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#### Aspects of intermodal transport in expedition of goods

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**Abstract**. Moving goods domestically or internationally is done often involving several successive modes of transport, to provide a degree of flexibility in relation to the requirements of users of such services.

Transport of goods is an essential component of the production process and involves movement components and products at the factory, and from one unit to another.

The transport system is one of the basics of fundamental economic growth.

Basically, there is no production activity that is not related material and subject, in one way or another by transport.

The fundamental objective of sea transport and trade is to ensure the normal freight nationally and internationally, safely and on time, with economic efficiency and in accordance with the conventions, laws and contractual terms in force.

In fact, freight transport is a core set of logistics activities that take place in almost every marketing channel and consists of creating utilities of time and instead.

#### 1. Acceptance of the concept of intermodal

Intermodality is a freight route that crosses it from start to finish in a network with multiple vehicles. The main objective of intermodality is to provide goods exporter possibility to move from door to door, effectively and comfortably.

Goods moving internally or internationally is often accomplished by the successive involvement of several modes of transport in order to provide a greater degree of flexibility in relation to the requirements of users of such services.

Intermodal transport consists of combining two or three modes of transport between the point of origin and the final destination of the goods in order to move efficiently in terms of time and cost and to provide door-to-door service to customers.

Intermodal transport services are also known as multimodal or coordinated services. Intermodal transport also offers benefits to shippers and transporters. The goal is to integrate the most advantageous features of each mode of transport in order to achieve optimal performance and maximum customer benefits.

The development of intermodal transport began about five decades ago. Among the factors that contributed to its offering and use by an increasing number of operators, the following are registered:

- Creation of new types of means of transport, eg vessels capable of transporting only containers and articulated wagons that take up containers on two levels;
- Improvement and standardization of container sizes;

- The possibility of exchanging equipment between transport modes (containers and trailers);
- Calling computers, to monitor the movement of transport means, containers and transport documents, for establishing routes and scheduling transport operations;
- Establishing intermodal terminals that ensure the transfer of goods between different modes;
- Facilitating the circulation of large containers as a result of their handling technology and the cost of equipment.

#### Intermodal transport

Means of transport for the movement of goods and persons to determine the classification in one of the modes. Therefore distinguish the following modes: air, road, rail, sea or inland waterway.

#### Unimodal transport

Unimodal transport (direct) is usually performed by a single carrier, issuing his own transport document, as one means of transport and mode of transport is given the type of vehicle used. In case the goods have to travel a route that involves using several means of transport for each is necessary to conclude a separate agreement with all that entails (transport documents, liabilities, obligations).

#### Combined transport

Unlike the first period, the unimodal transport, the carrier assumes responsibility for contracting transport modal transport services required by contracting it with each carrier separately, as needed [1].

So starting with the second period was introduced and a new system of accountability, so-called "responsibility network" based on document combined transport (bills of lading FIATA FBL - COMBICONBILL), covering the distance from the warehouse using two or several modes of transport. The main issues raised by combined transport derive from liability regime for non-localized damage that is difficult, if not impossible, to specify who is liable for damages and the system is applicable.

The third period began with the organization by an operator of a transport chain using at least two modes of transport and to cover the distance between a place or home port, via one or more interface points until a port or point of destination by issuing a single document, under which freight is charged one, and that the operator assumes responsibility for the entire transport chain for both localized damage and those localized.

Development of intermodal transport system involving joint effort of carriers, exporters/importers and the political will (the legislature / executive). Intermodal system is not yet sufficiently developed in Romania, the main causes being [2]:

- lack of demand derived from insufficient knowledge on the senders and recipients of the benefits of this mode of transport, the Incoterms 2000 specifications and the brochure 500 International Chamber of Commerce;
- the absence of an adequate legal framework, in terms of reduction, simplification and harmonization of customs procedures, banking or other measures to promote intermodal transport integration in the global context, encourage national operators to develop competitive systems or even cooperate with foreign operators. Also, the legal framework should allow carriers to assume responsibility for the entire transport chain in fair conditions, be compatible with the usages and international practice so as to ensure lower costs, establish an equal position for imports and exports so that there is no possibility of import operators pursue policies of low price goods in interest expense;
- failure in some ways responsibility displayed / transport interfaces which discourages intermodal transport operators to take risks inherent in the carriage door to door;

- Continue transport (fluent, "through transports"): transport origin / destination with one or more transhipment and / or ground with the assistance of different carriers under a single contract. If one transport mode is used when it comes to transport successive If more than one way when they can be segmented or intermodal transport (combined).
- Overlapped transport (in a broad sense are always intermodal): *Ferroutage* vehicle on a railway platform or *Transroulage* vehicle or wagon train ship.
- Bimodal transport european terminology sometimes used as equivalent to the combined transport to describe the transport of mixed road / rail (road / rail) or by means of transfer trucks, trailers and semi-trailers / railway platforms or through the use of semi-hybrid capable of running both on roads and on railway.

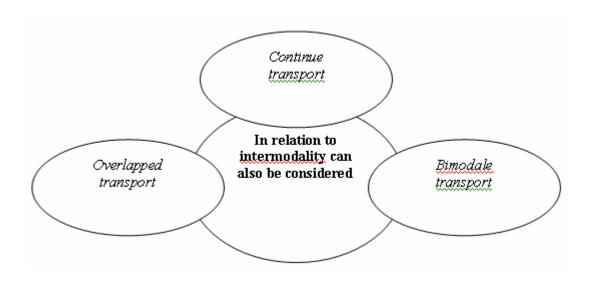


Figure 1 The correlation between continue transport - overlapped transport - bimodal transport

#### 2. The importance and role of intermodal freight transport

To shipping and transport of goods have a very important role, as they have provided international logistics goods by making the link between producer and consumer in safe and fast conditions of quality. Important changes occurred in foreign trade and international economic cooperation necessarily led organization and conducting expeditions, transport and international cargo insurance through specialized intermediaries operating under the legal form of shipping companies, shipping, international cargo insurance companies [3].

FIATA defined the shipper as "architect of transport" extremely generous name that highlights the fact that the sender analyzes in detail requests, offers transport and insurance and he was the one who "designing" the best solutions.

According USER - the Forwarding Companies in Romania - the freight forwarder is any entrepreneur who, by order and on behalf of a principal "client" is to be carried, that organizes transport of goods, without himself carrier.

The movement of goods from manufacturer to purchaser different means of transport contributed to economic and social progress, the development of international relations. The importance and role of the international transport of goods can be summarized as follows:

#### 1) Economic:

- provides entry materials into circulation;
- supports the production process;
- eliminate economic isolation by increasing international trade;
- stimulate domestic and international market, achieving a balance on the market in terms of prices;
- ensure mobilization processing capacity;
- specialization boosts production by stimulating international trade:
- extend or complete production processes.

#### 2) Social:

- stimulate contacts between businessmen and producers, participation in international events exhibitions, symposia;
- facilitate tourism expansion;
- contribute to better healthcare and a better mutual aid in isolated or disaster areas;
- contribute to the development of education performance by sharing teachers and better communication between them and the students.

#### 3) Political:

- improve political relations between states and peoples by stimulating economic and social development;
- contribute to the development of productive forces and the transport channels in the country and in international cooperation;
- supports the policy of defending the country.

International transport of goods across in their development, at least one border state contributing to production, consumption productive and unproductive trade.

Their main features are [4]:

- production continues until the activity of trading;
- creates services rather than material products;
- activity measurement is achieved by conventional units tonne-kilometer ton miles, depending on the mode of transport.
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The manufacture of transport is the movement in space, consisting of: means of transport; road/path that is moving; skilled labor; goods which are the subject of transport.

From the foregoing an important conclusion, namely: in transport, the production process is always to give the money directly as a result of useful services rendered by the movement of goods and persons, services procured and implemented through and using international freight forwarding business.

#### 3. Commercial management of intermodal transport

Important changes occurred in foreign trade and international economic cooperation led of necessity freight forwarding organization and performance through professional intermediaries operating in the legal form of shipping and transport companies, further referred to as transport entrepreneurs.

#### 3.1. Definition intermodal transport entrepreneurs

United Nations Convention on intermodal freight transport adopted in Geneva in 1980 (Intermodal Transport Convention) defines intermodal transport contractor as follows: "Any person who himself or through another person enters into a contract intermodal transport and acting as a principal part in this contract and not as agent on behalf of the consignor of the goods or carriers participating in intermodal transport operations and assume responsibility for performance of the contract".

#### 3.2. Classification entrepreneurs intermodal transport

A first possible classification of intermodal transport entrepreneurs is group them together:

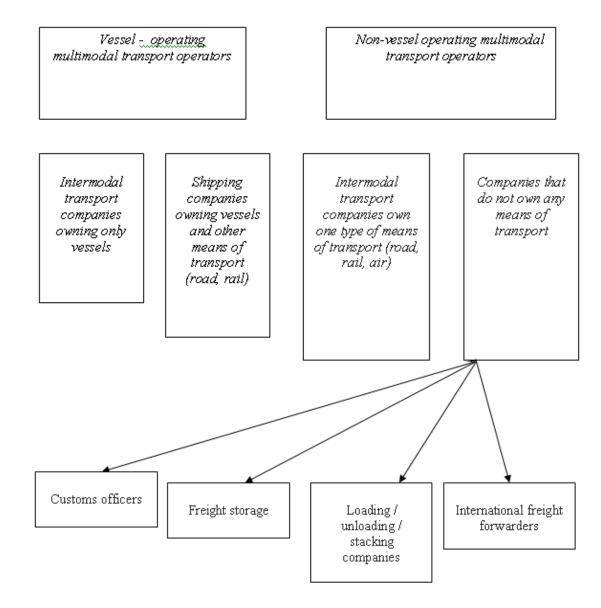


Figure 2 Categories of intermodal transport contractors

Traditionally owners were content to carry goods from one port to another and to limit its own liability for goods transported only period when the goods are aboard their ship.

Currently, the owners have expanded their services so as to include even land transport of goods and air transport. Such a combination of modes defined as maritime transport companies being intermodal transport contractors operating ships.

They may or may not hold property and other means of transport of goods by road or by rail.

If they do not have other means of transport than vessels and they can buy them by subcontracting to specialized carriers.

Moreover, they can usually subcontract and services within a country on loading / unloading / stacking and storage of goods and a number of other ancillary services (conditioning / markup etc.).

Intermodal entrepreneurs who operating with ships are the largest intermodal transport entrepreneurs there, both in terms of the assets they hold, turnover obtained, and the influence they exert on the market.

There are contractors of transport, other than maritime operators, who can also provide transportation "from door - to - door" cargo covering more than one mode of transport.

Instead subcontract portions of the route within a country's air transport or they may subcontract sea voyage, that they will not owns and will not operate vessels to carry sea voyage. For this reason they are known as intermodal transport entrepreneurs which does not operate with ships.

In most cases such intermodal transport companies owned only one kind of transport, such as trucks or, more rarely, aircraft and rail transportation.

It should also be noted that they only operate on certain routes guidance, such as a European road carrier rarely will hold or will control a road transport company on another continent.

Also in the category of transport companies that do not operate ships entering and those who do not own any means of transport.

In this category we include international freight forwarders, customs brokers or, in rare cases, companies storing or loading / unloading / stacking of goods. This type of intermodal transport contractors must subcontract all modes of transport.

Some of the largest international freight forwarders have a turnover as high as the largest intermodal transport contractors operating ships, though not all the activities they carry can be considered intermodal transport.

In Romania, in this category can include house forwarding "Romtrans" which already arrange shipment of goods in foreign trade of the place of delivery to the place of destination, export, import, transit certain relationships, groups of goods or types of operations.

What characterizes the present activity of this company is the tendency to become entrepreneurs by organizing and coordinating the transport of intermodal transport "from door-to-door".

In this regard, international shipper turns often trustee transport forwarding agents working on his behalf

Significant in this regard are operations of grouping small lots of freight or the consolidation of containers, that resulted directly reducing the time and cost of transport, thus increasing the efficiency of this activity.

A final type of intermodal transport entrepreneurs, which in appearance is very similar to that mentioned above, it is those companies that have set a target to only providing intermodal transport services.

Neither these companies do not have ships, and are therefore also called intermodal transport entrepreneurs who operate ships.

This type of intermodal transport entrepreneurs may in the future be able to play dominance of intermodal transport companies operating vessels. They may be those who can provide developing countries and countries in transition, so and Romania, the best reason to participate in intermodal transport.

These entrepreneurs intermodal not have means of transport other than than for short distances and are therefore exempt from costly investments in the procurement of vehicles for long distances and can instead focus on the needs of their customers providing high quality services.

They also must have to control a sufficient volume of goods to be able to subcontract in competitive terms for their transport by sea, road, rail or air as services charge / discharge / stacking and storage.

They can choose the type of transport at any time or combinations of different modes that recommend and are effective thus meeting the requirements of their customers. Their work requires an efficient organization and partners who can rely and which can cooperate in their field

Without a sufficiently large volume of goods such companies will not be able to obtain adequate transport and competitive conditions; the sufficiency of goods, however, they will be able in most cases to achieve the objective which it proposed better than entrepreneurs intermodal transport operating vessels and than other types of entrepreneurs inter-modal operates vessels.

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