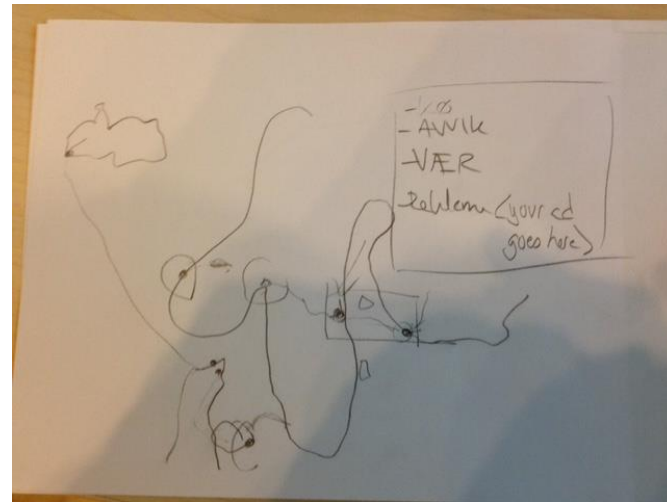
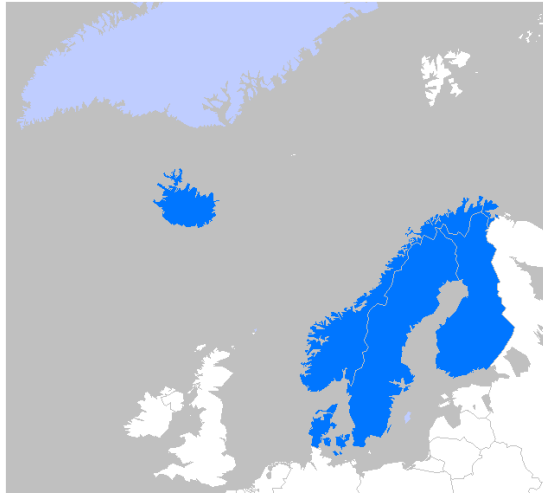


# Points from ICT group 2

## 04-050615

Aleksi, Ola, Viktor, Gunilla, Peter, Mie,  
Magnus, Niklas, Ellen

# The shared transport information system



## **Discussion result:**

1. The described functionality can be realised using transport network descriptions.
2. Each transport network (roads, railways, buses, boats) is described geometrically and logically with nodes and links.
3. Each network description is maintained by the network owner.
4. Information important to the public should be associated with the transport links.
5. If travellers plan their routes using the same transport network, discovering the information will be simpler and more reliable.
6. Transport networks must be linked together using transfer nodes. This will enable both border crossings and mode changes.
7. Transfer nodes are defined and maintained by the part in need of them. It is not necessary to establish new organizations to handle this.

This use of transport networks **requires that:**

- Network nodes must be named in a way that survives network updates.

## **Conclusion:**

Group 2 wants to demonstrate this use of linked networks.

A demonstration requires effort, so we need to seek funding .

# Application for funding:

- The project aims for creating a demonstrator that shows how we can connect transportnetwork and realtimeinformation from all the nordic countries for a continuous informationssystem that makes effective, environmentalfriendly and safer transports across borders
- The project will create a service that delivers road-, traffic- and disruptioninformation from all the nordic countries and for all transportforms as road, rail and sea
- The work is based on a "use case" from interviews with transportfirms where we can prove deficiency in chart- and navigational services and that causes problems for the transportfirms
- At the present it is very difficult for the transportfirms to get the big picture when you are dependant of finding the information from several systems and from different countries
- The project aims to show the demonstrator at ViaNordica in Trondheim 2016
- There is a possibility for continuing and completing the work during the next period
- The project is intended to be run by a projectleader from the ICT-unit in NVF with the help of the members, students and others - to finish the demonstrator.

# Project plan

- Sufficient plan for application [link](#)
- Peter will finish and enter the application
  - Application is evaluated when?
- Ola develops project plan and budget
- Story map – Ellen finds expert
- Prezi and satellite image?
- Sound contextual
- CO2 savings
- Predictability deliveries and delay fines, traffic-safety, accidents, lower stress levels

# Tomorrow

- Start work on the application for economic aid
- Grupp2 presentation
  - Describe the logical connection of transfer nodes
  - Railwaystation transfer nodes (example from Finland)
  - Powder-Trans presentation (shorter version)
  - Annan synvinkel/variant
    - Ruter.no
    - reseplanerare.trafiken.nu (Trafikverket – Stockholm –SL, Haacon) även info om t.ex. CO2

# Demonstrator

- Data fra Fi, No, Da (veg), Sve (geodatabase, laste ned)
- Mailet Banedanmark
- Connectivity
- Generate shorter links
- No demonstrator independant of extraneous network architecture

# Connectivity “points”

- Road category
- (vegklasse)
- “Weight” (importance) –category
  - Classification needs to be compatible across the borders
- Functional roadclass (0-9)



# Connector nodes

- Transfer nodes ISO19147
- Svensk veg og jervegsstandard
- Data administration: The owner of the network (domain) has the administration and ownership of the transfer node
- Content: what the node connects to
- Busstop-register
  - A new transfer node!

# Transfer -node

- (owner knows what domain to use)
  - Search gives road, rail, bus ... domain from different countries
  - Other domain
- Geographical name
  - Coordinate
  - Address (street)
- Network-information

# Case

- Freight-terminal (boat/rail)
- Powdertrans case from Niklas

# Notes on implementation

## **Elements of a project plan**

Look at other ongoing projects (ITS-directive, RSI, Kristin G...)

Apply for funding

Detail selected use cases

Define data structures

Define demonstrator scenarios

Evaluate and select tools

Define work packages

Assemble contributors

Build system

### **Possible server platforms:**

ArcGIS Server (NOK 150.000,- + NOK 60.000,- pr year)

**PosGIS + EPGS + Application Server: (NOK 0,-)**

### **Development tools**

Java, DotNet, Python, Javascript,.....

Common database => free choice of tools.

### **Design:**

One server, but separate schemas pr. transport network.

### **Hosting:**

Server available SINTEF.

### **Work process:**

Import national geodatabases into separate schemas.

Reduce data volume to relevant “corridors” if necessary.

Define transfer nodes manually.

Evaluate pgRouting, or define custom routing.

Define supported use cases and user interfaces / animations.

(What to demonstrate, and how)

Define work packages.

Use student projects?

Design the database. Look at existing projects