

C-LIEGE

*Clean Last mile transport and logistics management
for smart and Efficient local Governments in Europe*

Integrated Urban Freight Transport – A novel approach encouraging co-operation
and better management for increasing energy efficiency and reduction CO₂

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Annual Polis Conference 2012, Perugia

29th November 2012

Background



Why C-LIEGE?

- 72% of the European population lives in towns and cities.
- 85% of Europe's GDP is generated in cities.
- Urban transport is responsible for about a quarter of CO2 emissions from transport, and 69% of road accidents occur in cities.
- Up to 70% of other pollutants are due to urban traffic.
- Energy accounts for **80% of all greenhouse gas** (GHG) emission in the EU: current energy and transport policies would mean EU CO2 emissions would increase by around 5% by 2030 and global emissions would rise by 55%.
- The present energy policies within the EU are not sustainable.
- EU commitment is to achieve at least a 20% reduction of GHG by 2020 compared to 1990.

The responsibility for urban mobility policies lies primarily with local, regional and national authorities

Source: European Commission, White Paper on Transport (2011), Action Plan on Urban Mobility (2009), Energy policy for Europe (2007)

The project identity card



Project Title:



*Clean Last mile transport
and logistics management
for smart and efficient local
Governments in Europe*

Project Acronym:

C-LIEGE

Grant Agreement:

IEE/10/154/SI2.589407

Funding Scheme:

IEE Programme 2010

Starting Date:

1st June 2011

Duration:

30 months

The C-LIEGE team



 <p>FINANZA INNOVAZIONE TRASPORTI</p> <p>FIT CONSULTING S.R.L.</p> <p>FIT CONSULTING SRL (FIT)</p>	 <p>European Regions Research and Innovation Network (ERRIN)</p> <p>EUROPEAN REGIONS RESEARCH AND INNOVATION NETWORK (ERRIN)</p>	 <p>TRANSPORTES, INOVAÇÃO E SISTEMAS, SA (TIS-PT)</p> <p>TRANSPORTES, INOVAÇÃO E SISTEMAS, SA (TIS-PT)</p>	 <p>IMPACT CONSULTING SLR (IMPACT)</p> <p>IMPACT CONSULTING SLR (IMPACT)</p>	 <p>AKADEMIA MORSKA SZCZECIN</p> <p>MARITIME UNIVERSITY OF SZCZECIN (MUS)</p> <p>mobile transport & management</p>
 <p>NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)</p> <p>NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)</p>	<p>Imperial College London</p> <p>IMPERIAL COLLEGE LONDON (IMPERIAL)</p>	<p>tu technische universität dortmund</p> <p>TU DORTMUND UNIVERSITY (TUDO)</p>	<p>LEITAT Technological Center</p> <p>managing your technologies member of</p> <p>LEITAT TECHNOLOGY CENTRE (LEITAT)</p>	
 <p>PARAGON EUROPE "REALISING EXCELLENCE"</p> <p>PARAGON EUROPE LIMITED (PARAGON)</p>	 <p>istituto sui trasporti e la logistica fondazione</p> <p>INSTITUTE FOR TRANSPORT AND LOGISTICS (ITL)</p>	 <p>Leicester City Council</p> <p>LEICESTER ENERGY AGENCY / LEICESTER CITY COUNCIL (LEA-LCC)</p>	 <p>BERMAG SP.J. (BERMAG)</p>	
<p>IKU_DIE DIALOGGESTALTER</p> <p>IKU GMBH COMMUNICATION CONSULTING (IKU)</p>	 <p>KLOK Kooperationszentrum Logistik e. V.</p> <p>KLOK KOOPERATIONSZENTRUM LOGISTIK E.V. (KLOK)</p>	<p>Newcastle City Council</p> <p>NEWCASTLE CITY COUNCIL (NCC)</p>	 <p>MUNICIPALITY OF MONTANA (MONTANA)</p>	

Objectives & impacts



- ❑ C-LIEGE is conceived as a leading initiative to **support energy efficiency in urban freight movements** and to promote the use of new and renewable energies sources when delivering goods.
- ❑ C-LIEGE aims to develop, test and transfer successful measures and tools to achieve energy saving and reduction of CO2 and GHG emissions.
- ❑ C-LIEGE will set **integrated framework for energy-efficient urban freight transport demand management and planning** by the promotion of energy efficient and cleaner freight movements in urban areas and defining a novel set of integrated solutions and “push-and-pull” demand-oriented measures.
- ❑ Effectively transfer good practices addressed to achieve a better matching between supply & demand of freight transport, according with energy saving principles for a better managing freight movements in urban areas.

C-LIEGE Components 1/4



► Download our [Integrated Urban Freight Transport Flyer](#)



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Clean Last mile transport and logistics management

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C-LIEGE Components

 <p>GOOD PRACTICES</p> 	 <p>STAKEHOLDER MANUAL</p> 	 <p>C-LIEGE TOOLBOX</p> 	 <p>C-LIEGE GUIDELINE FOR URBAN FREIGHT MOBILITY PLAN</p> 
 <p>C-LIEGE PUSH AND PULL MEASURES DATABASE</p> 	 <p>QUALITY PARTNERSHIP Coming in 2013</p> 	 <p>EU ACTION PLAN Coming in 2013</p> 	 <p>ROADMAP FOR LOCAL GOVERNMENTS Coming in 2013</p> 

Elicitation of Good Practices in UFT & Database

- ❑ **Elicitation of Good Practices in UFT:** identification and evaluation of good practices in the field of urban freight transport (UFT) implemented in European cities identifying strengths, weaknesses, opportunities and threats.
- ❑ **UFT Best Practices Database:** structured and manageable repository of UFT Good Practices identified in Microsoft Windows Excel to obtain a directly usable and sustainable database, with high quality multimedia applications.

Benefits

- ❑ Delivers on-demand access to valuable performance benchmarks and good practice research findings from relevant applications at EU cities.
- ❑ Informative supporting tool for relevant stakeholders.

C-LIEGE Components 3/4



C-LIEGE Push and Pull Measures Database

- ❑ Complete database of “push and pull” demand-oriented measures for energy efficient and environmental-friendly UFT planning and management.
- ❑ The database comprises 45 “Push” and “Pull” measures providing an accessible and comprehensive resource of freight best practice measures.

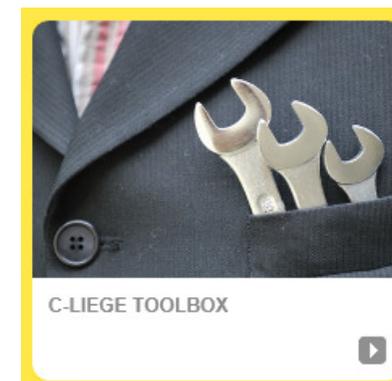
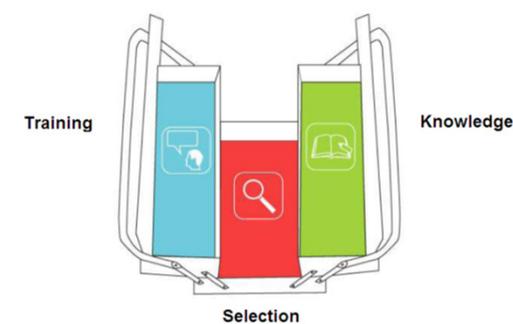
Benefits

- ❑ Offers a range of measures potentially applicable to areas with different characteristics and peculiarities for a better managing freight movements.
- ❑ Provides practitioners with a ready-made supporting tool.
- ❑ Providing empirical evidence of success measures.

C-LIEGE Components 4/4

C-LIEGE Toolbox

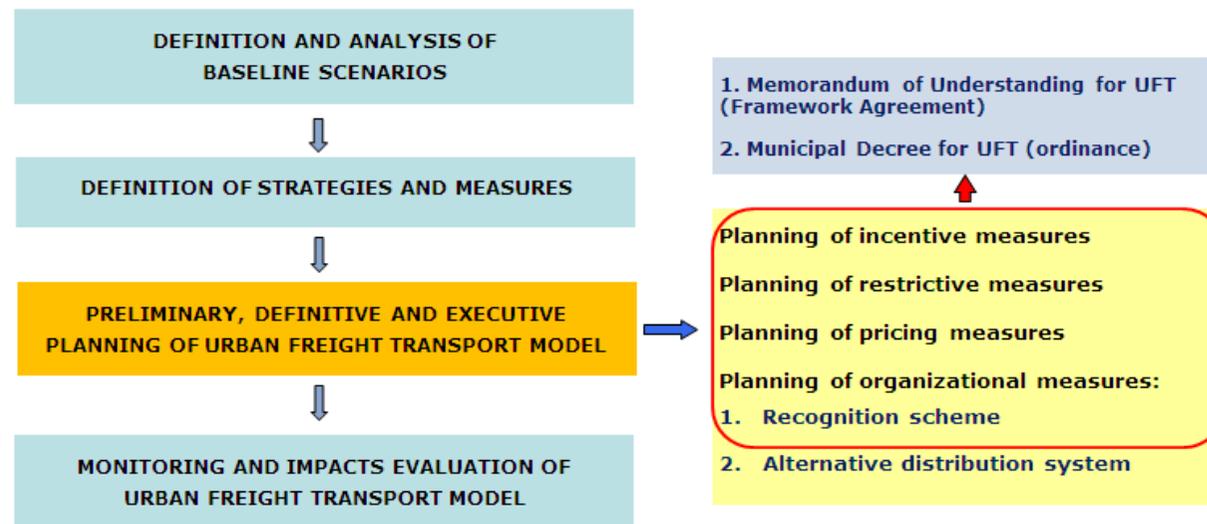
- ❑ The C-LIEGE Toolbox is aimed at providing a decision support tool for Local Administrations to:
 - a) plan, implement and monitor appropriate push and/or pull measures to achieve an integrated urban freight transport demand management and planning;
 - b) establish the functions and tasks of the City Logistics Manager (CLM).



a) Plan, implement and monitor push and pull measures

- 1) **clearly identify problems and needs** related UFT in their cities;
- 2) **define objectives and targets** to be reached;
- 3) **define appropriate strategies and policies** in compliance with regional and/or local transport plans (which include freight transport);
- 4) **select shared and harmonized push and/or pull measures** to promote a cleaner, cost-efficient and energy saving freight movements in urban areas balancing the environment, economy, energy, transport efficiency, safety and urban planning;
- 5) **Monitoring and evaluation** effectiveness and efficiency of the measures in reaching objectives and targets.

b) Functions and tasks of City Logistics Manager



Workflow related to the functions of the City Logistics Manager

CLM support Local Administration in planning and implementation **UFT demand management measures for a better managing freight movements** based on:

- ✓ *persuasion*, to change behavior through activities involving information, consultation and consensus building;
- ✓ *granting*, developing new services and alternative transport and delivery systems;
- ✓ *restriction*, discouraging use of private cars and more polluting freight vehicles.

C-LIEGE Pilots measures



Push measures

Measure n° 4:	Distribution Plans to reduce frequency of deliveries in public procurement
Measure n° 14:	Time window restrictions
Measure n° 23:	Mobility credits
Measure n° 24:	Electronic access control
Measure n° 35:	Environmental zones
Measure n° 37:	Freight noise mapping
Measure n° 42:	Night deliveries
Measure n° 43:	Using building code regulations for off-street delivery areas
Measure n° 45:	Access restrictions for polluting freight vehicles

Push & Pull measures

Measure n° 2:	Inclusion of Freight in Urban Mobility Plans
Measure n° 3:	Construction Logistics Plans
Measure n° 5:	Charging for distribution operations in central areas
Measure n° 6:	Delivery and Servicing Plans
Measure n° 38:	Mobility Master Plans
Measure n° 39:	Technical guidelines for delivery spaces
Measure n° 41:	Multi-user lanes

Pull measures

Measure n° 1:	Local Freight Development Plans (FDPs)
Measure n° 7:	Free-to-use loading bays
Measure n° 8:	Free access to public transport lanes
Measure n° 9:	Changing traffic regulations to improve freight access
Measure n° 10:	Financial support for fleet conversion
Measure n° 11:	Enactment of access "time windows"
Measure n° 12:	Allocation of additional freight parking spaces
Measure n° 13:	Ad-hoc routes for freight distribution
Measure n° 15:	Optimising leasing models for clean freight vehicles
Measure n° 16:	Real-time loading space booking
Measure n° 17:	Priority for lorries at selected junctions
Measure n° 18:	ICT support for eco driving
Measure n° 19:	Van sharing
Measure n° 20:	Collect points
Measure n° 21:	Pack stations
Measure n° 22:	Freight exchange
Measure n° 25:	Freight map for appropriate routes and vehicular restrictions
Measure n° 26:	Web-based market place
Measure n° 27:	Computer simulation demonstrating efficient distribution of goods
Measure n° 28:	Online routing tool
Measure n° 29:	Web promotion of sustainable city logistics
Measure n° 30:	Virtual Distribution Centre
Measure n° 31:	Web service to manage preferred delivery locations and times
Measure n° 32:	Algorithm to plan deliveries when unexpected events take place
Measure n° 33:	Systems for assessment of UFT impacts
Measure n° 34:	Signposting freight routes
Measure n° 36:	Freight Quality Partnership (FQP)
Measure n° 40:	Freight Operators Recognition Schemes (FORS)
Measure n° 44:	Eco-driver training

Other C-LIEGE components



- Stakeholders Manual
- Roadmap to establish and promote “Premium Quality Partnership”.
- Premium Quality Partnership for Freight in the pilot cities.
- Local Freight Development Plans (LFDPs) for each of the pilot cities.
- Transferability plan for Local Administrations on energy saving and sustainable demand management and planning in (UFT) domain.
- Action plan for the EC on measures and policies to make UFT more energy-efficient, sustainable and professional.

Main expectations to the EC on the CO2-free city logistics consultation



CO2-free city logistics consultation

1. Passenger and freight transport are equally important, but the lack of integrated treatment causes many problems.
2. The urban dimension of the EU transport policy: Commission prepares to implement the initiatives proposed in the 2011 Transport White Paper on Sustainable Urban Mobility Plans, access restrictions and urban pricing schemes and urban logistics, which are the subject of the consultation.
3. The 2011 Transport White Paper announced the Commission's intention to produce "best practice guidelines to better monitor and manage urban freight flows" and to put forward "a strategy for moving towards 'zero-emission urban logistics'."

C-LIEGE input on the CO2-free city logistics consultation

1. C-LIEGE has defined profile and functions of urban freight transport demand manager (**City Logistics Manager**) for supporting Local Authorities to define and implement integrated and energy-efficient transport demand-oriented measures able to reconcile passenger and freight transport needs allowing a better use of both cities' spaces and times slots in different timescale, reducing journeys as well as promoting new culture for "smart" cities and transport.
2. C-LIEGE is addressing this scenario by setting integrated framework for energy-efficient UFT demand management and planning through both a cooperative approach between public and private stakeholders and the definition of **push and pull demand-oriented schemes** (a combination of incentive, disincentive and pricing measures). C-LIEGE will promote energy efficient and cleaner urban freight movements to contribute in CO2-free city logistics.
3. C-LIEGE has developed the **urban logistics Good Practices Database**, a structured repository of 100 good practices to establish a comprehensive framework of the European good practices, projects and initiatives in UFT domain to better manage urban freight flows. C-LIEGE will define **roadmaps** and **policy recommendations** to make urban logistics more efficient, sustainable and integrated.

Contact



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INTEGRATED URBAN FREIGHT TRANSPORT – MORE CO-OPERATION AND BETTER MANAGEMENT FOR MORE ENERGY EFFICIENCY AND LESS CO₂

C-LIEGE is the showcase for good practices and a helpful hand for all European cities striving for cleaner and sustainable urban transportation. On the basis of good practices the project will define an integrated framework for energy efficient Urban Freight Transport (UFT) management and planning. A novel set of integrated solutions and "push-and-pull" demand-oriented measures will be tested and shared in roadmaps for the implementation in European cities. Seven pilot experiments in six European countries ensure the applicability of the C-LIEGE approach: Bulgaria, Italy, Poland, United Kingdom, Germany and Malta.

News from C-LIEGE components

News

C-LIEGE Mid-Term Workshop, 4th October 2012, Newcastle

First C-LIEGE Measure

C-LIEGE website:
<http://www.c-liege.eu/>