KOMODA

Co-modality - Towards Optimised Integrated Chains in Freight Transport Logistics

Funding: European (7th RTD Framework Programme)
Duration: Jan 2008 - Dec 2009
Status: Complete with results
Total project cost: €1,247,002
EU contribution: €1,018,739

Call for proposal: FP7-TPT-2007-RTD-1
CORDIS RCN: 85769

Background & policy context:
The creation of a vision of a Europe wide e-logistics system supporting co-modality, or in other words: optimal use of the transport resources in terms of expenses and environmental impact.

Objectives:
KOMODA's objective was to produce a roadmap to nurture an integrated e-Logistics platform by and between modes of freight transport across Europe. Such a platform would need to comply with the following requirements:

- Be based on open standards;
- Be usable by any concern;
- Be able to communicate freely between existing applications.

Methodology:
KOMODA followed a bottom-up approach, with a strong involvement of the freight industry stakeholders. The work included a wide Delphi survey amongst the logistics chain stakeholders to obtain a comprehensive picture of available e-logistics applications used in transport operations, their sources, availability, functionality and use by companies. Additional desk research on transport and technical requirements complemented this exercise.

Obstacles and opportunities were identified for the final development of a structured and coherent action plan for innovation and change leading towards an integrated, Europe-wide e-logistics system. Several of such IT logistics platforms are currently in use, however, mostly consist of private company applications that are not connected and often not compatible. The major challenge for the KOMODA project was to overcome the fragmentation of such solutions that were already in place. For these developments, KOMODA identified the industry requirements, in terms of the organisation of the logistic chain and technical specifications of the integrated information system.

Opportunities and obstacles affecting the future implementation of the e-Logistics integrated platform were identified, resulting in the development of recommendations to empower the former and minimise the later. KOMODA tried to break common cultural approaches in order to stimulate dialogue and common knowledge regarding the transport global situation (e.g. shift of productions towards the East, saturation of existing corridors, development of ICT with greater potential) and future scenario's which must be faced with new cooperative solutions and mentality in order to ensure that the overall transport network would be sustainable.

Parent Programmes:
FP7-TRANSPORT - Transport (Including Aeronautics) - Horizontal activities for implementation of the transport programme (TPT)
**Institute type:** Public institution  
**Institute name:** The European Commission  
**Funding type:** Public (EU)  

### Lead Organisation:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>EU Contribution</th>
</tr>
</thead>
</table>
| Instytut Logistyki I Magazynowania | UL ESTKOWSKIEGO 6  
61-755 POZNAN  
Poland | €191,800 |

### Partner Organisations:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>EU Contribution</th>
</tr>
</thead>
</table>
| Politechnika Poznanska                  | Pl Marii Sklodowskiej Curie 5  
60965 Poznan  
Poland | €60,000  |
| Ethniko Kentro Erevnas Kai Technologikis Anaptyxis | Charilaou Thermi Road  
57001 Thermi Thessaloniki  
Greece | €111,300  |
| University Of Newcastle                 | 6 Kensington Terrace  
NEWCASTLE UPON TYNE  
NE1 7RU  
United Kingdom | €134,006  |
| Ptv Planung Transport Verkehr Ag        | Stumpfstrasse 1  
76131 KARLSRUHE  
Germany |                  |
EU Contribution: €95,200

**Tis Pt, Consultores Em Transportes, Inovacao E Sistemas, Sa**

**Address:**
Rua Vilhena Barbosa 11
1000N/A285 Lisboa
Portugal

**EU Contribution:** €120,350

---

**Univerza V Mariboru**

**Address:**
Slomskov Trg
2000 Maribor
Slovenia

**Organisation Website:**
http://www.uni-mb.si

**EU Contribution:** €63,960

---

**Mobisoft Oy**

**Address:**
Hatanpaan Valtatie 26
33100 Tampere
Finland

**EU Contribution:** €59,092

---

**Turun Yliopisto**

**Address:**
Yliopistonmaki
20014 Turku
Finland

**EU Contribution:** €59,440

---

**Maritime Association For Research And Innovation-Mari**

**Address:**
Via Sottoripa 1A/98
16124 Genova
Italy

**EU Contribution:** €123,591

---

**Technologies:**
Information systems
Sustainable urban mobility planning

**Development phase:** Research/Invention

---

**Key Results:**
The Komoda project extensively surveyed logistics chain stakeholders to obtain a comprehensive picture of the e-logistics applications used in transport operations. Obstacles and opportunities were identified for the final development of a structured and coherent action plan for innovation and change leading towards an integrated, Europe-wide e-Logistics system.
The current state of the European e-logistics may be shortly characterised as:

- Very fragmented with a great number of proprietary applications tailored to companies' individual needs, reflecting the fragmentation of the logistics market;
- Unevenly developed, i.e. insufficient support regarding inter company co-operation in the supply chain, interoperability of modes and international transport network harmonisation;
- Nearly inaccessible for many logistics market stakeholders; small and medium-sized enterprises usually cannot afford to deploy the advanced e-logistics applications which makes their market position unfavourable.

The proposed e-logistics system matches the European logistics market which is fragmented on both the demand and the supply sides. The system offers a combination of specialised information and communications technology (ICT) applications, tools, algorithms, procedures, libraries, databases and external platforms, that are working on a common and transparent standard. Such ICT solutions may be used selectively by companies and customised to their own requirements.

**Technical Implications**

The deployment of this Europe-wide e-logistics system will be a long-term and complex process.

**Strategy targets**

Innovating for the future (technology and behaviour): A European Transport Research and Innovation Policy

**STRIA Roadmaps:** Network and traffic management systems

**Transport mode:** Multimodal transport

**Transport sectors:** Freight transport

**Geo-spatial type:** Other