

CHAPTER 1: The environment of Last Mile Distribution logistics

UNIT 2: Scope and definition of Last Mile Distribution Logistics

Capsule 1.2.4

Demand side actors



Co-funded by the Erasmus+ Programme of the European Union information contained therein.

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To be done prior to this capsule:

1.1.1, 1.2.1

Capsule linked with:

1.2.2, 1.2.3

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Objectives of the Capsule

This capsule will give an overview of who are the actors of the demand side and their requirements when it comes to deliveries. Because the demand is very diverse, the concern of this unit will be on making sure that students understand that there is a wide variety of demand generators, each with different requirements.

| Category | E-learning | EQF | | |
|----------|------------|-----|---|---|
| | | 4 | 5 | 6 |
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| Exercises included | YES |
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| Effort for the capsule | Content | Exercises | Extra Material |
|------------------------|------------|-----------|----------------|
| | 20 Minutes | 5 Minutes | 15 Minutes |



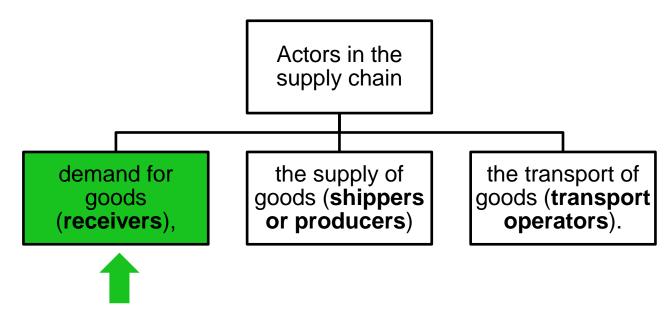
Contents

- 1. Who are the demand side actors?
- 2. What interests do they have?
- 3. Conflicts within the urban space
- 4. What do demand side actors order?



1a. Who are the demand side actors?

In capsule 1.2.1 the actors in the supply chain were categorized.

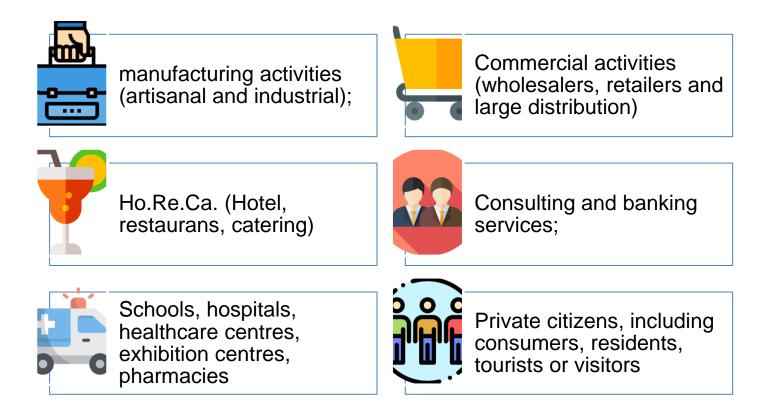


In this capsule we will focus on the receivers of freight and goods



1b. Who are the demand side actors?

When it comes to logistics, there are several actors (stakeholders) that generate traffic and **demand for last mile delivery services**. They are:



Icons from https://www.flaticon.com/



2. What interests do they have?

Economic actors located in the urban area (manufacturers, service providers, etc.)

• Site accessibility and on-time deliveries.

Private Citizens (Residents)

- Minimum inconvenience caused by LMD
- · On time delivery of products, with a short lead-time
- Availability of a variety of goods in shops in the city centre.

Private Citizens (Visitors/tourists)

- Minimum inconvenience from LMD and a wide variety of products in the shops
- Availability of a variety of goods in shops in the city centre.

Commercial activities and services

• On time delivery of products, with a short lead-time.

Very different interests



3a. Conflicts within the urban space

- Conflicts between the different interests of stakeholders inevitably arise, particularly between residents and transport operators in urban areas, and public authorities frequently intervene to try to balance the interests of both sets of stakeholders.
- There is also an inherent conflict between residents and tourists/visitors as consumers, which want goods to be available in shops, and the same stakeholders who regard road freight movements in urban areas as a "nuisance" because they create traffic congestion, noise and environmental pollution and are also regarded as intimidating.
- The fact that users of personal passenger transport are also residents with a vote in local elections, while freight transport operators do not usually have such direct political influence, means that freight traffic is more likely to be regulated by city authorities than passenger traffic.
- There is a saying "Freight doesn't vote"



3b. Conflicts within the urban space

- As inner city areas often see a concentration of retail activity and these areas are increasingly pedestrianised to create an attractive environment for shopping, there is a need to avoid the interference between loading and unloading operations and pedestrians when shops are open.
- Similar problems occur in historic city centres where there is a high concentration of tourists.



Photo by ITL, displaying a lorry illegally parking in a historical area of the city centre of Bologna



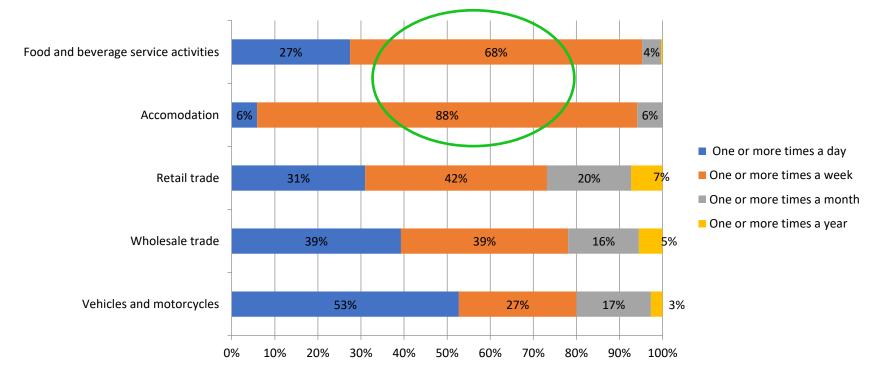
4a. What do demand side actors order?

- It is not easy to define what are the goods and freight and demand side actors order
- For this reason, it is important to do some research and study their behaviour, which can vary greatly from city to city and from country to country
- In the next slides, we provide an example of a study conducted to determine which type of goods move in the city of Bologna (freight flow estimation)



4b. What do demand side actors order?

From this data, we understand that different sectors require different types of deliveries, for example the accommodation and Ho.Re.Ca. sectors require many frequent deliveries



Data by ITL (2019) concerning to urban freight traffic flows in Bologna - Italy (data from the SULPITER project)



Further considerations

- The stakeholders that generate the demand of logistics and last mile services are very diverse and even among themselves they have different requirements and needs
- The conflict between freight and other vehicles is more acute when transport operators do not load/unload the cargo in private off-street loading/unloading bays and any designated on-street bays, but park vehicles on the street in illegal locations.
- When considering the volume of traffic that causes congestion, peaks of freight traffic often coincide with those of passenger traffic
- Given the potential conflict between stakeholder groups in relation to urban freight deliveries, the public sector's role can be considered to be to promote sustainable urban distribution, which seeks to find a balance between minimising both the economic costs and the impacts of last mile delivery on behalf of all stakeholder groups.



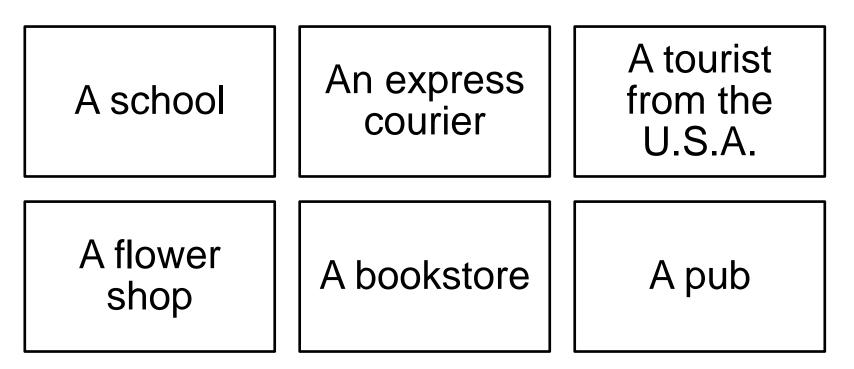
Summary

- Some actors generate demand for freight and goods within the city
- These actors are shops, retailers, commercial activities, services, manufacturing activities and private citizens
- Even within demand side actors, there are several interests that need to be balanced. For example residents want minimum inconvenience caused by LMD and on time delivery of products, however trucks need to have access to the streets and consequently they generate nuisance
- It is important also to understand which types of goods/freight circulate in a city but it is not easy, so in-depth studies are necessary



Self-evaluation quiz: Question 1

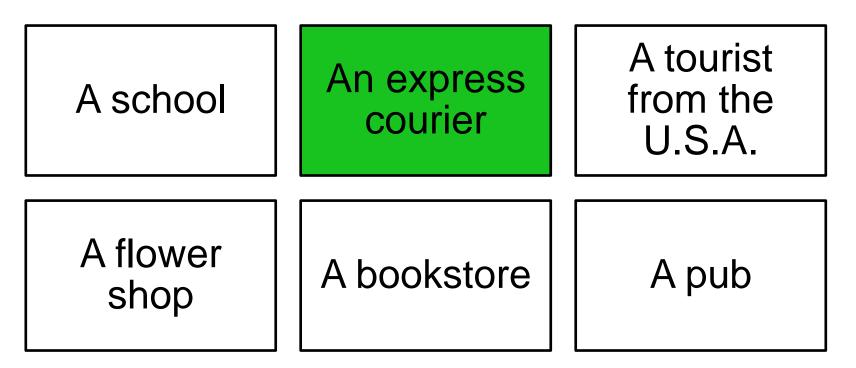
Which of the following is NOT a demand side actor?





Self-evaluation quiz: Question 1 (answer)

Which of the following is NOT a demand side actor?





Self-evaluation quiz: Question 2

What is the interest of a private citizen (resident) in a city in relation to LMD?

Minimum inconvenience caused by freight traffic

Access to public transport

Respect of local regulations



Self-evaluation quiz: Question 2 (answer)

What is the interest of a private citizen (resident) in a city in relation to LMD?

Minimum inconvenience caused by freight traffic

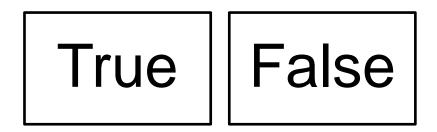
Access to public transport

Respect of local regulations



Self-evaluation quiz: Question 3

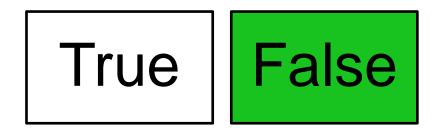
In last mile deliveries, demand side actors have the same needs and objectives





Self-evaluation quiz: Question 3 (answer)

In last mile deliveries, demand side actors have the same needs and objectives





References

(1) 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

(2) Interreg Europe SULPITER Sustainable Urban Logistics PlannIng To Enhance Regional freight transport (2019), SULP Policy Document Bologna https://www.interreg-central.eu/SULPiTER.html