

CHAPTER 1: The environment of Last Mile Distribution logistics

UNIT 4: Characteristics and complexity of urban freight logistics

Capsule 1.4.6

Environment regulations in urban areas



To be done prior to this capsule:

1.2.1, 1.4.1

Capsule linked with:

1.2.5, 1.4.5, 2.1.3

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Objectives of the Capsule

This capsule presents some environmental regulations to be considered in urban freight transport logistics.

Category	Document, source	EQF		
		4	5	6
			X	X

Exercises included	YES
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Effort for the capsule	Content 10 Min.	Exercises 5 Min.	Extra material 5 Min.
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Contents

1. Introduction
2. Urban Vehicle Access Regulations (UVAR)
3. Multiple choice exercise

Instructions for source revision

Environmental regulations in urban areas are rules approved by local regulatory bodies, such as municipalities or cities, with the aim of reducing the environmental impact generated by the mobility of people and goods.

European municipalities have the competence to manage their own cities and therefore, organise them according to their environmental goals. One of the different measures that municipalities, and specially cities, implement with the aim of reducing the environmental impact caused by the mobility in them, is to regulate the access of vehicles to urban areas, a measure that, in addition to private vehicles, also affects urban freight distributors or operator and specially to those that deliver in the last mile.

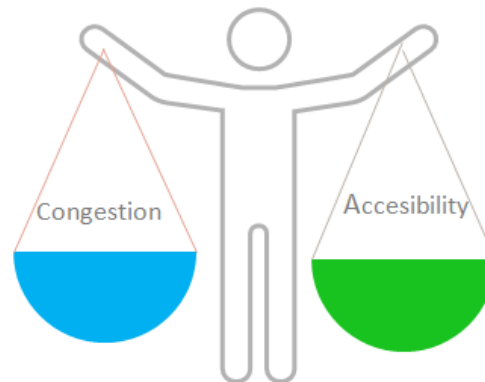
In this capsule, browsing in a web site, you will learn the name of the tool that regulates vehicles access to urban areas, and what are the main regulations schemes used along Europe.

1. Introduction

Urban freight logistic is a complex ecosystem, where economic, social, territorial and environmental impacts take place. Furthermore, almost 80% of EU citizens is living in cities, and this percentage does not stop growing.

In this context, the European Commission, through general environmental legislation, works to ensure that European citizens enjoy cities with clean air and water, that they avoid exposure to excessive noise, that cities deal properly with waste, that they protect their nature and biodiversity, that better green infrastructure is promoted and much more.

Consequently, many cities struggle with the balance of congestion, “liveability”, air pollution, noise levels, accessibility, damage to historic building and other pressures of urban life.



1. Introduction

In this context, cities are taking measures to achieve cleaner air, more space for walking and cycling, less traffic congestion, etc. and the **Urban Vehicle Access Regulations (UVAR)** is a powerful tool that they are using.



DEFINITION:

UVARs regulates the vehicular access to urban infrastructure (particular and goods). They can also be seen as regulations, restrictions or bans.



2. Urban Vehicle Access Regulations (UVAR)

Source (web site in EN): Urban Access Regulations in Europe. (n.d.).

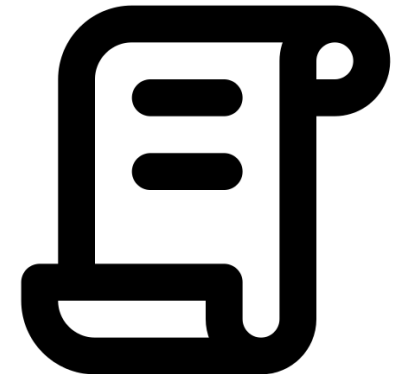
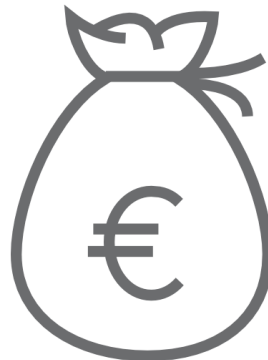


<https://urbanaccessregulations.eu/>

Summary:

Cities regulate their access using three main regulation schemes:

- Access is regulated by vehicles emission
- Access is regulated by payment
- Access is regulated by other systems (permits for example)



2. Urban Vehicle Access Regulations (UVAR)

Although there are three main regulations schemes, cities can also combine them too.

For example, when vehicles must pay and meet emissions standards to access to the city centre, as it happens in London.



2. Urban Vehicle Access Regulations (UVAR)

1) Access regulated by vehicles emission:

If a city wants to regulate the access based on the vehicle emissions, it has to organise the city by AREAS or ZONES. One of this area will be categorized as a **LOW EMISSION ZONES (LEZ)**, where access for the most polluting vehicles is regulated.



Low Emission Zones are often the most effective measure that towns and cities can take to improve air pollution. In fact, in addition to Low Emission Zones, there are also **Zero Emission Zones**, and even **Ultra Low Emission Zones**.

Normally cities control the LEZ area using cameras and also identifying the vehicles according to their environmental impact (environmental badges or sticker – see capsule 2.1.3).



2. Urban Vehicle Access Regulations (UVAR)

The level of impact of LEZs on air quality depends on many things, such as:

- The emissions standard set,
- How well the LEZ is enforced (controlled),
- Which vehicle types are affected,
- The geographical area of the LEZ,
- Etc.

Browsing in the web site, you will see several impact analysis done in some European cities (section Low Emission Zones - Impact of Low Emission Zones).

2. Urban Vehicle Access Regulations (UVAR)

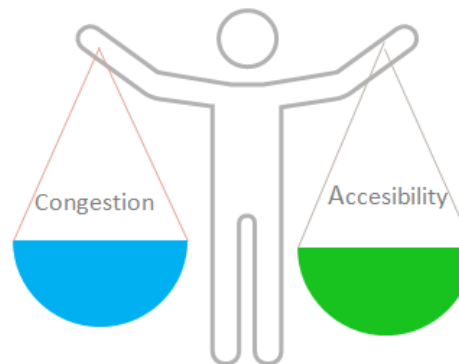
2) Access regulated by payment:

An Urban Road Toll or **Congestion Char** is where entry to an area is subject to payment. In most cities the money raised is used to improve transport in and around the city.



Why Urban Road Tolls?

Many cities and towns struggle to balance congestion, air pollution, noise levels, accessibility, damage to historic buildings and other pressures of urban life. Urban Road Tolls is one of the ways to reduce traffic and congestion in a city and ensure that those that need to travel with a vehicle - for example **deliveries** - can travel rather than sitting in a traffic jam.



2. Urban Vehicle Access Regulations (UVAR)

3) Access regulated by other systems:

Apart from specific permits, in some cities are being used **Emergency Smog Schemes**.

With this system, when high pollution is expected, or after a certain number of days of high pollution, there are restrictions on vehicle usage, often combined with restrictions on solid fuel burning. It could affect certain area, whole municipality or a region.

Checking in the section “Schemes by Country”, you will see if in your country there is any Pollution Emergency restriction applicable.



Exercises

Select the correct answer for each question, only one:

1. Urban Vehicle Access Regulations (UVAR):
 - a) Are environmental rules approved by regional regulations bodies.
 - b) Are rules that states are taking to achieve cleaner air, more space for walking and cycling and less traffic congestion.
 - c) Are tools used by cities to regulate the vehicular access to urban infrastructures.

Exercises

Select the correct answer for each question, only one:

2. Cities use Urban Vehicle Access Regulations (UVAR) because :

- a) They want to get money.
- b) To ensure the entry and transit of public transport in the city.
- c) Cities struggle with the balance of congestion, “liveability”, air pollution, noise levels, accessibility, damage to historic building and other pressures of urban life.

Exercises

Select the correct answer for each question, only one:

3. UVAR's and regulation schemes:

- a) Two main regulations schemes are used: vehicles emission and payment.
- b) Three main regulation schemes are used: vehicles emission, payment and others, such us permissions.
- c) Three main regulation schemes are used: vehicles emission, payment and camera control.

Exercises

Select the correct answer for each question, only one:

4. Low Emission Zones (LEZ):

- a) Are more restrictive than Ultra Low Emission Zones (ULEZ)
- b) It is not an effective measure that towns and cities can take to improve air pollution.
- c) It is an effective measure if a city wants to regulate the access of vehicles based on the vehicle emissions.

Exercises

Select the correct answer for each question, only one:

5. Which is the regulation scheme being used in London?
- a) Emergency Smog Schemes
 - b) Access regulation according to vehicles emission.
 - c) Access regulation according to vehicles emission and payment