

# SPECIAL REPORT

## Smart weather-based control saves millions in Oslo



Foto: Ruter A/S

**Oslo Sporveier, the public transport company responsible for subways and trams in Oslo, controls its heating facilities according to weather reports from MET, the Norwegian Meteorological Institute. By setting the heat according to current needs, energy consumption can be reduced by up to 85% in some facilities, resulting in overall savings of millions of NOK.**

The Norwegian winter weather conditions present a challenge for anyone operating different types of transport. Rail-based traffic is particularly difficult because snow can easily become packed in the switches, resulting in traffic disruptions. That's why heating elements are used to melt snow and ice before problems occur. Heating wires are used in the same way to keep platforms and steps free of snow and ice during the winter for the safety of the passengers.

Up until now, the heating facilities have been controlled manually or by the current temperature, which has meant that the heating has been on even when it hasn't really been needed. Heating actually only needs to be activated in certain special weather conditions.

## Large amount of reduced energy consumption

KTP has now supplemented its Infracontrol Online installation with control based on weather reports from MET.

- *This provides simple and ingenious temperature control at a very reasonable investment, says Johnny Lie, who is in charge of the ENÖK (energy and economy) project at Oslo Sporveier. He continues by saying: Since we set the temperature according to weather reports, we are also better prepared when the weather changes.*
- *By only having the heating on when it's really needed, we can reduce energy consumption by as much as 85% in some facilities. This makes an important contribution to the environment and reduces operating costs without sacrificing quality. We expect the pay-off time on our investments to be approximately 1.5 years.*

During the past winter, it was possible to save a great deal of energy in this way and Oslo Sporveier is now continuing to expand the use of this profitable weather-based control.

- *We expect that all of our 340 switch heaters and our approximately 80 heating systems for steps and platforms will have this control by next winter. With a total installed output of some 8.5 GWh, this represents savings on the order of 5.3 GWh."*

## About Infracontrol Online

Infracontrol Online is a unique web-based service where operational alarms, defect reports and comments are collated into simple, easy-to-read cases. The service is also used to manage the overall control of technical functions within a community's infrastructure such as street lighting and parking information.

Infracontrol Online provides everyday benefits by assuring quality, simplifying operations and maintenance work, reducing energy consumption and by the simple expedient of making sure the right person gets the right information at the right time. Today the service is used for many different applications by e.g. the Swedish Transport Administration, Swedavia, Oslo Tramways and a number of Swedish cities, towns and municipalities.

Infracontrol Online requires no software or hardware investments; all you need to use the service is a normal web browser or a mobile phone.

Infracontrol Online is completely brand independent, which means that any type of equipment can be connected to the service. The service is based on modern technology such as Microsoft .NET 3.5, AJAX, WCF, Web Map Services and SQL Server, which means good scalability and excellent integration with other systems.