

CHAPTER 1: The environment of Last Mile Distribution logistics

UNIT 1: Scope and definition of Last Mile Distribution Logistics

Capsule 1.4.1

A specific ecosystem to deal with

To be done prior to this capsule:

1.1.1

Capsule linked with:

1.4.2, 1.4.3 e 1.4.4

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Objectives of the Capsule

Upon completing this capsule, the learner should be aware that all urban environments are different, and that therefore customised solutions should be devised. An expert will introduce its context and the challenges in its city.

Category (Arial 18)	Conference or intervention	EQF		
		4	5	6
		X	X	X

Exercises included	NO
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Effort for the capsule	25 Minutes
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1. Link to the video of the expert (Italian)

- **CLIP 1 Why should Municipalities deal with LMD?**
<https://www.youtube.com/watch?v=07mFuTzavzk>
- **CLIP 2 What are the main challenges related to LMD in your city?**
<https://www.youtube.com/watch?v=J6ZC1LEe6dU>
- **CLIP 3 Which are the main city logistics measures in Ravenna?**
<https://www.youtube.com/watch?v=Q-iY7QpYipl>
- **CLIP 4 Are there further initiatives that the municipality undertook to improve city logistics?**
https://www.youtube.com/watch?v=G0y3RF_ZE9M&ab_channel=FondazioneITL
- **CLIP 5: The relationship with the city logistics stakeholders**
<https://www.youtube.com/watch?v=Uu8DrnJWmpE>

In the next slides the main points in English are listed.

1. CLIP 1 Why should Municipalities deal with LMD? (Transcript)

- When a vehicle moves, the municipality starts to work for the benefit of several users: pedestrian, cyclists, cars and obviously also freight and goods.
- A Municipality must acquire knowledge on logistics movements and flows within the city. Logistics generates impacts on several users, so by studying last mile delivery the Municipality can decide how to deal with freight vehicles.
- Why is it important for municipalities to deal with LMD? Because every movement within the urban area can create congestion, for example for vehicles that queue or pedestrians who wait to cross the streets. You'll surely think of the congestion that freight vehicles can create within historical centres. This is the reason why a Municipality deals with the movement of goods.
- Together with these issues, a Municipality must ensure the quality of the spaces within a city. The quality of spaces can be deteriorated by the presence of vehicles, vans and freight vehicles in general. Public spaces can decrease their quality and they will no longer be suitable for shopping or strolls, and for all the activities that can be performed in a city centre.

2. CLIP 2 What are the main challenges related to LMD in your city?

- Ravenna is medium-sized city with a historical centre limited to a specific area, as it is common in Italy. Small historical centres have usually narrow streets that cannot accommodate many vehicles at the same time. However, because historical centres usually have many shops, they also generate traffic.
- Please consider that even if small, in Ravenna's centre there are 400 shops. Every shop needs to procure its goods so it's easy to imagine that many vehicles will get into the city for this purpose. Every shop is different so many types of vehicles are required (small, big, or with certain characteristics).

3. CLIP 3 Which are the main city logistics measures in Ravenna?

- LMD, for professionals like myself, is a challenge because municipalities have the objective to maintain and improve the quality of public spaces, which are for everyone. However, it is a challenge to decrease the impact of freight vehicles on public spaces and their users.
- One of the objective within LMD is to look at the vehicles emission standards, especially for narrow streets when the so-called canyon effect is created i.e. when pollutants accumulate in the streets and cannot escape.
- So, in Ravenna we want to improve the overall emissions from freight, by improving the fleet employed for LMD. We do it by studying the different sectors and how goods move within a city. We then try to understand how to carry goods with zero or low emission vehicles.

4. CLIP 4 Are there further initiatives that the municipality undertook to improve city logistics?

- To concretely work on LMD, the Municipality of Ravenna and my office in particular, has worked on several studies in collaborations with masters students and has researched good practices from other European cities similar to Ravenna.
- After these studies, we have worked with important University to further deepen the study and understand problems better. Currently, our latest development consist in the commissioning a complete study to assess the feasibility of introducing cargo bikes, freight e-vehicles and low emission vehicles. We very carefully looked at other cities in order to adopt a completely different LMD system in the city.

5. CLIP 3 The relationship with the city logistics stakeholders

- When studying urban logistics, there is one complex activity: to identify the main actors and to properly address them. As an example, we need to consider that many shops have several conflicting interests. Let's think about the last mile delivery needs for a shop selling clothes or shops having a cold supply chain (Ho.Re.Ca): in these cases deliveries will need to be made, for example, at different times. So, all shops have legitimate interests that can be in conflict with one another.
- When we make surveys and address stakeholders, we must then pay a lot of attention and can be very articulated because we need to get insightful data. Questionnaires and surveys can be very time-consuming for shops and shops may not be so careful in answers.
- However, the interaction with the stakeholder is critical to understand the needs of those who deliver and those who receive the goods.