



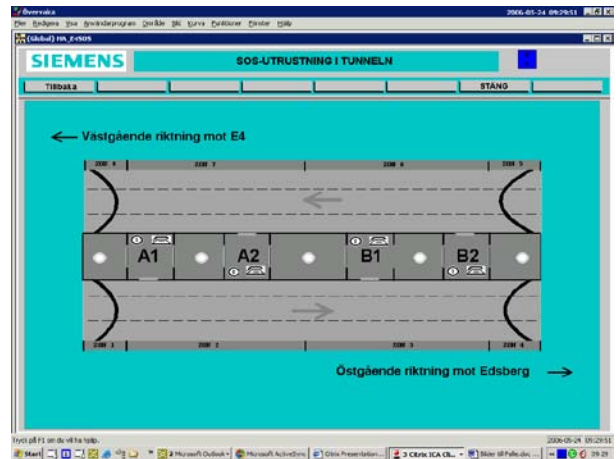
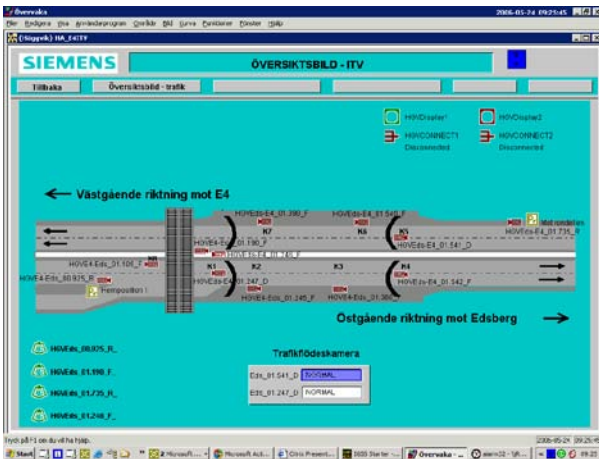
Häggvik Traffic Tunnel

Traffic control

Stockholm, Sweden

Plant description – Tunnel control

The Swedish National Roads Administration uses IGSS as their control and monitoring system for the Häggvik Traffic Tunnel. This control system is made up of two main areas, Tunnel control covers traffic regulation and Pump control covers Water drainage facilities. The Highway Roads Administration communicates with the Häggvik SCADA system via a Citrix server.



In the tunnel area itself, doors for the emergency exits, fire extinguishers, fire detectors in the emergency exits and inspection passages, as well as heat detectors in the tunnel pipes are all monitored.

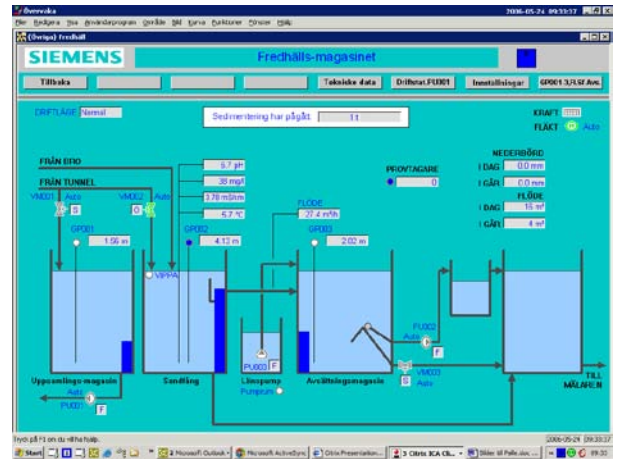
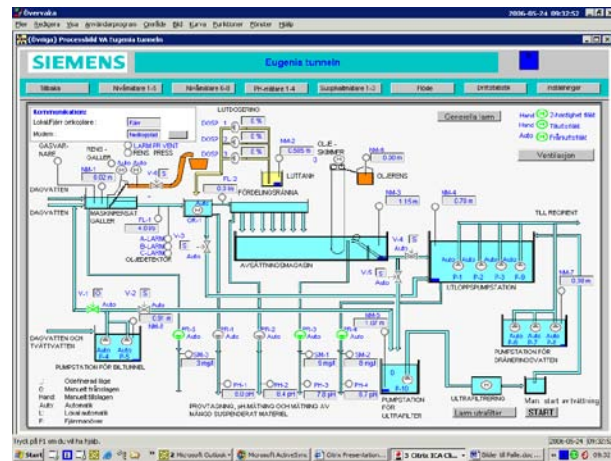
During irregularities in traffic flow, the operator must activate the pre-programmed sequences which carry out redirection of traffic. This can include closing the tunnel, closing a lane etc. Two pictures are displayed whenever irregularities occur. One is used during redirection between lanes and closure of lanes. The other is used during blockades. It is possible to establish two-way traffic or to close one or both tunnel pipes.



CUSTOMER CASE

Plant description – Pump control

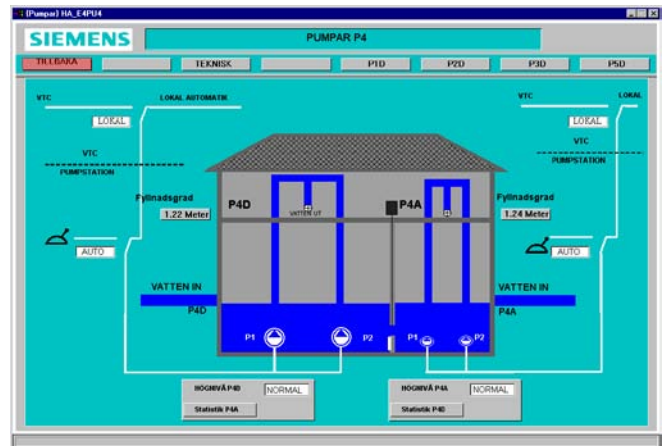
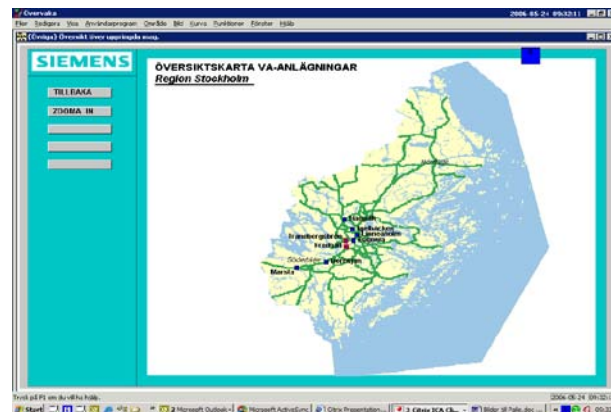
Access to all installed pumping stations in the Häggvik area is found under PUMPS .



For every pumping station in the plant there is mimic picture for control and monitoring. All pumping stations are initially set up after the same model, and then individually customized for specific function and equipment.

IGSS system

The surveillance system is a 2,000 objects multi user system with 10 operators, and a 2,000 objects single user system, duty terminal and alarm send-out.



Owner

The Swedish National Roads Administration

System Integrator

Siemens Norway