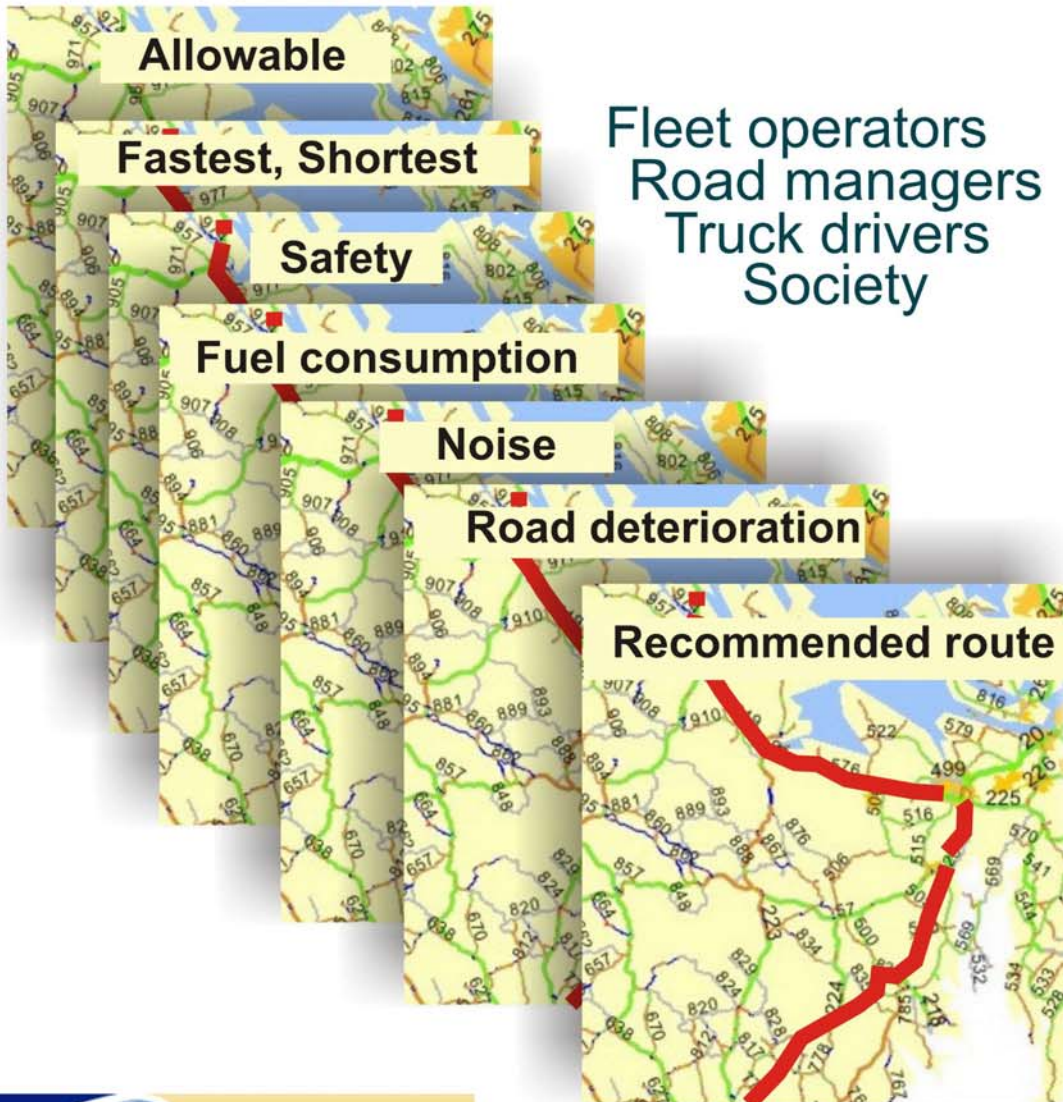




# HEAVY ROUTE

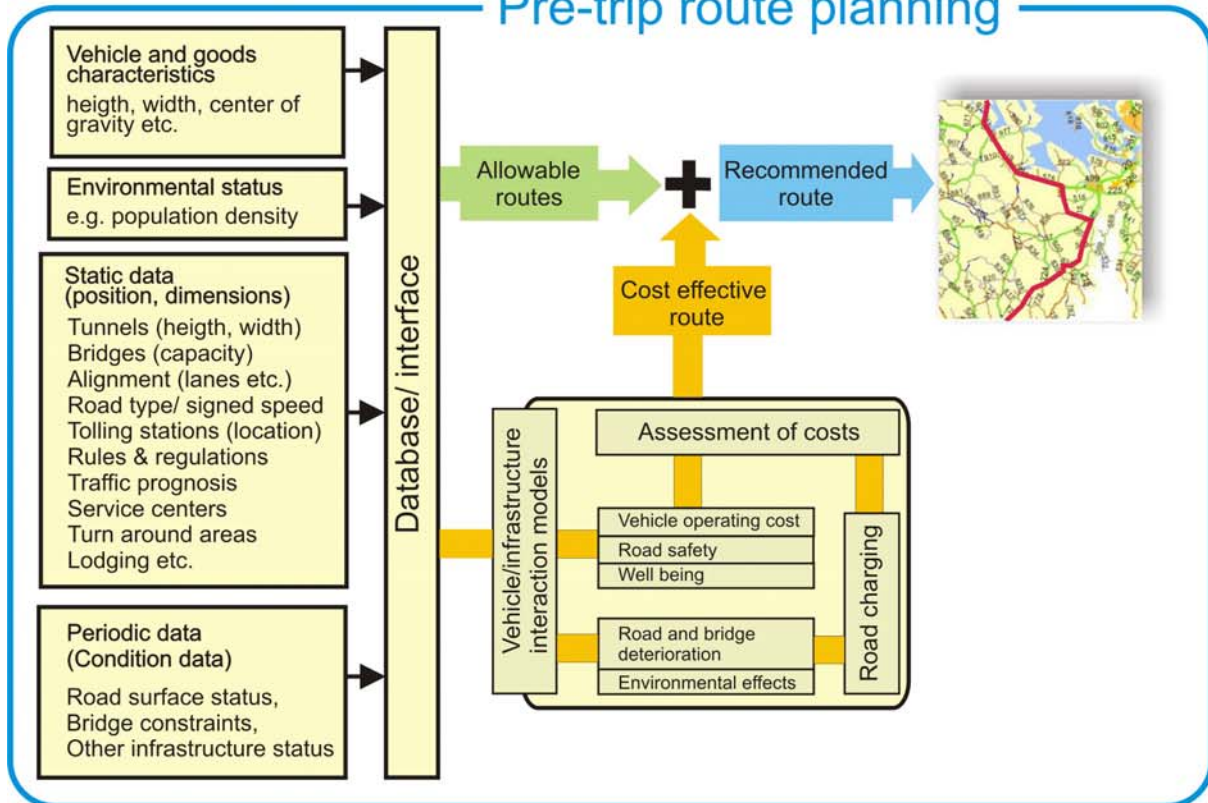


## Intelligent Route Guidance for Heavy Goods Vehicles

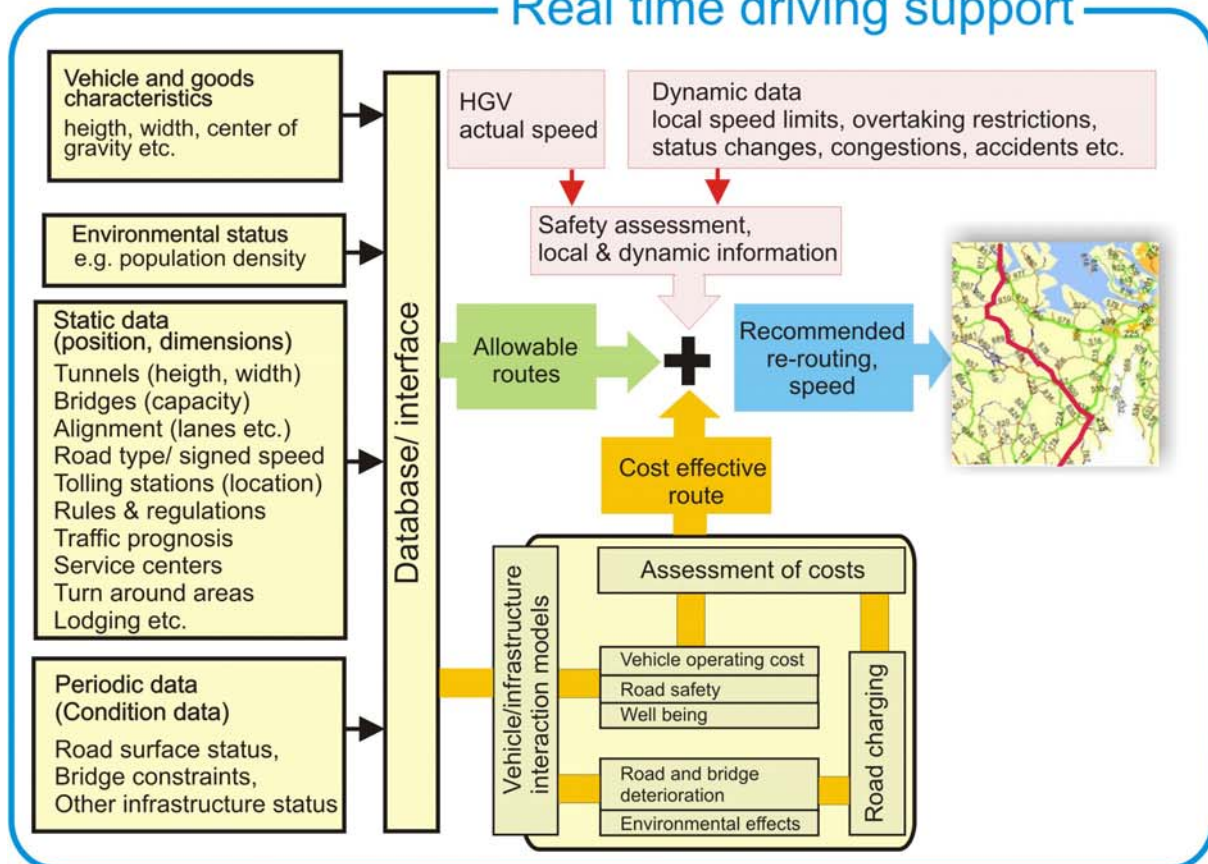


Fleet operators  
Road managers  
Truck drivers  
Society

## Pre-trip route planning



## Real time driving support







## The HeavyRoute objective

The objective of HeavyRoute is to develop an advanced route guidance and driver support system for heavy goods vehicle (HGVs) as a tool for deriving the safest and most cost effective routes for road freight transports through Europe.

The system will be built on available and implemented technologies such as fleet management and logistics systems, guidance/re-routing systems, traffic monitoring and management systems, dynamic map updating and various ITS solutions.

## The HeavyRoute applications

### Pre-trip route planning

This is an off-board or back-office system used for planning the route before the journey. Different routing solutions will be developed taking into account HGV constraints of the infrastructure (bridges, tunnels, roads, environmental zones, etc.) deriving "allowable" routes and thereafter deriving "recommended" routes based on arguments addressing the road safety, energy, environment, infrastructure costs and tolling.

Vehicle/Infrastructure interaction models, together with static and periodic road and bridge data as well as vehicle and goods attributes, are used to calculate the effects on safety, environment and infrastructure deterioration and the corresponding costs.

### Real time driving support

An on-board system will support the driver during the journey with relevant local information such as speed limits, overtaking restrictions and location of service areas as well as relevant status and status changes, i.e. dynamic data on traffic flow, road and bridge conditions, etc. Based on the incoming data the on-board system can suggest an alternative route.

The on-board system will also provide real time driver warning and recommended driving (e.g. recommended speed) to maintain or improve vehicle safety, using vehicle and infrastructure data. Truck accidents such as roll-over due to insufficient warning of approaching road conditions will be prevented.

Regulation of distance between HGVs or re-routing not to exceed the bearing capacity of roads or the limits for bridge loading is another application.

## HeavyRoute project partners

arsenal research

[www.arsenal.ac.at](http://www.arsenal.ac.at)

Österreichisches Forschungs- und Prüfzentrum arsenal Ges.m.b.H



ERTICO

[www.ertico.com](http://www.ertico.com)



FEHRL

[www.fehrl.org](http://www.fehrl.org)

Forum of European Highway Road Laboratories



LCPC

[www.lcpc.fr](http://www.lcpc.fr)

Laboratoire Central des Ponts et Chaussées



Navteq

[www.navteq.com](http://www.navteq.com)



PTV

[www.ptv.de](http://www.ptv.de)

Planung Transport Verkehr AG



Volvo Technology AB

[www.volvo.com](http://www.volvo.com)



VTI

[www.vti.se](http://www.vti.se)

Swedish National Road and Transport Research Institute (VTI)



More information can be found on HeavyRoute homepage:  
<http://heavyroute.fehrl.org/>

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