

NJUG CASE STUDY

CASE STUDY NUMBER 74: KIER AND BRISTOL WATER PLC – THE ROAD TOWARDS ZERO HARM

WINNER OF THE NJUG SAFETY AWARD 2014

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities solely on street works issues. The 43 utility companies and 15 utility contractors we represent are major contributors to economic growth and work to deliver gas, electricity, water and telecommunications to both individual consumers and UK plc. NJUG members need to continue to drive forward further improvements. We have therefore developed the NJUG Vision for Street Works, which revolves around seven main principles:

- Safety
- High Quality
- Minimise Disruption
- Keep the Public Fully Informed
- Sustainable Methods and Materials
- Avoid Damage to Underground Assets
- Innovation

This case study is an example of the street works sector delivering on these principles and turning the vision into reality.

Overview

Kier took over the Bristol Water Network Maintenance Contract in May 2013 on an emergency 16-month contract following the previous incumbent going into administration. The year before Kier took over the emergency contract, an unacceptable level of safety of performance was apparent. A Service Strike Elimination Strategy and a Behavioural Safety Programme were subsequently introduced alongside increased health awareness.

Case Study

Service Strike Elimination Strategy: A road map was produced with the overall objective of eliminating strikes of underground utility apparatus. Stand down sessions were undertaken with all employees on the contract, who were questioned anonymously, using an Audience Response System which provides immediate answers, to establish the culture and attitude towards service strikes; why they occurred; and whether zero service strikes was feasible.



Radio Detections Cable Avoidance Tool (CAT – Model Number 4+e) with downloadable data capability were provided to employees after a specialist training programme (provided by SHOC) comprising both theoretical and practical training. CAT would then be used to alert employees to shallow buried services. The CAT also allowed users to proactively download data to allow management to review how CAT was being used and provide data to enable reactive investigations into service strikes.

Where service strikes occurred, investigations were undertaken immediately to prevent a reoccurrence of such incidents and move away from the previous blame culture. Investigators presented their findings at weekly contract safety review meetings and the investigations themselves were scrutinised to ensure they were undertaken properly and

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the root causes were identified. A weekly conference call with the Regional Operations Director provided feedback on all incidents and allowed for any lessons learnt to be shared on other contracts. A 'Lessons Learnt' publication on all incidents was created and circulated to provide teams with information to assist them on their undertakings. This was accompanied by a set of questions to test the teams' understanding of the content, which was then checked by supervisors who could then address any misunderstandings.

10 steps to safe digging were introduced on the contract to support HSE Guidance HSG47 ('Avoiding danger from underground services'). Teams were encouraged to take time before commencing a job, or when problems arose, to reflect on Kier's core value of *"Nothing is so important that we cannot take time to do it safely"*, therefore allowing time to problem-solve and, if necessary, escalate issues that couldn't be resolved.



Additionally, lightweight service strike protection boards were designed and produced in conjunction with Pro-protect Safety Signs, and were issued to protect services that had already been exposed by safe digging.

Make a Difference (MAD) Behavioural Safety Programme:

The 'MAD' programme was introduced on the contract under Kier's core value (*"Nothing is so important that we cannot take time to do it safely"*), together with Bristol Water's leadership. Safety champions were introduced to improve communication between the workforce and management, reporting on concerns, issues and successes. Safety champions were encouraged to undertake peer inspections and report back on findings. Volunteers from the workforce became Behavioural Safety Coaches and undertook a Diploma under the National Leadership Programme, following which they rolled out the behavioural safety modules to their peers. In addition, stand

down sessions took place to report back on performance and celebrate successes.

Increased health awareness: Occupational health assessments, including wellbeing assessments, an awareness campaign, an early intervention programme (through work-based physiotherapy) and confidential counselling services were introduced and led to reduced rates of sickness and absence amongst the workforce.

Benefits and achievements: Compared to the first nine months of 2013, the first nine months of 2014 saw the following achievements: a 74% reduction in service strikes on the Bristol Water contract; a 50% reduction in injuries amongst the operational workforce; and an 80% reduction in the number of road traffic collisions. September 2014 was the first month in the history of the network maintenance contract where zero service strikes were recorded despite 1319 services being crossed / exposed. The contract achieved thirteen months without a RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences) reportable incident – equivalent to over 691,322 hours worked since the last such incident. Overall, the programmes introduced delivered a better trained, more efficient and safer workforce; a culture of openness and learning from mistakes; a decrease in the number of incidents and complaints from members of public and better relationships and a collaborative approach between Kier and Bristol Water.