

ROAD WEATHER INFORMATION SYSTEM IN ESTONIA 2015

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Topics

- RWIS overview
- RWIS history
- Plans for 2015
- Maintenance of RWIS
- Number of stations - comparison with Finland and Sweden
- Road information center

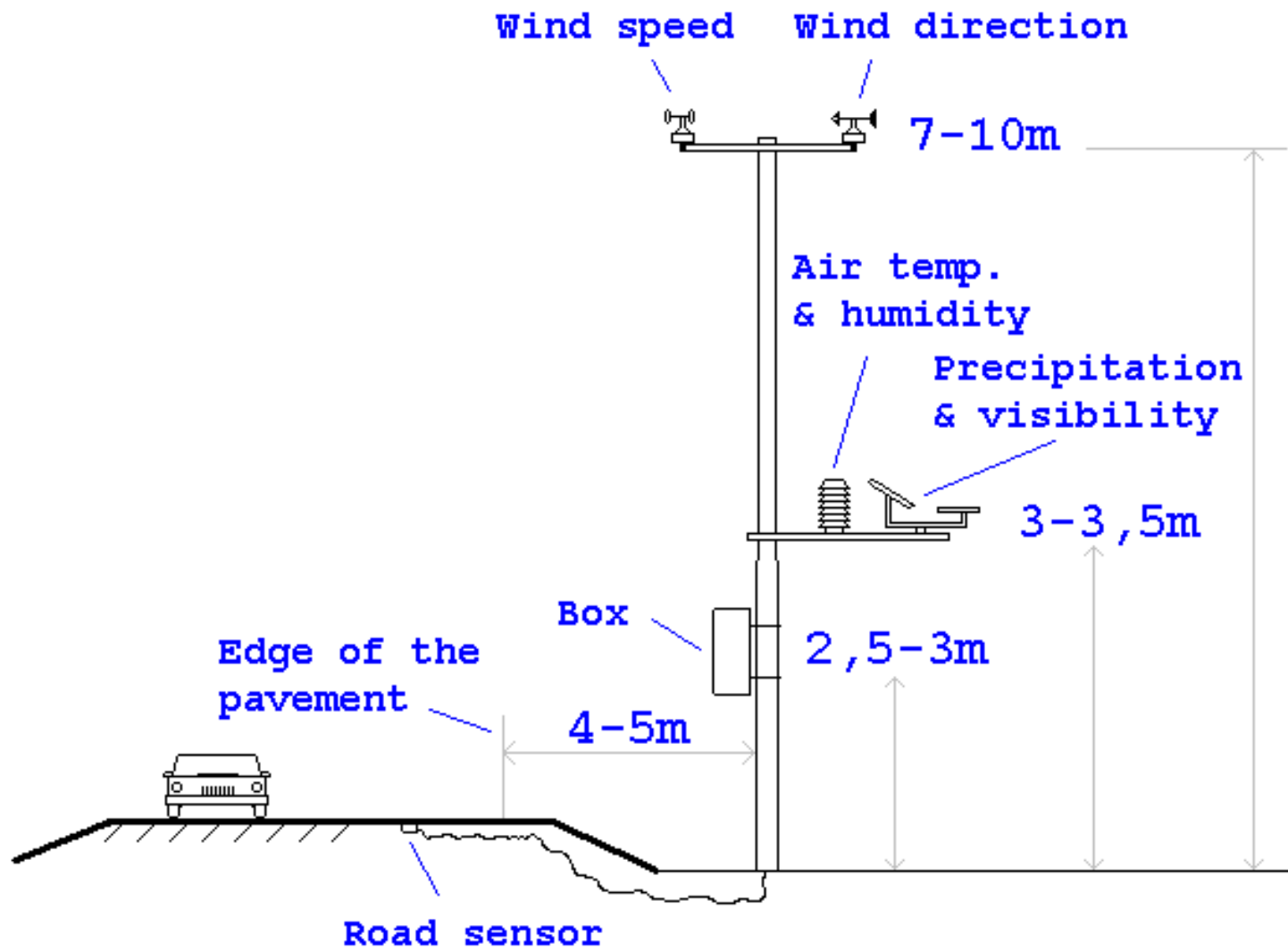
Estonian RWIS – what is it?

- Road weather information system (RWIS) in Estonia consists of:
 - 64 road weather stations
 - 92 road cameras (including 19 real-time cameras)
 - 4 VMS signs
 - server for collecting, processing and storing the data
 - 2 web pages for presenting the data

What kind of weather stations

- 28 swedish stations (SAAB)
- 2 swedish stations with optical sensors (SAAB+Vaisala)
- 28 finnish ROSA stations (Vaisala)
- 6 finnish optical stations (Vaisala)

ROAD WEATHER STATION



Ikla station (finnish)



Finnish road sensor



Finnish road sensor



Kassinurme station (swedish)



Swedish road sensor



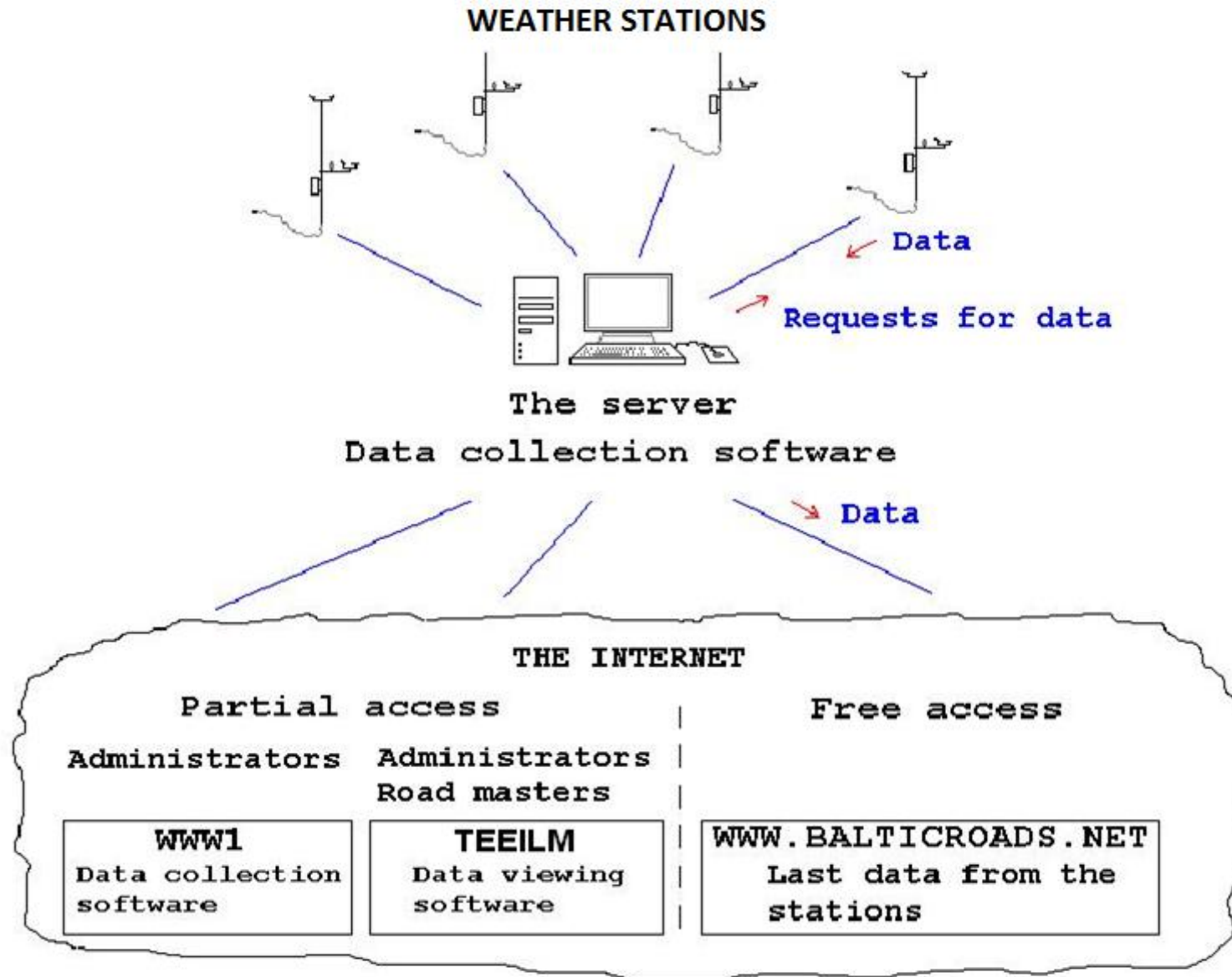
Swedish road sensor



Finnish optical sensors



Data management



Muhu road camera



Kuusalu road camera



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2 web pages

Teeilm web page is for road masters, a username and a password is needed for full access and it contains all the information we have from road weather stations, including salting information and other specific parameters.

Balticroads web page is for all road users, no chance to login and only main 11 weather parameters are available.

RWIS history

- First 4 road weather stations in 1995
- First road camera in 1999
- First VMS sign in 1999
- First internet web page in 2000
- First real-time camera in 2010

Plans for 2015

- Installing of 1-2 new weather stations with physical road sensors
- Installing 12-14 new road cameras, also upgrading 1-3 existing cameras to work in real-time
- Continuous cooperation with finnish road weather specialists in estonian road weather training course held in October
- New version of Teeilm webpage
- A small test project for the winter 2015-2016 including prismatic VMS signs using only street lighting + solar panels for power source

Plans for 2015

- Working together with Estonian and Finnish Met Offices to continue developing a good quality road weather prognosis in Estonia (first test was done during February-May 2015)
- Improving the quality of educating road masters, the goal is to use RWIS more efficiently

Maintenance of RWIS

- Currently a 3-year contract (October 2014 – September 2017) for the whole system
- 1 year of maintenance costs ~ 180 000 EUR
- Fixed prices for all different types of equipment (RWIS station, road camera, VMS sign and server)
- Extra money will be paid only for spare parts that cost 2000 euros or more (prices are also fixed in the contract)

Number of stations - comparison with Finland and Sweden

- Number of RWIS stations on bigger roads:
Estonia: 64 (62) Finland: 370 (333) Sweden: 774 (774)
- Length of bigger roads:
Estonia : 4000 km Finland: 8000 km Sweden: 26 400 km
- AADT:
Estonia : 2654 v/day Finland: 8000 v/day Sweden: 4774 v/day
- Number of RWIS stations (taking into account of length of roads, AADT, financial situation):
in Estonia there are **2,9** times more RWIS stations than in Finland
in Estonia there are **3** times more RWIS stations than in Sweden

Traffic information center

- One traffic information center in Estonia – Road Administration's department since 1st of January, 2012, operating 24 hours a day
- 1-2 persons working at a time, in 2 shifts 24/7, up to 3 persons working in case of a snow storm or other serious event affecting driving conditions
- Traffic information center is not responsible for organising road maintenance works, it only gathers and passes on information
- Cost-free short phone number **1510** is available for all road users 24/7 (around 20 000 calls a year)
- Traffic information data is sent to road users and road masters using different media: Road Administration's webpage, radio stations, smart phones, emails etc

Thank you for your time!

Comments and questions please
send to:

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