

What is “ICT for Clean & Efficient Mobility”?

Definitions

❑ ICT

- Employment of intelligent communication and information technologies for

❑ Clean & Efficient

- Improved traffic management -> smoother traffic flow
- Less consumption
- Better cost and time management
- Driver behavior effects consumption

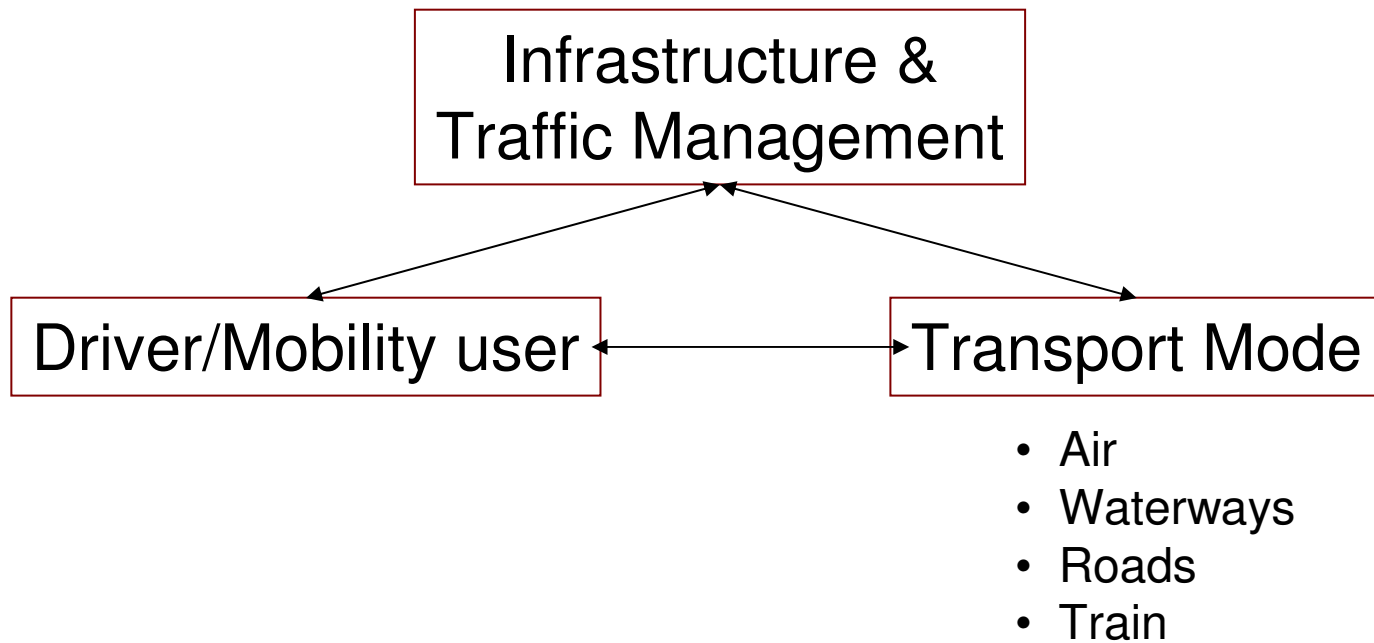
❑ Mobility

- Personal mobility
- Transport of goods
- Mobility management

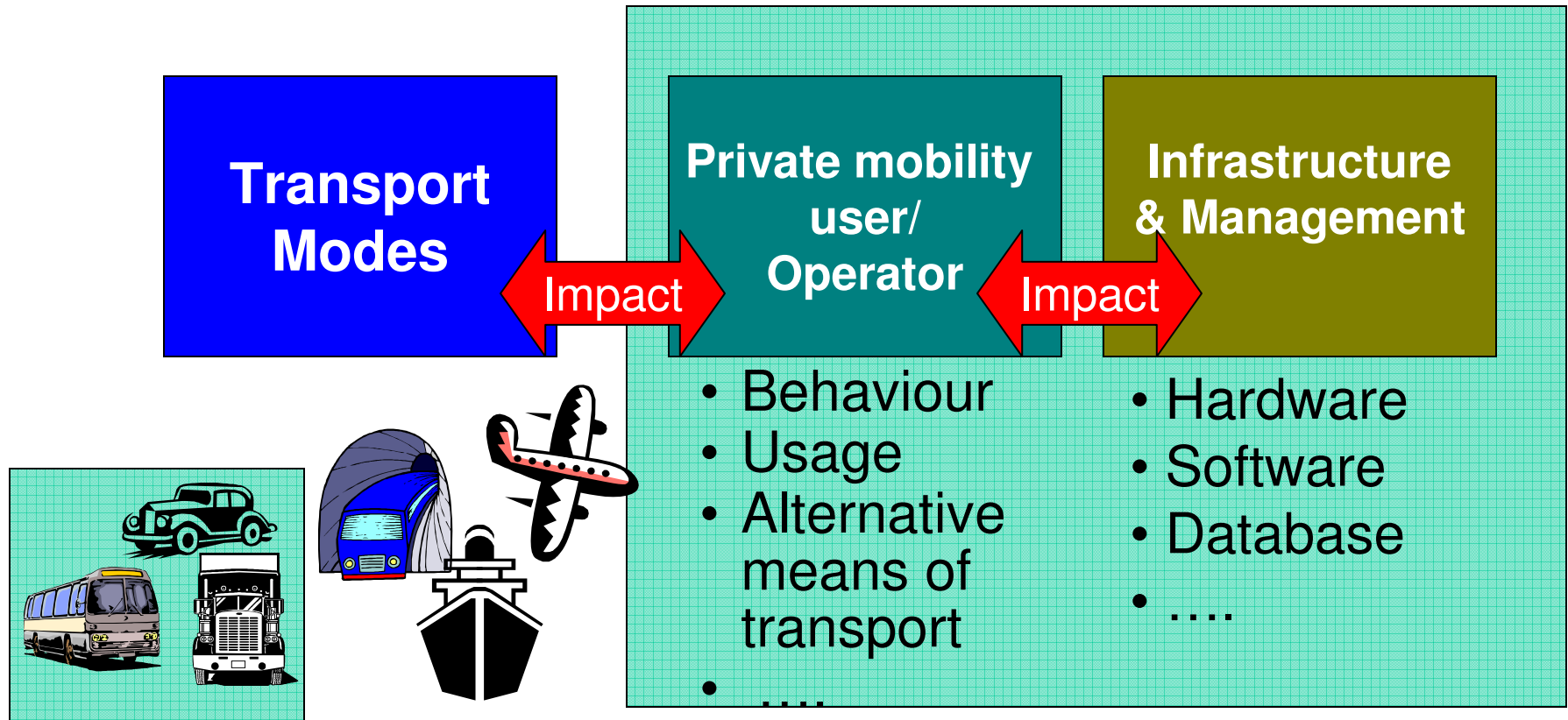
Scope and Objective

- Identify and assess which ICT applications and services for mobility have the strongest potential to yield environmental benefits;
- Examine relevant measures that could complement and enhance the environmental compatibility and sustainability of mobility;
- Examine potential for educational and support tools and feedback to promote more environment-friendly driver behaviour;
- Undertake a cost-benefit assessment of measures to reduce environmental impact of mobility;
- Identify specific measures to promote and support deployment.

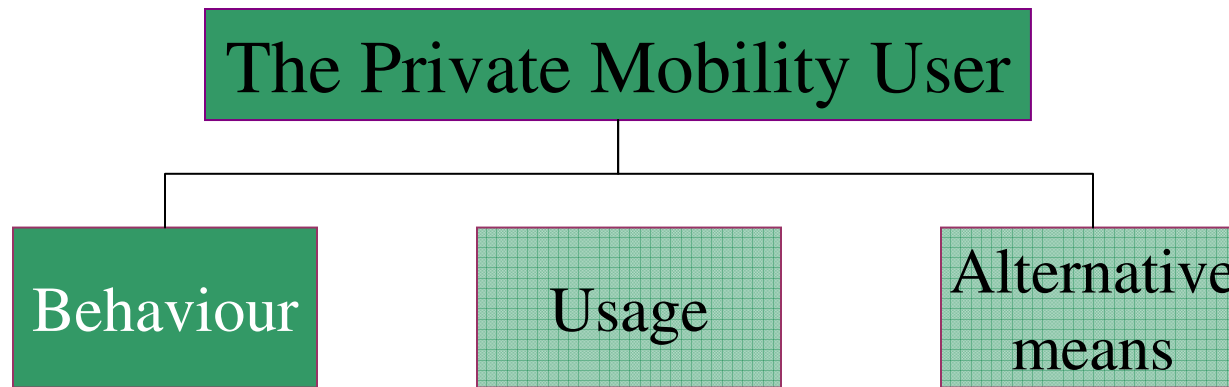
Integrated Approach



Our “Field of Play”

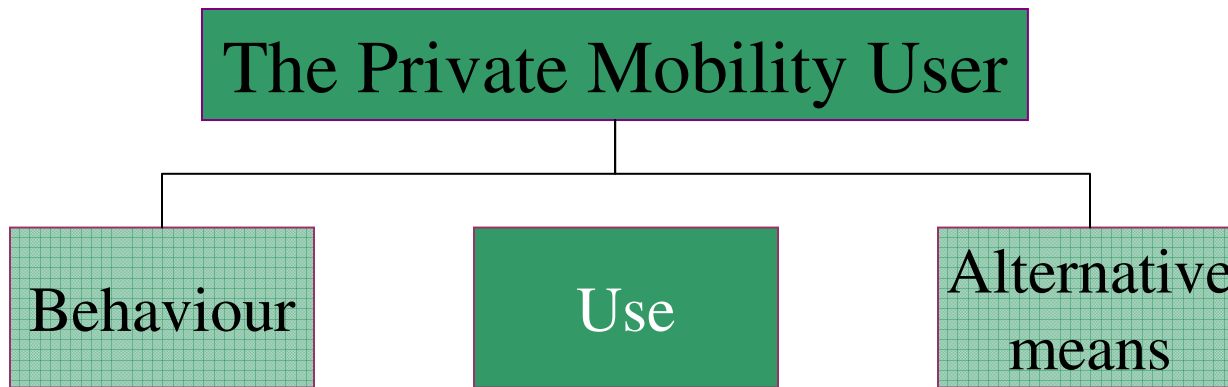


Hardware + Software



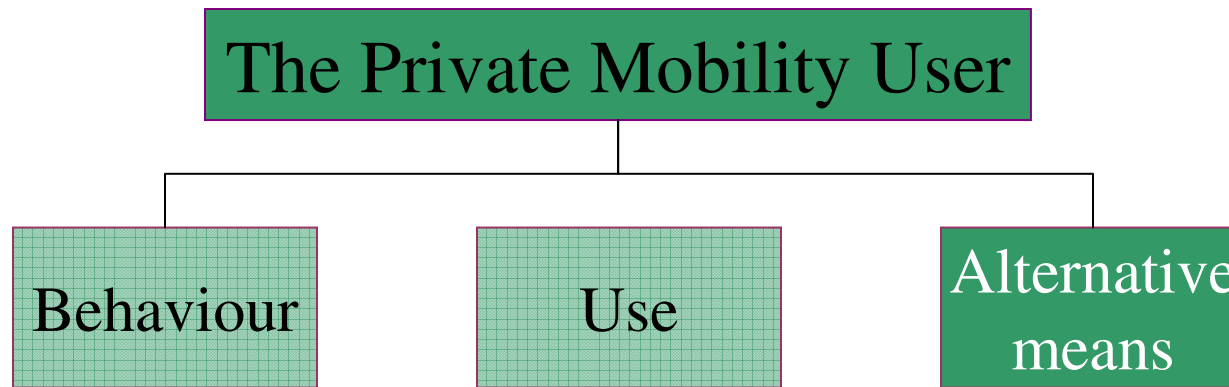
Behavior

- User education and training
- User Information
 - Pre-trip, on-trip, post-trip



Use

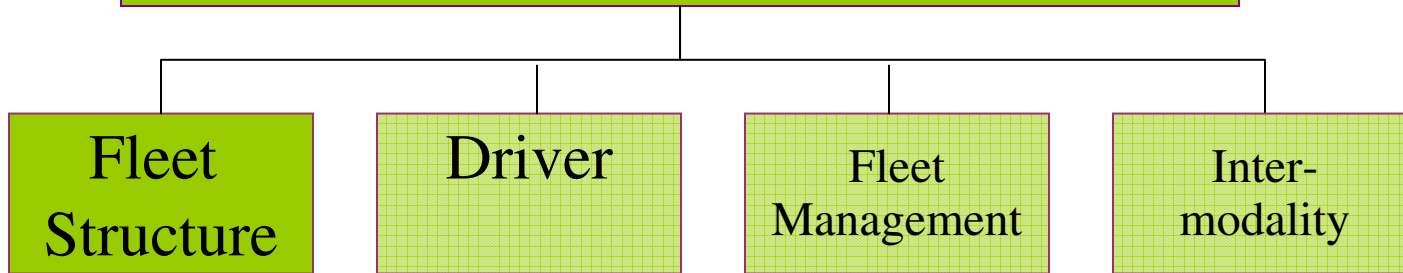
- Capacity
- Timing
- Frequency
- Costs



Alternative Means

- Selection of appropriate means of transport
- Public transport
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The Fleet Operator/Owner/Manager



Fleet Structure

- Vehicle type
- Vehicle park age
- Maintenance policy

Driver

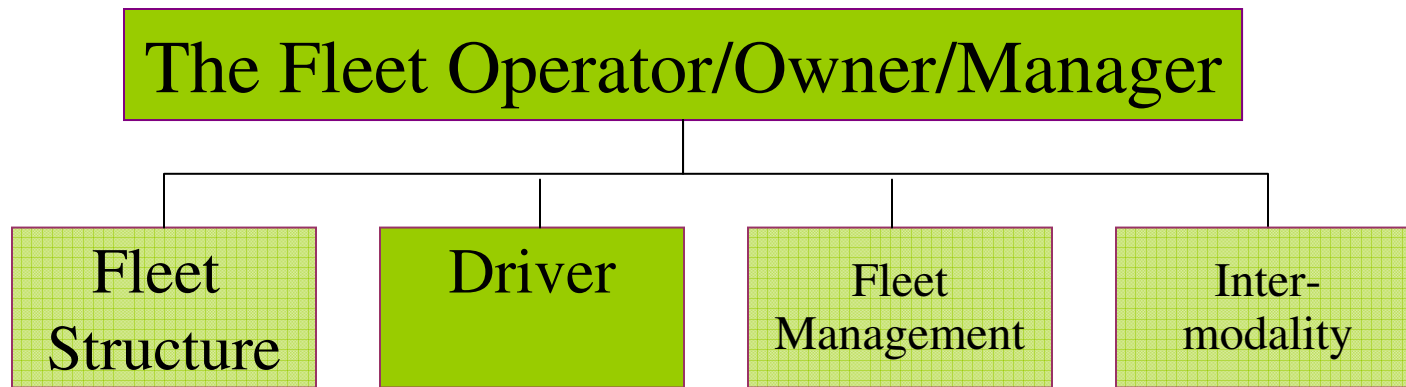
- Education and training
- Driver information
- Specific requirements for and pressure on commercial drivers

Fleet Management

- Employment of modern ICT systems
- Route planning
- Capacity planning
- Transport system (hub structure, interaction of different transport modes, etc.)

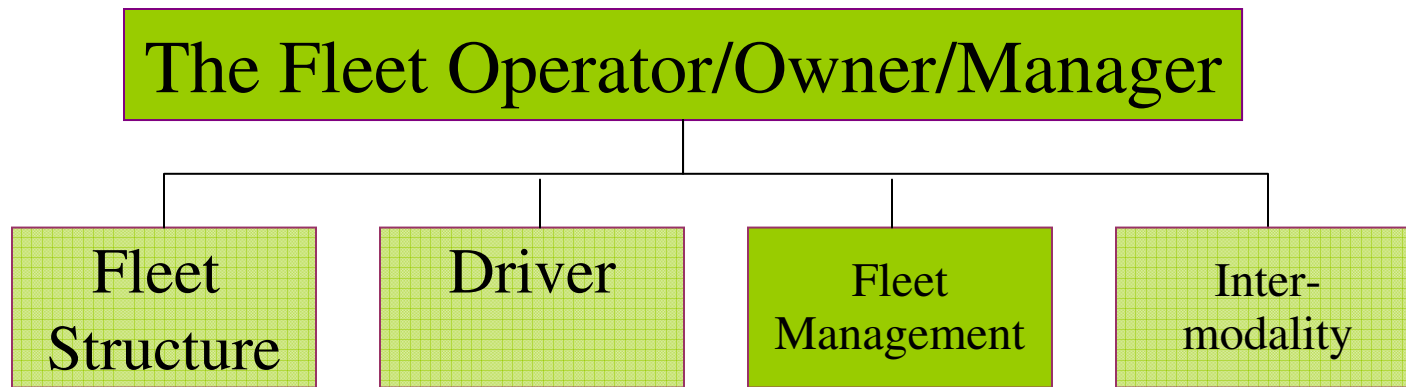
Intermodality

- Transport mode
- Hub structure
- Interfaces
- City logistics



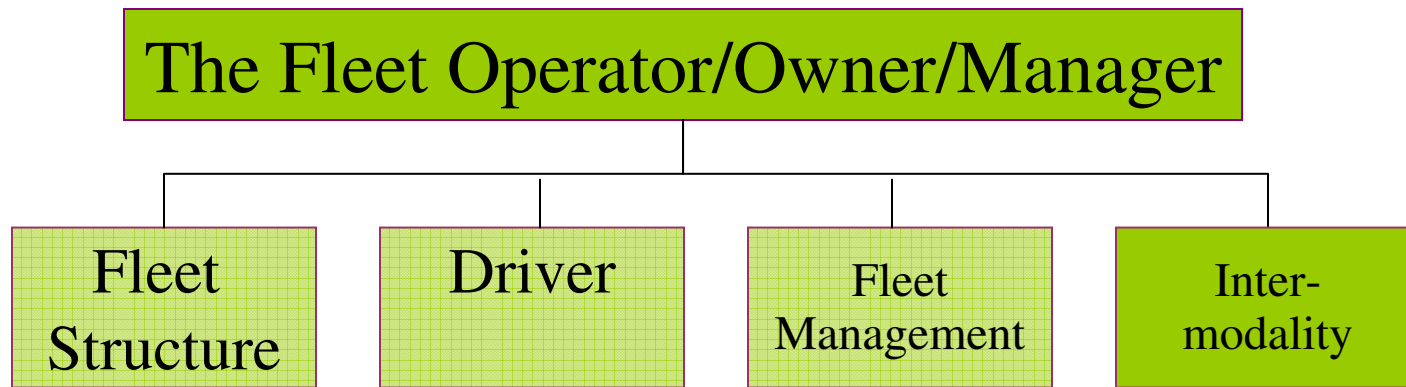
Driver

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- **Driver information**
- **Specific requirements for and pressure on commercial drivers**



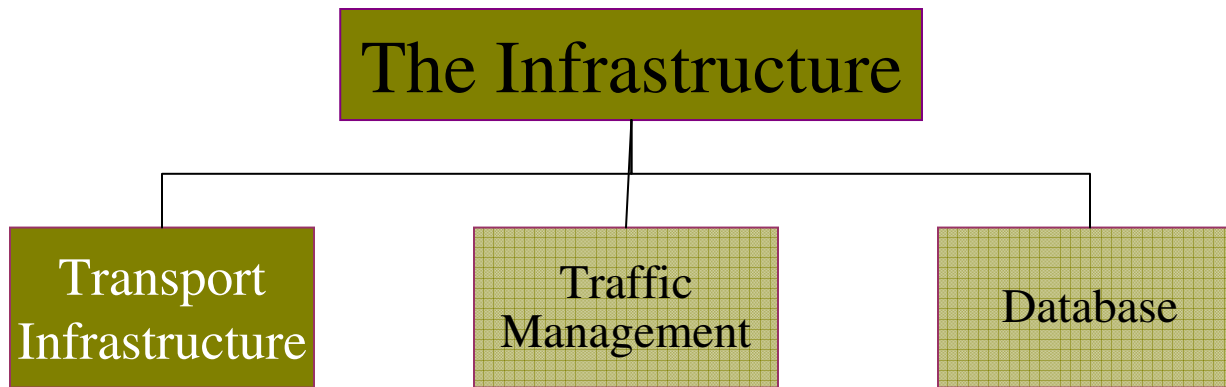
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Transport Infrastructure

(road, rail, air, waterways)

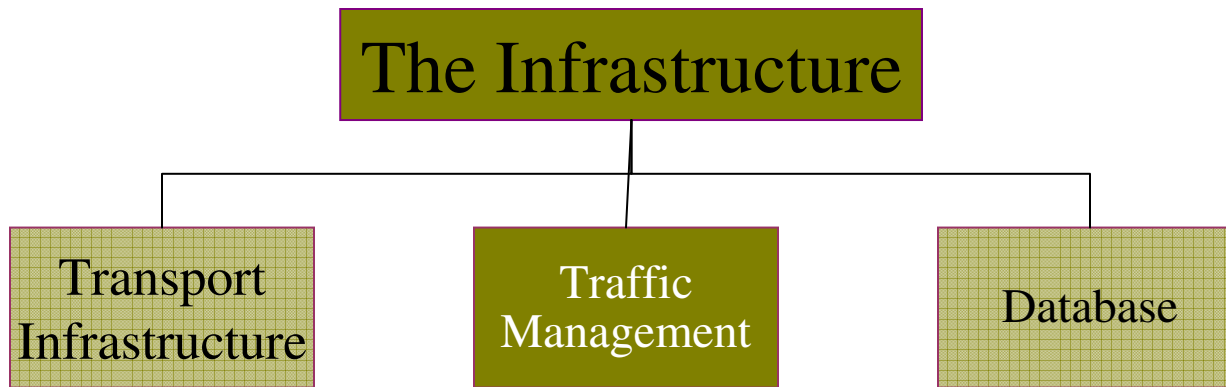
- Network density/structure
- Age and technology status of network
- Black spots/bottlenecks

Traffic Management

- Traffic density/demand
- Traffic sign infrastructure
- Variable message signs
- Incident Management
- Access control
- Road use charging

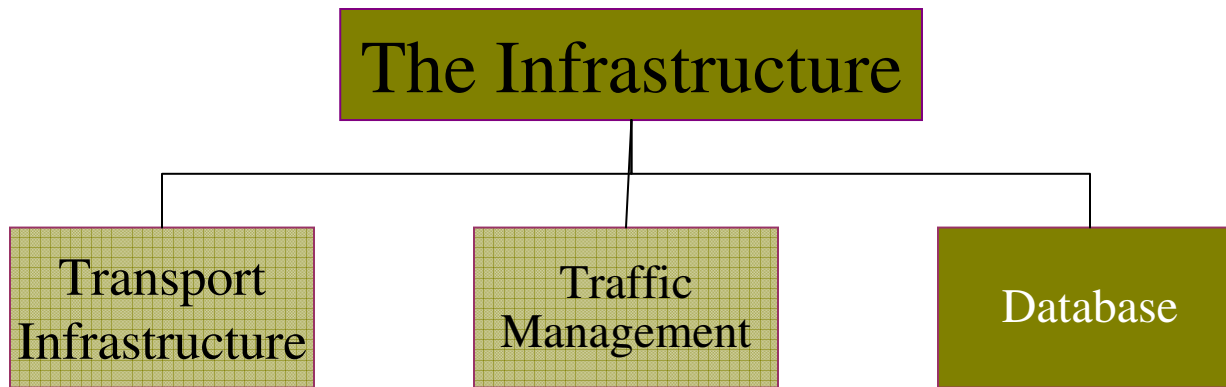
Databases

- Collection, processing and distribution of traffic information -> real-time, dynamic, digital maps
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-

The Stakeholders

- The Driver -> Consumer organization
- The vehicle manufacturer
- The supplier
- The service provider (traffic information)
- The mobile network operator
- The infrastructure designer and operator
- The Traffic Center
- The Fleet operator/manager/owner
- The associated workgroup leaders (WG RTTI, WG Communication)

Some Hypotheses...

Effects on consumption and emissions:

- ICT can produce positive side effects
- Well trained and informed mobility user
- Holistic inter-modal Traffic Management
- Design and implementation of appropriate infrastructure
- Employment and optimization of existing technologies