



# The Future of SCADA and Telemetry



# The Drivers for Change



- Leakage reduction and water auditing
- Energy usage reduction
- Compliance reporting
- ComReg enforcement action on unlicensed radio networks
- SCADA security to be addressed
- Implementation of IT policies

# Irish Water

## 2014: The Year of the View



- Control room in IW HQ established (3/4 vendor systems). DRT0 move pending.
- Visibility of existing accessible SCADA systems (operational)
- Implementation of connectivity to “obscured” SCADA systems (ongoing)
- Integration of key performance data into IW enterprise reporting system
- Develop centralised alarm management system
- Improve SCADA/telemetry networks where necessary
- Radio licencing issued to be addressed (ComReg14/56)

# 2015 And Beyond



- Implementation of national telemetry network to be undertaken in 2015/2016
- Enterprise SCADA Networks to be the norm in LAs
- Renewed focus on CSO monitoring
- Unlicensed radio telemetry networks to be brought up to standard (ComReg 14/56)
- Review of SCADA security to be undertaken
- Improve and augment existing SCADA/telemetry networks

# The UK Model: NI Water



- 60 on-site SCADA systems (30 small, 20 medium, 11 large treatment plants)
- Two telemetry control centres
- 30 high-site telemetry base stations with IP connectivity to control centres
- 2200+ telemetry RTUs with digital polling radio and SNMP network management
- 300+ low power radios and 1000+ GSM loggers (DMA and CSO)
- Migrating to DNP3/WITS RTUs and IP connectivity and control

# DNP3/WITS-The next great thing?



- DNP3/WITS-20 years in development
- Bespoke (proprietary?) implementation of an open protocol
- First deployment in Thames Water in 2012/13 (<100 sites to date)
- 2 top-end (Central Control) software suppliers
- 4/5 RTU manufacturers
- 2 GSM logger manufacturers

# Summary



- Enterprise SCADA in each LA with a national IW telemetry network
- Average county will have 500+ sites connected to SCADA/telemetry
- Greater use of automation and remote control
- Implementation of IP across the network
- Convergence of IT and SCADA
- Adoption of utility standard security with encryption
- Integration with Business Intelligence Systems