Intelligent Route Guidance for Heavy Goods Vehicles

Sustainable Surface Transport 1.6.2

Coordinator: Anita Ihs  vti
HeavyRoute in figures

Start: September 2006
Duration: 30 months
Total budget: € 3.28M

8 Partners:
Two thirds of freight transport in Europe is carried out on roads. And is increasing...

Longer and heavier vehicles...
The consequences:
Congestion
Accidents
Fuel consumption
Emissions
Noise
Road and bridge damage
The consequences:
Congestion
Accidents
Fuel consumption
Emissions
Noise
Road and bridge damage
The consequences:
Congestion
Accidents
Fuel consumption
Emissions
Noise
Road and bridge damage
The consequences:

Congestion
Accidents
Fuel consumption
Emissions
Noise
Road and bridge damage
Overall objectives

Applying and combining existing and newly developed systems, technologies, databases and models to develop an advanced HGV route guidance and driving support system

- Improved road safety and capacity
- Reduced negative impact on environment
- Reduced road and bridge maintenance costs
HeavyRoute Stakeholders

Fleet owners and planners
Truck drivers
Road Authorities
Road and bridge operators
Service providers
Truck manufacturers
Other road users

Opinions have been assessed through workshops, interviews, and questionnaires
The HeavyRoute three main applications

- Pre-trip route planning
- Driving support (warning)
- Monitoring and management of HGVs on bridges
Pre-trip route planning

Allowable routes:
  • Physical and Legal restrictions for HGVs, Preferred truck networks

Recommended routes:
  • Environmental effects
  • Vehicle Operating Costs
  • Maintenance costs
  • Ride Quality
  • Safety

- Emissions
- Noise
- Fuel consumption
- Road damage
- Truck roughness index
Organisation

Project management group
PM + WP leaders and consortium representatives

Scientific Committee
Reference group: HeavyRoute end user

WP 7 Management

WP 1 System conception & user requirements
WP 2 Databases and vehicle/infrastructure interaction
WP 3 Route guidance and driver support
WP 4 Traffic simulation and effects of management strategies
WP 5 System integration and evaluation
WP 6 Dissemination, clustering and coordination
For more information:

Web site: http://heavyroute.fehrl.org

Coordinator: anita.ihs@vti.se
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30</td>
<td>Vehicle/infrastructure interactions models</td>
<td>Leif Sjögren, VTI</td>
</tr>
<tr>
<td>9:50</td>
<td>Truck attributes and other map data</td>
<td>Kees Wevers, Navteq</td>
</tr>
<tr>
<td>10:10</td>
<td>The HeavyRoute cost database</td>
<td>Gunnar Lindberg, VTI</td>
</tr>
<tr>
<td>10:30</td>
<td>Panel discussion</td>
<td>Moderator:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bernard Jacob, LCPC</td>
</tr>
<tr>
<td>10:50</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>11:20</td>
<td>Pre-trip routing application</td>
<td>Silke Forkert, PTV</td>
</tr>
<tr>
<td>11:40</td>
<td>Driver support/warning (roll-over, black spots)</td>
<td>Hocine Imine, LCPC</td>
</tr>
<tr>
<td>12:00</td>
<td>Bridge management application</td>
<td>Hocine Imine, LCPC</td>
</tr>
<tr>
<td>12:20</td>
<td>Driving simulator and field tests</td>
<td>Anita Ihs and Leif Sjögren, VTI</td>
</tr>
<tr>
<td>12:40</td>
<td>Traffic simulations and CBA</td>
<td>Gunnar Lindberg, VTI</td>
</tr>
<tr>
<td>13:00</td>
<td>Panel discussions</td>
<td>Moderator:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bernard Jacob, LCPC</td>
</tr>
<tr>
<td>13:20</td>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>13:30</td>
<td>Lunch</td>
<td></td>
</tr>
</tbody>
</table>