



NJUG CASE STUDY

CASE STUDY 4: Continuous Improvement for Street Works

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities on street works issues. The 38 companies¹ we represent 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 six main principles:

1. Safety is the number one priority
2. Damage to underground assets is avoided
3. Utilities work together and in partnership with local authorities to minimise disruption
4. Utilities deliver consistent high quality
5. Utilities maximize use of sustainable methods and materials
6. Street works in the UK are regarded as world class

This case study is an example of NJUG delivering on these principles and turning the vision into reality

Overview:

P.J.Keary Ltd have supported utility street works activities by providing independent auditing and benchmarking of contractor performance for more than 15 years. During that time the working environment for utility contractors carrying out street works has become increasingly challenging in terms of gaining access to the streets due to tighter control by Highway and Parking Authorities, the rising volume of traffic; and the ability to supervise works due to difficulties in travelling between sites. Quality control of works including the identification and timely rectification of errors linked to a process of continuous improvement is key to delivering the NJUG Vision for Street Works. To support these aims P.J.Keary Ltd have developed a web based application call Kearynet.

This case study is an example of how Kearynet has been utilised to support the delivery of a number of the Vision principles.

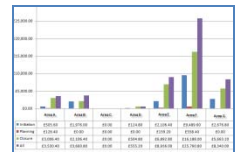
¹ NJUG's current members are Energy Networks Association (representing electricity and gas), Water UK (representing all water and wastewater companies), National Grid, Openreach, Virgin Media and THUS, a Cable and Wireless Business. Our associate members are Clancy Docwra, Skanska McNicholas, Balfour Beatty, Morrison, Morgan Est, NACAP, PJ Keary, First Intervention, Carillion and Enterprise. Including members through trade associations, NJUG represents thirty-eight utility companies.

Case Study:

Due to the increasing complexity of both the regulations and the working environment, Utilities undertaking street works continually require more information to enable them to meet the requirements of NRSWA and TMA. P.J.Keary working in partnership with utilities identified an opportunity to extend the use of Kearynet, which was originally developed to support their own street works inspection services, to enhance how utility street works are managed. Its capability has been gradually developed to provide real time control throughout the entire life cycle of any work providing a fully auditable record of the work undertaken together with analytical and diagnostic reporting. Utilising these tools provides improved quality control for the day to day management of individual jobs, and supports a process of continuous improvement through the use of the performance analysis reporting and benchmarking of contractors, leading to reduced levels of non-compliance and exposure to fines.

Work records linked to digital images are collected throughout the lifecycle of any activity from advanced planning, enabling, repair activity, reinstatement and post inspection; and if necessary, the rectification of defects

1. Enabling site surveys validate and correct notice information, record road construction details, assess traffic management requirements and identify existing damage. This improves the quality of notices and permits, the reliability of planning, leading to a reduction in aborted noticing and site visits, and reduces the time required for first time reinstatement by providing early sight of reinstatement requirements and the avoidance of unsubstantiated claims associated with damage that pre-dates the work
2. Real time progress reporting using digital images enables supervisors to monitor progress and address issues remotely reducing waiting and travelling time. Further the transfer of real time information showing the extent of works and site status helps accurate and timely closure, cancellation and registration of notices/ permits without the need to wait for track sheets to be returned. It has also been found that the use of digital images supported by real time reports when compared with data held on corporate work management systems frequently identified incorrect information concerning the extent of the work completed or the actual site status. Timely intervention can avoid these errors being transferred to highway authorities.
3. Post completion audits are used to provide an independent assessment of reinstatement quality and site compliance with SROH, S74 and Noticing requirements. This enables any faults to be rectified quickly avoiding the intervention and enforcement action of the highway authority. Further, the analysis of any faults found is used to support the identification and retraining of poor performing gangs or contractors
4. Real time management of remedial works whether under a formal notice from the highway authority or identified as part of the quality control process also provides confidence that work has been carried out as required.
5. Performance review of all data gathered throughout the process is carried out on a monthly basis with action plans agreed to address recurrent mistakes and performance issues.



| Category | Value | Value | Value | Value | Value | Value | Value |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| Category 1 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 2 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 3 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 4 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 5 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 6 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 7 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 8 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 9 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |
| Category 10 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 |

Through the application of this process utilities have greatly improved their understanding of performance, addressed issues and have delivered continuous improvement.