

### **CHAPTER 3: Trends for more effective LMD logistics**

### **UNIT 4: Improving logistics' effectiveness & impact**

Capsule 3.4.2

Working on urban drivers' behaviors



### To be done <u>prior</u> to this capsule:

Links to make with driving permits and their content. Important to relate with the lack of understanding from citizens about the delivery personnel's working conditions.

### **Capsule linked with:**

The knowledge provided in this capsule is complementary to capsules 2.2.1, 2.2.2 and 2.2.3.

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# Objectives of the Capsule

Constraints are numerous within the city to circulate and properly deliver packages, whatever the product. Since urban mobility modes are the most complex but citizen behaviours and knowledge about sharing space is not the same, this Capsule aims to provide learners with the necessary skills to act in an exemplary way as delivery professionals or when coordinating such professionals.

Category	Document, source	EQF		
		4	5	6
			Х	Х

Exercises included YES

Effort for the capsule

60 Minutes (40 min reading and 20 min test)



# Content of the Capsule

- 1. Cohabitating with several mobility modes
- 2. Urban rules and differences in users' knowledge
- 3.Logistics' operations in that environment
- 4. Exemplarity of delivery drivers

#### Remark:

It is recommended to relate with local/national regulations in previous Capsules, for learners to understand the constraints faced by logisticians to deliver at certain times, with available parking space or not, etc.



# Instructions for the Capsule

You will find attached to this Capsule several documents:

- 1. SUSMILE synthesis for the different documents attached, and the reason why we selected these examples to reflect and inspire good professional practices
- 2. Case study documents, presenting different situations or analysis to encourage proper urban commercial driver behaviors

Other case studies may be more adapted in the future with more recent data and more innovative operations to suit the needs of urban logistic demand. We invite you to keep watch for those updated reviews that may bring additional value to this SUSMILE MOOC content.



# Source 1 – SUSMILE Synthesis

This document is meant to present briefly the case study for this Capsule: "Working on urban drivers' behaviors"

It is important to keep in mind that most external sources were not directly designed for this MOOC. Our synthesis document aims at clarifying some elements and explaining why we considered the selected sources as interesting to reflect this particular Capsule topic.

Please note it may be time-related as the initial production of this synthesis was done in 2022 and new technologies, practices or company models may have merged in the years to come.

The objective of such sources is to invite students putting theoretical elements into perspective and understand each private sector model to face either its environment, competition, etc.



## Source 2 – Information source: document attached (S2)

Giacomo Dalla Chiara, Klaas Fiete Krutein, Andisheh Ranjbari, and Anne Goodchild (2021), Research article "Understanding urban commercial vehicle driver behaviors and decision making"

Document available in English.

#### **Summary:**

This study presents the data collected on the behaviour of commercial vehicle drivers by conducting rides with various logistics carriers. The results show global drivers' time management, such as parking time vs delivery operations or driving time. The study also reveals that drivers park in the permitted parking spaces, with less than 5% of stops occurring in the traffic lane. The results provide estimates of trip lengths, stopping times and parking types chosen, as well as insights into the reasons for these decisions and the factors that influence drivers' choices.



## Source 3 – Information source: blog

Routific (2020, August), "The best GPS app for delivery drivers in 2021"

https://blog.routific.com/best-driver-apps-for-route-planners

The information provided in the link above is interesting to read with the dedicated proposal below. The link below gives an example of what the experience of new technologies can be for delivery drivers:

Last mile guidance video

Important note: SUSMILE project does not aim at directing toward one specific solution. Articles in English



## Source 4 – Information source: document attached (S4)

Nan Xu, Xiaohan Li, Qiao Liu and Di Zhao - Sensors (2021, September), "An Overview of Eco-Driving Theory, Capability Evaluation, and Training Applications"

Document in English

#### **Summary:**

This paper reviews the energy saving theory and technology of eco-driving, eco-driving capability evaluation, and the practical application of eco-driving, to point out some limitations of previous studies. The research on eco-driving theory mostly focuses on a single vehicle in a single scene, and there is a lack of eco-driving research for fleets or regions. The parameters used to evaluate eco-driving capabilities mainly focus on speed, acceleration, and fuel consumption, but external factors that are not related to the driver will affect these parameters, making the evaluation results unreasonable. Thanks to vehicle big data and the "Internet of Vehicles" there is now a better access to such information for solving regional eco-driving, as well as for the fair evaluation of eco-driving. In general, the development of new technologies provides new ideas for solving some problems in the field of eco-driving.



## Source 5 – Information source: document attached (S5)

FORS professional (2022), "Safe Urban Driving"

Document available in English

#### Summary:

The Safe Urban Driving course trainer's kit is one of a series of publications produced by Transport for London to help the commercial fleet sector improve road safety, reduce their impact on the environment and the road network, and increase their level of regulatory compliance.

The course provides drivers with the knowledge and skills to share the road safely with vulnerable road users, particularly pedestrians, cyclists and motorcyclists. This module gives drivers first-hand experience of feeling vulnerable on busy urban roads and knowledge of how different road users may act in certain situations. SUD is essential training for all commercial drivers who regularly drive HGVs and public service vehicles in the urban environment and where there are high volumes of RVUs, such as cyclists and pedestrians.



# Source 6 - Information source: online article

Team Woop (2021, February), "Delivery personnel: the first pillar of customer satisfaction"

https://www.woopit.fr/en/post/delivery-personnel-the-first-pillar-of-custumer-satisfaction

Article in English

#### Summary:

This page summarises all the key concerns that transport operators have for their delivery staff in order to satisfy their customers. It focuses on the behaviour of the individual and how last mile delivery has profoundly changed the perception of the profession as well as the skills required for a career in the sector.



## **Exercises**

The questions are listed in the second part of Source 1.

There is limited guidance on the expected answers (provided in the document "S1 Answers"), to allow teachers to adapt their messages or to deepen some of the information available to their students. The aim of this capsule is to invite them to formulate a synthesis of the key messages and to be able to defend them.

The questions are directly linked to the documents and sources provided. Teachers are free to challenge their students with the questions they find interesting or possibly to formulate their own questions, especially for EQF 6 levels.