Picture: Wikimedia Common, S. Solberg J.

NordicWay 2

- C-ITS pilot project to enable vehicles, infrastructure and network operators to communicate safety hazards and other information on roads in the Nordic countries
- NordicWay 2 objectives:
  - Pilot deployment of interoperable Day-1 & Day-1.5 C-ITS services
  - Contribute to harmonization and interoperability of C-ITS in Europe through C-ROADS
  - Support infrastructure readiness for Connected and Automated Driving
  - Assess impacts of C-ITS services

- Coordinator
  - Per Einar Pedersli, Norwegian Public Roads Administration
- More info: www.nordicway.net

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Piloted services

Day-1 services

- In-Vehicle Signage
  - 🇳🇴🇫🇮 In-vehicle speed limit
- Hazardous location notifications
  - 🇳🇴🇫🇮 Weather and road condition
  - 🇳🇴🇫🇮 Slow or stationary vehicle
  - 🇸🇪 Emergency vehicle approaching
  - 🇳🇴🇫🇮 Traffic ahead warning
  - 🇳🇴 Emergency brake light
  - 🇳🇴 Cooperative collision warning
- Road works warning
 - 🇳🇴🇫🇮 Road and lane closure
  - 🇳🇴🇸🇪 Mobile roadworks
- Signalised intersections
  - 🇳🇴 Signal violation / intersection safety
  - 🇸🇪 Time to green
  - 🇳🇴🇸🇪 Green light optimal speed advisory (GLOSA)
  - 🇸🇪 Traffic signal priority request
- Probe vehicle data
  - 🇳🇴🇫🇮 Single vehicle data

Day-1.5 services

- Traffic management
  - 🇳🇴🇫🇮 Traffic information & smart routing
  - 🇳🇴 On-street parking information and management
  - 🇳🇴 Information on alternative fuel vehicle fuelling & charging stations
- Connected and automated driving
  - 🇳🇴 Data collection for mapping of infrastructure readiness
- Connected and cooperative navigation in and out of the city
  - 🇸🇪 Dynamic access control of designated infrastructure
- Dynamically controlled zones
  - 🇸🇪 Dynamic environmental zone

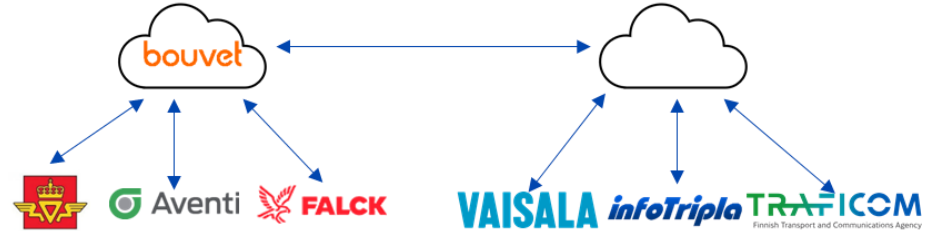Co-financed by the European Union
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Interchange network
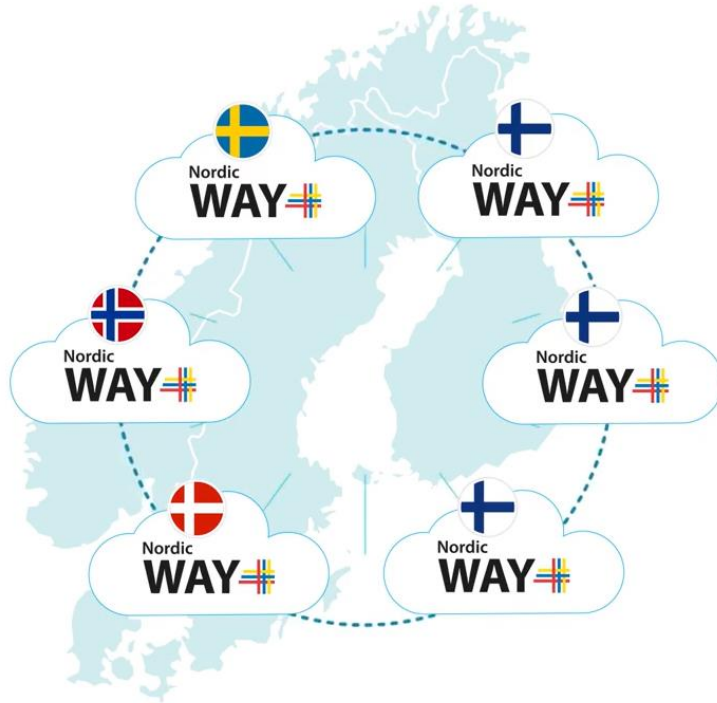
Norwegian Interchange

Finnish Interchange

The system works almost everywhere, anytime and across borders

Methodological frameworks

- FESTA Handbook
- C-ROADS Evaluation and Assessment Plan
- NordicWay (1) methodology
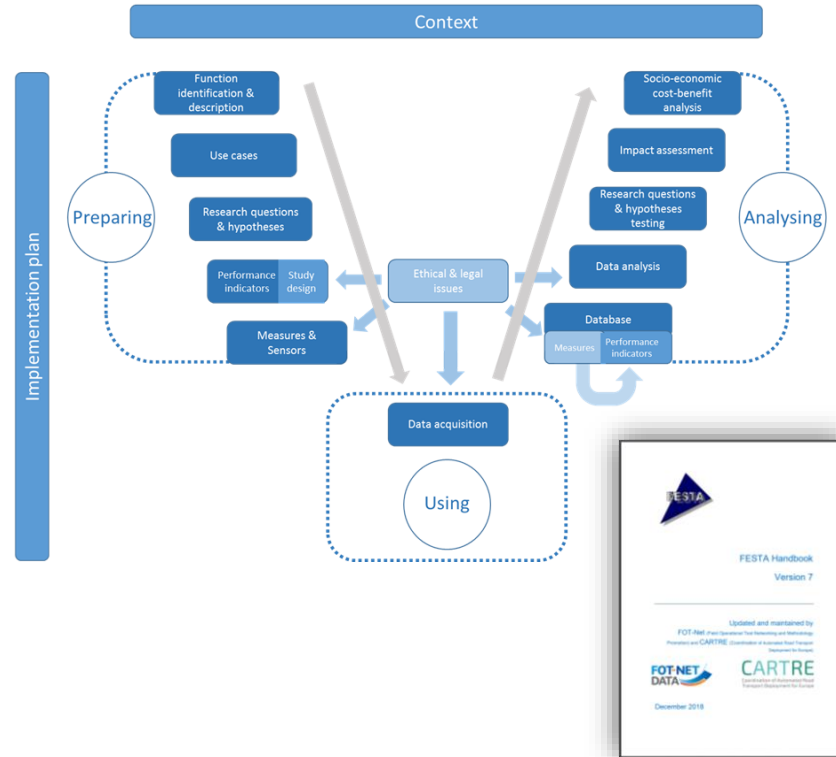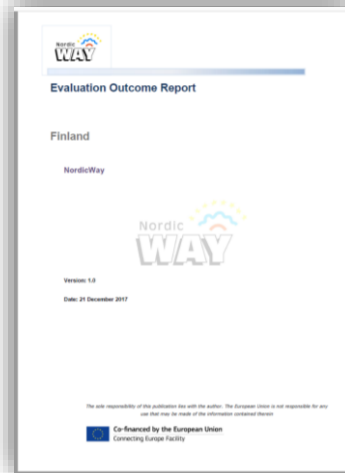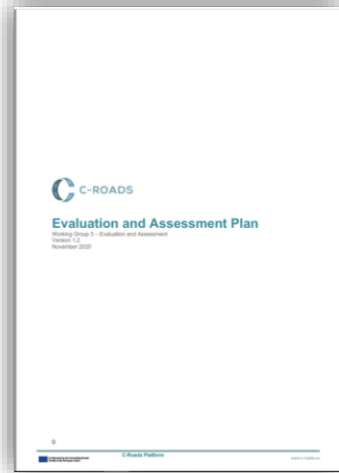
Focus areas for the evaluation

- **Quality of service**:
  Is the quality of C-ITS services sufficient?

- **User acceptance**:
  Is general public interested in using these services and paying for them?

- **Ecosystems**:
  What kind of ecosystems are fit for providing C-ITS services in the Nordic countries?

- **Socio-economic impact**:
  Can we expect societal benefits from the C-ITS services?

Approaches for harmonisation of evaluations across NordicWay 2

Ecosystems

- Jointly made script for the workshops
- Local workshops
- Joint summary of results across all the countries

User acceptance

- Jointly made survey to study the user acceptance among general public
- Local translations, local data collection
- Joint summary of results across all the countries

Quality of services

- Common KPIs to be utilised at all sites
- Joint summary of results across all the countries

Socio-economic impacts

- Jointly made assessment of the socio-economic impacts for the whole region

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Thank you!

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