ITS station specifications

Trond Foss
SINTEF Transport Research

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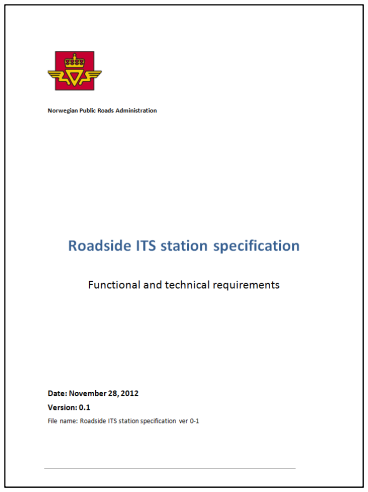
Norwegian Public Roads Administration

Roadside ITS station specification

Functional and technical requirements

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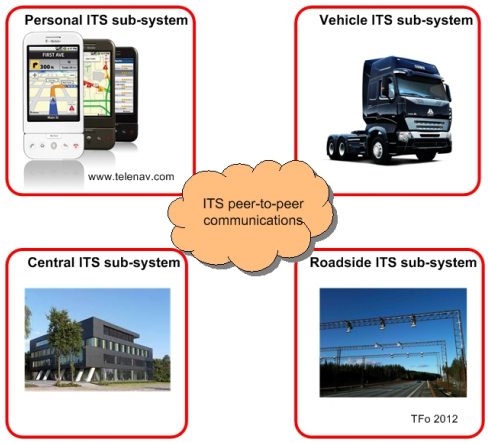
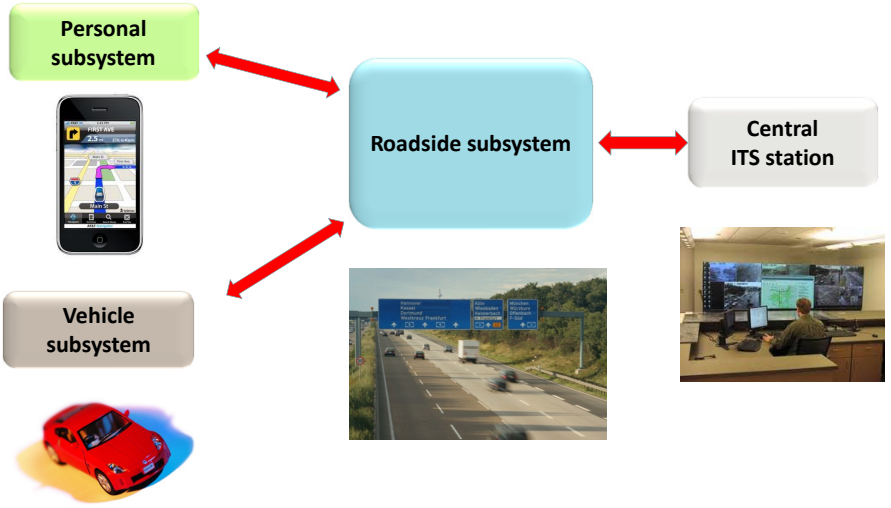
The ITS station reference model – 4 ITS sub-systems

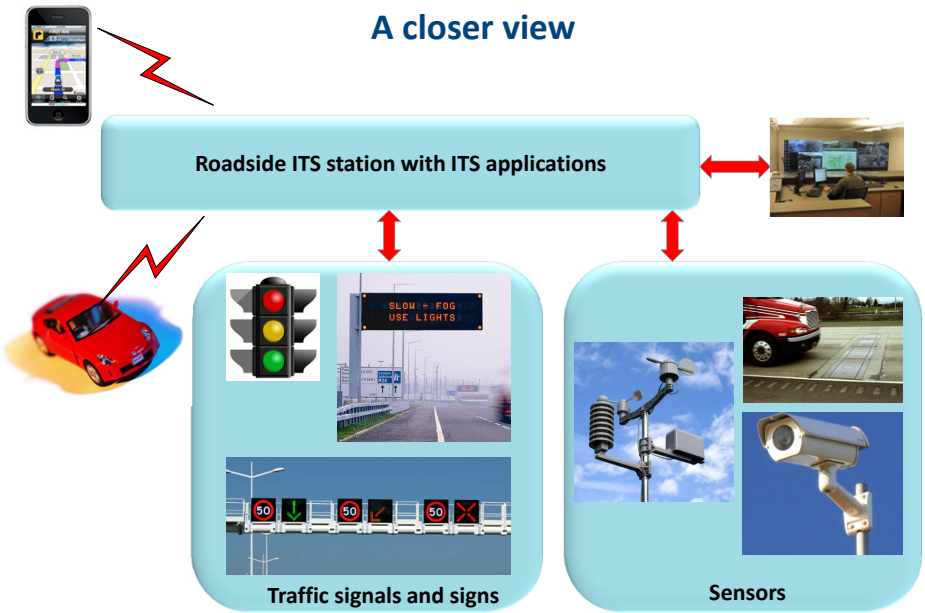


ETSI EN 302 665 V1.1.1 (2010-09) Intelligent Transport Systems; Communications Architecture.

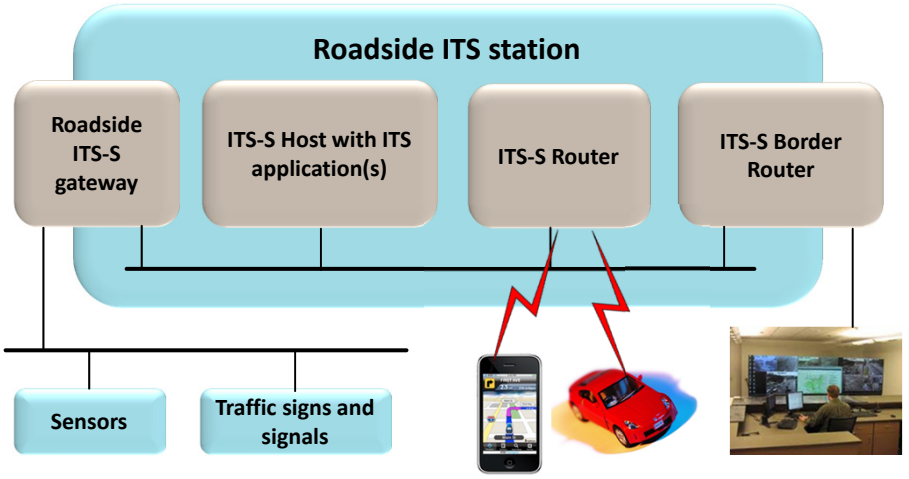
The main task: to develop an ITS Roadside sub-system



A closer view



Roadside ITS station



Roadside ITS station specifications

- What are the ITS applications to be hosted by the ITS-Host?
- How should the Roadside ITS-S interface with sensors and traffic signals and signs?
- How should the Roadside ITS-S interface with the Vehicle Sub-system?
- How should the Roadside ITS-S interface with the Personal Sub-system?
- How should the Roadside ITS-S interface with the Central ITS station

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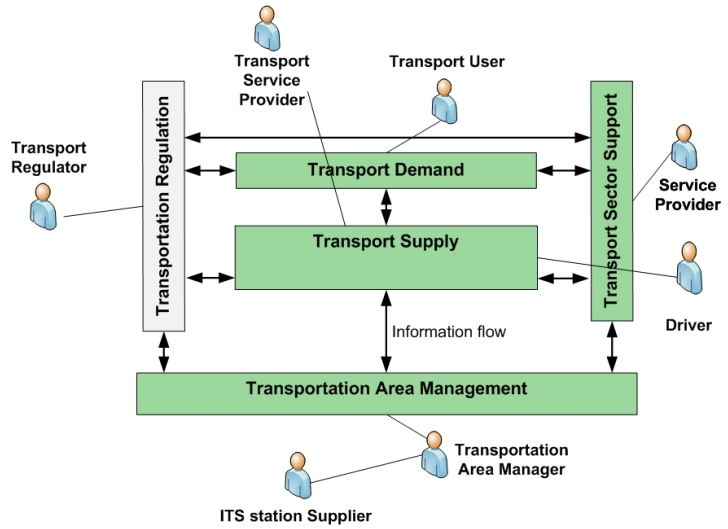
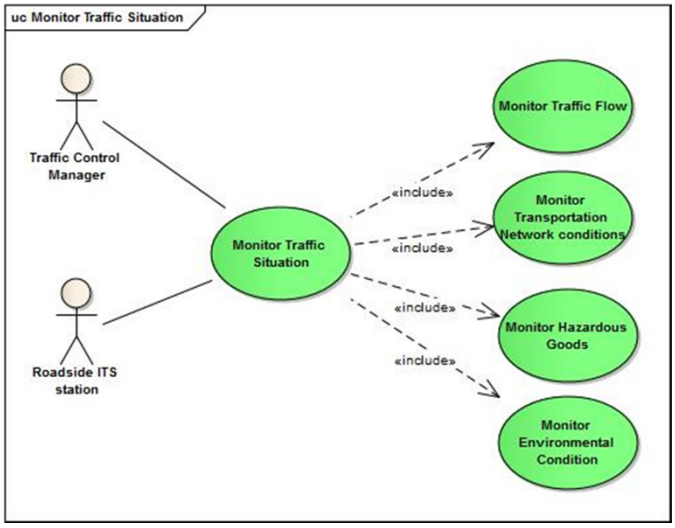
Role and responsibilities model based on ARKTRANS



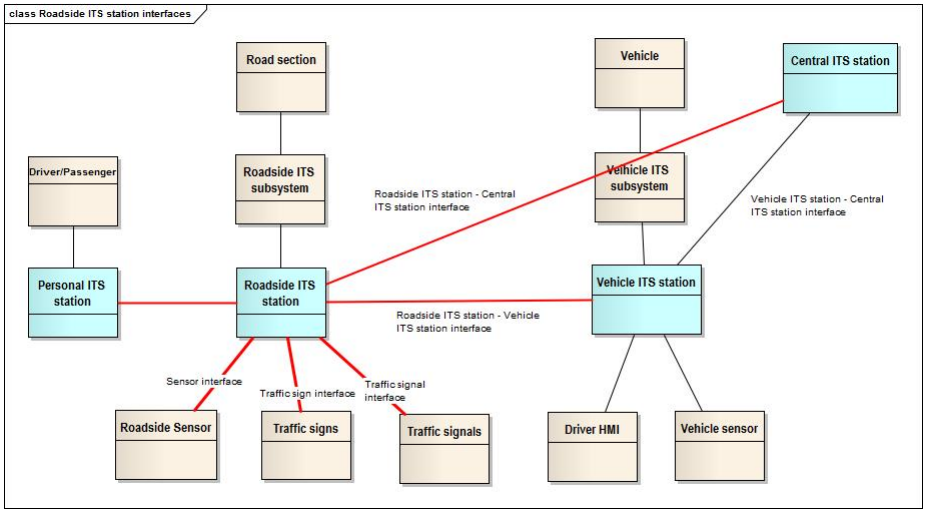
Functional architecture (main functions)

1. Manage Transportation Network Information
2. Manage Transportation Network Quality
3. Support Transportation Network Continuous Operation
4. Perform Operational Traffic Management Planning
5. **Monitor Traffic situation**
6. Perform Traffic Control
7. Provide Traffic situation Information
8. Support and Control Mobility and Transport Means Operation
9. Manage En-route Reporting
10. Manage Transport Means Information

5. Monitor Traffic situation



Interfaces



Technical requirements

- Mechanical requirements
- Environmental requirements
- Installation requirements
- Other physical requirements
- Marking and identification
- Colour and size
- Other requirements

European and international standards are crucial

- ETSI EN 302 665 Intelligent Transport Systems (ITS); Communications Architecture