



Best and Innovative Practices in Europe for Road Mobility

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NordicWay 1-3, innovative corridor projects generated by NEXT-ITS to pave the road for more advanced future deployment

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Bottom line

- Regional cross border ITS deployment cooperation is an asset
- It can also be an important facilitator for innovative initiatives
- Bridging the gap between development and deployment



Background

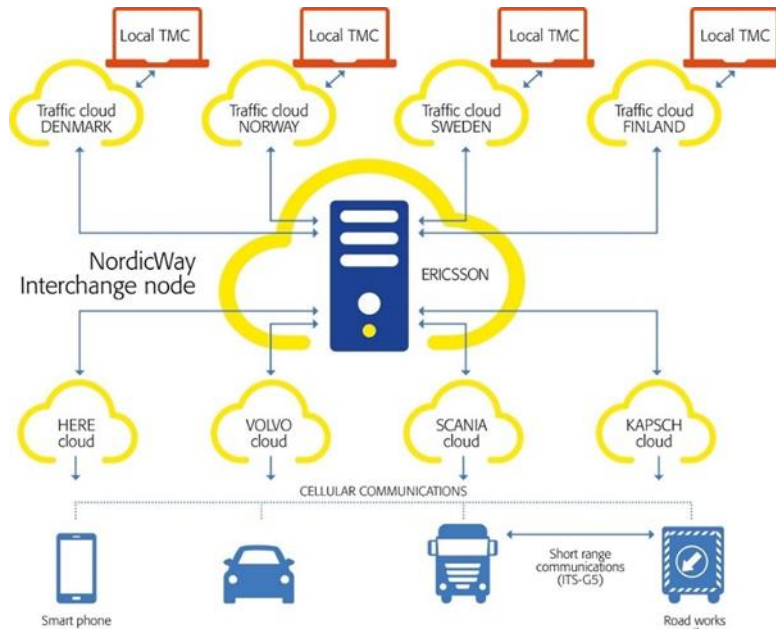
Discussion within the NEXT-ITS community

- How to prepare for new innovative deployments?
- How to address the connected vehicle?
 - Specifically in a nordic countries context
- What cooperation schemes will be necessary

- A new initiative



NordicWay 1



Co-financed by the European Union
Connecting Europe Facility

NordicWay 1



- An interoperable cellular cloud-based C-ITS solution, scalable to Europe and beyond
 - Full road network C-ITS coverage
 - Innovative services for the mobility of people & goods
 - New possibilities of organising traffic to optimize the use of existing infrastructure
- An eco-system supporting the OEMs and service providers costumers relationships as well as existing privacy and security solutions
- Sufficient latency for most Day 1 C-ITS
- Services well accepted by users
- High benefit/cost ratio



Nordic WAY 2



NordicWay 2 is a collaboration between public and private partners in Finland, Norway, Sweden and Denmark

Co-financed by the European Union within the Connecting Europe Facility programme 2017-2020



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Nordic
WAY 2



Picture: Wikimedia Common, S. Solberg J.

Strategic approach

- The connected vehicle - A functionality in the transport system
- Can facilitate a wide range of services
- Thus a substantial potential to improve transport system performance in terms of efficiency, environmental aspects and traffic safety.

NordicWay approach

- Take advantage of cellular networks (long range communication)
 - Avoid road side installations
 - Better area (road network) coverage
- OEM channel to the car
- Information exchange back-end (interchange node)
- Short range communications as case specific solutions if necessary
- Cross-border cooperation and European cooperation



Scalable throughout Europe and beyond



Piloting and expansion

- NW1 – Communication through cellular network
- NW2 – National pilots testing C-ITS services
- Cooperating Ministries and Administrations providing beneficiaries
- Introducing implementing bodies
- Cities
- More industrial partners
- All in all a broader cooperation (From 4 to 13 external partners in Sweden)
- More services



NordicWay 3

Urban Connection

- NordicWay 3 is a collaboration between public and private partners in Finland, Norway, Sweden and Denmark
- Co-financed by the European Union within the Connecting Europe Facility (CEF) program managed by INEA, 2019 -2023.



Cities involved

1. Trondheim, Norway
2. Oslo, Norway
3. Gothenburg, Sweden
4. Uppsala, Sweden
5. Stockholm, Sweden
6. Tampere, Finland
7. Helsinki, Finland



- NW1 – Communication through cellular network
- NW2 – National pilots testing C-ITS services
- NW3
 - Aims to get C-ITS services to deployment through coordinated pilots across countries and cities
 - Further develop the role of the cities, investigating roles and processes in the ecosystem of C-ITS
- Cooperating Ministries and Administrations providing beneficiaries
- More implementing bodies (FI: 6 and SE: 24)
- More cities
- More industrial partners



NordicWay 3 – Urban Connection

C-ITS pilot

Enables vehicles, infrastructure and network operators to communicate safety hazards and other information between different stakeholders.



Credit: Carmenta



Co-financed by the European Union
Connecting Europe Facility

nordicway.net

NordicWay 3 aims for deployment

NordicWay 3 has the ambition to take the services piloted as close to deployment as possible.



Credit: Volvo Busses AB



NordicWay 3 Flagships

NordicWay 3 **flagship pilots** are coordinated C-ITS pilots with mature technology and with full cross-border functionality and are implemented at several sites in the Nordic countries.



Traffic signals



Emergency
Vehicle Warning



Road Works
Warning



Geofencing &
Dynamic zones



NordicWay 3 Interchange

Pilots communicate through the **NordicWay federated Interchange Network** and use mainly cellular communication to the end users.





Dare to think ahead

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