The STREETWISE Project - Addressing Traffic Information Needs of the Freight Industry

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STREETWISE

- Euro-Regional project
- Common national & cross-border issues
- “seamless and effective travel information and coordinated management of traffic across borders using ITS”
STREETWISE and Freight

- Freight & Fleet Management – EC and STREETWISE Priority
  - increasing volume of road freight traffic
  - high value of time
  - freight – long distance traffic

- STREETWISE countries
  - growth in road freight traffic
  - limited number of sea crossings
  - “Golden Rule” – freight users have particular needs that should be addressed

- Earlier STREETWISE work
Freight Patterns

- Freight grown by 25% in last 5 years
- 95% road based
- Importance to economy

However,
- Constrained by at least one sea crossing
- Traffic channelled into these corridors – particularly Dover Straits
Freight Patterns

Key Trade Routes (Source: FTA)
Freight Patterns

Ireland

- Irish Economy – grew by ~80% in 1990’s
- Road accounts for >95% of all freight movements
- Information systems implementation – low in comparison to Europe
- Ro/Ro increased by 235% (1993-2000)
- Lo/Lo increased by 86% (1993-2000)
- 99% of road freight exports go to GB – 84% final destination, 15% landbridge
So what has STREETWISE done?

- Study on Traffic Information Needs of the Freight Industry
- All STREETWISE area, particular focus on Ireland
Study Aims

- Problems faced by long distance freight operators
- Needs of the freight industry for improving long distance cross-border travel
- Demand for new Pan-European Services
- Business case for freight oriented services
Study Methodology

- Build on previous STREETWISE work
- Analysis of freight movement patterns
- Interviews with key organisations/individuals
- Survey of Irish hauliers
- Workshop with Irish freight community
Structuring Travel Information

What: Information content

Where: Priority locations for investment

How: Delivery Method
What Information?

Causes of Congestion (ITS UK)

- Recurrent: 65%
- Roadworks: 10%
- Incidents: 25%
What Information?

Common Problems

- Recurring Congestion
- Unreliable travel times
- Accidents and other incidents
- Roadworks and other planned events on the network
- Stress associated with uncertainty of delays
- Non-provision of alternate route advice
What Information?

Freight Traffic
- Restrictions on driving hours and delivery
- Parking
- Distance of journeys and modal transfer
- Industrial Action
- Limited opportunities for diversion
- Importance of on-time delivery
- Value of time of freight traffic
- Overhead Costs
- Procedures
# How - Information Content

<table>
<thead>
<tr>
<th>Static info (long term planning)</th>
<th>Quasi-static info (medium term planning)</th>
<th>Dynamic/Real Time info (rerouting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Historical Data</td>
<td>➢ Roadworks</td>
<td>➢ Incidents</td>
</tr>
<tr>
<td>- Journey Times</td>
<td>(long term)</td>
<td>➢ Journey times</td>
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<tr>
<td>- Flows</td>
<td>➢ Ferry schedules</td>
<td>➢ Congestion</td>
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<td>- Network cond.</td>
<td>➢ Planned events</td>
<td>➢ Alternative routes</td>
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<td>➢ Restrictions</td>
<td>➢ Public holidays</td>
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<td>➢ Toll road info</td>
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</tbody>
</table>

- Restrictions - Customs

- Roadworks (long term)
- Ferry schedules
- Planned events
- Public holidays
- Toll road info

- Incidents
- Roadworks (short term)
- Journey times
- Congestion
- Alternative routes
Where?

1. Route selection M2 round M25
2. Route and ferry selection
   - Holyhead / Liverpool
   - Fishguard / Pembroke
3. Route and ferry selection
   Holyhead or Liverpool
4. Route selection - Dublin to Cork
Where?
Industry Views

- Interviews, questionnaire and workshop

- 85% - real-time travel information “greatest potential”
  - but
  - confidence in accuracy
  - sufficient info on incidents/journey times

- Static/Quasi-Static information has some value
Industry Views

- Pre-trip and during trip
  - Information on roadworks
  - Major Incidents
  - Events
  - Ferry and weather information ranked low

- Other Information
  - Secured parking areas
  - Country specific restrictions
Industry Views – Info Delivery

- Preferred Delivery Mechanisms
  - Mobile phone/SMS
  - Radio broadcasts
  - RDS/TMC
  - Integration with in-vehicle systems
  - VMS

- Pan-European Service
  - single service covering geographic area

- Simple to use, cheap to operate
Study Recommendations

- **STREETWISE**
  - Freight Information Service
  - Pan-European Service

- **Ireland**
  - Deployment of High Quality Monitoring Infrastructure
  - Traveller Information Services
Next Steps – Industry and Operator Workshop

- Workshop London – “Freight Industries and Road Authorities in Partnership”
- Representatives from all areas of industry – truck manufacturers, logistics companies and trade associations
Workshop Recommendations

Freight users’ needs for information

- High quality info can assist decision making by freight operators
- Information to drivers as well as operating base
- Information at decision points
- Alternative route and travel time priority – not just delays
- In longer term, traffic information must integrate into other equipment and systems
Workshop Recommendations

Government and Road Operators

- Should continue to develop high quality traffic data
- Short term solutions vital to increase credibility
- Education needed about work road operators doing – not just apologising
- Governments could consider incentives for using telematics systems
- Trucks could provide additional data to road operators
- Road operators could use existing infrastructure
Long Distance Corridors

- Feasibility Study 2002
- Analyse and evaluate relevance of LD traffic on LDC (what, who, numbers, problems, where)
- User Groups
- Traffic data
- Problem areas
LDC – Demonstrator

- Demonstrator – 2004 - 2006
- Objective - facilitate road user and road operator with a set of measures directed to long distance traffic on specified routes for a 2 year period
- Principle - use existing measures and information services as much as possible

- To end of 2003 – define user needs and scope
Parallel study
STREETWISE looking at full region – covers all key routes within STREETWISE and to mainland Europe
Typical Measures

- Schematic journey time maps
- Partnership with freight industry to obtain, utilise and share floating vehicle data
- Dedicated recommendations for re-routing
- Information on service areas

- Not just long distance – but for regional traffic
Questions/Further Information

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