



# eDrul

## e-Commerce Enabled Demand Responsive Urban Logistics



eDRUL

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**Coordinator:** Siena Parcheggi SpA (I)

**Partners:**

City of Aalborg (DK)  
Platform Stedelijke Distributie (NL)  
Softeco Sismat SpA (I)  
Intarsys GmbH (D)  
Mobisoft Oy(FIN)  
Ecorys NEI (NL)  
Memex srl (I)  
TIS.pt (P)

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[www.edrul.com](http://www.edrul.com)

**Contact Person**

**Dr. Marco Boero**  
Softeco Sismat SpA  
Phone: +39 10 6026 1  
Fax: +39 10 6026 350  
email: [marco.boero@softeco.it](mailto:marco.boero@softeco.it)

### OBJECTIVES

The overall objective of eDRUL Project is to investigate, develop and validate an innovative logistics www platform, and supported service models, for improved management of freight distribution and logistics processes in urban area. Strongly based on integration with e-Commerce/e-Business architectures and concepts, the developed solutions will enable:

- Communication and teamworking among the various actors involved in the freight distribution process, through a set of innovative networked e-Business services;
- Optimal use and improved interaction among the consumers and the logistics and retail system, through a number of e-Commerce services;
- Management of available resources of the logistics system (fleets and available capacity, logistics platforms, goods collection and unload areas, routes, etc.) in a way to realise flexible, demand-driven freights distribution schemes integrated within the ITS urban scenario.

### TECHNICAL APPROACH

eDRUL innovative e-logistics solutions will be tested and validated in 3 different European sites in Italy (Siena), The Netherlands (Kenniswijk) and Portugal (Lisbon). The project approach includes the following main elements:

- Analysis of the e-logistics needs of urban areas (regulatory aspects, IST infrastructures and e-Commerce/e-Business services) and of different user categories within the urban logistics chain (end-users, Authorities, fleet operators, etc.);
- Identification of main objectives for the target IST architecture (economics, mobility, environment, etc.) and definition of the main system requirements;
- Functional specifications, design and development of the general eDRUL platform, (logical scheme, main components and information interactions, e-Business and e-Commerce integrated services and interactions with the ITS infrastructures);
- Demonstration, testing and validation of eDRUL solutions at different levels in 3 urban sites, with different area characteristics and well-defined mobility policies and transport infrastructures;
- Comparative evaluation of site results, by a common framework and evaluation methodology, as regards mobility, transportation and sustainability impacts;
- Assessment of the business case for demand responsive, e-logistics freight distribution systems, and the conditions under which these may be implemented successfully in European urban areas;
- Dissemination of eDRUL achievements through a User Group/Logistics Forum, promotion with the Authorities and market stimulation for innovative e-logistics schemes and IST solutions.



## EXPECTED ACHIEVEMENTS

Specifically, the main expected project achievements include:

- The design and development of a novel IST architecture and platform, including planning and management tools, to allow flexible and intelligent management of logistics processes in a multi-fleet, multi-operator context and the overall coordination of freight distribution processes (Urban Logistics Coordination Agency);
- The implementation of a B2B service infrastructure, enabling the inter-networking and collaboration of the different actors of the logistics chain;
- The implementation of a B2C service infrastructure, enabling interaction between the customers and the goods retail/distribution system;
- The integration of the urban logistics system with other ITS urban mobility management services (traffic information, parking management, access control) in a view of co-ordinated management of urban mobility and overall sustainability of urban processes;
- Testing and validating of the developed generic solutions at different levels in three urban sites, in Italy, The Netherlands and Portugal. These sites are clearly representative of the diversity of urban configurations and contexts existing in Europe, being thus representative of implicit clusterizations of European urban areas that was meant to include in this project;
- A comparative assessment of the different impacts of new technologies and services by a means of common evaluation methodology. This will allow evaluating the suitability of the various IST elements and components, assessing their transferability and investigating the business case and market potential of the developed technologies and devices;
- The promotion of the developed solutions, both the IST architecture and tools and the organisational/operational models, through dissemination via a Logistics User Forum of operators, city and different actors of the logistics chain.

## PROJECT CONTACTS

Updated information about **eDRUL** project activities and achievements is regularly published on the official project website .

<http://www.edrul.com>

WALTER SCAPIGLIATI PROJECT CO-ORDINATOR

GIORGIO AMBROSINO TECHNICAL CO-ORDINATOR

Siena Parcheggi, Via S. Agata, 1  
53100 Siena  
[e.drul@sienaparcheggi.com](mailto:e.drul@sienaparcheggi.com)

