

Using developed, field-proven methodologies to deliver certainty.

Client SA Water
Project Metro and Outer RTU Replacement
Location Metro and Outer Metro Adelaide, South Australia

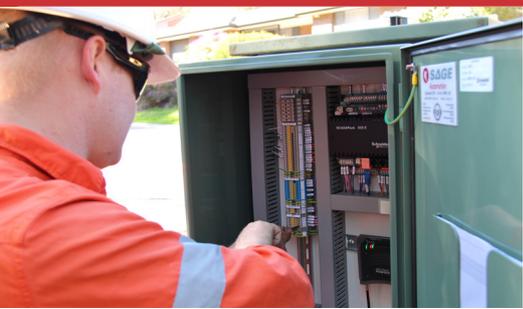
The control and monitoring of SA Water's assets utilises a widespread telemetry network to ensure the security and maintained operation of their water network.

SA Water sought to renew ageing and obsolete Remote Telemetry Units (RTUs) with devices that would meet their current standards for SCADA and renew their associated analogue radio network with digital radio network, providing a more secure data network with greater bandwidth and better status monitoring capability for data communication.

The hardware deployment also incorporated the application and deployment of standardized template based configurations and hardware arrangements.

SAGE Automation was engaged to undertake the upgrade at over 500 sites, used for the system control and monitoring throughout Adelaide's metro and outer metro regions. The technology was applied at treatment plants, pumping stations, storage, tanks and cathodic protection.





Capabilities Demonstrated

- Implementation of digital radios, NextG modems and SCADAPack RTUs at remote outstations.
- Supply, program, install and commission all hardware;
 - RTU cabinet design and manufacture
 - Install outstation RTU and communication device
 - Install antennas, cabling and antenna supports
 - Configuration of the RTU, radio and NextG modem
 - 12VDC Power Supply
 - Battery - backed power supplies for critical hardware.
 - Field instrumentation and control wiring
- Decommission and disconnect redundant hardware.
- Equipment procurement and supply.
- RTU, radio and modem configuration and programming.
- Site audit, installation and cut-over procedures.
- Factory Acceptance Testing, Commissioning and Site Acceptance Testing.
- High compliance project documentation and validation records including data sheets and construction drawings.

Innovation

SAGE was engaged for the advanced development of SA Water's RTU and radio standard configurations. During our involvement we simplified and provided stability to the client base code, refining the definition of the standard products and simplifying the maintenance of the established installations. SAGE actively pursued the best engineering solution for the client, identifying and communicating improvement to the standard template and delivery practices. SAGE has communicated a number of enhancements to the standard work templates that provided logistical and forwarded financial benefits to the client.

SAGE implemented innovative processes in the development of the project. The large number of elements and scale of the project encouraged changes to our project delivery, including integrated testing and validation of the system design; refinement of our manufacturing process and the review of processes and templates focused on site installation and completeness. These innovations provide better efficiency, quality and cost benefit to the client.

SAGE developed systems during the project to improve the quality of the scope deliverables. These systems ensured the work products were installed and commissioned to the highest possible standard. The precedence set by the project provides the benchmark for future asset upgrades and large scale telemetry projects.



Projects

Innovative engineering solutions for industrial automation and control



Manufacture

World class custom control and power switchboard systems



Service

Fast response 24/7 support from specialist technicians



Business Optimisation

Lean business solutions delivering tangible results



Training

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