

Services piloted Norway

What is important for a road operator in a country like Norway?

- Weather and Road Condition
- Slow and Stationary vehicle
- Signal violation/GLOSA
- Traffic ahead warning
- Mobile road works
- Road and lane closure
- Cooperative collision warning (wrong way driving)
- In-vehicle speed limits



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Norway in one slide:

- **Goods producing industries are located along the coast in remote areas!**
 - Fisheries, fish farming and fish slaughterhouses
 - Ship building yards
 - Furniture production
 - Factories are cornerstones of the local villages!

- **Long trunk road network – mostly 2 lane**
 - Oslo – Kirkenes – 2494 km – 34 hours of driving

- **Weather**
 - From fjord to a mountain pass in as little as 45 minutes (E8)
 - Normal winter weather would be extreme weather in mainland Europe



Focus of Norwegian services

- **Freight transport and getting the goods to the market**
 - Mainland Europe
 - Russia
 - Asia

- **Nobody is in a bigger hurry than a dead salmon!**
 - 36 hours from fish pen to table in Japan

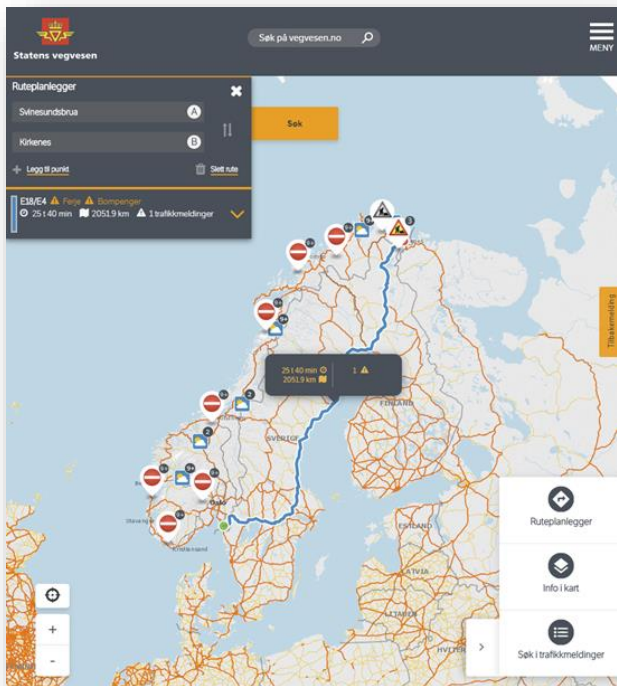
- The question was: How can C-ITS services be used instead of building new roads (tunnels)?



Photo: Ny rv 714 AS

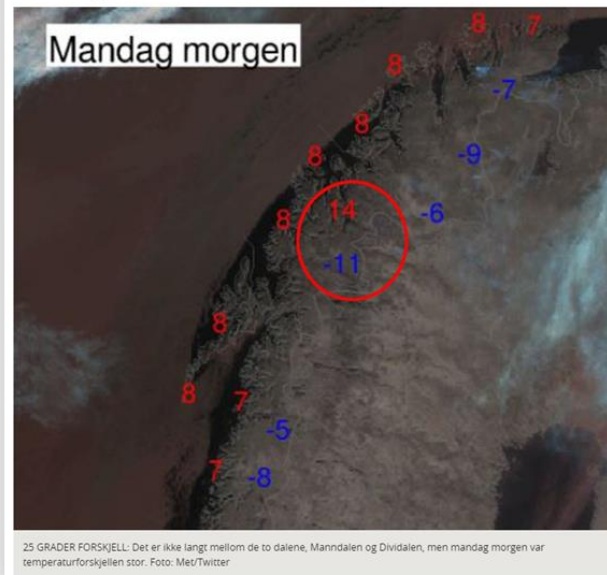


The challenges to be solved



Even our smart routing sends us through Sweden on our way from the South to North – and you save 9 hours

Sjekk den temperaturforskjellen!



Two seasons in 65 minutes, from +14 degrees to -11



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Even good winter days can be bad



Two axel trucks and snow is a poor combination



Approx 40 miutes later it is time to put on show chains



The more the merrier – joined after 20 minutes



Well we have some more issues



Waiting out a storm at the local gas station in Skiboten



Figuring out how to put on snow chains – and yes it is solid ice with water on top



Salt to remove ice also attracts the locals



Tunnels where truck have to drive in the middle to fit



How can European C-ITS services be adapted to solve our problems?

We have piloted services and tried to make them useful for the Norwegian Public Roads Administration

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