One more customs formality was necessary at Suvarnabhumi Airport.

The overall time used in transportation and customs formality was recorded by e-Seal. The tracking results were as follows:

- The result of total transit time was 27.57.49 (hh:mm:ss).
- Transit time in Cambodia was 18:51:48 (hh:mm:ss) from Phnom Penh to the checkpoint
- Transit time in Thailand was 09:06:01(hh:mm:ss) from the checkpoint to the airport.

The key delay issues were the driver's rest-time, which consumed 7.54.59 (hh:mm:ss) in the night and transit customs procedure in Thailand, which consumed 2.30.00 (hh:mm:ss). The changing of the trailer at the border took only 22 minutes.

Apparently, the transit customs procedure in Thailand took too long. If the concept "Two Countries Transit" under ACTS were to be followed, the customs transit procedure would take less than 15 minutes.

Based on this concept, the Cambodia multimodal transport operator would enter into ACTS as a principal, providing a transit accompanying document-TAD⁶⁹ to the driver for the customs transit process at the borders. Without a customs inspection and the formalities, the driver can transport trailers and containers directly to the airport without changing trailers. The transit operation time will become significantly shorter and, most importantly, the cost of the customs transit procedure will disappear.

The multimodal transport operator can benefit when it or its agent become an "authorized transit trader" (ATT)⁷⁰ who receives a "non-inspection of the goods" for export, transit and import clearance from customs.

⁶⁹ TAD is evidence of customs declaration of the transit goods shown by a barcode to be scanned by at every customs checkpoint in order to check the declaration and the goods with the system under the ACTS scheme. It is a document used for exit, transit and entrance at customs checkpoints. Only one customs declaration can be made under AFAGIT and AFAFIST at the origin country, and none during the journey

⁷⁰ ATT is very similar to AEO (authorized economic operator) but is applicable in the ASEAN Customs Transit System. Traders who are qualified to be Authorised Transit Traders (ATT) will be given certain privileges that include permission to start transit movements from their own premises at departure, and to deliver to their own premises at destination.

Another benefit is that the authorized transit traders can clear the export and import goods at their premises without a customs inspection.

The other point of the customs issue is the operating time taken by customs officials in each country. It is possible that the working hours and rest hours may be differ, which can obstruct the movement of the goods at border crossings.

International transport agreements – ASEAN case

In subregional communities, agreements that aim to facilitate the transportation may be different in terms of granting the traffic rights of cross border and interstate transport.

Members of ASEAN have approved three framework agreements related to the facilitation of the movement of the goods within the subregion;

- a) ASEAN Framework Agreement on Facilitation of Goods in Transit AFAFGIT
- b) ASEAN Framework Agreement on Facilitation of Inter-State Transport AFAFIST
- c) ASEAN Framework Agreement on Multimodal Transport AFAMT

These agreements facilitate transports operations in the following way:

The ASEAN Framework Agreement on Facilitation of Goods in Transit grants traffic rights to trucks that have been issued the ASEAN Goods Vehicle Cross-Border Permit to travel across designated routes provided by the transit countries of the member States. Each member State can issue 500 permits to truck operators.

The ASEAN Framework Agreement on Facilitation of Inter-State Transport gives 500 trucks of each member State the right to travel on designated routes provided by other members to carry goods from and to origin and destination countries. This benefits truck operators that practice back haul⁷¹, and unlimited access to all member States' territories on the agreed designated routes.

The ASEAN Framework Agreement on Multimodal Transport allows multimodal transit operators to change modes of transport en route when physical linkage of land is not available the connectivity for the entire journey benefit from the three frameworks, demonstrated in the case study discussed below.

Case Study: Combination of multimodal transport, goods in transit and interstate transport within ASEAN⁷²

(a) At the Batam Industrial Park in Indonesia, a consignor wishes to send some goods to Dagon 2 in Yangon, Myanmar. He can use the sea/sea mode if he controls the transportation, but shipment is FCA (free carrier – Incoterms) and the transport is controlled by the consignee.

⁷¹ Backhaul is the return movement of a transport vehicle from its original destination to its original point of departure. Carriers can transport a full load, partial truckload or less than truck load by following the same route.

⁷² A hypothetical case according to ASEAN Training Material on Multimodal Transport Operation

(b) A consignee prefers to use multimodal transport via Singapore, Malaysia and Thailand to Myanmar due to reasons related to customs procedures and better transit time.

(c) The possible modes of transport are as follows:

- Ferry from Batam to Singapore
- Truck from Singapore to Yangon

(d) Players involved in the operation:

- Myanmar multimodal transport operator
- Indonesian multimodal transport operator
- Singaporean multimodal transport operator
- License truck operator in Singapore

The Indonesian multimodal transport operator hires a ferry to carry the goods to Singapore and requests its agent, a Singaporean multimodal transport operator to handle the transport by truck to Yangon.

The Singaporean multimodal transport operator does not have an ASEAN Goods Vehicle Cross-Border Permit licensed truck for the transit and interstate transport operation under the ASEAN Framework Agreement on Facilitation of Goods in Transit and the ASEAN Framework Agreement on Facilitation of Inter-State Transport, so he has to hire a licensed truck operator who has this permit.

The truck travels from Singapore using ACTS, eliminating the need for the Singaporean multimodal transport operator to hire Malaysian and Thai multimodal transport operators as subcontractors, because the truck driver only has to submit one document t (transit accompanying document – TAD) at each customs checkpoint (entrance/exit at frontier posts). The truck travels across Malaysia and Thailand which, crosses the Thailand-Myanmar border to Myawaddy, clears the import customs formality and continues to transport the goods to the final destination.

In the above scenario, the activity of each party is as follows:

- The Indonesian multimodal transport operator acts as a carrier/principal for the multimodal transport operation from Batam to Yangon and issues one set of the multimodal transport bill of lading to the consignor. The consignor sends the original bill of lading to the consignee in Myanmar.
- The Singaporean multimodal transport operator is a subcontractor (or agent) for the Indonesian multimodal transport operator to transload and transport the goods from Singapore to Yangon using a truck from the operator (common carrier) that has an ASEAN Goods Vehicle Cross-Border Permit permit. The Singaporean multimodal transport operator enters into ACTS as a principal or declarant for the transit operations and is responsible for any customs debt, which may incur from Singapore to Myanmar. Upon the arrival of the truck, the Myanmar multimodal transport operator collects the bill of lading from the consignee in exchange for the goods.
- The Myanmar multimodal transport operator is the party that deals with the consignee for the contract of carriage and the freight charge of the entire transport and reimburses the cost of transportation to the Indonesian and Singaporean multimodal transport operators.
- The Indonesian multimodal transport operator is the party that enters into the contract of carriage with shipper based on AFAMT.
- The Singaporean multimodal transport operator is a subcontractor hired by the Indonesian multimodal transport operator, but becomes a principal under ACTS.

Note: The Singaporean multimodal transport operator can be hired as a subcontractor by the Myanmar multimodal transport operator.

The multimodal transport operator should have a good understanding of these agreements and know how to use them correctly and efficiently.

5. The carrier's rules

Often, unforeseen circumstances can occur and result in increased operating costs. One scenario to explain this is as follows:

A shipment from Kobe, Japan to Poi Pet, Cambodia by sea/land mode via Thailand is set to arrive at Laem Chabang port. A Thai multimodal transport operator acting as an agent, is subcontracted by the Japanese multimodal transport operator to arrange the transit operation to carry the container cross the border to Poi Pet without transloading.

Unfortunately, shipping lines are not allowed to move containers across the border according to its rules. The cost of unstuffing the container and transloading the goods onto the truck, including the trucking charge is incurred. In addition, the Thai multimodal transport operator must find a transloading location where it is allowed by customs and might have to pay additional charges.

Another scenario, which has the most pain points, involves freight forwarders, NVOCCs or multimodal transport operators', "container deposit" for cross border containers. Certainly, shipping lines may allow their containers to cross borders, however, they collect a deposit from the operator, which in many cases exceeds \$3,500 per container.

For large transit shipments, freight forwarders, NVOCCs or multimodal transport operators may not have sufficient funds to cover these container deposits, and in the worst case, the return of the container deposit fee takes over a month after the containers are returned to the carrier's depot at the transit country. This container deposit should be noted, especially by subcontractors or agents of multimodal transport operators that prefer to carry out transit/trans-shipment procedures. This occurs in South-East Asia.

In the shipping business or other modes of transport, multimodal transport operators should be aware that not all types of the goods are accepted by the carriers, including at the place of delivery at the destination country under such circumstances as risks of wars, political issues or sanctions.

Moreover, the dangerous goods accepted by a shipping line, may not be accepted by this same shipping line in the next booking. This may be because the ship operator of his alliance refuses to receive such dangerous goods.

6. Selection of the transport routes

The selection of transport routes occurs at the planning stage when the multimodal transport operator is requested to operate the transport by traders.

The wrong choice can lead to delays or even invisible costs, which is ultimately borne by the multimodal transport operator.

Types of multimodal transport corridors

Below are descriptions of the types of multimodal transport corridors:

- (a) **Single corridor:** Available routes and modes of transport between **two countries**, involves multimodal transport. For example, a shipment from a factory in Busan, Republic of Korea bound for to Ho Chi Minh City, Viet Nam can be transported using multimodal transport:
 - Land/sea or land/air (door to port or terminal);
 - Sea/land or air/land (port or terminal to door);
 - Land/sea/land or land/air/land (door to door).

The arrangement of a multimodal transport operation is based on a business contract between a seller and buyer under the Incoterms.

(b) Multiple corridor: Available routes and modes of transport between origin and destination countries involves multimodal transport with a transit or trans-shipment operation via the third countries or more countries. For example, the malt from France and Belgium and hops and yeast from Germany are shipped to the Lao People's Democratic Republic for the production of "Beerlao" via Laem Chabang Port, Thailand.

As there are a lot of alternative gateway ports in Europe, multimodal transport operators should consider the location of malt silos that are close to the most suitable ports to ship the malt. It is also not necessary to make the shipment transit at Laem Chabang port; it can be done at the Bangkok port in Thailand, or the Danang port in Viet Nam depending on the cost and time used, as well as other factors.

Multimodal transport operators need to consider all available routes and possible modes of transport from the origin place to the final destination, then select the best choice based on other factors, such the customer requirements.

Hub of multiple corridors

A hub of multiple corridors is where the mode of transport is changed to advance the goods to the next station or the final destination.

A trans-shipment hub is mostly referred to as the place where the mode of transport is changed in forwarders' world.

Trans-shipment⁷³ is the word most used by freight forwarders and multimodal transport operators, however, changing the mode of transport is called "transit" when goods are transferred under customs control from one customs office to another office in the same country.

Often, a multimodal transport operation may use more than one hub if hubs or transit places are available in more than one place on the intended multimodal transport route.

⁷³ Trans-shipment also refers to a customs procedure under which goods are transferred under customs control from the importing means of transport to the exporting means of transport within the area of one customs office which is the office of for both importation and exportation. Source: Revised Kyoto Conventions.

Major hubs for a multimodal transport operation

South-East Asia:

Singapore serves as sea/air hub for shipments of meat products from New Zealand to the European Union and shipments of textile products from Cambodia to the United States. It also serves as a hub for shipments bound for South Africa from the countries in the subregion.

Malaysia serves as a hub for Brunei Darussalam for unimodal and multimodal transport, as well as the gateway for Halal food to the Middle East. Malaysia also serves as a hub for the southern part of Thailand for rubber products bound for China using inland waterways connecting with sea transport.

Thailand is a hub for the Lao People's Democratic Republic, especially for sea/land and land/sea modes for shipments to and from Europe, for Cambodia for land/air mode for to United States for leather and textile products, and for Myanmar using land/sea and land/air modes to Japan and the United States.

Viet Nam can serve as hub for the Lao People's Democratic Republic to access sea transport to import and export bulk shipments. Viet Nam also can serve as hub for China for the road/rail transport mode.

The Lao People's Democratic Republic has become a hub for South China for the rail network in China to connect with its railway and change the mode of transportation by using trucks or the railways of Thailand to carry goods to the port in Bangkok or Laem Chabang port for final delivery by sea in other countries.

Far East Asia:

Busan Port in the Republic of Korea is a trans-shipment hub for maritime, serving multimodal transport to China, Mexico and the United States.

Hong Kong, China is major hub for China for the shipment to and from any part of the world. It is also possible that in the future that Shenzhen, China will be major hub for China.

Shanghai, China plays a vital role as the maritime hub of China. It serves multimodal transport operations in China nationwide. Chengdu, China is the hub for rail transport from China to the Russian Federation and Europe under the Belt Road Initiative.

Case Study: New Silk Road from Europe to Japan⁷⁴

Fiat engines are loaded into containers at a Foggia factory in Italy and dray the containers to Nuremberg, Germany.

These containers are transferred to a DHL train that first heads to the Polish terminal Mataszewicze, which is on the border with Belarus, using the western corridor via Kazakhstan up to the western Chinese city of Chengdu and conveys to the port in China for sea transport to the final destination, Yokohama Japan.

The sea transport takes 60 -65 days. Total transit time is 35 days.

⁷⁴ Source: DHL showcase **106**

The Middle East

Dubai, United Arab Emirates is the major hub for Europe in the Middle East, especially for shipments from South-East Asia and South Asia by sea that connect to air transport.

West Asia

Bandar Abbas, Islamic Republic of Iran is a major hub for the member countries of the Commonwealth of Independent States⁷⁵ where sea transport shipment is connected to land transport for transport to the final destinations.

Africa

Mombasa, Kenya serves as a gateway to the East African Coast and Nairobi is the hub for East and Central Africa.

Cape town and Durban in South Africa are traditional hubs for Africa. In West Africa, Lomé, Togo and Accra, Ghana serves as hubs.

Europe

All major seaports in Europe are gateways and hubs to connect with road, rail and inland waterway transport within Europe. On the continent, combined transport is more popular for the carriage of routine business.

Schiphol Airport in Amsterdam and Frankfurt Airport in Germany are major hubs for the air/land mode in Europe.

North America and South America

Miami in the United States is a hub that provides an integrated logistics solution for shipments from all over the world to Latin America and the Caribbean, as well as for shipments from Latin America and the Caribbean to the United States.

Manzanillo in Mexico is the gateway to Texas under the sea/ land mode and vice versa.

For South America, the major airports that serve as gateways are in Sao Paulo, Brazil and in El Dorado, Colombia.

The top five seaports in South America:

- Santos, Brazil
- Colon, Panama
- Balboa, Panama
- Cartagena, Colombia
- Manzanillo, Mexico

⁷⁵ Commonwealth of Independent States – 12 States

7. Availability of common carriers in the corridors and the means of transport

The availability of common carriers for designated planning of the transportation route is important. It is not only necessary to consider whether there are any common carriers that provide the service on particular routes, but also whether the goods being shipped are suitable for the common carriers. Huge bulk shipment is not suitable for container liners that regularly operate on a particular transportation route.

Even though common carriers may be available in the intended routes, the means of transport may not be suited for the goods. For example; the project cargo may require a special type of equipment, such as a floating crane or a self-propelled modular transporter (SPMT) for delivery.

8. Facilities and situation at the connecting point.

- (a) The connecting point or the place where the mode shift is carried out is one of the factors that multimodal transport operators should seriously consider in terms of lower handling cost and the freight cost for the next legs of transport. Not only must these elements be taken into account, but the multimodal transport operator also must be aware of the current situation at that particular connection point, transit place or trans-shipment place. This is because there could be congestion or other circumstances, such as backlogs or blank sailing⁷⁶, which would inhibit the multimodal transport operator from performing the operation according to the plan.
- (b) The infrastructure and equipment availability at the transit/trans-shipment place and whether the connecting point is suitable for carrying out a transit/trans-shipment operation are other issues that a multimodal transport operator should be aware of. The latter is also based on the nature of the goods, whether the goods require any special equipment and the rules or regulations of the transit/trans-shipment place, as some commodities may be banned from the place. For example, some dangerous goods may not be allowed to enter into some ports, or some project cargo cannot be handled, as they are too heavy or too high to convey from one place to another place in the transit countries.

The other issue is the accessibility of the facility to connect to the port, the air terminal or a frontier post for the next phase of transport.

Safety and security along the way is another factor that multimodal transport operator must consider when choosing the transportation route.

9. Alternative transport routes and time/cost module

When a multimodal transport operator designs the transport routes, he should also plan alternative routes, and find a window or gateway of the transit countries on those particular routes.

The multimodal transport operator must realize that each alternative has different costs and time frames. For example; transportation from Thailand ex Laem Chabang port to Kaiserslautern in Germany can be completed via many alternative routes, as in Europe the connectivity of the ports and road or rail, including inland waterways

⁷⁶ Blank sailing refers to as void sailing, happens when an ocean line service operator decides to cancel a call or skip a particular port, region, or possibly an entire leg on the scheduled route.

is very comprehensive. That is, any major port in Europe can be considered as connecting points or for shifting the mode of transport during the planning stage of the multimodal transport routes.

A sample of the possible routes in this case are the following:

- Laem Chabang Hamburg Mannheim Kaiserslautern
- Laem Chabang Hamburg Mainz Kaiserslautern
- Laem Chabang Rotterdam Mannheim Kaiserslautern

Using sea transportation from Laem Chabang to a major port in Germany is a very obvious decision. In practice, the Hamburg port may be selected as a connecting point. This would come as priority because the port is in Germany.

From Hamburg, the goods can be moved by rail to Mainz or Mannheim in Germany and finally transported by truck to Kaiserslautern, Germany.

Another possible route is to use seaborne transport bound for Rotterdam port in the Netherlands and change the mode of transport by using inland waterways (barge) to Mannheim and final delivery by truck to Kaiserslautern.

And yet another possible choice is to use the Antwerp port in Belgium as the gateway for the connecting point

An analysis was conducted on the competitive advantage between the ports at Antwerp and Rotterdam⁷⁷. for shipments sent to and from Singapore to Basel via these two ports.

In terms of freight charge from Singapore to both ports, there is no difference in costs for shipping a container, but the terminal handling charge of Antwerp port is approximately 15 per cent more than the charge at Rotterdam port.

In general, the research indicated that the trucking charge was cheaper out of Antwerp port, while the cost of using a barge was the same, except for very short distances, as the Belgium Dutch barge network gave Rotterdam a competitive advantage and rail transport was cheaper from Rotterdam than from Antwerp.

ANTWERP			ROTTERDAM				
	Truck	Barge	Rail		Truck	Barge	Rail
Ocean freight and terminal handling charge	645	645	645	Ocean freight and terminal handling charge	665	665	665
Surface transport cost	1260	480	806	Surface transport cost	1770	480	510
Total	1905	1125	1451	Total	2435	1145	1175
Transit time from Antwerp port	9 hrs.	6 days	3 days	Transit time from Rotterdam port	10 hrs.	5 days	3 days

The table below shows the cost in euros and time of each mean/mode of transport

One may say that Antwerp is more competitive for using trucks and Rotterdam is more competitive for using the rail transport. Barges are too slow, and the cost is not much different from rail transport in Rotterdam.

⁷⁷ PwC research, 2015

To decide which mean/mode of transport is suitable, the multimodal transport operator may need to discuss with the client about weighing costs with time and deciding which takes precedence.

The time/cost – distance methodology⁷⁸ is the graphical representation of the cost and time data associated with the transport processes. The purpose of the model is to identify inefficiencies and isolate bottlenecks along a particular route by looking at the cost and time characteristics of every section along a route.

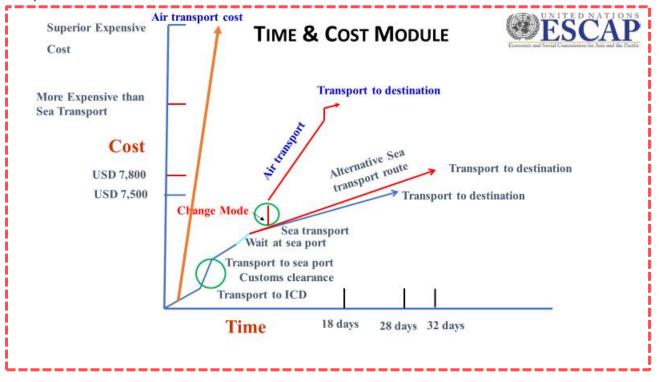
This would help policymakers do the following:

- Compare over a period of time the changes of cost and/or time required for transportation on a certain route;
- Compare and evaluate competing modes of transport operating on the same route;
- Compare alternative transit routes.

Theoretically, if the only three factors to consider are time, cost and distance, to determine which route is the most suitable, then the Time/Cost - Distance methodology would help in making the decision.

However, according to the business practices, distance would not be a major concern for multimodal transports operators and their clients.

The time/cost module can be used for analysis of alternative transport in either the same or different modes and routes of transport according to the above example for a shipment from Laem Chabang, Thailand to Kaiserslautern, Germany. it also can be used to show multimodal transport or unimodal transport cost/time of each particular route.



Time and Cost Methodology in business practice

⁷⁸ UNESCAP Time/Cost – Distance Methodology

The illustration in the diagram shows four choices for the transport arrangement.

- 1. In the original plan, the shipment is expected to arrive in 28 days using normal sea transport at cost of \$7,500.
- 2. Using an alternative transportation arrangement, the shipment takes 32 days and is slightly more expensive, costing \$7,800.
- 3. Changing the mode from sea transport to air transport, the shipment could arrive in 18 days, but the cost would be higher than the original plan.
- 4. When shipping by air freight, the cost is very expensive, but the shipment could arrive in two days.

If the supply chain is broken and the lead time to deliver the goods remains only 20 days, the consignor may have to find another alternative. It could not resort to the second choice because the estimated arrival time is later than the time for the original plan. The fourth option, shipping by air, is way too expansive even though the goods would arrive in two days. The last remaining alternative is the third choice, multimodal transport by changing sea transport to connect with air transport. The goods would arrive in 18 days, but the consignor would have to pay a higher freight charge. This rate, however, would be a much lower than the charge for air transport.

9.1 Different destination

One problem with the alternative transport routes for a multimodal transport operation is the destination, which may be different from the original plan when using unimodal transport. Under some circumstances, to achieve a timely delivery, multimodal transport may not be able to carry the goods to the intended final destination, but only to the nearest possible place.

Case study

A t-shirt manufacturer in Thailand enters into a contract with a buyer in the Netherlands as CFR Rotterdam port and commits to delivering the goods within three months after receiving the purchase order. The production lead time is two months, and the seller expects the sea transport transit time to be a month, while the actual transit time is estimated to be 24 days.

The supply chain is broken, resulting in a 10-day production delay. As the commitment for delivery is three months, and the seller has only 20 days left to transport the shipment, sea transport cannot be used because the travel time is 24 days. An alternative transport is air freight, but it is too expensive, and the cost would consume all the profits. Accordingly, using air transport is not feasible.

Multimodal transport is probably the best option at this point. Consequently, a multimodal transport operator is contacted about availability to transport the good within the specified time frame at a lower cost than air transport.

The operator calculates the overall cost and lead time and finds that the cost is higher than sea transport by approximately five times, but that the total transit time could be achieved within the time frame by using sea/air mode from Laem Chabang to Dubai by sea transport, and then transport from Dubai to Schiphol Airport by air transport due to no suitable flight bound for Rotterdam airport. The t shirt manufacturer agrees to this option in order to meet the time commitment.

Having not realized that the destination, Rotterdam seaport, is different from the original sales contract, upon arrival of the shipment at Schiphol Airport, the buyer complains to the t-shirt manufacturer.

In this situation, the t-shirt manufacturer may offer and pay the land transportation cost to the buyer's premises from Schiphol Airport. That is a very simple solution. In order to save on costs, the t-shirt manufacturer should ask the buyer the difference in transportation cost from Rotterdam seaport to the buyer's premises compared with the cost if the goods had been sent to Schiphol Airport. If the transportation cost from Schiphol Airport to the buyer's premises is cheaper than from the Rotterdam seaport, the t shirt manufacturer should not have to pay anything, but if it is higher, the seller should make up the difference.

10. The network and cost

The networks of multimodal transport operators vary. They can be grouped into three categories:

- (a) **Own** This represents the operator's own branch or own office along the transportation route to operate transit and deliver;
- (b) **Same network group** –The agents or subcontractors of the operator are in the same network group. All parties know each other and work together closely;
- (c) **Cross network** –The agents or subcontractors of the principal (multimodal transport operator), are not in the same network group and do not know each, but the operator knows all the parties. The coordination of the operation among the agents may not be smooth.

These network categories are reflected in the cost of the principal (multimodal transport operator). For instance, the own network may use the cost centre in which all relevant branches or offices may provide quotes for the handling and transit operation, including the freight charge for the next leg of the transport, without adding any profit offered to the principal. The principal marks up the quote for its own profit and presents the transport costs to the traders on a cost-plus basis. This is called "cost centre", which is used among multinational companies.

In contrast, the network comprised of agents or subcontractors may create a higher cost for the principal, as those agents or subcontractors have to add their profit for participating in the operation, and in the worst case, add the profit to the freight charge of the next leg of the transportation. This also called "profit centre". Accordingly, the net cost of the same operation between "own network" and "agent network" is different. The own network has the advantage of a lower costs, which could help make a multimodal transport operator's offers to traders more competitive.

11. Incoterms

Multimodal transport operators should have a good understanding about Incoterms. Especially, the part about costs related to transport and the operations that the parties in the operation must bear.

A multimodal transport operation involves all of the Incoterms, even though the usage of FAS, FOB, CFR or CIF terms, are only for the carriage of goods by sea.

The Incoterms stipulate that these four terms are used for maritime and inland waterway transport as the main contract of carriage. This can lead to misunderstandings that they cannot be performed in a ultimodal transport. That is not true.

For example, a FOB shipment can be carried out by a multimodal transport from port to door. In fact, a consignee that enters into a contract of carriage with a multimodal transport operator, purchases the goods under FOB terms

from the seller, and instructs the operator to receive the goods from the seller, on board the vessel in the origin country and deliver them to its premises at the destination country. The seller merely places the goods on board the vessel and the obligation under Incoterms is completed. The risk and costs end after the goods are on board. The seller picks up the bill of lading, which indicates that the port of loading and place of receipt is at the origin port, but the final place of delivery is the "consignee door", not the port of discharge.

In another scenario, the CFR or CIF terms are used in a contract of carriage between a seller and a multimodal transport operator. The buyer picks up the delivery at the port of destination. The combination of land transport and sea transport under one bill of lading in which the place of receipt is "door" and place of delivery is "port" is the multimodal transport operation. Under this scenario, the obligation and risk of the seller is when the goods are on board the vessel.

Not only gaining a good understanding of the Incoterms, the multimodal transport operator should also be able to explain them to the traders he deals with. Often, misunderstandings between shippers/consignors and consignee about the Incoterms occur, especially with regard to delivery, risk transfer and cost.

Case study: a real-life case

A shipper in Hong Kong, China requested a multimodal transport operator to carry freight under the DDP term⁷⁹ to Don Muang Airport in Bangkok, whereby the shipment was Hong Kong ex-factory. This shipment was carried by land transport to the port in Hong Kong, China and then sent by sea transport to the Bangkok port. After arrival, the agent of the multimodal transport operator cleared the goods from the customs house and paid the taxes. Before delivering the goods to the consignee, the agent of the transport operator asked the consignee which to specify area in Don Muang Airport for the delivery. The consignee instructed the agent to send the goods to the airport and the place/area would be given later after the arrival of the truck carrying the goods.

Upon arrival, the consignee requested the agent to unload the cargo and transfer it to the fourth floor of the new terminal. The agent refused because this was a DDP shipment, and neither the shipper nor multimodal transport operator were obligated to unload the goods at the destination.

The consignee did not agree. The agent of the multimodal transport operator tried to explain the scope the DDP term, but the consignee insisted on receiving the goods on the fourth floor of the new terminal. The truck carrying the goods at the airport was retained for seven days due to the consignee's refusal to receive the cargo.

The agent could not claim for the truck detention and wished to be reimbursed for the cost from the shipper through the principal in Hong Kong, China. The shipper refused to pay it.

The case was settled, and the consignee paid the truck detention fee and for the stevedore to unload the goods and delivery at the place after several explanations were given by the agent.

12. The nature of the goods and the selection of the type of carriers

It is inevitable that the nature of the goods and the type of carriers to be used go hand in hand.

To select a common carrier suitable for the goods being shipped is based on the nature of the goods including the packing of them.

 $^{^{79}}$ DDP term, the seller has no obligation to unload the goods at place of destination

There are many types of cargo, for example general cargo that can be transported by either a conventional ship or a container vessel. Some dangerous cargo may be rejected by carriers or masters. Accordingly, a multimodal transport operator should be able to select the most appropriate carrier to ship the goods. It can be a bulk carrier, container liner, RO/RO, project cargo carrier, or airline using special aircraft that is scheduled or not scheduled to carry shipments in that transport corridor.

Major types of the goods can be divided into several categories, as follows;

1. Bulk cargo

Commodity cargo that is transported unpackaged in large quantities. It can be in the form of liquid or granular, as a mass of relatively small solids. Examples of dry bulk cargo are coal, grain, cement, fertilizers, wood chips, iron and scrap metals. Examples of liquid cargo are LPG, chemicals, oil, petroleum, juices and vegetable oil.

Dry bulk cargo is usually dropped or poured, with a spout or shovel bucket, into a bulk carrier ship's hold, railroad car, or tanker truck/trailer/semi-trailer body or by using a belt conveyor with hopper to feed into the ship's hold or a pre-slinging (a cargo sling or net) to load the goods onto conventional vessels.

Smaller quantities (still considered "bulk") can be boxed or drummed, palletized or filled in a dry bulk container for dry bulk cargo or even be filled in an ISO tank container or flexitank container or intermediate bulk container (IBC) for liquid cargo.

2. Project cargo

This refers to cargo that does not fit into a standard general-purpose container⁸⁰, especially in sea transport, as it is too large and heavy for normal handling and requires extra care, using a special handling method and equipment. In general terms, it is an oversized, OOG (out of gauge).shipment. In container transport, a flat rack container, open top container or platform can be used. For non-container transport a RO/RO vessel or bulk-project carrier can be used. Nonetheless, whether the transport is done by container or non-containerization, a good lashing is required.

3. General containerized cargo

This refers to goods that can be stuffed into a standard ocean container, which is available as a dry and reefer container. The general size of the container is 20', 20' high cube, 40', 40' high cube and 45' container⁸¹.

In many cases, the multimodal transport operator may have to lease the equipment, for example; on the Trans-Siberian route or New Silk Road route from Europe to the Far East or vice versa.

There are several types of leases for containers:

One-way – A container is leased in one country and dropped off in another country. **Round trip** – A container is leased and returned in the same country.

⁸⁰ Some parts of the project cargo can be stuffed into general-purpose dry containers.

⁸¹ See chapter two.

Short lease – A 60 to 90-day lease.

Long-term lease – A lease of at least two years.

Several container leasing companies are members of the Institute of International Container Lessors. Among them are the following:

- Amficon (United Kingdom)
- Interpool
- GE Seacon
- Gold
- Cronos
- Flexivan
- Textainer
- Trac
- TRITON
- Florens
- CAI

4. Air freight cargo

Airfreight shipments are loaded into containers normally called ULD or a unit load device. An ULD can be in pallet form or container form. It is used for carrying luggage, freight and airmail on wide-body aircraft or specific narrow-body aircraft. It allows a large quantity of cargo to be bundled into a single unit. Each ULD has its own manifest or packing list in order for the contents to be easily tracked.

The unit load device pallets are rugged aluminium sheets with rims designed to lock "cargo nets" lugs. The pallets are closed containers of aluminium or a combination of other steel for strength. Some units have built-in refrigeration units.

A multimodal transport operator needs to be informed the names of the air freight appointed as the airline's agent, and the International Air Transport Association (IATA) cargo agent and consolidator.

This airfreight forwarder assists the multimodal transport operator in determining the load factor and the size of the cargo and whether it is suitable for the aircraft and the ULD, including how to handle special cargo that needs special handling according to IATA TACT rules, such as animals, arms, war materials, dangerous goods, oversized or heavy cargo, perishable goods, wet cargo, temperature-controlled products and general cargo⁸².

In many cases the multimodal transport operator is an agent of the airline and an IATA cargo agent, therefore, has good knowledge on how to handle the air cargo, including whether to book a charter flight.

5. Dangerous goods

Dangerous cargo requires an experienced operator to ensure the safety of the ship, aircraft, road hauler and stevedore when handling or transporting it.

⁸² The Air Cargo Tariff and Rules

The International Maritime Organization plays a vital role in dealing with technical and operational matters related to the following subjects: development of necessary amendments to relevant conventions and other mandatory and non-mandatory instruments; and the preparation of new mandatory and non-mandatory instruments, guidelines and recommendations for sea transport.

Among the conventions and mandatory instruments (as may be amended from time to time) for dangerous are the following:

- 1974 SOLAS Convention (chapters VI and VII and other relevant parts, as appropriate);
- MARPOL (Annexes III and V, as appropriate);
- International Convention for Safe Containers (CSC), 1972;
- International Maritime Dangerous Goods (IMDG) Code and related supplements;
- International Maritime Solid Bulk Cargoes (IMSBC) Code and related supplements;
- International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk (IGC Code);
- International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on board Ships (INF Code);
- International Code for the Safe Carriage of Grain in Bulk;
- Code of Safe Practice for Cargo Stowage and Securing (CSS Code).

Packaging, marking, stowage and segregation of dangerous goods are covered under the International Code of Safe Practice for Cargo Stowage and Securing.

For air cargo, a multimodal transport operator needs to be aware of the IATA DGR⁸³ and ICAO TI regulation⁸⁴ and pay special attention to the compulsory requirements on shipper's declarations, labelling and handling, limited quantities and restricted articles with regard to the air transport of dangerous goods.

⁸³ IATA Dangerous Goods Regulations

⁸⁴ Technical Instructions for the safe transport of dangerous goods by air - International Civil Aviation Organization

The table below demonstrates the class of Dangerous Goods both for Maritime and Air Transport.

DG class	Air and maritime cargo
Class 1	Explosives with 6 Divisions
	Div. 1 Mass explosion
	Div. 2 projection hazard not mass explosion
	Div. 3 fire hazard, minor blast and/or projection
	Div. 4 no significant hazard
	Div. 5 very insensitive substances /mass explosion
	Div. 6 Extremely insensitive/not mass explosion
Class 2	Gases
	Div. 1 Flammable gas
	Div. 2 Non-Flammable, non-toxic gas
	Div. 3 Toxic gas
Class 3	Flammable liquids
Class 4	Flammable solids, substances liable to spontaneous combustion and substance which in contact with water, emit flammable gasses
	Div. 4.1 Flammable solids
	Div. 4.2 Substances liable to spontaneous combustion
	Div. 4.3 Substances which, in contact with water, emit flammable gases
Class 5	Oxidizing substances and organic peroxides (subdivided as follows)
	Div. 5.1 Oxidizing substances
	Div. 5.2 Organic peroxides
Class 6	Toxic and infectious substances
	Div. 6.1 Toxic substances
	Div. 6.2 Infectious substances
Class 7	Radioactive material
Class 8	Corrosives
Class 9	Miscellaneous dangerous goods

An operator that handles dangerous goods in whatever mode of transport must be well versed in handling and shipping them. Some of the items, the operator needs to be aware of are as follows :

- 1. The number allocated by the United Nations Economic and Social Councils Committee of Experts on the Transport of Dangerous Goods in order to know proper shipping names.
- 2. Proper shipping names are used for transport that appear on the packings or documents.
- 3. Dangerous goods classes, which are divided into the nine classes, shown above.
- 4. The relevant packing groups, according to the degree of danger of the goods:
 - Packing group I—high danger
 - Packing group II—medium danger
 - Packing group III—low danger.

- 5. Containment of the product to be used can be divided in the context of a multimodal transport operation as follows:
 - **Conventional packing** a tradition container, such as bags, drums, cylinders and or cartons.
 - **IBC intermediate bulk container –** a medium rigid packaging for storing and transporting liquid or dry powder cargo.
 - Tank container container for holding large amounts of liquid dangerous cargo
 - **Bulk container,** which is available in five categories:
 - (a) Sheeted bulk container: an open top bulk container with rigid bottom (including hoppertype bottom), side and end walls and a non-rigid covering. It includes bulk containers with an opening roof, side or end wall that can be closed during carriage.
 - (b) Closed bulk container: a totally closed bulk container, which has a rigid roof, sidewalls, end walls and floor (including hopper-type bottoms). The term includes bulk containers with an opening roof, side or end wall that can be closed during carriage.
 - (c) Flexible bulk container (FBC)⁸⁵: a hermetically sealed container for bulk cargo with a capacity of 10 m3 or more with a not-rigid body, a loading sleeve being locked by folding and a discharging sleeve with two contours preventing inadvertent discharging. Flexible bulk container is provided in its top part with lifting strops (slings) being an integral part of container strengthening carcass."
 - (d) Portable tank: a bulk packaging (except a cylinder having a water capacity of up to 1,000 pounds) designed primarily to be loaded onto, or temporarily attached to a transport vehicle or ship and equipped with skids, mountings, or accessories to facilitate handling of the tank by mechanical means.
 - (e) Multiple-element gas containers (MEGC): built to the similar standards as portable tanks and are used for the transport of non-refrigerated gases.
- 6. Knowledge about the multiple classification of dangerous goods, for example, some dangerous goods may fall into more than one class, such as toxic and flammable solids or corrosive as well as "non-otherwise specified" (a mixture of several hazardous articles in one chemical product), which may have a specific United Nations number.
- 7. Hidden dangerous goods, such as camping equipment, kerosene, matches, and magnet or household goods purpose, such as solvent-based paint and adhesives.
- 8. Limited quantities (LQ): the maximum quantity per inner packaging or article for transporting dangerous goods as limited quantities, which can be found in column 7a of the dangerous goods list. The excepted quantity (EQ) is the maximum quantity per inner and outer packaging for transporting dangerous goods as excepted quantities appear in column 7b in the dangerous goods list. Both are not available for all types of dangerous goods.
- 9. Labelling, marking and placarding is necessary to ensure the correct identification of dangerous goods in the transport chain.
- 10. Material safety data sheet (MSDS) or safety data sheet (SDS): the document that product owners need to prepare for transport operators to understand what is and how to handle dangerous goods in various situations, including transportation. It may contain a description of the dangerous goods, such as the United Nations number, the proper shipping name, class of dangerous goods, packing group and subsidiary hazard including flash point, LQ/EQ and marine pollutant.

⁸⁵ Definition given by the Economic Commission for Europe: Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals – 2009.

The MSDS/SDS needs to be tendered to the multimodal transport operator to enable the submission of this document to the carrier for approval or acceptance for carriage. The shipping line or airline determines whether it will accept the dangerous goods. Other factors involved in the acceptance are stowage and segregation of dangerous goods before being loaded on board.

Same dangerous goods may be rejected by a shipping line that had previously accepted them. In a shipping alliance, the vessel in the next voyage may not be operated by that particular shipping line, but instead by another vessel that is not willing to accept that dangerous goods cargo.

Land transport always gets involved with shipping dangerous goods. Some commodities are not considered to be dangerous in maritime transport, but are seen as dangerous goods when carried by land transport.

13. Packaging

The type of packaging required depends on the following:

- (a) Nature and type of goods
- (b) Volume
- (c) Weight
- (d) Number of packages
- (e) Types of packages
- (f) Mode of transport
- (g) Final destination

Types of packaging

The seller of goods must package and mark the shipment in manner that is appropriate for the type of transport being used. Packaging appears in various forms. Among them are the following:

Pallet – A flat transport structure that supports goods in a stable fashion while being lifted by a forklift, pallet jack or front loader. The goods are often placed on a pallet secured with strapping, stretch wrap or shrink wrap before shipment. The pallet is made of wood or plastic.

The types of pallets are as follows:

(a) Stringer Pallet

A stringer pallet uses a frame of three or more parallel pieces of timber (called stringers). The top deckboards are then affixed to the stringers to create the pallet structure. The pallet can have a notch cut into them, allowing "four-way" entry.

(b) Block pallet

A block pallet is typically stronger than a stringer pallet. Parallel and perpendicular stringers are used to better facilitate efficient handling. A block pallet is also known as a "four-way" pallet, as a pallet-jack may be used from any side to move it.

(c) Perimeter base pallet

All stringers and some block pallets have "unidirectional bases," namely bottom boards oriented in one direction. While automated handling equipment can be designed for this, often these pallets can operate faster and more effectively if the bottom edges have bottom boards oriented in both directions.

Skid

Skid is in the same form as a pallet, but it has no bottom deckboards.

Carton

A box or container, usually made of paperboard and sometimes of corrugated fibreboard. Many types of cartons are used in packaging. A carton is also referred to as a box.

Crate

A large shipping container, often made of wood, typically used to transport or store large, heavy items. Specialized steel crates are designed for specific products, and are often reusable. They are also referred to as "returnable racks

Wooden box/case

(a) All-wooden boxes

Wooden containers of the highest quality. Floor and walls are usually made of unplanned boards. Wood board used for boxes must be dried or with natural humidity.

(b) Plywood boxes

The packaging consists of wooden floor and walls, which are formed by wooden bearing parts with a plywood coating of different widths – typically plywood of thickness 9, 12 or 15 mm. If required, the structure can be manufactured as small all-plywood (non-wooden), eliminating the need for a heat treatment certificate.

(c) OSB boxes (oriented strand board)

The packaging consists of a wooden floor and walls, which are formed by wooden bearing parts with OSB coating of different widths – typically of thickness 9, 12 or 15 mm.

Drum

A cylindrical container used for shipping bulk cargo. Drums can be made of steel, dense paperboard (commonly called a fibre drum), or plastics, and are generally used for transporting and storing liquids and powders. They can easily replace containers.

IBC - Intermediate bulk containers

Known as IBC totes, IBC tank, IBC, or pallet tanks, they are reusable, multi-use industrial-grade containers engineered for mass handling, transport and storage of liquids, semi-solids, pastes or solids. The two main categories of IBC tanks are flexible IBCs, such as a jumbo bag, and rigid IBCs.

Other packing types, such as bundle packing, which is a group of things fastened together for convenient handling by using straps to bundle up items and roll packing for newsprint paper or kraft paper. The latter may require a forklift (paper roll clamp) to handle while for packing steel coils, a heavy lift forklift may be needed for handling.

One good example of handling extraordinary merchandise is shown below:

The whole piece of an escalator produced in Thailand is packed in a wooden case for transport to a country in the Middle East for installation in in a mall.

Containerized transport is not possible for the lengthy size of the goods, therefore, a conventional ship is required to carry the shipment. Upon arrival at the port, a low bed trailer is required to carry the box to the mall where it will be installed, which is under construction. At the mall, a crane is required to lift the case and install the escalator. A multimodal transport operator begins to carry out the carriage contract by packing and moving the shipment to the port of loading until delivery at the site after customs clearance, and then provides a crane to offload the escalator from the trailers on site. The operator needs competent subcontractors to carry out the entire operation.

Marking is important

Most multimodal transport operators do not get involved with packing directly unless it is hired to do so. Nevertheless, they should be familiar with the process and able to read the markings and labels stated on the packages in order to properly handle the goods while stuffing and unstuffing them.

Correct marking of packages helps to prevent incorrect handling and delivery, accidents and losses of weight and volume, including customs fines.

The markings must be clear and stand out from the other text on the package. Where possible, black symbols on a white background should be used.

When marking is applied directly onto the package and when adhesive labels are used, care must be taken to ensure that the marking is applied in a legible and durable manner. All packages should have markings on three sides.

Marks groupings⁸⁶

Mark groupings fall into three categories, shipping marks, information marks and handling marks.

Shipping marks	 Identification mark (such as shipper's or receiver's company name) Identification number (such as receiver's order number)
	Total number of items in the complete consignment
	Number of packages in the consignment
	Place and port of destination
Information marks	Country of origin
	Indication of weight of package
	Dimensions of packages
Handling marks	• This side up
	Centre of gravity
	Use no hooks
	Handle with care
	• Fragile,
	Handle with care
	• Keep dry
	Keep away from heat (solar radiation)
	Photographic materials
	Temperature limitations
	Flammable acid
	Sling here
	Stacking limitation
	Clamp here

Labelling on packages⁸⁷

Cartons or packages should be labelled on at least three sides. Labels and marking can be printed or stick on.

Labels provides information to the handler on the contents and the peculiarity of each package. This is especially important for dangerous goods, odd sizes or overweight cargo.

The shipping mark and the statement of origin should be arranged one below the other. The weight and the dimensions should be applied at the bottom right of the package, and handling information preferably should be posted at the top left of the package.

For cuboid packages, the handling information and the markings should not be separated. They should be applied on as least two adjoining sides. The only exceptions to this rule are pictorial markings that are tied to a specific

⁸⁶ Source: ASEAN training material on unitization and cargo packaging

⁸⁷ Ibid

location, for example, those showing the centre of gravity. For cylindrical objects, the labelling should be applied on the two opposite sides. It is sufficient to mark bagged cargo and bales on one side only.





Dangerous goods package marking

In addition to the United Nations number and proper shipping name, other markings may be required, such as a marine pollutant mark, LQ marks/EQ marks and a lithium battery mark.

The package must be labelled appropriately to warn about the hazards. while a placard in larger size packages is used to mark the freight container and/or vehicle to display the category of the dangerous goods being carried.

It is the responsibility of the multimodal transport operator to determine which handling equipment is suitable for the packing and the nature of the goods. The operator needs to attain the necessary information before concluding the transport contract and taking charge of the goods.

Fumigation

Fumigation is a method of pest control used during the processing of goods and wooden packing to be exported in order to prevent the transfer of exotic organisms, termites, mosquitos or any harmful living organisms that could transfer diseases. It is compulsory for international transit required under the International Marine Organization (IMO) International Maritime Dangerous Goods Code or by national laws.

The International Plant Protection Convention has in place regulations to prevent the spread of nonautochthonous parasites by developing ISPM-15 – International Standards for Phytosanitary Measures No. 15.⁸⁸

Some of the exemptions to the fumigation requirement are the following:

Presswood pallet – Made with sawdust, wood shavings, recycled wood and wood wool. Plastic pallets – Plastic mondipal pallets are fully free of any ISPM-15 laws and regulations. Wood packaging – Wood packaging made wholly of processed wood material. Euroblock palletblocks – Wood fibre export pallet blocks 100 per cent ISPM-15 proof

Fumigation procedures can harm food transported internationally. For example, methyl bromide, which was used in the past, is currently prohibited in the European Union.

Occasionally, shipping lines fumigate container holding as dangerous cargo. For example, tapioca starches in jumbo bags are packed and fumigated at an inland container depot and is treated as dangerous goods. On the other hand, if the tapioca starch bags are packed at the factory where it is produced, it is treated as normal cargo by the shipping line in some countries.

Some countries, such as Australia, do not require fumigation treatment for air shipments.

14. Unseen and unexpected risk factors

Often multimodal transport operators' plans and selected transport routes are made without taking into account potential risk that may occur.

Riots, strikes, port congestion, backlog of common carriers, political instability, wars, shortage of equipment and blank sailing are major risks that a multimodal transport operator should cross check with agents for each place along the transportation route. Otherwise, there could be a delivery delay and higher costs of operation may be incurred.

Pain point of wrong decision – real life

Normally, the transit time from Bangkok to Rotterdam by sea transport is 24 days. During a backlog of sea transport to Europe, many carriers cannot meet the original timeline and often are subject to a delay of up to two weeks.

⁸⁸ International Standards for Phytosanitary Measures No. 15 (ISPM 15) is an international phytosanitary measure developed by the International Plant Protection Convention (IPPC). It directly addresses the need to treat wood materials of a thickness greater than 6mm, used to ship products between countries

In this scenario, a seller committed to deliver the goods within a month. However, under the current situation, the seller could not ship the goods on time and a delay of one week was expected.

Shipping the goods by air transport was so costly and created a loss for the transaction. Without any other choice, the seller called a multimodal transport operator in search of a solution.

The multimodal transport operator advised the seller to use multimodal transport, which would enable the shipment to arrive on time. The multimodal transport operator decided that using sea transport from Bangkok to Dubai and from Dubai to Rotterdam, air transport would be used is the best result.

The transit time by sea transport from Bangkok to Dubai was 14 days and the transit time by air transport was two days (customs transit procedure + air transport lead time).

Upon arrival of the shipment in the Dubai port, the multimodal transport operator realized that there was port congestion and the container was to be retained at port for two weeks. After transit clearance, the multimodal transport operator's agent moved the container to the airport, unstuffed the container and was ready to ship out the goods by air transport.

Unfortunately, the airlines were also backlogged and the earliest available flight was in a week.

The total transit time became five weeks and two days. Paying a higher a freight charge, the operation was not for the seller.

In the conclusion, there are a number of factors for the multimodal transport operator to consider before entering into a contract of carriage, otherwise the operation could become a catastrophe. In this chapter, there is not mention about the cost of as multimodal transport operation, which is another factor that has to considered.



- 1. Why is the registration of a multimodal transport operator important to a trader, consignor or consignee?
- 2. What is the impact on the multimodal transport operator's liability if the date or the period of delivery of the goods at the place of delivery is inserted in the multimodal transport document?

3. What is the limitation in using a FIATA multimodal transport document?

4. Why is the customs procedure at the transit country so important when multimodal transport is being done?

5. Why is liability insurance compulsory for a multimodal transport operation?

6. What is the benefit of being an authorized transit trader?

- 7. How many classes of dangerous goods are there?
- 8. When a multimodal transport operator determines the route of transport, what other factors should the operator consider?
- 9. What is the benefit of an own network for a multimodal transport operation?

10. Which type of packaging is required for fumigation?

- 11. What does the single corridor refer to?
- 12. What should a multimodal transport operator take into account when planning alternative transport routes?

- 13. How many categories of marks groupings are there?
- 14. What is the benefit of the Time/Cost Distance module?

15. Under the term of the CFR (Incoterms), can a multimodal transport operation be carried out?

Chapter 7: Responsibility and liability of a multimodal transport operator

Introduction

The responsibility and liability of transport service providers for each mode are different. They are based international conventions and rules. For each mode, there can be more than one convention applicable to it. For example, many international rules and the mandatory nation laws of each country are related to sea transport.

Multimodal Transport combines every possible mode of transport to move goods on a prescribed route from the receiving point to the delivery point. To separate the responsibility and liability of each mode of transport used for multimodal transport would be burdensome for the cargo interests and multimodal transport operator to determine the compensation for loss of or damage to goods or delay in delivery, as often happens in intermodal transport.

Many countries follow the United Nations Convention on International Multimodal Transport of Goods (Geneva, 24 May 1980) – **MT Convention 1980**, which stipulates the responsibility and liability of a multimodal transport operator. Some of the subregional issues for an agreement on multimodal transport are based on this Convention.

The MT Convention is not into force because only 11 parties have signed or ratified it. It was to be entered into force 12 months after the Governments of 30 States had either signed it subject to ratification, acceptance or approval or have deposited instruments of ratification, acceptance or approval or accession with the depositary.

This chapter give the readers an introduction to the responsibility and liability of a multimodal transport operators, including the exclusion and limitation of a multimodal transport operator's liabilities.

Chapter Objectives

The following are described in this chapter:

- International conventions applicable to unimodal transportation;
- International conventions applicable to multimodal transportation;
- Contract of carriage and parties in the contract;
- Multimodal transport operator's responsibility and liability, including the parties involved with a multimodal transport operator's liability;
- Details of liability for loss, damage and delay in delivery, including localized damage and loss of the right to limit the liability of a multimodal transport operator;
- Exclusion of a multimodal transport operator's liability;
- Consignor responsibility and duties;
- Limitation of the multimodal transport operator's liability and assessment of compensation for loss of or damage to goods;
- Legal issues on time bar, notice of loss of or damage to goods, judicial proceedings, arbitration and general average.

International conventions applicable to unimodal transportation

Air	Warsaw Conventions 1929
	Montreal Convention 1999
Sea	Hague Rules 1924
	Hague-Visby Rules 1968
	Hamburg Rules 1978
	Rotterdam Rules 2009
Rail	Convention concerning International Carriage by Rail 1980
	Uniform Rules concerning the Contract of International Carriage of Goods by Rail (CIM) 2006
Inland waterways	The Budapest Convention on the Contract for the Carriage of Goods by Inland waterways (CMNI) ⁸⁹ 2000

The following statement was made by UNCTAD on implementation of multimodal transport rules:

"The problem which arises is the extent to which these mandatory conventions applicable to unimodal transportation would also influence contracts where more than one mode of transport is involved, bearing in mind that some of these unimodal conventions also extend their scope into multimodal transport.

For example, the CMR (article 2), CIM (article2) and Montreal Conventions specifically include provisions dealing with the transport of goods by more than one mode. In any event, in the absence of a uniform liability system for multimodal transport, the liability for each stage of transport is determined by the relevant unimodal convention or national laws, which adopt varying approaches to issues, such as the liability questions.

Accordingly, the liability of the multimodal transport operator for loss or damage to goods may differ, depending on which stage of transport the loss has occurred. The question becomes even more complicated if the loss or damage cannot be localized, or the loss occurs gradually during the entire transport.

International conventions applicable to multimodal transportation

One convention and one set of rules are the basis agreements or the regional/subregional laws and regulations, including the national laws and regulations, applicable to multimodal transport,

- United Nations Convention on International Multimodal Transport of Goods (Geneva, 24 May 1980))
 MT Convention 1980
- UNCTAD/ICC Rules for Multimodal Transport Documents

⁸⁹ Member States: Belgium; Bulgaria; Croatia; Czech Republic; France; Germany; Hungary; Luxembourg; Moldova; Netherlands; Romania; Russian Federation; Serbia; Slovakia; Switzerland; and Ukraine.

^{*}Poland and Portugal have not yet ratified it.

Contract of carriage --- who makes and concludes contract of carriage?

In the Incoterms 2020, for the term EXW, FCA, FOB and FAS⁹⁰, it is stated that the buyer is the party that must contract or arrange at its own cost for the carriage. The rest of the terms are the seller's obligation.

Under four Incoterms, the buyer can deal with the multimodal transport operator for the carriage and cost of transportation, and also is the party that pays the freight charge, nominates the multimodal transport operator as the carrier to pick up the goods at the seller's premises or the precise point of pick-up of the freight, such as at a terminal or alongside a ship or even on board the vessel.

However, most of the international transport conventions, rules national maritime laws in various countries stipulate that the consignor is the party that concludes the contract with the transport operator.

The consignee is the first party that contracts the carrier for the carriage of the goods, however, in maritime trade, in some cases, the contract of carriage provides a clause that the shipment is to be subject to the terms and conditions of the bill of lading, a document which is issued unilaterally at a later stage by the carriage. On the other hand, some bills of lading refer to the contract of carriage for the terms and conditions. Accordingly, it is crucial to understand the relationship between contracts of carriage and bills of lading, and the effects of these two documents on the parties to the contracts of carriage.

In many cases, the parties to such a prior contract of carriage only deals explicitly with some key provisions of the contract, such as the places of taking over/delivery or loading/discharge of the goods and the freight, and leave all other matters to the applicable mandatory law and to the standard terms of business of the carrier. Later on, when the bill of lading needs to be issued, further instructions are given by the consignor to the carrier

In all cases the bill of lading supersedes the pre-existing contract of carriage, so in effect, excluding the possibility of providing counterevidence against the contents of the bill of lading⁹¹ provided by the consignor.

Consignor in multimodal transport

In **MT Convention**, it is stated that:

"Consignor" means any person by whom or in whose name or on whose behalf a multimodal transport contract has been concluded with the multimodal transport operator, or any person by whom or in whose name or on whose behalf the goods are actually delivered to the multimodal transport operator in relation to the multimodal transport contract."

In the **ASEAN Framework Agreement on Multimodal Transport (AFAMT),** the definition is the same as the definition in the **UNCTAD/ICC rules:**

"Consignor means the person who concludes the multimodal transport contract with the multimodal transport operator."

In the **FIATA multimodal transport bill of lading**, the following definition is given:

⁹⁰ FOB and FAS, the Carriers could be NVOCCs or shipping lines in general cases.

⁹¹ Dr. Frank G.M. Smeele - Professor of Commercial Law at Erasmus University at Rotterdam.

"Consignor means the person who concludes the multimodal transport contract with the freight forwarder."⁹²." To elaborate more on why a consignor is the party that concludes the multimodal transport contract. For example, when the buyer deals with the multimodal transport operator for the contract of carriage at the parallel stage of the business conclusion with the seller under those four Incoterms, it can be determined that the contract of carriage has already existed before issuance of the bill of lading. When the carrier receives the goods and takes charge of the goods, the bill of lading has to be issued. The function of the bill of lading or transport document becomes a receipt of the goods by the carrier and evidence of the contract of carriage between the consignor and the carrier because the consignor is the party who knows the commodity and the quantity that is handed over to the carrier, and instructs the carrier to transport the goods according to his shipping instruction.

However, ultimately, the bill of lading becomes the actual contract of carriage between the carrier and the consignee when it has been transferred to the consignee by the consignor.

Consignee in multimodal transport

In the MT Convention, it indicated that

"Consignee" means the person entitled to take delivery of the goods.

In the **ASEAN Framework Agreement on Multimodal Transport (AFAMT)** and the **UNCTAD/ICC rules,** the same definition is applied:

Consignee means the person entitled to receive the goods from the multimodal transport operator.

In the FIATA multimodal bill of lading; the definition given is:

Consignee" means the person entitled to receive the goods from the freight forwarder.

The name that appears in the consignee column of the bill of lading may not be the final party who receives the goods in international commercial practice. The consignee can transfer the title of the goods to the third party in a "String sales"⁹³, when the transport document is negotiable, while all types of waybills used for transportation are non-negotiable documents so the title of the goods cannot be transferred during transit.

Multimodal transport operator's responsibility and liability

What is the International Multimodal Transport?

As defined in the MT Convention 1980, "international multimodal transport means the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country. "The operations of pick-up and delivery of goods carried out in the performance of a unimodal transport contract, as defined in such contract, shall not be considered as international multimodal transport."

 ⁹² FIATA used the wording "freight forwarder" which could be referred as a multimodal transport operator or a NVOCC.
 ⁹³ String sales, or the multiple sale of goods during transit, is clarified in Incoterms 2010. Specifically, FCA, CPT, CIP, FAS, FOB, CFR and CIF terms are amended to provide that the seller in the middle of a string sale has an obligation to "procure goods so delivered" and not to "ship" the goods. (applicable to Incoterms 2020)

The same definition appears in the ASEAN Framework Agreement on Multimodal Transport, from which it can be determined when and where the liability of the multimodal transport operator commences and is assumed.

Basic concept of responsibility:

In general, the responsibility of the multimodal transport operator is based on various conventions, rules, or international agreements under the same concept. It starts from where the goods are taken charge by the operator and is then obligated to deliver the goods according to the place shown in the contract of carriage. There are similar clauses under the same concept shown below:

AFAMT⁹⁴: It covers the period from the time the multimodal transport operator has taken charge of the goods to the time of they are delivered.

FIATA: The responsibility of the carrier for the goods under these conditions covers the period from the time the carrier has taken charge of the goods to the time they are delivered.

UNCTAC/ICC rules: The responsibility of the multimodal transport operator for the goods under these rules cover the period from the time the operator has taken charge of the goods to the time they are delivered.

MT Convention 1980: The responsibility of the multimodal transport operator for the goods under this Convention covers the period from the time the operator has taken charge of goods to the time of they are delivered.

According to the UNCTAD/ICC rules, the period of responsibility starts from where and when the goods have been handed over to and accepted by the multimodal transport operator for carriage and the goods have been taken in the operator's charge to the time of delivery at the designated place in another country, which is indicated in the multimodal transport documents.

The responsibility of multimodal transport operator commences based on three elements:

- The goods have been handed over to multimodal transport operator;
- The multimodal transport operator has taken charge of the goods at an agreed precise point;
- The multimodal transport operator accepts the goods for carriage.

Scope of the multimodal transport operator's responsibility

The scope of services, including the responsibility of the multimodal transport operator, can include the following:

- Door to port
- Port to door
- Door to door
- **Port to place** (CFS, ICD, rail ramp)
- **Place** (CFS, ICD, rail ramp) **to port**
- **Door to place** (CFS, ICD, rail ramp)
- Place (CFS, ICD, rail ramp) to door

⁹⁴ Article 7 of ASEAN Framework Agreement on Multimodal Transport

Note: The word "place" does not mean the premises of the consignor or consignee, but it refers to any common facility place.

Door, port or place refers to origin country and destination country for transportation that involves two or more countries.

"Place of receipt" and "place of delivery" on a transport document, are the key words of responsibility for a multimodal transport operator. This is because the responsibility starts at the place of receipt and continues to the place of delivery, which is stipulated in transport documents as, for example, bill of lading or waybill.

Under which circumstances should the delivery of the goods by the multimodal transport operator considered to be completed?

Delivery can refer to the time when the multimodal transport operator has completed its obligation and released its responsibility of carriage and liability as long as there is no loss of or damage to the goods or delay in delivery while carrying out delivery according to the contract of carriage or any international conventions, or relevant national laws.

Delivery can be considered completed under the following circumstances:

(a) Handing over of the goods to the consignee;

(b) Placing the goods at the disposal of the consignee in accordance with the multimodal transport contract, or with the law or usage of the particular trade applicable at the place of delivery;

(c) Handing over the goods to an authority or a third party to whom, pursuant to the law or regulations applicable at the place of delivery, the goods must be handed over.

The above circumstances appear in similar context in the definition of "delivery" in AFAMT, UNCTAD/ICC rules, the MT Convention and on the FIATA multimodal transport document.

Under which conditions should the multimodal transport operator deliver the goods to the consignee

For the delivery of the goods to the consignee, the multimodal transport operator undertakes to perform or to procure the performance of all acts necessary to ensure delivery of the goods:

- (a) When the multimodal transport document has been issued in a negotiable form⁹⁵ "to bearer", an original of the document is surrendered, or
- (b) When the multimodal transport document has been issued in a negotiable form "to order", to the person surrendering one original of the document duly endorsed, or

⁹⁵ Note: If the document is "negotiable", namely made out "to order", or to the order of a named party, or to the bearer, the right embodied in the document can be transferred along a chain of sale contracts by delivery, with any necessary endorsement of the document alone. Thus, while the goods are in the physical possession of a carrier during transit, a seller is able to pass possession and property in the goods to a subsequent buyer simply by passing on the negotiable document of title (string sales in Incoterms).

- (c) When the multimodal transport document has been issued in a negotiable form to a named person upon proof of his identity and surrenders one original document; if such document has been transferred "to order" or in blank the provisions or (b) above apply, or
- (d) When the multimodal transport document has been issued in a non-negotiable form to the person named as consignee in the document upon proof or his identity, or
- (e) When no document has been issued to a person as instructed by the consignor or by a person who has acquired the consignor's or the consignee's rights under the multimodal transport contract to give such instructions.

The above-mentioned conditions are found in UNCTAD/ICC rules and in AFAMT, while the MT Convention 1980 conveys similar content.

- 1. Conditions for a multimodal transport document to be issued in negotiable form:
 - (a) It shall be made out to order or to bearer;
 - (b) If made out to order, it shall be transferable by endorsement;
 - (c) If made out to the bearer it shall be transferable without endorsement;
 - (d) If issued in a set of more than one original, it shall indicate the number of originals in the set;
 - (e) If any copies are issued, each copy shall be marked "non-negotiable copy".
- 2. Delivery of the goods may be demanded from the multimodal transport operator or a person acting on his behalf only against surrender of the negotiable multimodal transport document duly endorsed, where necessary.
- 3. In the case of issuance of a non-negotiable multimodal transport document, the multimodal transport operator shall be discharged from his obligation to deliver the goods if he makes delivery thereof to the consignee named in such non-negotiable multimodal transport document or to such other person as he may be duly instructed, as a rule, in writing.

Who are involved with the multimodal transport operator's liability?

The multimodal transport operator is liable for loss of, damage to goods and delay in delivery under the contract of carriage. This extends to subcontractors and agents according to various rules and convention.

UNCTAD/ICC rules, AFAMT, the MT Convention and the FIATA bill of lading refer the liability of a multimodal transport operator for subcontractors (servants), agents and other persons in a similar context as follows:

"The Multimodal transport operator shall be responsible for the acts and omission of subcontractors or agents, when any such servant (subcontractor) or agent is acting within the scope or his employment, or of any other person of whose services he makes use for the performance of the contract as if such acts and omissions were his own."

"Servants (subcontractors) or agents" are the party who acts on behalf of the multimodal operator. Basically, they are subcontractors or agents of the multimodal transport operator. However, to clarify "any other person of whose services he makes use for the performance of the contract", can be referred to any "common carriers" whom the multimodal transport operator uses their services as sub-contractors, such as shipping lines, airlines, truck operators or rail operators.

In the MT Convention, article 20 – Non-contractual liability is explained as follows:

"If an action in respect of loss resulting from loss of or damage to the goods or from delay in delivery is brought against the servant (subcontractor) or agent of the multimodal transport operator, if such servant (subcontractor) or agent proves that he acted within the scope of his employment, or against any other person of whose services he makes use for the performance of the multimodal transport contract, if such other person proves that he acted within the performance of the contract, the servant (subcontractor) or agent of such other person shall be entitled to avail himself of the defences and limits of liability which the multimodal transport operator is entitled to invoke under this Convention".

Regarding the role of the agent of the multimodal transport operator there are two types:

- (a) An agent who acts on behalf of the multimodal transport operator concludes a multimodal transport contract should not regarded as a principal. Accordingly, the liability of the agent should not be involved with the liability of the principal against third parties (consignor or consignee).
- (b) An agent who acts as a subcontractor or a delivery agent performs his duty under the scope of the employment of the multimodal transport operator should not be directly involved with the principal liability.

In article 4 of AFAMT, it states that "the agent may become the defendant in a judicial proceeding as the plaintiff at his option, may institute an action in a court which, according to the law of the country where the court is situated, is competent and within the jurisdiction of the place of taking the goods in charge for the multimodal transport or the place of delivery".

In the International Institute for the Unification of Private Law (UNIDROIT) article 2.2.3 (agency disclosed), the follow is stated:

- (a) Where an agent acts within the scope of its authority and the third party knew or ought to have known that the agent was acting as an agent, the acts of the agent shall directly affect the legal relations between the principal and the third party and no legal relation is created between the agent and the third party;
- (b) However, the acts of the agent shall affect only the relations between the agent and the third party, where the agent with the consent of the principal undertakes to become the party to the contract.

Agents' liability may differ in some countries when separate laws are used to judge the liability of the agent. For example, under the Thailand Civil and Commercial code:

"An agent who makes a contract on behalf of a principal who is, and has his domicile, in a foreign country is personally liable on the contract, although the name of the principal has been disclosed, unless the terms of the contract are inconsistent with his liability⁹⁶".

In conclusion, the agent's liability is based on applicable rules or any mandatory laws in that particular country and may include other conditions.

⁹⁶ Section 824 Thailand Civil and Commercial code.

What is the liability of a multimodal transport operator?

AFAMT, the MT Convention, UNCTAC/ICC rules and the FIATA bill of lading all stipulate in similar text, the following:

"The carrier shall be liable for loss of or damage to the goods as well as for delay in delivery if the occurrence which caused the loss, damage or delay in delivery took place while the goods were in his charge, unless the carrier proves that no fault or neglect of his own, his servants or agents or any other person has caused or contributed to such loss, damage or delay. However, the carrier shall only be liable for loss following from delay in delivery if the Consignor has made a declaration of interest in timely delivery, which has been accepted by the Carrier and stated in the bill of lading."

In most practices, there is no declaration in the bill of lading for timely delivery because the freight charge will become very expensive.

What is the difference between delay in delivery and non-delivery within 90 consecutive days?

Delay in Delivery

In the MT Convention, UNCTAD/ICC rules and AFAMT refer as:

(A) Delay in delivery occurs when the goods have not been delivered within the time expressly agreed upon or, in the absence of such' agreement, within the time which it would be reasonable to require of a diligent multimodal transport operator, having regard to the circumstances of the case.

There are two points to consider:

- 1. Within timely expressly agreed upon: If both parties, the multimodal transport operator and the consignor agree to insert in the bill of lading "the date or the period of delivery of the goods at the place of delivery" and that the shipment could not be delivered on agreed date or within the agreed period of delivery, it may be deemed as delay in delivery, for which the multimodal transport operator is liable for loss.
- 2. When no such agreement has been inserted in the bill of lading, it would be reasonable to require due diligence from the multimodal transport operator regarding the circumstances of the case: "The Multimodal Transport Operator shall prove⁹⁷ that he, his servants (subcontractor) or agents or any other person took all measures that could reasonably be required to avoid the occurrence and its consequences."

In AFAMT article 10 (2), it states that the multimodal transport operator is not be liable for loss following from delay in delivery unless the consignor has made a declaration of interest in a timely delivery, which has been accepted by the multimodal transport operator. Therefore, there is no liability of multimodal transport operator if the consignor does not make a declaration of interest for a timely delivery in the multimodal transport document.

This is based on MT Convention, UNCTAD/ICC rules, AFAMT and is also stipulated in the FIATA bill of lading.

⁹⁷ Multimodal Transport Operator is the party who has to prove.

Non-delivery within 90 consecutive days

In the MT Convention, UNCTAD/ICC rules, AFAMT and FIATA Bill of Lading mentioned in the same context;

"If the goods have not been delivered within ninety consecutive days following the date of delivery determined in accordance with the above (A) paragraph⁹⁸, any person entitled to claim the goods may, in the absence of evidence to the contrary⁹⁹, treat the goods as lost."

Non-contractual liability – Tort

The UNCTAD/ICC rules indicated the following, which are similarly expressed in the FIATA bill of lading indicate that;

"All claims against the Multimodal Transport Operator relating to the performance of the multimodal transport is applied according to these rules, whether the claim could be found in contract or in tort."

Similar content also appears in the MT Convention and AFAMT, which extends to the subcontractor or agent of the multimodal transport operator that provide a service in the scope of his employment.

The exclusion of multimodal transport operator liability

The multimodal transport operator is not liable for loss, damage or delay in delivery with respect to goods carried if **he proves that the event** which caused such loss, damage or delay occurred during that carriage is one or more of the following circumstances:

a. Force majeure¹⁰⁰;

b. Act or neglect of the consignor, the consignee or his representative or agent;

c. Insufficient or defective packaging, marking, or numbering of the goods;

d. Handling, loading, unloading, stowage of the goods effected by the consignor, the consignee or his representative or agent;

e. Inherent or latent defect in the goods;

f. Strikes or lockouts or stoppage or restraint of labour from whatever cause, whether partial or general;

g¹⁰¹ With respect to goods carried by sea or inland waterways, when such loss, damage, or delay (during such carriage has been caused by:

i) Act, neglect, or default of the master, mariner, pilot or the servant of the carrier in the navigation or in the management of the ship, or

ii) Fire unless caused by the actual fault or privity of the carrier.

However, when loss or damage has resulted from unseaworthiness of the ship, the multimodal transport operator can prove that due diligence has been exercised to make the ship seaworthy at the commencement of the voyage.

⁹⁸ (A) Delay in delivery occurs...... As shown in the second page before this page.

⁹⁹ MT Convention did not stipulate this phrase "in the absence of evidence to the contrary". ¹⁰⁰ Only available in AFAMT

¹⁰¹ This appears in AFAMT, the FIATA bill of lading and UNCTAD/ICC Rules, as "Defences for carriage by sea or inland waterways"

In the MT Convention, no exclusion of the multimodal transport operator liability is stipulated and UNCTAD/ICC rules provide only "the defences for carriage by sea or inland waterway¹⁰²".

There are differences between AFAMT and the FIATA bill of lading regarding the party that should be entitled to prove these circumstances.

In the FIATA bill of lading, the following is stated:

When the Freight Forwarder establishes that, in the circumstances of the loss or damage could be attributed to one or more causes or events, specified in the above items "b to f", it shall be presumed that it was so caused, always provided, however, that **the claimant shall be entitled to prove** that the loss or damage was not, in fact, caused wholly or partly by one or more of such causes or events. "However, defences of carriage by sea or inland waterways which appears in item "g", "the multimodal transport operator is the party who shall prove" as shown in the FIATA bill of lading.

In AFAMT, the multimodal transport operator is the party that has to prove that the events that caused such loss, damage or delay during the carriage in one or more of such events.

The loss of the right to limit liability of the multimodal transport operators

The loss of the right of the multimodal transport operator to limit its liability is covered in the MT Convention, AFAMT and UNCTAD/ICC rules. Below is the relative text in the MT Convention.

"When the multimodal transport operator, with intent to defraud, gives in the multimodal transport document false information concerning the goods or omits any information required to be included, he shall be liable, without the benefit of the limitation of liability provided for in this Convention, for any loss, damage or expenses incurred by a third party, including a consignee, who acted in reliance on the description of the goods in the multimodal transport document issued."

The multimodal transport operator is not entitled to the benefit of the limitation of liability if it is proved that the loss, damage or delay in delivery resulting from a personal act or omission of the multimodal transport operator done with the intent to cause such loss, damage or delay, or recklessly and with knowledge that such loss, damage or delay would probably result¹⁰³.

Localized damage

Localized damage is damage that occurs in one particular stage of multimodal transportation. As such, the application of international convention or mandatory national law would be used to consider the limit of liability.

¹⁰² The multimodal transport operator is not responsible for loss, damage or delay in delivery with respect to goods carried by sea or inland waterways when such loss, damage or delay during such carriage has been caused by: act, neglect, or default of the master, mariner, pilot or the servants of the carrier in the navigation or in the management of the ship, fire, unless caused by the actual fault or privity of the carrier, however, always provided that whenever loss or damage has resulted from unseaworthiness of the ship, the multimodal transport operator can prove that due diligence has been exercised to make the ship seaworthy at the commencement of the voyage.

¹⁰³ AFAMT and UNCTAD/ICC rules

The following is stipulated in the MT Convention:

"When the loss of or damage to the goods occurred during one particular of the multimodal transport, in respect of which an applicable international convention or mandatory national law provides a higher limit of liability than the limit that would follow from application of its paragraphs 1 to 3 of article 18¹⁰⁴, then the limit of the multimodal transport operator's liability for such loss or damage shall be determined by reference to the provisions of such convention or mandatory national law.

However, in AFAMT, UNCTAD/ICC rules, and the FIATA bill of lading, the localized damage is expressed in the same context that:

According to AFAMT, UNCTAD/ICC rules, FIATA bill of lading and Thailand MT law, when the loss of or damage to the goods occurred during one particular stage of the multimodal transport, in respect of which an applicable international convention or mandatory law would have provided **another limit** of liability **if a separate contract of carriage had been made for that particular stage of transport**, then the limit of the multimodal transport operator's liability for such loss or damage shall be determined by reference to the provisions of such convention or mandatory law.

Note: The clause of "if a separate contract of carriage has been made for that particular stage of transport" means "as if a separate contract of carriage had been made for that particular stage of transport", even though there is no such separate contract of carriage being actually being made.

Limitation of the multimodal transport operator liability

The limitation of liability for loss and damage of the multimodal transport operation is different, depending on the rules in each agreement, convention or back clause of the bill of lading as follows:

AFAMT and UNCTAD/ICC rules:

- ^{1.} Without a declaration of the nature and value of the goods by the consignor, the multimodal transport operator shall in no event be or become liable for any loss or damage to the goods in an amount exceeding the equivalent of SDR 666.67 per package or unit or SDR 2.00 per kilogram of gross weight of the goods lost or damaged, whichever is higher¹⁰⁵.
- 2. If the multimodal transport does not, according to the contract, include carriage of goods by sea or by inland waterways, the liability of the multimodal transport operator is limited to an amount not exceeding SDR 8.33 per kilogram of gross weight of the goods lost or damaged.
- 3. Where a container, pallet or similar article of transport is loaded with more than one package or unit, the packages or other shipping units enumerated in the multimodal transport document as packed in such article of transport shall be deemed packages or shipping units. Except aforesaid, such article of transport shall be considered the package or unit.

¹⁰⁴ Maximum liability shall be limited to an amount not exceeding 920 units of account per package or other shipping unit or 2.75 units of account per kilogram of gross weight of the goods lost or damaged, whichever is the higher according to this article.

4. The aggregate liability of the multimodal transport operator shall not exceed the limits of liability for total loss of the goods.

The FIATA bill of lading stipulates this in its back clauses, while the Andean Community¹⁰⁶ also applies this according to UNCTAD/ICC rules.

The Agreement on International Multimodal Transport, 1996 of the members States of ALADI ¹⁰⁷to which the agreement is to apply are Argentina, Bolivia, Brazil, Colombia, Chili, Ecuador, Paraguay, Peru, Uruguay and Venezuela also apply as UNCTAD/ICC rules.

The Partial Agreement for the Facilitation of Multimodal Transport of Goods, 1995 of the member States of MERCOSUR¹⁰⁸ in which the Agreement is to apply are Argentina, Brazil, Paraguay and Uruguay also applies as UNCTAD/ICC Rules, except for Argentina, where the limitation of liability of the multimodal transport operator is "400 Argentine gold pesos per package, or 10 Argentine gold pesos per kilogram, whichever is the higher".

In the MT Convention, the limitation for the multimodal transport operator is higher than the limitation in the AFAMT and UNCTAD/ICC rules and it provides more details. It stipulated as follows:

- 1. When the multimodal transport operator is liable for loss resulting from loss of or damage to the goods according to article 16, his liability shall be limited to an amount not exceeding 920 units of account per package of other shipping units or 2.75 units of account per kilogram of gross weight of the goods lost or damaged, whichever is the higher.
- 2. To calculate which amount is the higher in accordance with paragraph 1 of this article, the following rules apply:
 - (a) Where a container, pallet or similar article of transport is used to consolidate goods, the packages or other shipping units enumerated in the multimodal transport document as packed in such article of transport are deemed packages or shipping units. Except as aforesaid, the goods in such article of transport are deemed one shipping unit.
 - (b) In cases in which the article of transport has been lost or damaged, that article of transport, if not owned or otherwise supplied by the multimodal transport operator, is considered one separate shipping unit.
- 3. Notwithstanding the provisions of paragraphs 1 and 2 of this article¹⁰⁹, if the international multimodal transport does not, according to the contract, include carriage of goods by sea or by inland waterways, the liability of the multimodal transport operator shall be limited to an amount not exceeding 8.33 units of account per kilogram of gross weight of the goods lost or damaged.
- 4. The liability of the multimodal transport operator for loss resulting from delay in delivery according to the provisions of article 16 shall be limited to an amount equivalent to two and a half times the freight payable for the goods delayed, but not exceeding the total freight payable under the multimodal transport contract.

¹⁰⁹ Article 18 of MT Convention

¹⁰⁶ The member States are Bolivia, Colombia, Ecuador, and Peru.

¹⁰⁷ Asociacíon Latinoamericana de Integracíon (ALADI).

¹⁰⁸ Mercado Común del Sur

- 5. The aggregate liability of the multimodal transport operator, under paragraphs 1 and 4 or paragraphs 3 and 4 of this article¹¹⁰, shall not exceed the limit of liability for total loss of the goods as determined by paragraph 1 or 3 of this article.
- 6. By agreement between the multimodal transport operator and the consignor, limits of liability exceeding those provided for in paragraphs 1, 3 and 4 of this article may be fixed in the multimodal transport document.
- 7. "Unit of account" means the unit of account mentioned in article 31. (Special Drawing Right SDR).

Consequence of delay in delivery

If the multimodal transport operator is liable in respect of loss following from delay in delivery, or consequential loss or damage other than loss of or damage to the goods, it is subject to liability which shall be limited to a certain amount that can be more or the equivalent of the freight under the multimodal transport contract for the multimodal transport based on which international convention or rules is applied.

In the table below, the limitation of loss or damage with or without sea/inland waterways transport and delay in delivery is shown.

Rules, Agreement, Convention, Transport Document	Loss or damage	Loss or damage without Sea or inland waterways transport	Delay in Delivery
MT Convention	920 SDR per package or 2.75 SDR per kilogram, whichever is the higher	8.33 SDR per package	Two and a half times the freight amount
UNCTAD/ICC Rules	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher	8.33 SDR per package	Not exceeding the equivalent of the feight amount
AFAMT	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher	8.33 SDR per package	Not exceeding the equivalent of the feight amount
FIATA Bill of Lading	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher	8.33 SDR per package	Twice times the freight payable
Andean Community	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher	8.33 SDR per package	Not exceeding the equivalent of the feight amount

Rules, Agreement, Convention, Transport Document	Loss or damage	Loss or damage without Sea or inland waterways transport	Delay in Delivery
ALADI	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher		Not exceeding the equivalent of the feight payable
MERCOSUR (except Argentina)	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher		Not exceeding the equivalent of the feight payable
Argentina	400 Argentine gold pesos per package, or 10 Argentine gold pesos per kilogram, whichever is the higher.		Not exceeding the equivalent of the feight payable
CMNI	666.67 SDR per package or 2.0 SDR per kilogram whichever is the higher		Not exceeding the equivalent of the feight payable

Notes: CMNI Contracting parties to the Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway, member states: Belgium, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Luxembourg, Moldova, the Netherlands, Romania, Russian Federation, Serbia, Slovakia and Switzerland. Poland, Portugal and the Ukraine

Assessment of compensation for loss or damage based on the ASEAN Framework Agreement on Multimodal Transport and UNCTAD/ICC rules

1. The assessment of compensation for loss of or damage to the goods is to be made by reference to the value of such goods at the place and time they are delivered to the consignee or at the place and time when, in accordance with the multimodal transport contract, they should have been delivered.

2. The value of the goods is to be determined according to the current commodity exchange price or, if there is no such price, according to the current market price, or if there is no commodity exchange price or current market price, by reference to the normal value of goods of the same kind and quality.

Determining the multimodal transport operator's liability -- AFAMT case

The table below presents the liability of the multimodal transport operator according to ASEAN Framework Agreement on Multimodal Transport.

Case	Event	Liability of the MTO	Remarks
Delay in Delivery	If Consignor does not make declaration of interest in timely delivery	No Liability	
Delay in Delivery	If Consignor makes declaration of interest in timely delivery	an amount not exceeding the equivalent of the freight under the multimodal transport contract	In case of freight collect, MT shall receive the freight from Consignee upon the delivery shall pay compensation for t delay up to the limit of the liability
Loss or consequential loss caused by Delay in Delivery	If the multimodal transport operator is liable in respect of loss following from delay in delivery, or consequential loss or damage other than loss of or damage to the goods,	an amount not exceeding the equivalent of the freight under the multimodal transport contract	The Consignee has the duty t prove the amount of loss following from delay in deliv or consequential loss or dam other than loss of or damage the goods. MTO shall pay compensation for such loss u the limit of the liability.
General Liability when the value of the goods has not been declared and inserted in the multimodal transport document	The nature and value of the goods have not been declared by the consignor before taking in charge of MTO	Maximum Liability SDR 666.67 per package or SDR 2 per kilogram of gross weight of the goods lost or damaged whichever is higher. However it shall determine the realised loss of or damage to the goods according to the assessment by reference to the value of such goods at the place and time they are delivered or the current commodity exchange price, or current market price, or by reference to the normal value of goods of the same kind and quality. according to Article 13 (1), (2)	If the value of the goods asse is over than the maximum liability, the liability of MTO be limited to the maximum liability.
General Liability when the value of the goods has been declared and inserted in the multimodal transport document	The nature and value of the goods have been declared by the consignor before taking in charge of MTO	The liability shall be as per the value declared and inserted in the multimodal transport document	In case the value of the good from the assessment under Article 13 is lower than the declared value inserted in the multimodal transport docum the assessed value shall be applied.
Not Delivery within 90 days and the value of the goods has not been declared and inserted in the multimodal transport document	If the goods have not been delivered within ninety consecutive days, they may be treated as lost	The compensation for the loss shall be assessed under Article 13, and the maximum liability will be in accordance with Article 14, 16 or 17.	

Case	Event	Liability of the MTO	Remarks
Not Delivery within 90 days and the value of the goods has been declared and inserted in the multimodal transport document	If the value of the goods has been declared and the goods have not been delivered within ninety consecutive days, they may be treated as lost	The liability for the loss shall be as per the value declared and inserted in the multimodal transport document	If the value of the goods assessed is over than the maximum liability, the liability of MTO shall be limited to the maximum liability.
Carriage without sea and or inland waterways	If the performance according to the multimodal transport contract does not include the carriage of goods by sea or by inland waterway	SDR 8.33 per kilogram of gross weight of the goods lost or damaged	This limit shall apply whether the nature and value of the goods is declared by the consignor.
Localised Damage	If the loss of or damage to the goods occurred during one particular stage of the multimodal transport is known and there is an international convention or mandatory law providing another limit of liability	The limit shall be determined by reference to the provisions of such convention or mandatory law applicable to that particular stage of transport	
Intentionally act of MTO to cause loss, damage or delay in delivery	Loss, damage or delay in delivery was resulted from the personal act or omission of MTO done with the intent to cause as such and with the knowledge that such loss, damage or delay would probably result	Loss of right to any limitation of liability	Assessment of compensation for loss of or damage to the goods shall be in accordance with Article 13.

Source: Dr. Chula Sukmanop

Notices, claims, actions and time bar

The notice of loss of or damage to the goods needs to be given to the multimodal transport operator in a timely manner.

In AFAMT, article 22 and UNCTAD/ICC rules no 9, this issue is stipulated similarly:

Unless notice of loss of or damage to the goods, specifying the general nature of such loss or damage, is given in writing by the consignee to the multimodal transport operator when the goods were handed over to the consignee, such handing-over is *prima facie* evidence of the delivery by the multimodal transport operator of the goods as described in the multimodal transport document.

Where the loss or damage is not apparent, the same *prima facie* effect applies if notice in writing is not given within **six consecutive days** after the day when the goods were handed over to the consignee.

There may be cases in which the goods are delivered to the consignee's premises and found to be damaged. The consignee may then hire a third-party surveyor to survey and prepare the report of damage. This report must be completed within six days. Moreover, the consignee may need time to prepare the notice of claim to the multimodal transport operator and in this case, it is highly possible that the notice in writing is not given within six consecutive days after the day of the goods were handed over to the consignee.

In some cases, the good are handed over to an authority or another third party occurs for legal or regulatory reasons, for example the consignee may need time to prepare import permits in order to make customs clearance. In that situation, if there is a dispute about the goods, the consignee would need more than six days to file a claim.

Time bar

In the UNCTAD/ICC rules and similarly, in the s FIATA bill of lading, and AFAMT, the following is stipulated:

"The multimodal transport operator should, unless otherwise expressly agreed, be discharged of all liability under the rules, unless suit is brought within nine months after the delivery of the goods, or the date when the goods should have been delivered or, the date the consignee would have the right to treat the goods as lost."

The MT Convention provides for a greater period. It stipulates that:

"Any action relating to international multimodal transport under this Convention shall be time-barred if judicial or arbitral proceedings have not been instituted **within a period of two years**. However, if notification in writing, stating with the nature and main particulars of the claim, has not been given within six months after the day when the goods were delivered or, where the goods have not been delivered, after the day on which they should have been delivered, the action shall be time-barred at the expiry of this period".

Community	Time-bar
ANDEAN	9 months
MERCOSUR	One Year
ALADI	9 months
ASEAN	9 months
Convention / Rules / FIATA	Time-bar
Convention / Rules / FIATA AFAMT	Time-bar 9 months
AFAMT	9 months

Most time bars are set at nine months. However, the Hague-Visby Rules provide one year, and the MT Convention provides two years. The time bar is a minimum of nine months to ensure that the multimodal transport operator has adequate time to institute recourse actions against the performing carrier. In the absence of any legal provision protecting the multimodal transport operator's recourse possibilities, a shorter period has to be chosen than the period which applies under mandatory law to the performing carrier.

Judicial proceedings

The plaintiff may institute an action in a court which, according to the law of the country where the court is situated, is competent and within the jurisdiction of operator the following places:

- (a) The principal place of business or, the habitual residence of the defendant;
- (b) The place where the multimodal transport contract was made, provided that the defendant has a place of business, branch or agency at that location where the contract was made;
- (c) The place of taking charge of the goods for multimodal transport or the place of delivery;

(d) Any other place designated for that purpose in the multimodal transport contract and evidenced in the multimodal transport document.

Notwithstanding the provisions mentioned above, an agreement made by the parties after a claim has arisen, which designates the place where the plaintiff may institute an action, takes effect. These conditions are listed in AFAMT and the MT Convention.

The FIATA bill of lading provides for a minimum judicial proceeding under which actions against the freight forwarder may only be instituted in the place where the freight forwarder has its place of business as stated on the reverse of the FBL and should be decided according to the law of the country in which that place of business is situated.

The UNCTAD/ICC rules only stipulate that its rules should only take effect to the extent that they are not contrary to the mandatory provisions of international conventions or the national law applicable to the multimodal transport contract.

Arbitration

The arbitration proceedings should be instituted at the option of the claimant, at one of the following places

(a) The principal place of business of the defendant or the residence of the defendant;

(b) The place where the multimodal transport contract was made, provided that the defendant has a business, branch or agency at that location through which the contract was made;

(d) The place of taking the goods in charge for the multimodal transport or the place of delivery, or any other place designated for that purpose in the arbitration clause or agreement.

The arbitrator or arbitration tribunal should apply the provisions of this agreement.

The above-mentioned provisions are in AFAMT and the MT Convention while this specific issue is not addressed in the UNCTAD/ICC rules or the FIATA bill of lading.

General average

The general average principle takes effect independently of a contract, but is incorporated not only in the bill of lading but also in the Marine Insurance Act 1906, which is explained as follows:

"There is a general average act where any extraordinary sacrifice or expenditure is voluntarily and reasonably made or incurred in time of peril for the purpose of preserving the property imperiled in the common adventure.

The law of general average is a principle of maritime law whereby all stakeholders in a sea venture proportionally share any losses resulting from a voluntary sacrifice of part of the ship or cargo to save the whole in an emergency. For instance, should the crew jettison some cargo overboard to lighten the ship in a storm. Such cargo jettisoned to prevent a vessel from becoming a total loss, or cargo damaged by water used in extinguishing a fire on board ship provide examples of general average sacrifices thus, the loss would be shared pro rata by both the carrier and the cargo owners.

In AFAMT and the MT Conventions, the following is stipulated regarding general average:

"The provisions of this agreement shall not prevent the application of the rules pertaining to general average adjustment contained in the multimodal transport contract, or in the relevant national law, to the extent that they are applicable."

Further on this subject. the following is stated in the MT Conventions;

"Nothing in this Convention shall prevent the application of provisions in the multimodal transport contract or national law regarding the adjustment of general average, if and to the extent applicable and,

"With the exception of article 25 (Limitation of Actions), the provisions of this Convention relating to the liability of the multimodal transport operator for loss of or damage to the goods shall also determine whether the consignee may refuse contribution in general average and the liability of the multimodal transport operator to indemnify the consignee in respect of any such contribution made or any salvage paid."

Meanwhile, on this subject, the following is stipulated in the FIATA bill of lading:

"The merchant shall indemnify the carrier in respect of any claims of a general average nature, which may be made on him and shall provide such security as may be required by the carrier in this connection."

An example of the multimodal transport operator 's standard conditions governing multimodal transport documents issued in accordance with the Multimodal Transportation of Goods Act, 1993, India¹¹¹ is as follows:

"The consignee or consignor, the holder of the MTD (multimodal transport document) the receiver and the owner of the goods shall indemnify MTO (multimodal transport operator) in respect of any claims of the general average nature which may be made on him and shall provide such security as may be required by the MTO [multimodal transport operator] in this connection."

¹¹¹ Yusen Logistics (India) Private Ltd

In addition, in the Multidoc 2016 BIMCO¹¹² the following is mentioned:

- (a) General average should be adjusted at any port or place at the multimodal transport operator's option, and to be settled according to the York-Antwerp Rules 2016, which covers all goods, whether carried on or under deck. The New Jason Clause as approved by BIMCO is considered as incorporated from now on.
- (b) Such security, including a cash deposit, as deemed by the multimodal transport operator may deem sufficient to cover the estimated contribution of the goods and any salvage and special charges should be required to be submitted to the multimodal transport operator prior to delivery of the goods.

Guarantee by the consignor and liability of the consignor

In conjunction with the liability of the multimodal transport operator, the consignor is not only in the position to receive the compensation for any loss of or damage to the goods that occur, but, on the contrary, is liable to the multimodal transport operator if it fails to perform the following:

(a)¹¹³ The consignor must guarantee to the multimodal transport operator the accuracy, at the time the goods were taken in charge by the multimodal transport operator, of all details relating to the general nature of the goods, their marks, number, weight, volume and quantity and, if applicable, to the dangerous character of the goods for insertion in the multimodal transport document.

(b) The consignor needs to indemnify the multimodal transport operator against loss resulting from inaccuracies in or inadequacies of the details of the shipment furnished by him, and remain liable even if the multimodal transport document has been transferred to him. The right of the multimodal transport operator to such indemnity is not limited to the consignor.

In the MT Convention, the liability of the consignor is further elaborated. The consignor is liable for loss sustained by the multimodal transport operator if the loss can be attributed to the fault or neglect of the consignor, or its subcontractors or agents when those parties are acting within the scope of their employment. In turn, subcontractors or agents of the consignors are liable for the losses if the loss can be attributed to fault or neglect on their part.

Consignee cannot be found or refuses to take delivery

There can be instances when the multimodal transport operator could not find the consignee who is entitled to receive the goods or the consignee refuses the delivery of the goods for various reasons, such as if the place of delivery is at the port of destination or the goods are not allowed to be imported.

After the multimodal transport operator has handed over the goods to the port and it is deemed that the multimodal transport operator has fulfilled its obligation and liability as the goods have been delivered according to the contract of carriage (in case of door to port) then the multimodal transport operator is no longer liable¹¹⁴.

¹¹² The Baltic and International Maritime Council – Multidoc 2016 is subject to the UNCTAD/ICC Rules for Multimodal Transport Documents

¹¹³ Appears in the MT convention, the FIATA bill of lading, the UNCTAD/ICC Rules and AFAMT in similar context ¹¹⁴ According to MT Convention article 14:

⁽iii) By handing over the goods to an authority or other third party to whom, pursuant to law or regulations applicable at the place of delivery, the goods must be handed over. (in same context with AFAMT)

At the port, if no one comes to clear the goods, the multimodal transport operator would become the party to take responsibility. The port or shipping line may ask the multimodal transport operator to cover port storage costs or container demurrage. The multimodal transport operator may liaison with the consignor for such payment, and in some instances the consignor refuses to pay.

The ASEAN Framework Agreement on Multimodal Transport and the MT Convention do not properly protect the multimodal transport operator under the above-mentioned circumstances.

In contrast, the Thailand Multimodal Transport Act, B.E. 2548 (2005) section 23 provides such protection as stipulated in the text below:

"In the case where the consignee cannot be found, or the consignee refuses to take delivery of the goods, the multimodal transport operator shall promptly notify the consignor and ask for his or her or its instruction.

If there are circumstances preventing the multimodal transport operator from promptly notifying the consignor or from obtaining an instruction from the consignor or the consignor fails to send the instruction within reasonable time, or the dispatched instruction is impracticable, if the goods have been released from the custody of the customs under customs law, the multimodal transport operator shall be entitled to sell, destroy or otherwise deal with the goods as appropriate and necessary". (Section 23 paragraph 2)

When the action provided in paragraph two of section 23 has been carried out, the multimodal transport operator shall notify the consignor without delay unless it is unable to do so. If the multimodal transport operator neglects to notify the consignor, the multimodal transport operator shall be liable for the compensation for the damages incurred.

In the case where the goods have been dealt with as mentioned in paragraph two of section 23, the multimodal transport operator shall be entitled to deduct the proceeds therefrom for freight, freight accessories, and expenses incurred from such undertaking. If there is a sum of money remaining, such amount of money shall be delivered without delay to the person who is entitled to it. If the amount cannot be delivered, it shall be deposited with the Deposit Office. In the event of a shortfall, the consignor shall be liable for such deficit amount.

In the case where the goods have been destroyed or disposed of as mentioned in paragraph two of section 23 without deriving any proceeds, the multimodal transport operator shall be entitled to claim against the consignor for the expenses incurred from such disposal.

Meanwhile, the FIATA bill of lading back clauses stipulate the following:

"All dues, taxes and charges or other expenses in connection with the goods shall be paid by the merchant. where equipment is supplied by the carrier, the merchant shall pay all demurrage and charges which are not due to a fault or neglect of the carrier.

If at any time the carriage under this bill of lading is or is likely to be affected, by any hindrance or risk of any kind (including the condition of the goods) not arising from any fault or neglect of the carrier or a person referred as his servants (subcontractors), agents or other persons whose services he makes use for the performance of the contract, and which cannot be avoided by the exercise of reasonable endeavors, the carrier may abandon the carriage of the goods under this FBL and, where reasonably possible, place the goods or any part of them at the merchant's disposal at any place which the freight forwarder may deem safe and convenient, whereupon delivery shall be deemed to have been made, and the responsibility of the freight forwarder in respect of such goods shall cease.

In any event, the freight forwarder shall be entitled to full freight under this FBL and the merchant shall pay any additional costs resulting from the above-mentioned circumstances."

Carriage of dangerous goods

The Consignor is obligated to perform the following¹¹⁵:

(a) Mark or label dangerous goods in accordance with international conventions or comply with the laws which may apply;

(b). Inform the multimodal transport operator of the dangerous character of the goods, and, if necessary, the precautions to be taken. If the consignor fails to do so, the consignor shall be liable to the multimodal transport operator as follows:

i) The consignor shall be liable to the multimodal transport operator for all loss resulting from the shipment of such goods;

ii) The goods may at any time be unloaded, destroyed or rendered innocuous, as the circumstances may require, without payment of compensation.

The above conditions may not be in force if the multimodal transport operator has taken the goods in his charge with knowledge of their dangerous character.

According to AFAMT and the MT Convention, if the consignor has already performed his duties and when the dangerous goods become an actual danger to life or property during the journey, they may be unloaded, destroyed or rendered innocuous by the multimodal transport operator, as the circumstances may require, without payment of compensation, except where there is an obligation to contribute in general average, or where the multimodal transport operator is liable within his scope of general liability.

However, according to the above-mentioned activities of the multimodal transport operator, AFAMT and the MT Convention do not stipulate the liability of the consignor against the multimodal transport operator for the loss, damage or any expenses.

In the FIATA bill of lading, which provides for better protection to the multimodal transport operator, it is stated in the back clause that:

"If any goods shall become a danger to life or property, they may in like manner be unloaded or landed at any place or destroyed or rendered harmless. If such danger was not caused by the fault and neglect of the carrier, he shall have no liability and the merchant shall indemnify him against all loss, damage, liability and expense arising therefrom".

In conclusion, the responsibility and liability of the multimodal transport operator is different when considering which agreement, convention or rules should be applied. A multimodal transport operator must have a clear understanding of the basis of the convention, rules or acts to be applied when issuing the transport document.

¹¹⁵ As written in AFAMT



- 1. Which party enters into a multimodal transport contract with a multimodal transport operator?
- 2. What is the extent of the multimodal transport operator's responsibility from the commencement to the end of a carriage contract?
- 3. What is localized damage?
- 4. If the multimodal transport operator hands over the goods to an authority, such as a terminal operator at the port, can it be deemed that the multimodal transport operator has made delivery of the goods?
- 5. Name the parties and their services that are hired by a multimodal transport operator carrying out a contract?
- 6. What is the compensation for delay in delivery required from the multimodal transport operator indicated in the FIATA bill of lading?
- 7. What type of liability should the multimodal transport operator bear?
- 8. What is the compensation required from the multimodal transport operator if localized damage is found?
- 9. Why is the time bar under the multimodal transport contract only nine months?
- 10. What is general average?
- 11. When loss or damage can be attributed to one or more causes or events, which party must prove such loss or damage, according to the FIATA bill of lading?

- 12. Within how many days must the consignee furnish in writing to the multimodal transport operator that a loss or damage was to be found to have occurred?
- 13. What is the indemnity required for the consignor or consignee from the multimodal transport operator if the dangerous goods become an actual danger to life or property during the journey and they are unloaded, destroyed or rendered innocuous?
- 14. What are special drawing rights?
- 15. What is the limitation of the liability of the multimodal transport operator when the multimodal transport includes water transport?

Chapter 8: Operationalization of the multimodal transport

Introduction

In this chapter, the reader learns how the operationalization of multimodal transport is performed by the multimodal transport operator starting with the cost calculation and communication within the group of operators and documentation.

After determining important factors, which are discussed in chapter 6, a multimodal transport operator may need to calculate all costs concerned in order to make an offer to the consignor or for consignee the cost of transportation, which depends on "from where to where and/or where to by way of, including the mode of transport to be used".

Chapter objectives

The following are described in the chapter:

- The potential costs that are involved with multimodal transport;
- A step-by-step example of the scenario of operationalization of multimodal transport by sea/air mode for a LCR shipment.

Identify potential costs for a multimodal transport operation

When a multimodal transport operator is requested to estimate the freight charge of the entire transport for a multimodal transport operation, it needs to not only consider the handling method according to all factors concerned, but also to carefully calculate the costs of the operation. The multimodal transport operator must ensure that all costs provided by the agents are still in effect

Regarding costs of a multimodal transport operation, a single corridor transport is cheaper than one with multiple corridors, as it reflects transport from only one country to another country.

In this chapter, a description is given on the cost of door-to-door transport based on multiple corridors under a sea/air mode. The door-to-door arrangement is presumed to be under Incoterms, EXW (Ex Works) basis.

The cost at the origin is comprised of the following

- (a) Pick up charge: The stevedore charge for picking up and loading the shipment onto the truck. (For a FCL shipment, this charge may refer to the stuffing of the goods into the container at the premises of the consignor.)
- (b) Trucking or hauling: The land transportation cost from the consignor premises to the CFS. (For a FCL shipment, it is the transportation cost from the consignor premises to the container yard at the port.)
- (c) Customs clearance fee: This most likely includes the official expenses and the service charge of the multimodal transport operator for taking care of the customs formality.

- (d) Service charge or handling charge: The service charge or handling charge for the export customs procedure and/or the export permits formality of the multimodal transport operator.
- (e) Certificate of origin charge: The service charge of the multimodal transport operator for arranging the application and picking up the certificate of origin from the authorities or the chamber of commerce, including any fee charged by authorities or the chamber of commerce.
- (f) Legalization fee: The cost of legalization of each country is different, as it depends on each embassy or consulate of a particular country. The multimodal transport operator may charge a legalization fee at actual cost plus the handling charge.
- (g) Warehouse/CFS stuffing charge: This occurs when the shipment cannot be loaded onto the container at seller's premises because it is a LCL shipment and the multimodal transport operator then uses trucks to carry the goods to the container freight station in order to conduct container stuffing. The consolidator collects the container freight station charge.
- (h) The port charge/gate charge, including the weight scale charge: These charges are collected by the container freight station warehouse operator, the terminal operator or the port.
- (i) Fumigation charge: Food transport and wooden packing is subject to fumigation in many countries. The multimodal transport operator needs to know the commodities and type of packing required for fumigation before shipping to the final country. As this is a LCL shipment, the consignor may use ISPM 15 pallet¹¹⁶in order to avoid the fumigation cost for the whole container. If this is not done, the multimodal transport operator has to pay the fumigation fee to the consolidator.
- (j) Terminal handling charge: Applicable in sea transport, it is collected by a shipping line per FCL container at box rate, or LCL shipment per freight ton which the consolidator may or may not collect this charge, depending on the market situation.
- (k) Freight charge: For LCL shipments, it is on a revenue ton basis. Often, consolidators may not charge the multimodal transport operator in some trade lanes.
- (I) Surcharge in shipping: In addition to the freight charge, the shipping line may have any additional surcharges, such as BAF (bunker adjust factor bunker surcharge), emergency surcharge, peak season surcharge, Suez Canal transit, ECA REG Surcharge¹¹⁷ and crisis/war risk surcharge etc. (These charges are only for FCL and mostly not applicable to LCL shipments by the consolidator.)
- (m) Transport document fee: The bill of lading fee or the sea waybill fee is collected by the consolidator. (This document is referred as "master bill of lading" or "master sea waybill")
- (n) Transmission fee: This is related to the Automated Manifest System. The United States first implemented this scheme in order to pay for efforts to clamp down on potential security threats. Many countries apply the same scheme under different names such as Advanced Manifest System, Advance Manifest

¹¹⁶ ISPM15 is the industry standard regarding wooden pallets. The regulations state that all wooden pallets must be heattreated prior to use and have an ISPM15 mark to show they comply with the regulations. This proves that the wood has been heat-treated appropriately and is free of pest infestations.

¹¹⁷ The ECA areas are also referred to as SECA (sulfur emission control areas). Carriers charge a fee to cover the costs for this more expensive fuel variant.

Regulation, Entry Summary Declaration and, Customs Advance Manifest. The countries that apply this system are Canada, China, the European Union member States, Japan, Israel, Turkey and the United States The consolidator collects this charge from the multimodal transport operator.

The costs at transit point may comprised of the following¹¹⁸:

- (a) Delivery order fee: In an exchange for a bill of lading or non-production of sea waybill, the delivery order is released and the fee is charged by the agent of the consolidator at the transit point (but, in fact, it is the final destination of that consolidated container). The delivery order is required for the release of the cargo.
- (b) Customs transit procedure charge: This charge is collected by the multimodal transport operator's agent at the transit point upon completion of customs transit clearance. It may include the service charge or handling charge of the agent.
- (c) Terminal handling charge. The import terminal handling charge is applied in the same manner as an export charge, but the amount depends on the revenue of the consolidator at the transit country. It is almost certain that the charge is high, because the terminal handling charge at the origin may be waived.
- (d) Change status fee: This charge is for LCL shipments that are consolidated in a FCL box, which are break bulk at the terminal. Some countries may not apply this charge when the status of the container is changed from FCL to LCL.
- (e) Handling charge: The delivery agent of consolidator (master loader) charges the agent of the multimodal transport operator a handling charge for either FCL or LCL shipments. For FCL shipments, the shipping lines usually do not collect the handling charge.
- (f) Port storage and container demurrage charge: If the agent of the multimodal transport operator is unable to move the freight out of the container freight station over the permitted free time, the container freight station operator may collect the storage charge. For a FCL shipment (not applicable for LCL shipments), the shipping line may ask for the container demurrage charge and the port asks for the storage charge. This depends on the situation at that container freight station or the port which could be affected by such factors as strikes, labour shortages or congestion.
- (g) Shifting charge: This includes the container freight station charge and transportation charge, namely the unstuffing/unloading charge of the goods from the container, loading charge of the goods to the truck and transport to the airport terminal.
- (h) Airport terminal charge: Several charges that are paid to the ground handling operator or airline cargo terminal operator such as cargo terminal charge and storage charge, which depends on type of merchandise, security escort fee for high-value goods, dangerous goods transportation fee, data transmission fee (FHL/FWB)¹¹⁹ x-ray fee and special care handling charge.

¹¹⁸ If another mode of transport is used for the second leg of a transport operation, such as inland waterways, rail or road transport, the cost of the transportation is applied. This is applicable only for the sea/air mode.

¹¹⁹ FHL: Consolidation List Message (House Manifest data message) or House Waybill details

(i) Air freight charge: This charge varies based on whether the agent of the of the multimodal transport operator is the agent of the airline. If so, then the air freight charge is cheaper than the general market rate, the co-load rate. The air freight rate is based on the actual weight of the cargo or chargeable weight¹²⁰, whichever is greater.

The costs at destination may comprise the following

- (a) Delivery order fee: It may be charged by either the ground handling agent, the airline or the airfreight forwarder.
- (b) Storage charge: The terminal operator may provide some free time, usually one or two days, thereafter, there is a storge charge.
- (c) Amendment fee: If for any reason, the consignee's name is changed in the delivery order, this fee is applied.
- (d) Any other charges: Fees for handling of special cargo, such as dangerous goods and cold storage including inspection sheet.
- (e) Customs formality charge: The agent of the multimodal transport operation at the final destination may charge the principal a service and handling charge for performing import clearance at the destination including the official fee, if any.
- (f) Transportation charge: The cost of transportation from the airport to the consignee's premises is charged, subject to the volume of the goods and type of truck used.

The cost of Door to Door SEA/AIR Service (LCL)			
Origin Country	Transit Country	Destination Country Shifting from Terminal to	
Transport by Land/Sea	Shifting freight by Land	Door	
Pick up and Stuffing Charge	Sea freight Delivery Order fee	Air freight Delivery Order fee	
Trucking or Hauler	Customs Transit Charge	Storage charge	
Customs Clearance fee	Sea Terminal Handling Charge	Amendment fee	
Service charge/Handling Charge	Change Status fee (Option)	Any Special handling charge	
C/O charge	Agency Handling Charge	Customs formality charge	
Legalisation fee	Port Storage/ Demurrage	Transportation charge	
CFS Stuffing Charge	Shifting charge		
Port / Gate and weigh Charge	Air Terminal Charge		
Fumigation Charge (Option)	Air freight charge		
Terminal Handling Charge (if any)			
Freight Charge]		
Shipping Surcharge (Option)]		
Transport Document fee]		
Security Data Transmission fee			

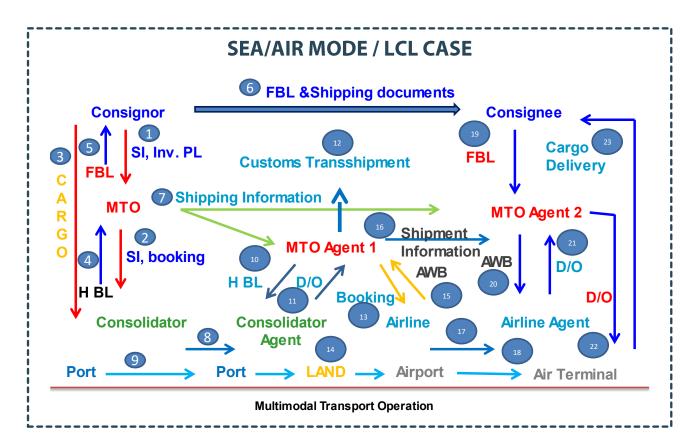
¹²⁰ Chargeable weight is calculated on dimension L x W x H in centimeters divided by 6,000 is the volumetric weight

For heavy or oversized cargo, special equipment hired for transport and handling may be required.

This comes at a cost. The transport of dangerous goods may incur the cost of labelling and placards, as well an additional freight charge.

How does a multimodal transport operation function?

Below is a scenario explaining the transport of a LCL shipment using the sea/air mode:



Based on the above diagram, a multimodal transport operation goes through the following steps:

- 1. The consignor prepares the invoice, packing list and shipping instruction (S/I) and gives it to the multimodal transport operator. (In many cases the consignor prepares only the invoice and the packing list, while rest of the documents is arranged by the multimodal transport operator).
- 2. The multimodal transport operator makes a "booking" and sends the shipping instruction to the master loader (consolidator).
- 3. The multimodal transport operator performs the customs formality and picks up the goods from the shipper's premises, sends it by truck to the container freight station and hands over the goods to the master loader.

- 4. After stuffing the cargo into the container, and loading the container onto the vessel, the master loader issues a house bill of lading, which gives the names of the multimodal transport operator that serves as the shipper and the consignee, the multimodal transport operator's agent. It also indicates the final destination of the consolidated container.
- 5. The multimodal transport operator issues a house bill of lading (in the diagram shown as FBL FIATA bill of lading) to the consignor.
- 6. The consignor gathers the necessary documents required by the consignee and sends them to consignee, including FB/L.
- 7. The multimodal transport operator informs both agents the details of the shipment, and sends the consolidator's house bill of lading to the first agent. (Note: The consolidator house bill of lading is able to make B/L surrendered¹²¹ at the origin and the multimodal transport operator just sends the copy of the said master loader house bill of lading to the agent so that the delivery order can be released without presenting the original bill of lading.)

The first agent working for the multimodal transport operator obtains the following:

- (a) The name of the consolidator (master loader) and delivery agent (consolidator's agent);
- (b) Details on the master loader's house bill of lading covering the shipment;
- (c) A copy of the FB/L and related information;
- (d) Instructions for making the transit operation to the second agent;
- (e) The original master loader's house bill of lading from the principal, the multimodal transport operator.

Note: If the original house bill of lading is surrendered at the origin location, then the first agent may only need to send a letter requesting for the release of the delivery order from consolidator's agent without showing the bill of lading.

The second agent of the multimodal transport operator receives the following shipment details:

- (a) FB/L details and FB/L copy;
- (b) The name of the transit operator for this bill of lading shipment, it is the first agent;
- (c) Instructions for making the final delivery to the consignee.
- 8. The consolidator at the origin location (master loader) sends a pre-alert or shipping information to the agent at the destination for breakbulk the shipment. The consolidator's agent submits a house

¹²¹ B/L surrender is the process of hand over a full set of Bill of Lading at the origin. Shipper may make a surrendered B/L to the carrier in order to let the consignee be able to get the delivery order for cargo release without the presentation of the original bill of lading to the agent of the carrier.

manifest¹²² and any amended information to the shipping line before the latter submits the carrier manifest to the authorities.

- 9. The consolidated container is shipped from the origin port to the destination port (the transit place of the multimodal transport operation).
- 10. Upon arrival of the container at the destination, the first agent surrenders the original house bill of lading to the consolidator's agent in the country, or if the full set of the original house bill of lading was surrendered in the origin country, the agent is to submit a letter requesting a delivery order from the consolidator's agent.

Note: In many countries, NVOCCs or the consolidator cannot not issue its own delivery orders, instead, it must use shipping line delivery orders provided by the consignee in exchange for the house bill of lading.

- 11. The consolidator's agent releases the delivery order to the first agent of the multimodal transport operator.
- 12. The first agent of the multimodal transport operator's agent handles the customs transit formality in order to move the goods from the seaport to the airport.
- 13. The first agent of the multimodal transport operator needs to estimate when the customs transit formality would be finished and makes an advance booking with the air freight forwarder that was appointed to be an agent for the airlines. (Unless the first agent is an air freight forwarder, he will arrange the air shipment.)
- 14. After completion of the customs transit procedure, the first agent hires a truck or uses his own truck to deliver the goods to the airport terminal to be loaded onto the intended flight.
- 15. After the goods are loaded on the aircraft, the air freight forwarder (appointed agent) issues a master air waybill and the first agent of the multimodal transport operator issues the house air waybill as a non-appointed agent of the airline. If the first agent is not carrying out the functions of the airfreight forwarder, then the appointed agent issues the house air waybill consigned to the consignee according to the shipping instructions provided by multimodal transport operator's agent.
- 16. The first agent of the multimodal transport operator informs the second agent of the multimodal transport operator about the shipment details and sends a copy of both air waybills and informs the principal, the multimodal transport operator in the origin country.
- 17. The airline at the origin (transit country) liaises with its agents at the destination through its communication system.
- 18. The shipment is transported from the airport of the transit country to the destination country by the airline.

¹²² In many countries, the NVOCC and consolidator cannot submit the house manifest.

- 19. The second agent of the multimodal transport operator notifies the consignee that the shipment has arrived and requests the consignee to surrender the FIATA B/L (FBL) to him in order to prepare for the delivery of the goods.
- 20. The second agent of the multimodal transport operator issues a letter (in diagram mentioned as AWB) requesting a delivery order from the airline agent who is the airfreight forwarder. In some countries the delivery order is issued by the terminal operator.
- 21. The delivery order is released to the second agent of the multimodal transport operator's agent
- 22. Upon receiving the delivery order, the second agent of the multimodal transport takes care of the customs formality on behalf of the consignee, collecting the goods from the terminal in exchange for the delivery order.
- 23. The second agent of the multimodal transport operator's hires or uses his own truck to pick up the goods at the terminal and deliver them to the consignee's premises.

The most important issue during the movement of the goods is the communication between the multimodal transport operator and the agents and between the agent at the transit point and the agent at the destination. This must be done closely to monitor and track the movement of the shipment and handle any problems that may arise.

In conclusion, the multimodal transit operator must liaise with the agents in order to calculate the overall cost of transportation, provide all necessary information to the agents and monitor the movement of the goods through the communication channel. The agent at the transit point needs to provide full details of the shipment to the final destination agent to ensure smooth delivery.



- 1. What is a demurrage charge?
- 2. What is a transmission fee?

3. What is an exchange status fee?

4. What is the function or duty of the first agent of a multimodal transport operation?

5. Who is the consignee in the master loader bill of lading?

6. When should the multimodal transport operator send the shipment information to its agents?

7. What document does the second multimodal transport operator need to collect from the consignee?

8. Who is the shipper in F B/L?

9. What is the most important issue related to multimodal transport during the movement of the goods?

10. Who issues the delivery order to the second agent of the multimodal transport operator?

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