

POOR WORKMANSHIP IS LEADING TO POOR SERVICE TO CUSTOMERS AND SIGNIFICANTLY INCREASED COSTS TO WATER AND SEWERAGE COMPANIES. WITH COMPLEX SUPPLY CHAINS PERVERSE INCENTIVES CAN FREQUENTLY RESULT, LEADING TO POOR WORKMANSHIP WITHIN THE SUPPLY CHAIN.

THE NEED

Performance of water distribution and sewer systems, and their asset life, is being limited by poor workmanship. Estimates are that up to 20% of meter installations are poorly completed leading to problems; 15% of manhole covers are replaced within the first year after installation; and 30% of sewer blockages are caused by poor clearance of a previous blockage. Water companies have tried various forms of incentive mechanisms in service contracts with their suppliers but many of these have either had unintended negative consequences, or have not been passed on to Tier 2 or Tier 3 contractors.

BUSINESS BENEFITS

- Appropriate forms of incentive incorporated into procurement systems will reduce service failures reducing cost and adverse customer impacts.
- For the UK Water Industry application of a 'right first time' approach to: sewer blockage clearance could save £10 million per year and reduce sewer flooding incidents by up to 20%; sewer manhole cover installation could save over £1 million per year and reduce traffic disruption; and application to meter installations could achieve savings of £2.5 million for every 100,000 meters installed.
- Guidance on drafting specifications, methods of measurement, verification schemes and forms of incentive to deliver appropriate quality workmanship on a 'right first time' basis.
- Worked examples implementing the guidance in different contexts and for three different work types.

WHY WRc

WRc have over 10 years' experience in the investigation of working practices in wastewater and water distribution networks. These have included detailed studies of specification and workmanship of street ironwork installation, sewer blockage clearance and meter installations. For instance we have investigated meter faults occurring on behalf of a number of companies, and identified where the installation practice is likely to be the key cause of subsequent failure. We have developed best practice guidance on such installations and carried out training with many different organisations.

SOLUTION

Contracts for utility operations that incentivise the whole supply chain to deliver value through a 'right first time' approach will be achieved through:

- An economic framework to understand the incentives on each link in the supply chain from the client right through to the operatives carrying out the work will ensure that contracts ensure that all parties are incentivised to provide 'right first time'.

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