SINNE

Smart Information Network for Environmental Monitoring

UNIVERSITY OF JYVÄSKYLÄ
KOKKOLA UNIVERSITY CONSORTIUM CHYDENIUS

Programme for Sustainable Growth and Jobs

Leverage from the EU 2014–2020

European Union
European Regional Development Fund

Project information

- Kokkola university consortium Chydenius / University of Jyväskylä
- Project partners
  - City of Kokkola
  - KIP environmental group
  - Boliden Ltd
  - Port of Kokkola Ltd
  - Hansa Ecuras Ltd
- Budget: about 360 000 €
  - Main financer: European Regional Development Fund, Central Finland ELY Centre
  - Other financers: City of Kokkola and companies
- Timetable: 1.12.2015 – 30.11.2018
- Web-page: http://www.cinetcampus.fi/projects/sinne

Project goals

- Develop an intelligent environmental measurement system
  - Produce continuous air quality and noise measurements
  - Combine all measurements to one application (weather, particles, noise)
  - Reliable operation of the system in different challenging conditions
  - Test and apply new measurement systems and methods
  - The approval of environmental officials for the new measurement system
- Execute pilot cases together with the project partners
  - City of Kokkola
  - Hansa Ecuras
  - Port of Kokkola
  - Boliden
  - KIP environmental group
- Focus on the data presentation of the measurement network
  - Create a simple way to illustrate the results of the measured conditions of the target area
  - Create a user interface of the target area where the results are displayed in real time for the customers and in some cases for the public

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Environmental noise measurement in SINNE-project

- A wireless noise measurement system has been developed and deployed in the project
- Deployed to KIP-area and to Kokkola market place
- Cost effective continous measurements, in daily use of the customers
- Gives real time information of the areas noise levels
  - Goal is in e.g. to reduce the demands of traditional noise measurement cases for the environmental licenses
  - Customers self-control
- Local weather stations in the systems
- Reference measurements using commercial devices

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Particle measurements in SINNE-project

- A wireless paritcle measurement system has been developed and deployed in the project
- Deployed to KIP-area and to Kokkola market place
- Cost effective continous measurements, in daily use of the customers
- Gives real time information of the areas particle levels
  - Goal is to produce approximate information about the dust sources and ammount of the dust
  - Customers self-control
- Local weather stations in the systems
- Comparing measurements using commercial devices

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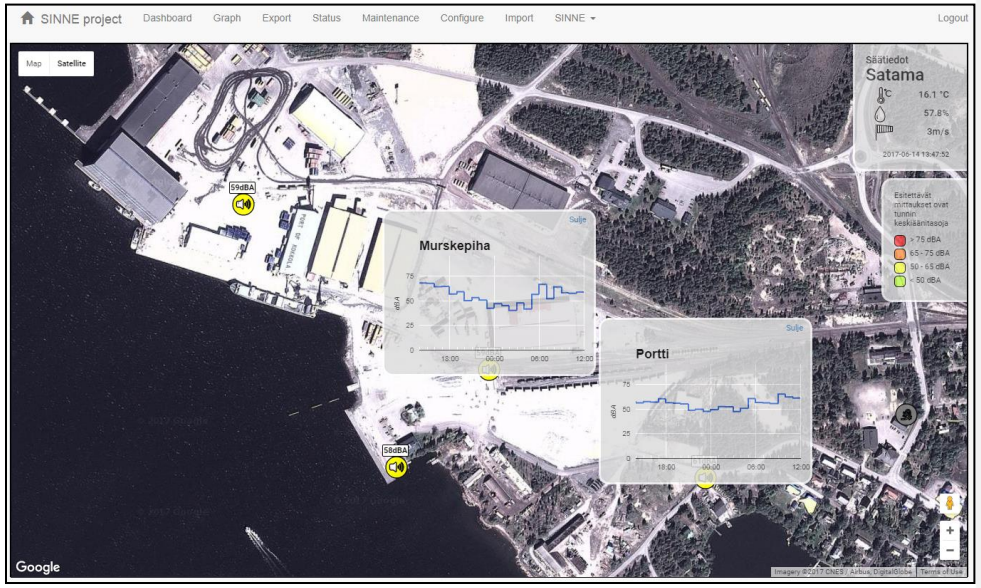
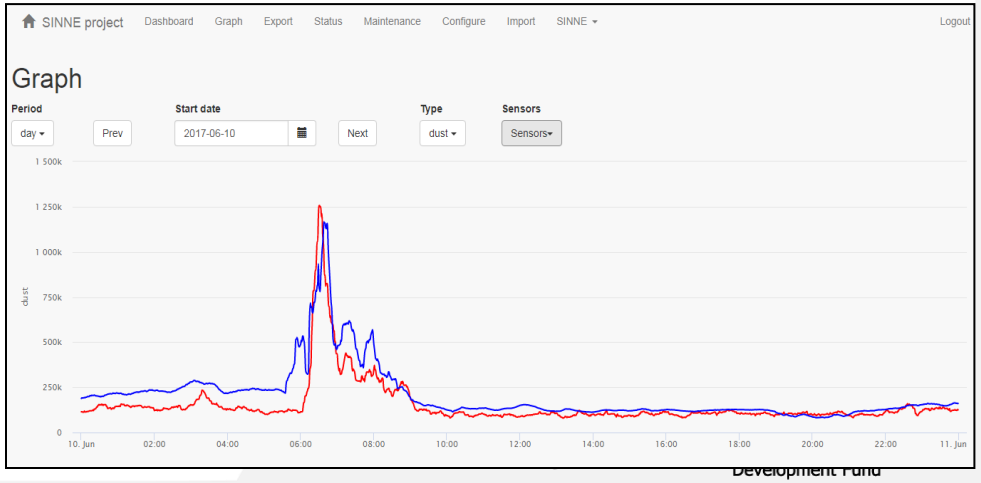
Projects user interface

- Map based web application
  - Measurement locations on map
  - Graphical presentation of the measurements
  - Different measurement can be compared together
  - Reference measurements displayed on the system
  - Exporting of the measurements
- User interface is tailored to different customers
- Public interface
  - Create a simple way to illustrate the results of the measured noise and particle levels





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Development Fund

Contact information

- Professor Ismo Hakala Ismo.hakala@chydenius.fi 040-7518089
- Project Manager Timo Hongell timo.hongell@chydenius.fi 040-4802715
- Project Coordinator Ilkka Kivelä ilkka.kivela@chydenius.fi 040-7710482

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