

CHAPTER 1: The environment of Last Mile Distribution logistics

UNIT 2: Scope and definition of Last Mile Distribution Logistics

Capsule 1.2.3

Public Authorities



To be done prior to this capsule:

1.1.1, 1.2.1

Capsule linked with:

1.2.1, 1.2.2, 1.1.3 and 1.2.7

Authors:

ITL
SUSMILE Consortium



Objectives of the Capsule

This capsule will incorporate how public and regulating bodies come into play when it comes to urban last mile delivery. The concept of external cost will be introduced to understand the role of public authorities.

Category	E-learning	EQF		
		4	5	6
		X	X	X

Exercises included	YES
--------------------	-----

Effort for the capsule	Content 20 Minutes	Exercises 5 Minutes	Extra Material 15 Minutes
------------------------	-----------------------	------------------------	------------------------------

Contents

1. Who are the public authorities?
2. The role of public authorities in LMD
3. External costs
4. Justification for public intervention

1a. Who are the public authorities ?

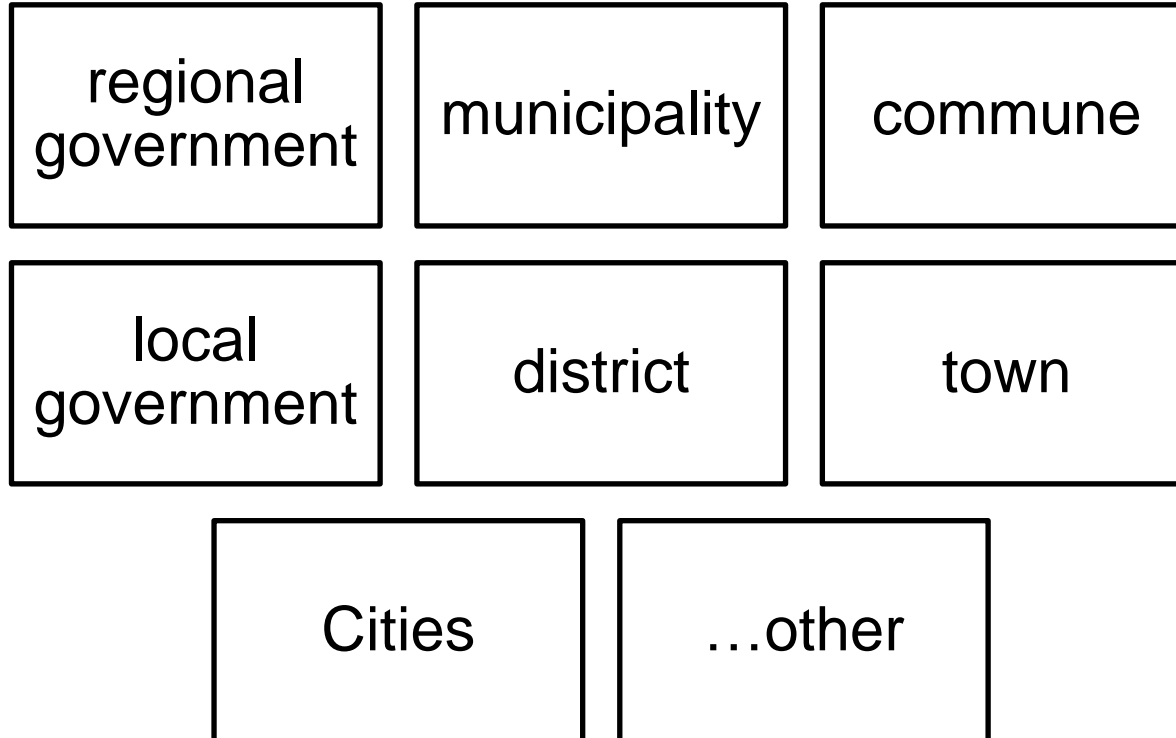
- With the term «public authorities» we refer to public administrative and governmental bodies
- They are legally designated parts of a states/country/region having responsibility over a territory
- Depending on the country, the relevant public authority involved with in planning of the city may differ



**Photo by Mateus Campos Felipe on Unsplash*

1b. Who are public authorities?

Some common terms to indicate the public authority of a city or region may be:



1c. Who are public authorities?

- Different public authorities come into play in the case of LMD

Local government

- Attractive city for inhabitants and visitors
- Minimum inconvenience from freight transport, while also having an effective and efficient transport operation.

National government

- Minimum externalities from freight transport, while maximising economic efficiency and effectiveness.

2. The role of public authorities in LMD

- Public authorities are very important in last mile delivery (LMD) and **strongly influence the other actors' choices and way of operating** by imposing regulations and rules over the circulation, the operations and the access to and within the city
- Their **role is to protect public health and ensure the well-being** of both citizens and business in their area
- These objectives may be in conflict at times, as business and industries' operation may create congestion and pollution; therefore, it is important to set the regulations and the rules that all actors must observe when operating in the urban areas
- When it comes to the importance of public authorities in LMD we must refer to the economic concept of external costs

3a. External costs

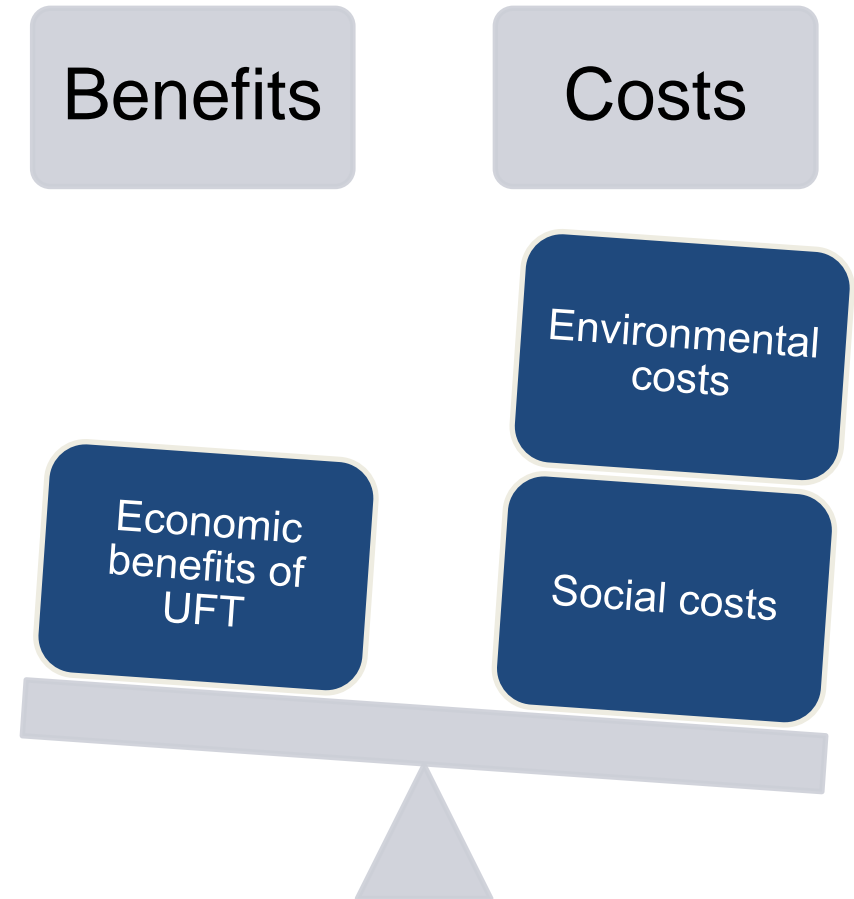
- External costs, also known as externalities, **arise when the social or economic activities of one (group of) person(s) have an impact on another (group of) person(s) and when that impact is not fully accounted, or compensated for, by the first (group of) person(s).**
- External costs of transport are generally not borne by the transport user and hence not taken into account when they make a transport decision.
- Cars exhausting NOx emissions, for example, cause damage to human health, imposing an external cost. This is because the impact on those who suffer damage to their health is not taken into account by the driver of the car when deciding on taking the car.

3b. External costs

Cost category	Social costs	External costs
Congestion costs and scarcity costs	All costs for traffic users and society (delay, unreliable travel times and/or arriving times, additional operation costs, missed economic activities) caused by high traffic densities given the available capacity of the Infrastructure	Additional costs imposed on all other transport users and society excluding own additional costs.
Accident costs	All direct and indirect costs of an accident (material costs, medical costs, production losses, suffering and grief caused by fatalities and injuries).	Part of the social costs that is not considered in own and collective risk anticipation and not covered by (third party) insurance.
Environmental costs	All damages of environmental nuisances (e.g. health costs, material damages, biosphere damages, long term risks).	Part of the social costs that is not considered (paid for).

4a. Justification for public intervention

- In economic terms, urban freight transport (UFT) negative impacts are due to the lack of internalisation by the users and operators of UFT services of the total external costs associated with urban freight transport
- Not all of the social costs are reflected in the price of freight transport charged by the UFT operators to their customers.



4b. Justification for public intervention

- Despite the economic benefits generated by UFT, there is a justification for intervention by the public sector in the market to redress the **balance between social cost and social benefits** derived from UFT.
- **Logistics activities and LMD activities are vital for any city** to be attractive and ensure that shops and business can stay alive.

Summary

- Public authorities go by different names (Municipalities, Commune, Districts...). When talking about LMD, they influence the way deliveries can be made into town through, for example, regulations
- Public authorities are important actors because they help balance the different of several actors and ensure the wellbeing of the citizens
- In fact, among their activities, public authorities aim to minimize the effect of the negative externalities due to LMD

Self-evaluation quiz: Question 1

What is the name of the public authority overseeing transport plans and LMD in your city?

Self-evaluation quiz: Question 2

When does an external cost arise?

When the environmental impact of one activity is very large over time and it is not paid by who has generated it

when the social or economic activities of one person has an impact on another person but its impacts is not compensated by the first person

When people protest against something and the government does not act upon it

Self-evaluation quiz: Question 3

What are the external negative costs associated with LMD?

Congestion

Accidents

Pollution
and poor air
quality

Depletion of
resources

All of the
answers
above

References

- (1) European Commission, Directorate General for Mobility and Transport (2019) Handbook on the external costs of transport <https://op.europa.eu/it/publication-detail/-/publication/9781f65f-8448-11ea-bf12-01aa75ed71a1>
- (2) 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