

## **FALCON**

### Freight And Logistics in a Multimodal Context

Research project funded under the CEDR Transnational Road Research Programme  
**CEDR Call 2015: Freight and Logistics in a Multimodal Context**

CEDR Call 2015: Freight and Logistics in a Multimodal Context is a Transnational Research Programme organised by CEDR. The funding partners for this programme are Germany, Netherlands, Norway and Sweden.

<b>Details</b>	
Acronym:	FALCON
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**Conférence Européenne  
des Directeurs des Routes  
Conference of European  
Directors of Roads**

#### **Project Summary:**

Europe has set ambitious emission reduction targets for the transport sector to lower global warming, climate change and improve (urban) air quality. Road transport accounts for about 75% of goods transport on land today and is projected to increase in the forthcoming decades.

The hypothesis considered in the FALCON project is trifold. First of all, intrinsically more efficient logistics are needed. Secondly, a modal shift from road to rail, short sea shipping and inland waterways is needed, i.e. optimal multimodality. Thirdly, smart performance based standards for vehicles and roads are needed to allow a step improvement in the efficiency of road transport as it is also clear that the European roads will have to absorb the lion's share of the increasing transport demand.

To align the EC goals and the means of National Road Authorities (NRAs) to cope with the growing demand it is paramount to increase the efficiency of freight transport and logistics including the optimising of multimodal transport chains. Therefore, the methodology of this project is to study freight and logistics in a multimodal context in order to acquire insight into:

- the possibilities for optimising multi-modality and the impact that these might have on road infrastructure;
- assessment procedures and tools that enable NRAs to analyse policy measures that influence mode choice;
- the possibilities of Performance Based Standards for vehicles to increase the efficiency of freight transport and the impact this might have on road infrastructure and modal choice.

The main objective of the research is to provide NRAs with a clearly written handbook explaining the principles of freight markets, logistics strategies, and how multimodal transport works and can be influenced. The second objective is to develop smart infrastructure access policy (SIAP) for current and future road freight vehicles ensuring proper fit between the vehicle and the infrastructure network. Hence the policy is going to be performance based and not prescriptive (such as current 96/53 EC). The effect of SIAP will be validated on a number of case studies acknowledging the impact on multimodality, infrastructure ageing, congestions, safety and environment.

The targeted project outcomes are:

- Analyses of trends and transport issues, transformed into a projection in a global co- and intermodal network of industry and logistics including the urban logistics
- Indications of how the flexibility of transportation of freight, matching with the entire network of all modes can be maximised.
- Recommendations for performance based standards for vehicles and road infrastructure to enable the use of innovative and more efficient vehicle concepts, contributing to the environment and complying with high safety standards and not harming the infrastructure.