Ivar Christiansen
Head of Traffic Management Section
Norwegian Public Roads Administration (NPRA)
Headlines

- Organisation, roles, involvement
- National policies and priorities
- Achievements
- Current project portfolio for eTicketing & Journey Planning
Organisation & Roles
Revised ITS Strategy for NPRA 2012

- Improved traffic safety for all groups of travellers
- Efficient measures to make road transport more climate and environment friendly
- Improved prioritisation and attractiveness of public transport
- Optimal use of transport capacity
- Robust, dependable and effective traffic management
- Improved accessibility and mobility for all based on universal design
### Organisation and roles in PT

<table>
<thead>
<tr>
<th>Level</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td><strong>National Level</strong></td>
<td>Public Transport Policy, Regulatory Frameworks, National Infrastructures</td>
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<tr>
<td>Ministry of Transport and Norwegian Public Roads Administration</td>
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<tr>
<td><strong>County Level</strong></td>
<td>Operational Service levels, Contracts, Fares, County Infrastructures</td>
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<td>County Administrations</td>
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<td>County Councils</td>
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<tr>
<td><strong>Municipal Level</strong></td>
<td>Land Use, Local Infrastructures</td>
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<td>Municipal Councils</td>
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<td>City Administrations</td>
<td></td>
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<tr>
<td><strong>Private Sector Level</strong></td>
<td>Operation, Production</td>
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Co-operation is necessary

This means...

19 Counties - and 428 Municipalities
Co-operation

General Layout

**Ministry**
- General Delegation and Specific Tasks

**NPRA**
- Directorate of Public Roads
- *Roles:*
  - Initiator
  - Co-ordinator
  - Harmonization
  - Implementation

**Task Group**
- **NPRA**
- County Administrations
  - County PT Companies
  - (Consultants)
  - (Researchers)
  - (Suppliers)
- Ministry experts

- Implementation and monitoring
- Proposals & Guidelines
- Chairs projects and tasks
Experiences after many years
From partly to full Cooperation

- Priorities are clear and agreed upon
- Ministry of Transport is active and monitors the processes
- The Directorate (NPRA) has gained a distinct role as coordinator and prime mover
- All stakeholders on-board and involved (some variation)
- Only small variation in organisation of PT in the Counties
- All stakeholders accept and comply with guidelines – with minor exceptions
- We make progress in overcoming the complexities due to distributed responsibility to 19 separate administrations
- Political attention has inspired stakeholders and spurred the activities
Policies and Priorities
Political Goals related to PT

National Transport Plan 2014–23

- Attention to urban areas and population growth
- Attention to environment-friendly transport means
- Aim: cover all increase of passenger transport demand by public transport with some contribution from bicycling and walking
- Means: both “carrot and stick”:
  - increase PT attractiveness and capacity
  - influence user preferences away from car use
  - restrict car traffic
eTicketing and travel planning in focus

- Make it more simple and convenient to travel by PT
- Create seamless and continuous services
- Focus on user needs and door-to-door services
- Administrative and operational borders must be transparent to the user
- Priority to national harmonisation of fares and products
- One common and coordinated transport system for all
Achievements
National Interoperability for e-Ticketing

- National guidelines (Handbook 206)
- Common electronic card specification
- Standard format for transaction exchange
- Interoperability Certification and Testing Regime
- Common terminology & symbols
- Mobil phone as ticket medium with QR-kode
- Centralized system for online purchase and delivery of digital content to travel cards, mobile APPS etc. (NOD)
- NFC-technology for reading and updating of travel cards via smartphones
- Fares structure harmonization and simplification towards a national fare system
- Cooperation with other countries to make use of HB 206 content (NTA – Ireland, OTI – Netherlands)
Achievements

History

- 2006 – Completely revised guidelines: Handbook 206
- 2010 – Proposal for national infrastructure for eTicketing
- 2011 – National organisation for interoperability services
- 2011 – New version, new structure with separate modules
- 2011 – Trade Norm for personal data management in PT
- 2011 – NPRA takes the lead for National Journey Planner
- 2012 – National Order Database (NOD) in operation
Achievements
Handbook 206

Handbook 206 Part 0 Revision history and content
Handbook 206 Part 1 Objectives and description
Handbook 206 Part 3 Ticket media and products
Handbook 206 Part 6 Universal Design
Handbook 206 Part 7 Data capture and Statistics
Handbook 206 Part 8 Terminology
Handbook 206 Part 9 Symbols
Handbook 206 Part 18 – NSD Ticket Media and Card Specification
Annex to Part 19 Appendix A DIS N3.xls
Annex to Part 19 Appendix B xdrBaseTypeIOS N1.x
Annex to Part 19 Appendix C XML Scheme N
Handbook 206 Part 22 National Order Database
Handbook 206 Part 22 – appendix B and D
Handbook 206 Part 23 Interoperability Certification and Testing Regime
Achievements

Handbook 107 National PT Data Management

Mobilitet 2013 – I.Christiansen NPRA
Achievements

IO AS – Interoperability Services

Company ToR:
Develop and operate systems that collects, edits and distributes data used in electronic support systems in the public transport domain, including electronic ticketing, information systems, data acquisition, data management, data distribution and similar.

In addition ancillary services and activity related to this. Products and services are mainly to be sold to national and/or county agencies or companies directly or indirectly owned by the National Government or one or more county councils.
Current Portfolio
Developing eTicketing and with User Focus

- Ferry card is interoperable on all ferry connections
- Electronic purse on your ticket card in the near future
- Mobile phones
- NFC
- Integration with journey planning
- Simple and efficient for users and operators
- NFC mobile phone communication to card (r/w)
- Exploring mobile phone as ticket medium with NFC

Project Portfolio

Statens vegvesen
Norwegian Public Roads Administration
"The Ministry of Transport and Communications has initiated the development of a national journey planner for all types of public transport. This will entail reporting travel data from county administrations and commercial transport providers. The goal is that travellers should be able to find and receive travel information via the internet and mobile phones by the end of this period. When systems for real-time travel information are established, the journey planner should also communicate information in real time."

From the current National Transport Plan
Multimodal means...

- Traditionally: car and public transport on road
- In our case Public Transport from all modes of transport

- and secondly; individual road traffic
We must cover all degrees of traffic demand – from the busy Oslo Area to rural, long distance connections
Project Portfolio

Proposed new Structure for Implementation

- National Administration
- County Administrations
- Rutebanken AS
- National Travel Data: National Travel Planning Service
- Electronic Ticketing: Interoperability Services
The Next Steps will include Integration

- Public Transport Data Base
- Other Sources
- Road and Traffic Data Bases

Routing Engine

Multimodal Routing Engine

Other End User Services National/Local

Official End User Service

Other End User Services National/Local
The long-term Goal

I can **plan, book and pay** for my public transport journeys with the help of **one** user-friendly interface on my phone, pad or PC.

We have to start exploring how to solve this challenge with **focus on the interest of the user**.
NPRA was awarded last week
Making our data open and free for re-use

- Road network
- Restrictions
- Routing engine
- Traffic volumes
- Travel times
- Road Weather
- Web-cameras
- Traffic messages
- Tolling data
- ..and more to come
The Informed Traveller

- Informed travellers give better transport
  - More environment friendly
  - More safe
  - More efficient travel
  - More convenient

- Available information services increase the expectations for more information and better services

- Increased predictability and preciseness give benefits for the individual, for business and for society
Thank You for the attention!
Questions?

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