SMARTFREIGHT

Smart Freight Transport in Urban Areas

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SINTEF ICT
SMARTFREIGHT Facts

- EU-funded, ICT programme
  - Funding: € 3 million (€ 2.2 million from EU)
- Started 1 Jan 2008; ending 30 June 2010
- Co-ordinator: SINTEF Hans Westerheim
Overview

Urban traffic management centre

Freight distribution management centre
Continuous Air interface for Long and Medium range telecomms
Projects on a similar theme

CVIS & COOPERS – Co-operative vehicle highway systems
SEEDA (South-East England Development Agency)
EURIDICE – Intelligent cargo
FACITS - Framework Architecture Classification for Intelligent Transport Systems
ITS(UK) - New CVHS interest group
Project objectives

1. Specify framework for the ICT
2. Facilitate traffic management measures for individual freight vehicles
   - Freight priority
     - must be fair and equitable
     - discriminate by vehicle type
     - discriminate by load factor
     - incentives for using an urban consolidation centre

‘Air traffic control’ for freight
The freight traffic controller
Other roles

- Co-ordination of back-loading
- Traffic data dissemination
Test sites

On-street, real test site
Trondheim - Wireless Network Laboratory

Virtual test sites
Winchester, Bologna, Dublin
- simulation / desktop modelling studies
Perceived benefits for freight

- Statistical data on link journey times to allow good scheduling
- Road closure and reopening notices
- Recommended HGV routes taking restrictions into account
- Freight in ‘bus’ lanes

Note: a lot of the most useful data is relatively static in nature
Perceived benefits for freight

Dynamic info may also be useful

- Real-time traffic data (only if accurate and timely)
- Alternative routing during accidents
- Personalised routing
- Hazard warnings
Perceived traffic benefits

- Improved traffic management as UTMC has a clearer picture of freight vehicles
- Avoidance of lorry incidents
- Information about vehicle breakdowns
- Freight statistics for planning purposes (O-Ds; vehicles types and weights etc.)
Barriers to SmartFreight concept?

- data privacy
- cost
- unclear benefits
- technical and organisational issues

The large numbers of freight operators and traffic control centres, operating in a variety of ways, makes data sharing a highly challenging task!
Questions? Comments?

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