FUA OF BUDAPEST (XVIII. district and Vecsés)

Interreg CENTRAL EUROPE
SULPiTER
European Union
European Regional Development Fund

FUA Objectives

- Highlight the importance of city logistics as a relevant part of Budapest SUMP (Balázs Mór Plan)
- Develop a comprehensive city logistics legislation both for the city and for the regional level
- Understand the needs of relevant stakeholders in terms of urban freight deliveries
- Develop pilot actions for testing and experiencing sustainable city logistic activities, solutions

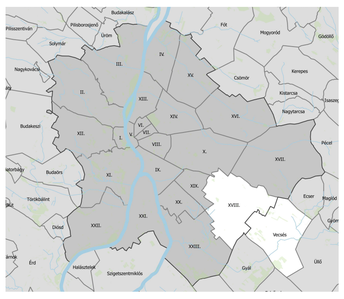
The territorial context

In the SULPiTER project we handle the FUA of Budapest on two levels:

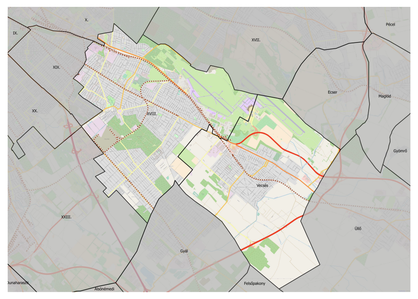
- The **focus area** consists of the territory of the two project partners, the 18th district of Budapest and the City of Vecsés.
- The **outlook area** of our study is the area of the whole city of Budapest (the other 22 district out of the 23).

The connection between the 18th district and Vecsés is not only, that they are neighbouring areas along the boundary of the capital, but also that the Budapest Ferenc Liszt International Airport (BUD) is located among others partly in the district and partly in Vecsés.

The FUA of Budapest upon the OECD classification is categorised as large metropolitan area of almost 3 000 000 inhabitants, out of the City of Budapest, capital of Hungary has 1 700 000 inhabitants. The administrative system is very special, Budapest is composed of 23 local municipalities having almost the same rights and responsibilities as the city of Budapest.



The focus area in the context of Budapest



The focus area, source: Open Street Map

The focus area, source: Google Earth

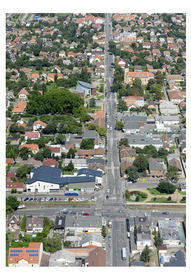
Features of the area:	Focus area	Outlook area
Km² involved in the study-area:	74,78 km²	525 km²
Number of inhabitant:	122 076	1 733 685
Number of municipalities involved:	*2*	+23
Number of working units (employers):	3167 operating companies	51369 operating companies

Number of zones used in the tool:

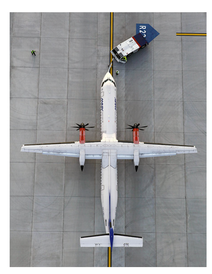
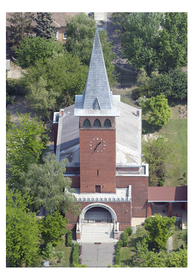
Altogether 20 zones were created from the 23 district of Budapest and the city of Vecsés for the interviewing. We merged together four really coherent districts in the citycore (I., V., VI. and VII.) and two in the suburb (XIX. and XX.). In the focus area, a bigger sample of the working units was examined.
Alltogether 381 interview took place, 111 in the focus area 111 and 270 in the outlook area.

Number of zones in Budapest Traffic Model:

The traffic model of Budapest has a total of 922 traffic-modelling zones in Budapest and the modell also includes 199 agglomeration settlements, consisting of a total of 255 traffic-modelling zones.
In total, the traffic model has the 1201 traffic modelling zones shown in the following figure.



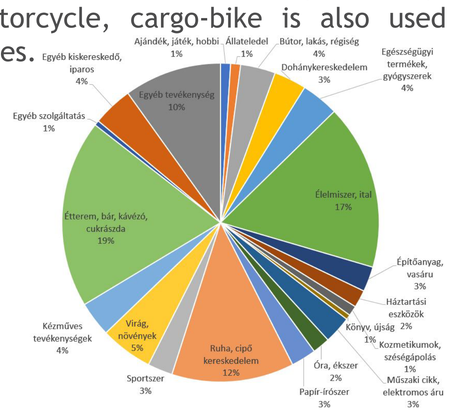


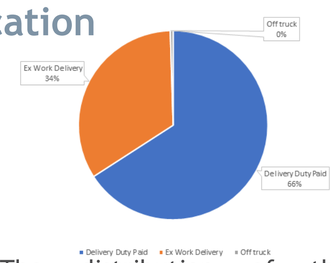

Results generated by the tool application

Features of the interviewed shops

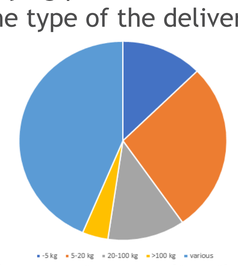
- 3,5 employees on average
- 50% are below 40 m2
- 22% of does not have an inside depot
- 14% has external depot
- external depot distance from the shop is 29 km on average
- 39% has their own fleet, usually it means only one vehicle
- 47% of the vehicles is car, 23% van, but truck, motorcycle, cargo-bike is also used in some cases.



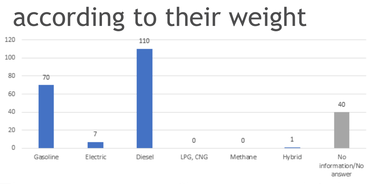
Distribution of the interviewed shops according to their activities



The distribution of the supplying processes according to the type of the delivery



Load units distribution according to their weight



The own fleet vehicles distribution according to the fuel supply type

Features of the supplying process

- in 39% of the cases both the shop owner and the consignor, in 38% the shop and in 23% the consignor decides the mode of the delivery
- within all the supplying processes 39% uses the services of a third party
- 12,6% of the shops uses the services of express couriers
- 3/4 of the deliveries take place once a week or more rarely
- most common type of load units is box

Problems

55% the parking and loading possibilities are not suitable in the area
9% the loading bays cannot be reached because of different physical obstacles or not proper legislation

Almost 10% of the problems reported leads to irregular behaviour in everyday situations.

Suggestions

34% establishment of more loading bays
19% change of the legislation

Freight Quality Partnership

- FQP members are selected from three groups in the immediate catchment area of the Budapest Liszt Ferenc International Airport:
  - Public-sector stakeholders: town/regional planners, transport specialists and the infrastructure and service providers were invited
  - Private sector stakeholders: logistic operator companies and the companies important for the FUA freight transport were included
  - Third group: logistic and goods transport and industry associations
- 5 meetings are scheduled for 2018-2019
- First FQP event was organized by the Budapest Airport Regional Development Cluster as an information event to share the results of the surveys and the current status of transportation in the Budapest FUA in general and with specific focus on the airport region.








Data interpretation

- In Budapest freight traffic access is regulated by vehicle weight, environmental category and the purpose of the delivery filtering a lot the vehicles entering to the inner part of the city
- Deliveries are often unregulated causing congestions and disturbances for private or public transport on delivery sites
- Many delivery problems are derived from the high percentage of vehicles under 3,5t and from the lack of strict legislation on delivery times in central areas
- Impacts of dense traffic in Budapest result the instability of deliveries in time and make deliveries inefficient both for transporters and for clients

LSI

Process of the LSI index calculation:
1) Selecting the scope of action.
2) Selecting criteria. The criteria are understood within the scope of action.
3) Selecting indicators. Indicators are the calculated values of the criteria.
4) Weighting.
5) Normalization.
6) Calculation of LSI.

Impact area	Performance
Economy and Energy:	0,325
Environment:	-0,294
Transport and mobillity:	0,232
Society:	0,265
Policy and measure maturity:	-0,275
Social acceptance:	0,227
User uptake :	0,099
LSI:	0,579