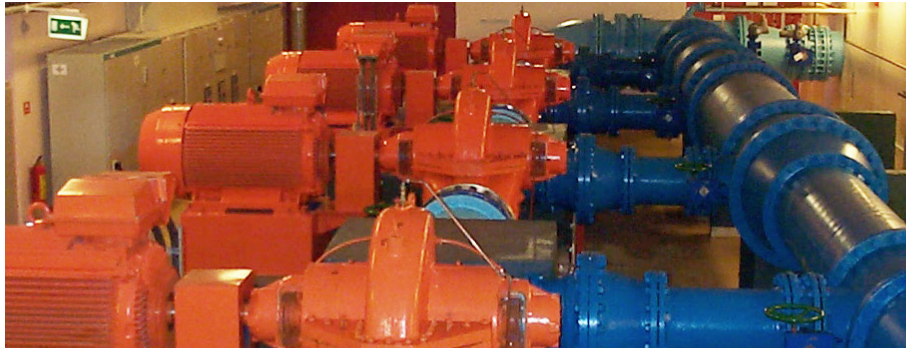


# Bluetooth Technology in Oslo Pump Stations



## Case Study Industrial Automation: ABB, Norway

Oslo Municipality has implemented a connectBlue Bluetooth solution through the ABB Industrial ITTM AC 800C control system. The Bluetooth solution provides wireless maintenance and operation of water pump stations to control the fresh and waste water flow throughout Oslo, Norway. This means that the connectBlue solution was installed in several hundred pump stations. Prior to the new solutions, costly operating panels had to be installed in each pump station.

### WIRELESS ACCESS TO THE PROCESS AND NETWORK

The connectBlue Bluetooth solution combined a number of features and provided Ethernet interface to the AC 800C, built-in web server accessible via Bluetooth technology and Ethernet, access to process data via customized webpages, wireless access to the Local Area Network (Ethernet) and local logger of dynamic information.

The solution enabled the Oslo Municipality staff to wirelessly - via standard Bluetooth enabled handheld devices - perform machinery service as well as re-program and adjust the operations of each pump station on site. The handheld device could also wirelessly connect with the control system.

In addition, the connectBlue solution featured an Ethernet interface connecting the AC800C to the Oslo Municipality WAN that allowed staff on site at a pump station to simultaneously maintain a connection with the WAN. Software changes made at a pump station were automatically stored on the WAN server, negating the need for staff to return to the central control room and download program adjustments before moving on to another pump station.

### CUSTOMIZED WEB PAGES WITH JAVA SCRIPT

The customized webpages displayed all necessary process data and was used to control and change parameters from a handheld device. Process pictures were developed using Java Applets to create advanced graphics and fast update of dynamic process values.

Webpages for alarms management enabled the user to display and acknowledge alarms in the pump station. Further, to prevent unauthorized access to the webpages, user access management was built in.

### KEY BENEFITS

- A single interface combining multiple functions saved on installation costs
- Replacement of fixed installed operator panels with handheld devices for each support staff
- Use of standard Bluetooth enabled handheld devices
- Convenient access to pump station data
- Ethernet and Bluetooth connectivity in the same solution

### ABOUT CONNECTBLUE

connectBlue™ is a leading provider of robust Industrial and Medical wireless solutions, designed and tested for the most demanding applications and environments. Based on Bluetooth technology, Wireless LAN (WLAN) and IEEE 802.15.4/ ZigBee, connectBlue provides ready-to-use products and modules as well as custom design solutions. connectBlue has its head office in Sweden and local offices in Germany and USA. For more information, visit [www.connectblue.com](http://www.connectblue.com)

connectBlue™

The strongest connection in a wireless world

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