



# Intelligent Road

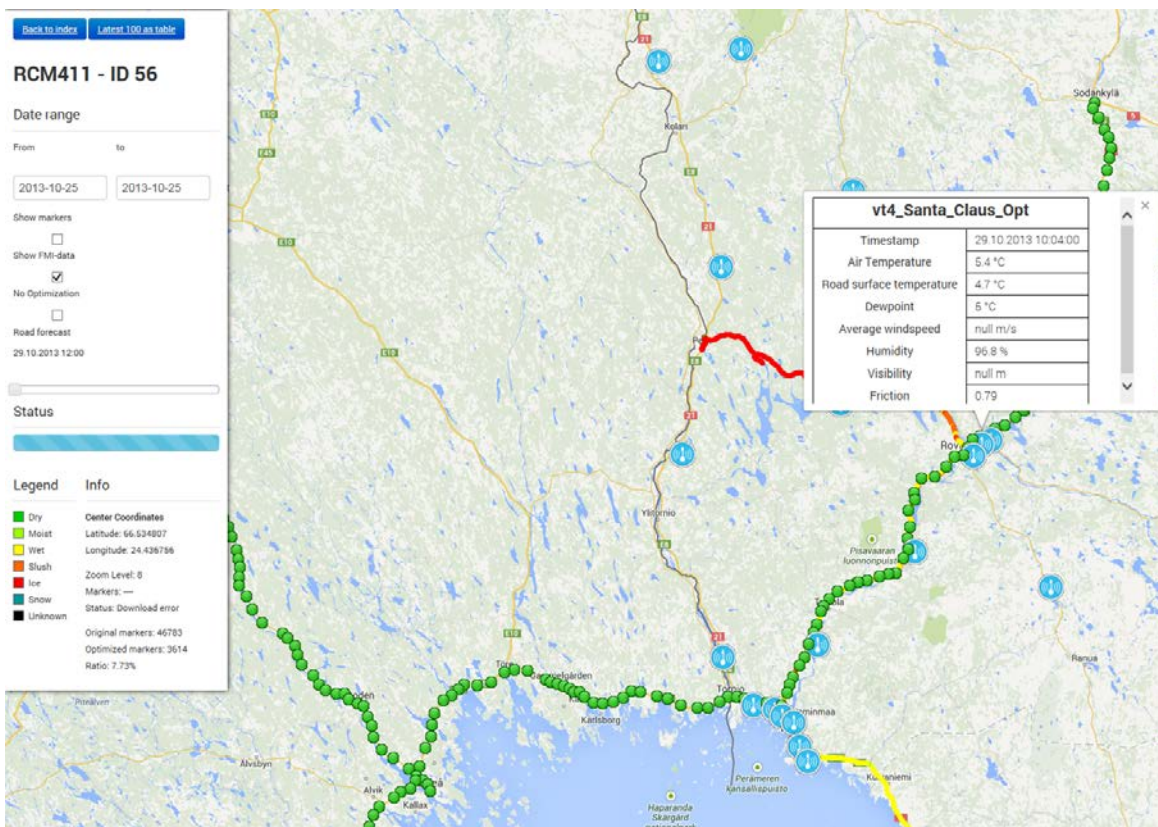
safety by arctic know-how



## ADVANCED DATA VISUALISATION

The Intelligent Road system is a demonstration platform for road-weather and road condition monitoring technology. In the demo phase, the data will be visualized through a web application.

Currently the system is gathering data from in-vehicle installed measurement systems, road-weather stations and from road weather forecasts that are updated every 15 minutes. The data collected from various sources allows, as an example, improvements in road weather forecasts, winter road maintenance and on telling the road-users of hazardous road conditions.



**Safety for arctic roads!** Intelligent Road system - preventing accidents on the arctic roads.  
**Safety by technology!** Real-time conditions information collected from vehicle-sensors, road-side technology, road-weather stations and weather forecasts.  
**Arctic know-how!** Collaboration of expert organizations from the arctic area.

Visit us at [www.intelligentroad.eu](http://www.intelligentroad.eu) and learn more.



IN COLLABORATION WITH:  
Sten Löfving Optical Sensors, Eistec, Rajd SysTech, Luleå Municipality, TraFi, Vaisala, Sunit, Kuljetus Kovalainen



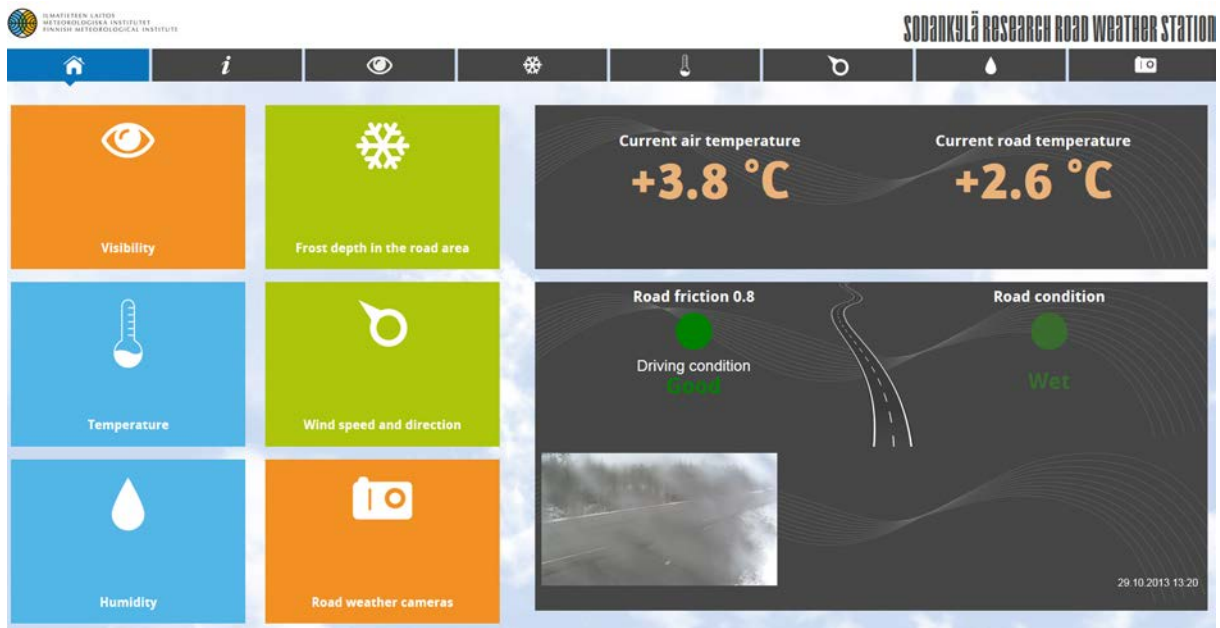
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## WHAT SERVICES CAN AN INTELLIGENT ROAD-WEATHER STATION OFFER?

The experimental road-weather station of Finnish Meteorological Institute is located in Sodankylä. The by-passing vehicle can exchange data with the road-weather station in order to acquire various road-weather data. The data can be displayed in the vehicle's own computer or in a mobile device.



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# A PLATFORM FOR TESTING AND COMPARING SENSORS

Volvo XC90, owned by the Luleå Technical University, is equipped with various friction and road condition measuring sensors. The vehicle gives long-term data for testing and calibrating the in-vehicle sensors used as part of the Intelligent Road system.

The vehicle is measuring the friction and road condition indirectly and directly by using optical sensors and the Holiday RT3 Curve which is measuring the lateral friction between the tire and the road surface.



## UPCOMING: A DEMONSTRATION EVENT

We will demonstrate the Intelligent Road system and especially the in-vehicle installed measurement system in Rovaniemi on the 11<sup>th</sup> of December 2013. See more on our [website](#).

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