

# Good practices and European urban freight (soft) measures state of the art

Marc Torrentellé 1-Mar-12  
LEITAT Technological Center

2<sup>nd</sup> Plenary Knowledge Sharing Workshop

WP2 main objectives are:

- to provide a review of the C-LIEGE pilot sites
- to provide a review of the European State of the Art on UFT
- to evaluate different good practices, identifying strengths, weaknesses, opportunities and threats in each case
- to exchange experiences among Local Authorities in EU Member States and relevant stakeholders groups

# Good practices identification

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Good practices have been identified from:

- C-LIEGE pilots sites: Parma, Leicester, Newcastle, Stuttgart, Montana, Szczecin and Malta
- EU projects or studies
- 1<sup>st</sup> Plenary Knowledge Sharing Workshop

- More than 100 European good practices identified



**15 GOOD PRACTICES SELECTED**

# Selection procedure criteria

<b>Energy saving potential</b>	
Unknown data	0 points
0 – 10%	1 point
11 – 30%	2 points
>30%	3 points
<b>Soft measures relevance</b>	
Hard measures	1 point
Soft measures	3 points
<b>Cost of implementation of the action</b>	
Unknown data	0 points
>750.000 €	1 point
50.000 – 750.000 €	2 points
<50.000 €	3 points
<b>Impacts of the good practice</b>	
Negative impacts	0 points
Positive impacts	2 points

# Selection procedure criteria

<b>Level of transferability of the good practice</b>	
Difficult	1 point
Medium	2 points
Easy to replicate	3 points
<b>Degree of innovativeness</b>	
More than 7 years' operating	1 point
3 – 7 years' operating	2 points
< 3 years' operating	3 points
<b>Level of cooperation</b>	
No cooperation	0 points
Public or private cooperation	1 point
Public and private cooperation	3 points
<b>Availability of documented information</b>	
Low	0 points
Medium	2 points
High	3 points

Strengths

Weaknesses

## SWOT ANALYSIS METHOD

Opportunities

Threats

- Round table discussion with a panel of European Association:
  - 1) Administrations → POLIS
  - 2) Shippers → Confcommercio International and Eurocommerce
  - 3) Freight carriers → European Express Association (EEA)
  - 4) Residents → European Consumers' Organisation (BEUC) and European Citizen Action Service (ECAS)



- Validate the UFT Database
- Opinion of the 15 good practices elicited
- Selection of 5 “excellence” good practices



# Good practices selected





- 15 good practices elicited:
  - 1) Night delivery (Barcelona)
  - 2) City distribution with cargo bikes (Donostia)
  - 3) Driver training (Bristol)
  - 4) Delivery and Servicing Plans (Sutton)
  - 5) Regulation incentives and restrictions (Parma)
  - 6) Access restrictions (Bristol)
  - 7) Incentives and access restrictions (Gothenburg)
  - 8) Use of bus lanes (Norwich)
  - 9) Freight Distribution Plan (Bologna)
  - 10) Tyne and Wear Freight Partnership (Newcastle)
  - 11) Delivery Space Booking (Bilbao)
  - 12) Restrictions of UFT routes (Leicester)
  - 13) Environmental Zone (Aalborg)
  - 14) Clear Zones (UK)
  - 15) Local Freight Network (Gothenburg)

# Night Delivery (Barcelona)

## STRENGTHS

- Several operators make night deliveries


Condis  
Mercadona  
LIDL  
Imaginarium  
Corte Inglés

- Reduce journey times  **50%**
- Reduce fuel consumption  **32 - 57%**
- Reduce emissions  **30 - 53%**
- More capacity load and less journeys
- Avoid fines for bad parking
- Unloading with negligible increase in noise levels  **0,3 dB(A)**



## WEAKNESSES



- Higher personal costs for freight operators and retailers  + 25%
- Small businesses cannot accept to receive the goods during night times
- Investment in vehicles is needed to reduce noise levels and comply with the rules

# City distribution with cargo bikes (Donostia)

## STRENGTHS

- No fuel consumption
- 16.000 deliveries/year: 12 tonnes per year CO2 have been reduced
- Access restrictions to the city centre are not applied
- Attract new customers because they can receive the deliveries at any time
- Improve the quality of life




# City distribution with cargo bikes (Donostia)

## WEAKNESSES



- Not all the goods can be transported by cargo cycles. Weight up to 180 kg and a capacity of 1500 Litres.

## STRENGTHS

- Public and private stakeholders are involved (Bristol City Council, UK Road Safety and freight operators)
- Ecodriving contribute to reduce pollution and fuel consumption  **8-13% less fuel consumption**
- Encourage to improve the efficiency of lorry fleets embracing:
  - the vehicle
  - the driver
  - the management of operations
- Combination of in class theory and on road practical demonstration

## WEAKNESSES

- It is difficult to encourage participation with smaller fleets as operators are less willing to take drivers off the road
- After the training, is complicated to monitor the driver's behaviour without ITS

## STRENGTHS

- Outline the needs to generate freight transport efficiently
- Better manage of freight movements
- A detailed study into the development of a DSP was carried out
- Financial support of the South London Freight Quality Partnership (SLFQP)
- Coordination of the DSP by a Senior Logistic expert
- The service contributes to a direct carbon reduction













**Expected CO<sub>2</sub> saving: 1,7 tonnes/year**  
**Expected fuel saving: 634 L/year**



# Regulation incentives and restrictions (Parma)

## STRENGTHS

- Reduction of energy consumption  **825 MWh/year**
- Reduction of fuel consumption  **80.640 litres/year**
- Reduction of freight vehicles  **39.345 vehicles/year**
- Reduction of trip km  **40 km/day**
- Reduction of emissions
  - CO<sub>2</sub>  **37.000 kg/year**
  - CO  **300 kg/year**
  - VOC  **38 kg/year**
  - PM10  **13 kg/year**
  - PM2,5  **11 kg/year**
  - NOX  **216 kg/year**

- Difficulties to achieve a consensus among the local stakeholders about the implementation of an innovative city logistics model
- Initial high cost of the action: 2.050.270,42 €

# Regulation incentives and restrictions

## (Parma)



## STRENGTHS

- More trips with fully loaded vehicles
- Increase the city attractiveness
- Improvement of the quality of life
- Financial supporters: Municipality of Parma, Infomobility, Environment Ministry and Emilia-Romagna Region

## WEAKNESSES

- New concept for stakeholders: innovative city logistics model
- Initial high cost of the action: 2.050.270,42 €



## STRENGTHS

- Less congestion due to the implementation of time windows and new pedestrian zones
- Improvement of the quality of life
- Time windows moves deliveries to the off peak (6pm-8pm) and early morning (5am – 8am)
- Consolidation of goods is promoted by the exemption from time windows for the consolidation centre delivery vehicles **15 new retailers**
- 3 km priority bus lane for consolidation vehicles

## WEAKNESSES

- The presence of time windows exemptions don't promote the reduction of congestion at peak hours

# Incentives and access restrictions (Gothenburg)

## STRENGTHS

- Plan distribution routes are easier for transport suppliers with change of one-way traffic regulations
- Access for all kinds of transport and unloading/loading at any spot along the streets
- Length restrictions : <10 m vehicles are allowed to enter between 6am and 8am
- Monitoring of compliance to the rules



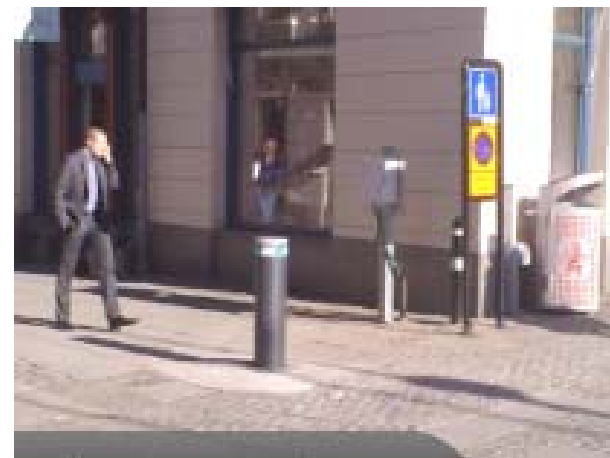
# Incentives and access restrictions (Gothenburg)

## STRENGTHS



- Less time required for deliveries
- Lower operation costs for transport companies
- Less risky situations and less traffic in the city center
- Increase the attractiveness of the city
- Local Freight Network played an important role

## WEAKNESSES

- The planned actions to incentive the vehicles with a load rate over 65% or at least 50 client visits per trip turned out to be more complicated than expected



## STRENGTHS

- Bus lanes are an efficient use of road space
- A study was undertaken to determine the most suitable lanes
- Increase of the average speed in 10 km/h to enter the city centre
- Fuel consumption reduction  - 11%
- Reduction of CO2 emissions  - 14%
- Drivers were required to undergo specific training

## WEAKNESSES



- The width of existing bus lanes are narrow: 3.0 m wide
- Bus lanes only can be used for consolidation center vehicles
- Negative reaction of cyclists
- Little benefit from using the bus lane at off-peak times
- The length of bus lane that can be used is small: 3,2 km

## STRENGTHS

- Initial analysis of the current freight delivery situation
- Better organization of the delivery process in the city
- Define the good practices to undertake
- Time windows depending on the pollution category of the vehicles:


3,5 h/d Non Euro

7,5 h/d Euro

9,5 h/d LPG/Methane and electric  **+ 7%**



## STRENGTHS

- Introduction of a payment in concept of delivery permit which varies in relation to the pollution category
- Set up of a van-sharing platform addressed to small operators 
- More availability of parking areas, loading and unloading of goods
- Reduction of the occupation rate of parking spaces for loading and unloading

## WEAKNESSES

- It was necessary to invest in a scoping study, which requires time and expertise
- 36% of km driven**

# Tyne and Wear Freight Partnership (UK)

## STRENGTHS

- Provide technical advice and guidance
- Exchange of knowledge
- Carry out UFT surveys and studies
- Detect the conflicts and needs in terms of UFT
- Help meet Local Transport Plan objectives: economy, emissions and quality of life
- Freight Partnership has an excellent website:  
<http://www.tyneandwearfreight.info/>

Newcastle  
North Tyneside  
South Tyneside  
Sunderland



## WEAKNESSES

- Lack of statistical data
- Lack of ex-ante and ex-post evaluation data

# Delivery Space Booking (Bilbao)

## STRENGTHS

- A fleet operator can book a delivery space in advance via internet
- Better control and management of delivery bays
- Double line parking reduction
- Rout optimization
- Reduction of emissions
- Less time required for parking



## WEAKNESSES

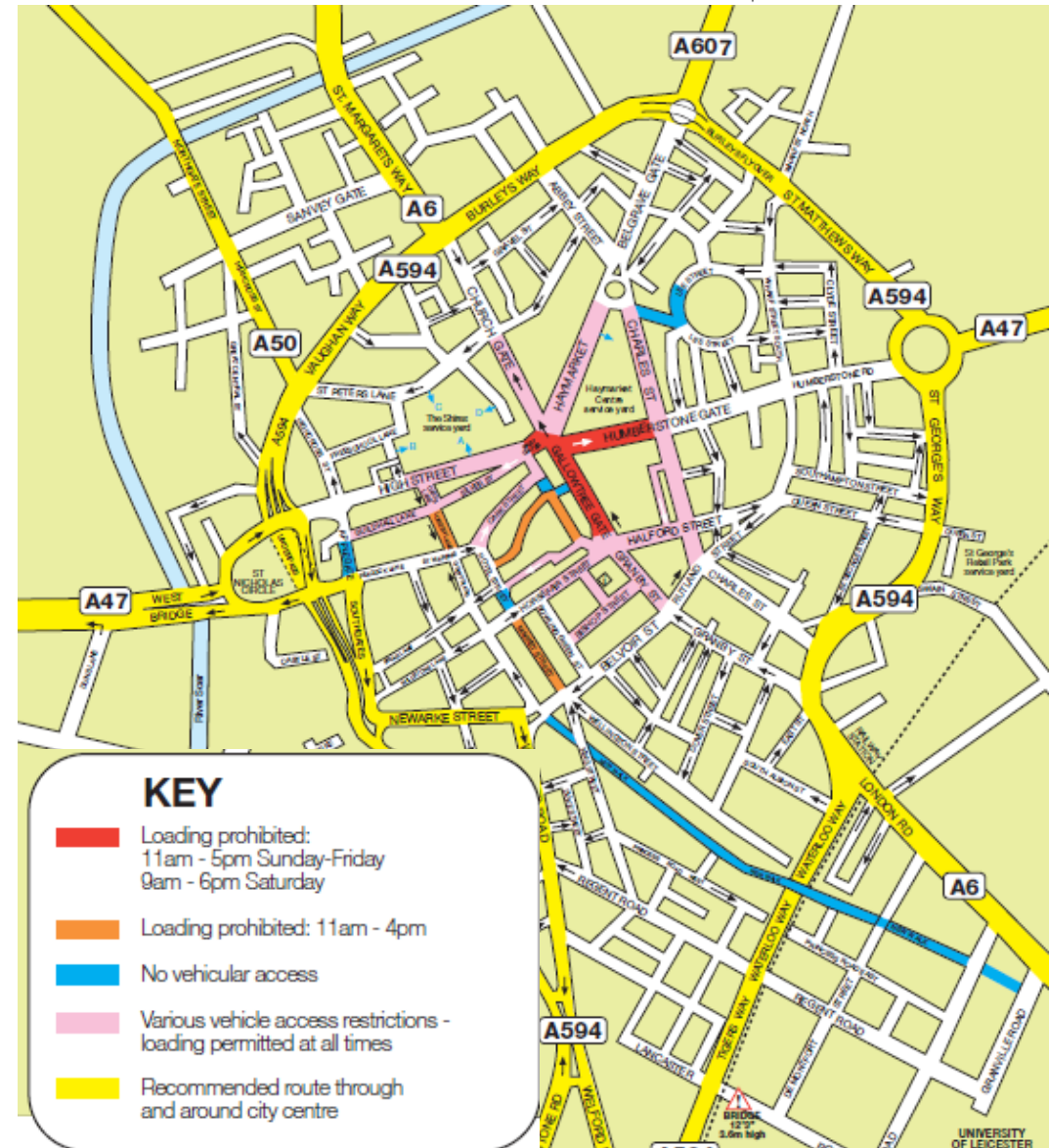


- High cost of investment
- Some drivers position against this system, as it makes more difficult the way in which the loading and unloading activity is developing
- Those fleet operators that control fleets could consider that the system complicate their job and increase their work volume

# Restrictions of UFT routes (Leicester)

## STRENGTHS

- Energy savings
- Less vehicles get lost due to better signage
- Freight mapping online
- Reduction of trip-km
- Reduction of emissions
- Noise reduction
- Better air quality
- Reduction of transport operation costs
- Improve the quality of life




## WEAKNESSES

- Some logistic operators consider the restriction of routes as an inconvenient
- The impacts are not quantified



## STRENGTHS

- Political support
- Harmonized LEZ rules in Denmark
- Encourage the purchase of cleaner freight vehicles  **54% are Euro IV or better**  
**15% are Euro II or earlier**
- Reduction of pollution
- Economic benefits for trucks manufacturers
- Vehicles retrofitted with particulate traps can access to the LEZ



## STRENGTHS

- Improve the quality of life
- Meetings were conducted before the implementation
- Information leaflets were handed
- The Police conduct special raids in the zone





## WEAKNESSES

- There is no way to count the number of filters



## STRENGTHS

- Provides a forum for towns and cities to exchange ideas
- Remove traffic from the Clear Zones areas has improved the perception of the urban environment
- Improve the quality of life
- Reduction of emissions



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## WEAKNESSES

- Lack of adequate funding
- Gathering support by public
- Input from a large number of stakeholders required



## STRENGTHS

- Promote the exchange of knowledge and experience among stakeholders
- Composed by different stakeholders: transport suppliers, real estate owners, retailers, associations, truck manufacturer and university
- Periodic meetings: 3-4 per year
- Private companies feel that they are involved in the changing process
- Administrator: wide knowledge and experience

## WEAKNESSES

- It requires a lot of time and resources
- Difficulties in gathering all the stakeholders in the meetings
- Different point of view may slow the implementation of good practices



**Thank you for your attention!**