IGSS

The Largest Traffic Control Center in Norway Uses IGSS

Statens vegvesen

Customer	
The Norwegian Public Roads Administration – Traffic Management Control Center in Oslo	
Country	
Norway	
Industry	
Traffic Management Control and Traffic flow	
System Integrator	
Siemens AS – Mobility division – Intelligent Traffic Solutions, Norway	
Application	
IGSS V8 multiuser - 15,000 objects	
Data	
Number of tunnels	
41	
Tunnels, distance	
52 km ~ 32 miles	
Cameras	
1014 cameras are monitoring the road system	

The Traffic Management Control Center in Oslo is manned 24/7 throughout the year and monitors the road traffic conditions in the eastern part of Norway handling 4 million passages daily.

IGSS is a part of the Siemens Traffic Management System (STMS) for Traffic Control in Oslo which covers several road tunnel systems.

STMS is the major access point for dynamic traffic regulation/restriction and closing of tunnels when an accident happens in the regulated areas. STMS operates with automatic and manual sign plans as well as auto sign changing based on data collected from the underlying systems. The IGSS system displays the changes by showing a one-to-one mapping of the signs and objects monitored.

The Challenge
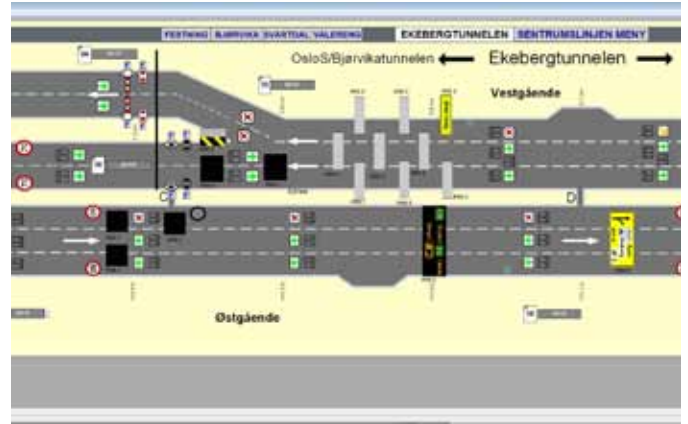## Integration of several OPC servers

The control system for traffic control in Oslo is introducing the next generation of data monitoring from the road tunnels.

All communication from the tunnel system's PLC system must go through an OPC specific interface based upon OPC Data Access 3.0. Some of the key points are highlighted below.

Several challenges must be met by the IGSS system.

One of the challenges is to integrate several OPC servers and continue communication with the PLC system especially when the number of OPC servers increase.

The IGSS system must support a hot dualized server solution. An additional requirement is a third IGSS server acting as an emergency system in Oslo.

INDUSTRIAL AUTOMATION
Interactive Graphical SCADA System

CUSTOMER CASE

„IGSS has been at the control center since 1990, and shown excellent customer support and willingness to meet new requirements and incorporate such changes in the next versions."

Mr. Amiri Farzin,
Senior Manager
Traffic Management Control Center
in Oslo

For the Human Machine Interface (HMI), the system has to provide a more optimal visualization of the tunnel over several PC monitors with seamless transition. It must be possible to scroll an image up to eight monitors wide over only three PC monitors.

IGSS and Siemens Traffic Management System are meeting these requirements for the next generation of control systems.

The Solution

IGSS V8 - multiuser
The system runs on an IGSS multiuser system with 15 operator stations split between the dualized servers and the emergency server.

All PLCs communicate with IGSS using the OPC Data Access (DA) 3.0 protocol.

The Result

Safety on the roads and in the operation

The implementation of the new system has improved the safety for the road-users and has provided the operators with an intuitive user interface.

The Future

Tracking of data
The staff at the control center would like to be able to track more data from the underlying systems. The Microsoft SQL server could provide this data.