

## What's new in Finnish RWIS

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The old Finnish RWIS system (meaning ICT-part) was implemented part by part during past 20 years period and was becoming harder and harder to maintain. The decision was made in year 2012 to renew the whole RWIS system. In first phase data collection, data storing and data dissemination were renewed. User interfaces are still waiting for their renewal.

The huge old one system was divided to 9 new separate applications. There are now four different metadata applications: one for weather stations, road weather cameras, traffic measurement stations and infrastructure related to observation stations. Correspondingly data collection was divided to separate independent applications: for road weather stations, cameras and traffic stations. Road weather data is managed in its own new data storage system. Road camera images are stored in special image storage. Traffic information is forwarded to the old storage. With the help of this new software architecture it is now much easier to develop each feature separately.

Very big changes were done to data dissemination. The old system had lots and lots of point to point data connections between different systems and storages. The new system is based on SOA (Service Oriented Architecture) and all data is transferred with the help of, or via, the service bus. This was a huge improvement, data is easily accessible to everyone.

The renewal project of Finnish RWIS started in year 2012 and ended 2015. The design phase took one year from March 2012 to March 2013. The development phase including procurement process took two and half years ending September 2015. The consultant costs were: design 150 000 euros and development 550 000 euros.