

CHAPTER 1: The environment of Last Mile Distribution logistics

UNIT 2: Scope and definition of Last Mile Distribution Logistics

Capsule 1.2.2

Supply chain actors



To be done prior to this capsule:

1.1.1, 1.2.1

Capsule linked with:

1.2.1, 1.2.2, 1.3.1 and 1.3.2

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Objectives of the Capsule

In this capsule learners will gain an explanation of the main actors that work in the supply side, and particularly the haulage, carriers, express couriers and their interests in the logistics market and specifically in LMD.

Category	E-learning	EQF		
		4	5	6
		X	X	X

Exercises included	YES
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Effort for the capsule	Content 15 Minutes	Exercises 5 Minutes	Extra Material 20 Minutes
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Contents

1. Types of shipments
2. Supply chain actors related to Last Mile Delivery (LMD)

0. Introduction

Deliveries in LMD logistics begin their journey starting from warehouses located on the outskirts of larger cities, or in logistics hubs located in strategic areas serving smaller localities than a city. The forwarders, as we will see in the next slides, organize the loads of each shipment to allow the vehicles to travel almost always full, for economic reasons and environmental sustainability. There are several delivery techniques to warehouses:

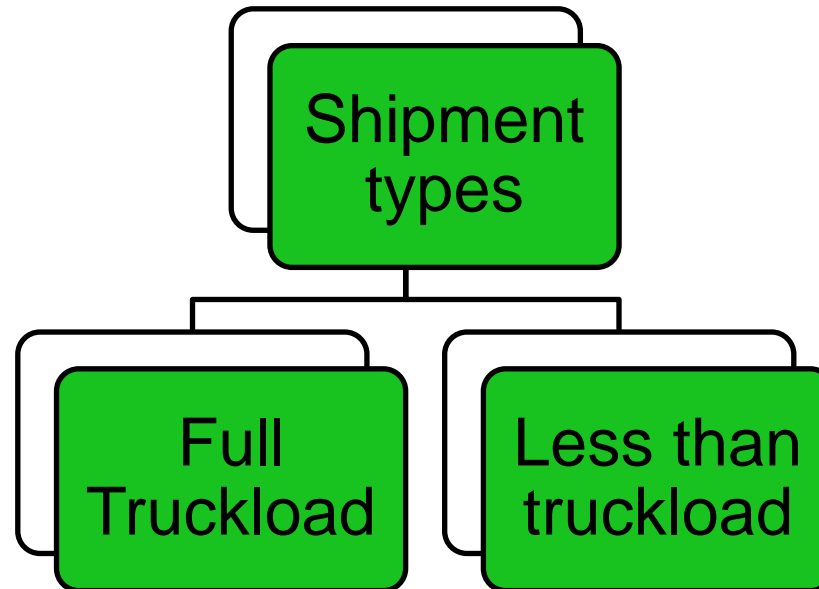
1. The products can be of a single sender;
2. The products within a single truck can be from different senders, and therefore goods with different characteristics (e.g. a truck transports drums for liquids and pallets).

In this way, warehouses are made more equipped with various goods and a surplus stock of a single product is avoided.

For warehouses that deal with LMD, it is essential to have a diversification of the product offer, in order to fulfill as quickly as possible several different types of orders.

1. Types of shipment

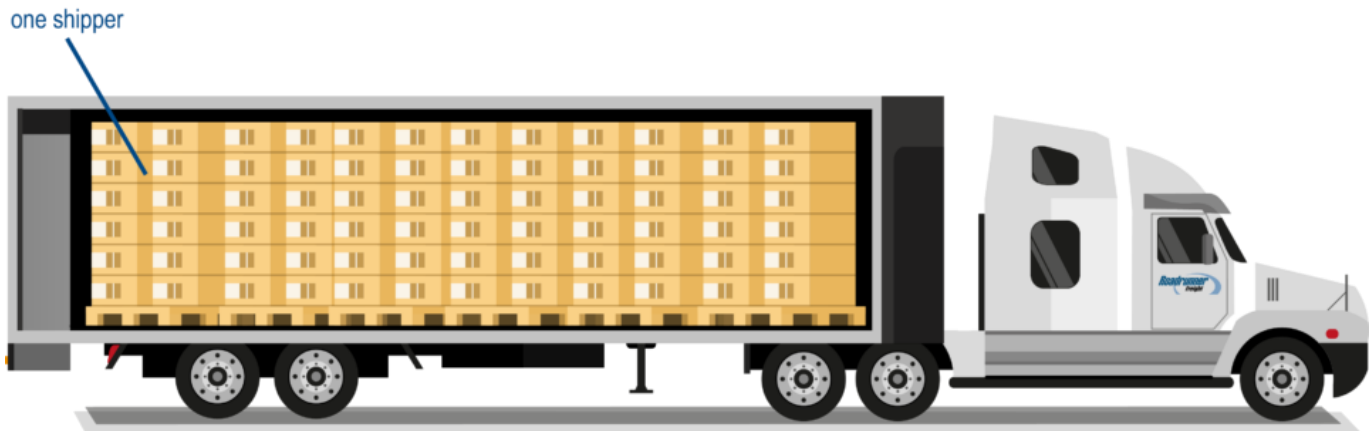
- In order to understand the several actors in the supply chain operating in LMD, it is necessary to understand that there are several types of shipment that can be made.
- In turn, this means that different types of transport will be needed



1a. Types of shipment: Full TruckLoad (FTL)

Full TruckLoad (FTL) = A shipment that fills the truck to capacity by weight or volume

Truckload (TL) Shipment

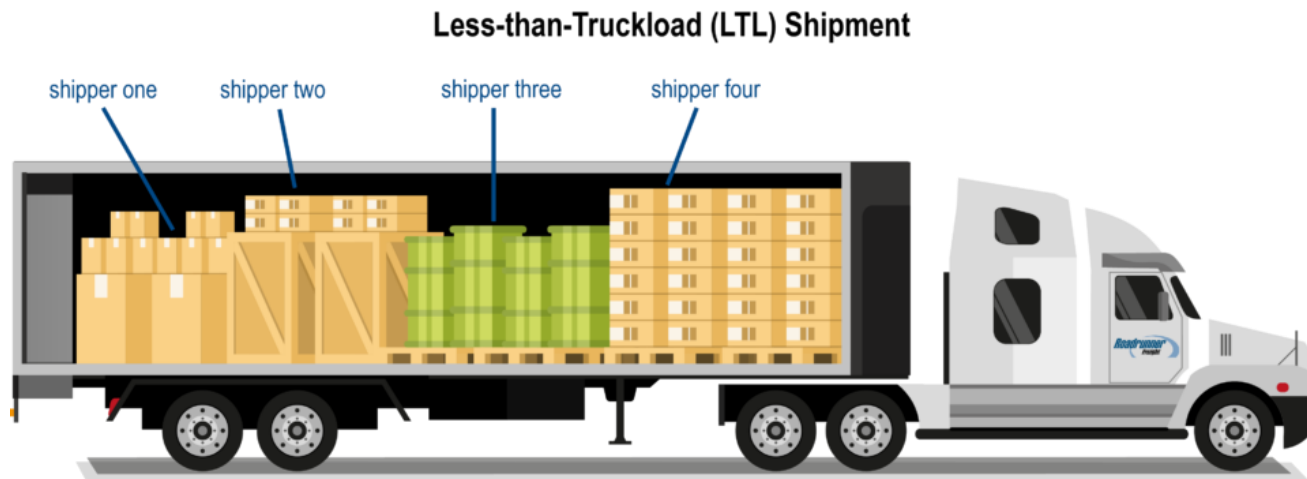


The entire trailer is filled with goods from the same shipper. Truckload shipping offers cost-savings when you have a significant amount of goods to ship and maximize space available on the full trailer.

Image from: <https://theindustrialjournal.altervista.org/spedizione-rtl-e-ftl-qual-e-la-differenza/>

1b. Types of Shipment: Less Than Truckload (LTL)

Less than Truckload (LTL) = A shipment that would not by itself fill the truck to capacity by weight or volume

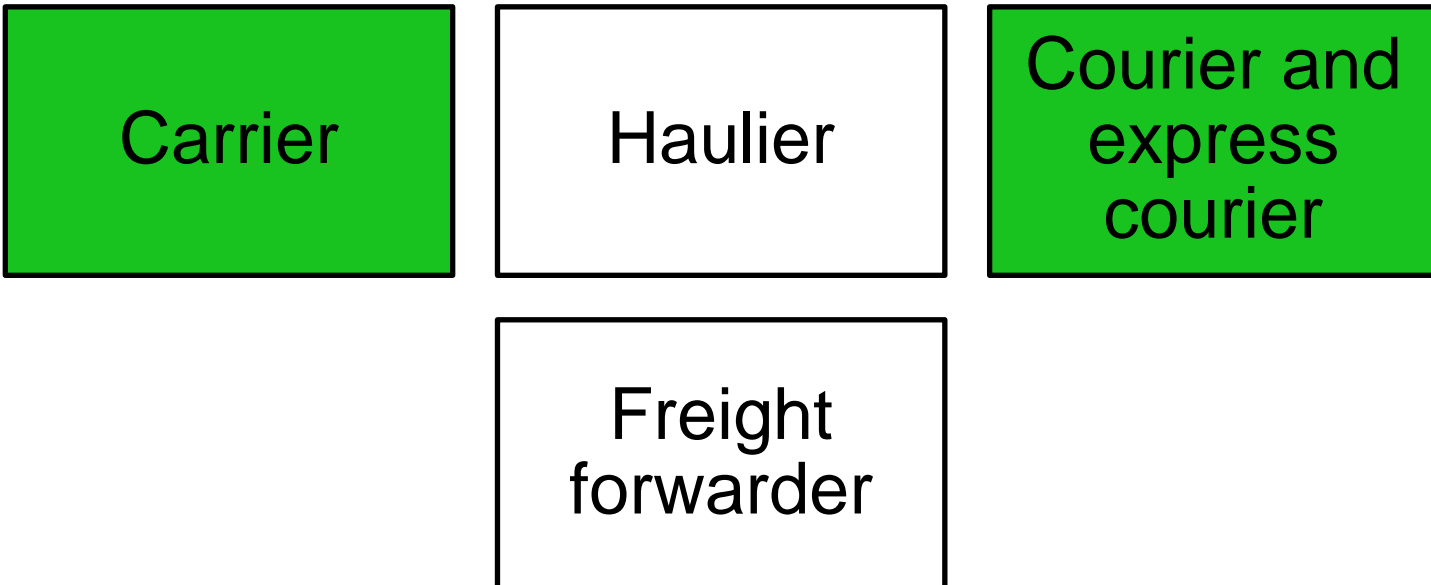


The trailer is filled up with pallets from individual shippers who are paying for space based on the dimensional space of their goods.

Image from: <https://theindustrialjournal.altervista.org/spedizione-ltl-e-ftl-qual-e-la-differenza/>

2. Supply chain actors related to Last Mile Delivery (LMD)

- There are several actors on the offer side that supply business with the service needed to deliver into cities.
- The ones in green are those that are most involved in last mile delivery.



2a. Carriers & Hauliers

(Common) Carriers

A transportation company engaged in the business of handling persons or freight for compensation and for all customers impartially.

Hauliers

- Carrier haulage is an inland container movement
- The carrier is liable if the merchandise is lost or damaged during transport, or if there is a delay.
- Merchant haulage is when the importer or the exporter assumes the transport of the container to or from a port terminal.
- The merchant is liable if the cargo is lost or damaged. One of the main advantages of merchant haulage is that it gives importers and exporters more flexibility in the timing of inland distribution
- Haulage usually refers to the transportation of bulky, heavy or large shipments

2b. Freight Forwarders

- An individual or company that accepts less-than-truckload (LTL) shipments from shippers and combines them into carload or truckload lots.
- Carriers collecting small shipments to be cumulatively consolidated and transported relying upon a single or several modes of transportation to a given destination.
- Functions performed by a freight forwarder may include:
 - 1) receiving small shipments (e.g., less than container load) from consignors, consolidating them into larger lots,
 - 2) contracts with carriers for transport between ports of embarkation and debarkation,
 - 3) conduct documentation transactions
 - 4) arrange delivery of shipments to the consignees.

2c. (Express) couriers

- Operators that provide fast (within 24 hours for express couriers or in the least possible time), door-to-door shipment service for high-valued goods and documents;
- Usually, the service is limited to shipments weighing 30-50 kg and of limited size;
- They experience great development thanks to the rise of e-commerce
- Goods are usually handled during the night and via planes to ensure short delivery times
- They focus on the management of the network and planning, especially last mile delivery



Examples of company operating as Express courier are DHL or FedEx (photos from <https://www.fedex.com/> and <https://www.dhl.com/>)

What is the interest of these actors?

Shippers/Carriers/Couriers

- Delivery and collection of goods at the lowest cost while meeting the needs of their customers.

Transport operators

- Low cost but high quality transport operations and satisfaction of the interests of the shippers and receivers.

Summary

There are multiple
supply chain actors in
logistics

Focusing on LMD, in this
capsule we have seen:
shippers, hauliers
carriers, couriers,
transport operations

They differ in their
business model, service
they offer but also in the
distance and time they
employ to make
deliveries.

They also have different
interests

Self-evaluation quiz: Question 1

What does a carrier do?

Transport of
people

Transport of bulk
materials for one
customer

Transport of
freight for a
price

Self-evaluation quiz: Question 2

What are the characteristics of a freight forwarder?

They deliver goods and freight over long distances in very short time

They collect small shipments to be cumulatively consolidated and transported

They are carriers that use only one transport mode at very low prices

Self-evaluation quiz: Question 3

Which of these is NOT one of the main interests for Shippers/Carriers/Couriers?

Delivery and collection of goods at the lowest cost while meeting the needs of their customers

Compliance with rules and regulations

Customers' opinion

Making plans for sustainable city planning

References

- (1) Dr. Jean-Paul Rodrigue, The Geography of Transport Systems Glossary Retrieved March, 15, 2022 from <https://transportgeography.org/glossary>
- (2) Dallari F., Pennacino E., Toriello F., Cossu E. (2016) Corso di Logistica e Trasporti – Spedizioni, normativa e commercio internazionale. Hoepli Editore. ISBN 978-88-203-6675-9
- (3) MDS Transmodal Limited, Centro di ricerca per il Trasporto e la Logistica (CTL) (2012) DG MOVE European Commission: Study on Urban Freight Transport, https://civitas.eu/sites/default/files/2012_ec_study_on_urban_freight_transport_0.pdf