



**FOOD IN CITY-**  
**Innovazione nella Logistica Urbana degli**  
**Alimenti"**  
**Casa ABRUZZO**  
**Milano, 23 Luglio 2015**

**Piani Urbani per una Logistica Sostenibile:**  
**The IEE ENCLOSE project Sustainable**  
**Urban Logistics Plan (SULP) methodology**



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**Urban Mobility Governance: main Axes of Intervention**

- Systems and ICT infrastructures
- Qualification and differentiation of PT services  
*(BRT-BHLS, Flexible transport, Feeder etc.)*
- **Urban logistics services**  
*(last mile distribution, UCC, etc.)*
- Integration of different modalities and services interoperability
- Green complementary Measures  
*(bike sharing-station, vans sharing, car sharing, etc.)*






**MIXED SOLUTIONS by TECHNOLOGIES and INFRASTRUCTURES ...**  
**but also ORGANIZATION/OPERATION and NORMATIVE**




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**Freight Distribution in Small and Medium (Historic) Towns**



**More complex due to:**

- City environment  
*old road infrastructure, narrow streets, etc.*
- more strict access regulations
- presence of heritage and historic assets
- higher risks for pedestrian safety


**... with higher impacts** *(pollution, emissions, etc.)*  
**and higher costs of logistics operation**

**21 cities with more than 1 million inhabitants**  
**180 cities with more than 200.000 inhabitants and less 1 Ml**  
**1364 cities between 40.000 and 200.000 inhabitants**

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## WHITE PAPER and City Logistics

"Achieve essentially CO2-free city logistics by 2030"

- optimizing urban logistics efficiency (economic, environment, ...)
- improving the links between long-distance, inter-urban and urban freight transport
- incorporating freight transport in local mobility policy by the development of "Sustainable Urban Logistics Plans"

**Actions: Best Practice exchange, R&D, Funding, Guidelines**



**... in any case solutions based on the experience of big towns and refer to one model !**



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## IEE-ENCLOSE Project

### ENergy efficiency in City LOGistics Services for Small and Mid-sized European Historic Towns (SMHTs)

- Starting date: May 2012
- Project End: February 2015
- Project Coordinator: MemEx (Italy)
- 16 partners from 13 EU Countries including 9 Towns

*Lucca, Trondheim, s'Hertogenbosch, Burgos, Almada, Dundee, Albalulia, Serres, Balchik*



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## Main Specific Results

### Implementation and operation of

- ✦ **Pilot Services** in Lucca, Trondheim and s'Hertogenbosch;
- ✦ **Soft measures** Burgos, Almada, Dundee, Albalulia, Serres, Balchik

### Development of

- ✦ **Feasibility Study** in 6 Follower Towns
- ✦ **FEV** requirements for Urban Logistics services
- ✦ **Sustainable Urban Logistic Plans** in 9 ENCLOSE towns
- by
- ✦ **Knowledge and experiences exchanges and training courses**
- ✦ **Common Sulp development methodology/guidelines**
- ✦ **Promotion and Communication ENCLOSE methodology**

*Point of view of City and Public Authorities*



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### ENCLOSE Pilot services in Forerunners Towns



**Trondheim  
s-Hertogenbosch  
Lucca**

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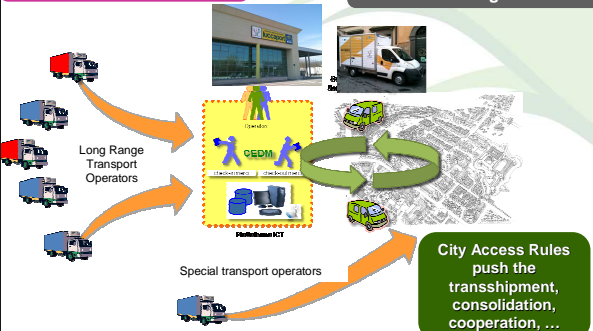
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### LuccaPort: Urban Consolidation Center

**Municipality Initiative: top down approach**

**Last Mile and Cross Docking Services**



Long Range Transport Operators

Special transport operators

City Access Rules push the transshipment, consolidation, cooperation, ...

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### ENCLOSE Pilots in Trondheim and s-Hertogenbosch

**168.000 inh.**



- Parcel distribution by electric vans
- Pallets distribution
- Consolidation Center



**Towards a Zero Emission Postal Distribution**

**140.000 inh.**



- Delivery by clean vehicles
- UCC-ECO2CITY service
- Low Emission Zone



**Transport operator/ Shopkeepers cooperation agreement**

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How could UCC survive ?

Not only “last mile” delivery services

Added Value Services, i.e.:

- Third party warehousing with on-demand delivery – Direct storage from Suppliers
- Fresh Foods
- Park&buy
- Packaging collection (reverse logistics)
- Hotel baggage delivery for tourist bus
- Specific solution for “self supply”
- Special urban quick deliveries
- Out of hours deliveries

... delivery service extension to the urban surroundings



Common problems ...

Burgos



Serres



Alba Iulia



Almada

Soft Measures in Almada

- New Loading & unloading regulation and access time windows
- Enhance enforcement control of the vans parking
- Electric trolley services from depot to market



## Soft Measures in Burgos

- New regulation (space and timing) for the historical centre access
- Card System for "self supply" of shop keepers and hostelry owners (base for innovative van sharing service/system)

BURGOS  
2020



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## "Soft" Measures in the other ENCLOSURE follower towns

	Soft measures
Alba Iulia	Regulation by time windows, restrictions, penalties, etc.
	Awareness Raising Campaign to shops and transport operators
Serres	Awareness campaigns to the shops, operators and general users
	Improving the visibility of (un) loading areas.
Dundee	Increase the enforcement levels on loading bays
	Electric Vehicles as replacements for existing Municipality fleets
Balchik	Restriction of the van access during the summer season
	Regulation by time window and space



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## Key role of City Administration

### Policy and support

- Development of specific mobility action
- City distribution plan
- Quality certificates / permits schemes
- Realization specific infrastructure (UCC, sharing platform)
- Cooperation PPP (e.g. UCC operation, ...)



### Measure / Regulations

- Access restriction rules (e.g. in relation to type of goods/days/times, Limited Traffic Zones, Environmental Zones, etc.)
- Enforcement scheme and activities
- Access Control Systems
- Specific incentives/rules for "green vehicles"



**Towards Sustainable Urban Logistics Plan**



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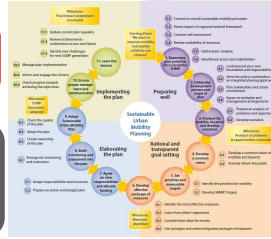
## SULP concept

A specific Plan for managing urban freight processes and designing solutions within mid-term horizon

SULP as key part of SUMP devoted to city logistics

All the 9 ENCLOSE towns developed the SULP as part of their SUMP or as starting point for SUMP development

SULP methodology was defined following the SUMP approach



## SULP planning and implementing

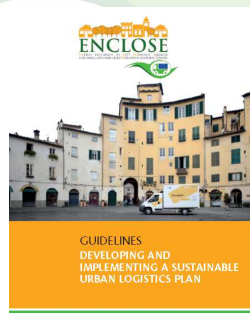
ENCLOSE provide a practical methodology supporting City stakeholders in the development of SULP

Working on:

- Institutional level
- Political level
- Operation/Organization level
- Infrastructures/ITS level
- Economic/Business level

with a **bottom-up and participatory approach**

SULP is based on an effective **Feasibility Study**



## SULP methodology structure

Main objectives and strategic lines  
Reference to Sustainable Urban Mobility Plan  
General city logistics context  
City logistics context, needs, opportunities and critical points  
Baseline

Identification of suitable services, measures, infrastructures

Organisation dimension	Business model	Costs and energy assessment	Responsibility and role
Planning and regulations			

Promotion Plan

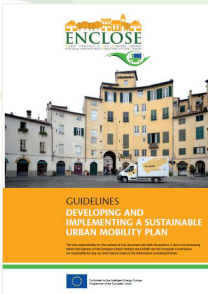
Consensus Process  
Local stakeholders discussions and assessment table

Road Map for SULP adoption by local Administrations

## "SULP" Guidelines supporting Local Authority

### CONTENTS

1. Purpose of the SULP guidelines
2. Introduction
3. Urban Mobility Governance
4. City Logistics in European SMHT
5. Sustainable Urban Logistics Plan (SULP)
6. Logistics services: needs, challenges and benefits
7. "Soft & Hard" measures reference context
8. Methodology Elements
9. SULP Integrated with SUMP



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## The SULP 11 elements



- E0 - Setting the objective and target
- E1 - Urban mobility scenario and priorities
- E2 - Analyze the logistics context and processes
- E3 - Setting requirements and logistics baseline
- E4 - Suitable measures and services vs. reqmts
- E5 - Design of Identified solutions
- E6 - Business Model, actor role and responsibility
- E7 - Services/Solutions Assessment and Impacts
- E8 - Responsibilities, implementing plan
- E9 - Promotion and Communication Plan
- E10 - Roadmap to adopt the SULP

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## Single element description

Each ELEMENT is described in terms of

- Rationale
- Tasks and timings
- Methods

Boxes: examples coming from the work carried-out in the 9 partner towns for the implementation of their SULPs

*Details of Elements*



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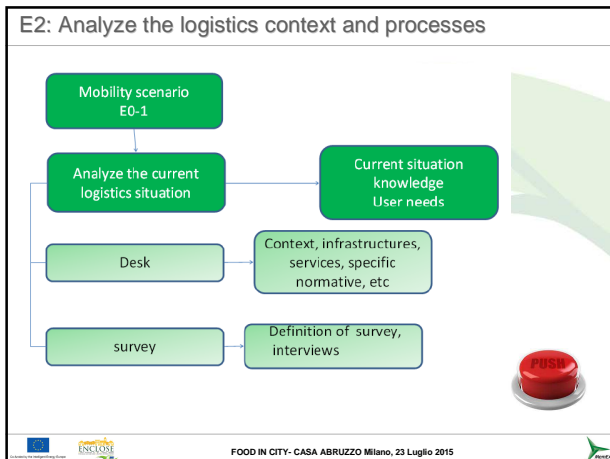
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### Some considerations

- EU pushes CO2 free logistics by 2030 ...without considering real situation in the Cities especially in SMT
- City Logistics is an ongoing process with good practices and some failures ...
- Existing many catalogs/portfolio of solutions and experiences...
- Many different models, schemes and services pushed also by a second generation of ICT and mobile tools
- It needs to understand the **key factors of block or enable** the success of the measure realization
- Simple and soft measures are to be considered in any case

**SULP at City Level is necessary**

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ENCLOSE website - [www.enclose.eu](http://www.enclose.eu)

Download from [www.memexitaly.it](http://www.memexitaly.it)

SOON !  
PORTFOLIO WITH THE  
SULP OF  
THE 9 ENCLOSE TOWNS

GUIDELINES  
DEVELOPING AND  
IMPLEMENTING A SUSTAINABLE  
URBAN LOGISTICS PLAN

**LOGICALTOWN**

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## FEV focus

### Electric Fleets in Urban Logistics

Improving urban freight  
efficiency in small and  
medium-sized historic towns



Annex:  
Electric Fleets in  
Urban Logistics  
Overview of current market  
March 2014



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