

**CASE STUDY:**

**Driving operational efficiencies and improving compliance in street works**

**UK Gas Distribution Utility,  
UK Water Utility**

**Overview**

The regulatory price control periods in UK Distribution offer a significant challenge in terms of having to optimise the total expenditure (opex + capex) and deliver an economic, effective & efficient value for money outcome. This drives key focus on innovation and lean service delivery to ensure targets and regulatory incentives are achieved.

With the cost of street works operations increasing year on year due to upward cost pressures of new legislation, utilities need to focus on reducing overall delivery costs.

**Highlights**

- Need for end to end job ownership across the Street works process, with optimal and transparent hand-offs
- Uniform tracking and monitoring of data across the lifecycle of job and notice, with real time visibility across relevant stakeholders
- Identify and cut down non-working time at site
- Optimise manual effort and increase productivity

**Street Works – Efficiency Vs Compliance**

With the ever increasing problem of congestion and the effect of the same on the economy, there is a responsibility on government to cut traffic disruption and reduce inconvenience to the public through better coordination of road works. The first attempt to deal with the problem of street works coordination came via the Public Utilities Street Works Act 1951. This was replaced by the New Roads & Street Works Act of 1991. The 1991 Act put the duty on Authorities responsible for streets to co-ordinate all works in the highway. In 2004 the Traffic Management Act (TMA) was introduced to tackle congestion and disruption on the road network. The Act, which was implemented in 2008, places a specific duty on local traffic authorities to ensure the smooth movement of traffic on the road network. The Act gives authorities additional tools to manage parking policies, enforcement on moving traffic and the coordination of street works. Amongst these additional tools are the ‘Permit Schemes’, provided as an alternative to the notification system set out in the New Roads and Street Works Act.

Street works play a pivotal role in delivering service to the end customers and is also one of the most debated and controversial aspect of utility businesses. With the focus from regulators increasing on customer service the regulators are keeping a close eye on how efficiently the end to end process of service delivery is managed. With an ever increasing cost of congestion upward from £20 billion a year, the focus is increasing on how utilities manage the street works function. This has and continues to drive new regulations such as Permits, Lane Rentals etc, which are being used as additional levers to better manage desired outcomes. New legislation has increased the overall cost of street works; with the cost of failure / non compliance and impact on reputation being identified as the main component.

Enzen has been focussed and committed in its efforts in the area of street works, as we strongly feel that having an efficient street works delivery model not only improves customer service and reduces overall cost of delivery, but also contributes significantly by reducing the cost of congestion on the economy. Enzen has the advantage of having continuous liaison with industry stakeholders e.g. NJUG, JAG, DfT etc. Our model is based on the core principle of expectations that bind joint working between the utilities and highway authorities. A cause & effect view of this principle is depicted below.

What does HA expect?	How does its non compliance impact HA?	What actions may HA take?	How may the HA action impact the Utility?	What must the Utility get right?
<b>Timeliness of Notifications</b>	Inability to accurately coordinate and take suitable actions	<ul style="list-style-type: none"> <li>• Issue FPNs</li> <li>• Rejection of Permit applications</li> </ul>	<ul style="list-style-type: none"> <li>• FPN liability</li> <li>• Admin cost in management of FPN process</li> <li>• Cost of re-planning works (e.g. operations &amp; admin)</li> </ul>	<ul style="list-style-type: none"> <li>• On-time, accurate notifications;</li> <li>• Formal authorisation on early starts;</li> <li>• Optimal planning hand-offs</li> </ul>
<b>Accuracy of information on Notices and/or Permits</b>	Inaccurate street works register may result in inconsistent / inaccurate traffic management actions	<ul style="list-style-type: none"> <li>• Issue FPNs</li> <li>• Move towards Permits / Lane rental scheme for better control (perceived)</li> </ul>	<ul style="list-style-type: none"> <li>• FPN liability</li> <li>• Permit / Lane rental costs</li> <li>• Admin cost in management of FPN process and subsequent error correction process</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy of information across the end to end work process;</li> <li>• aligned to ground reality</li> </ul>
<b>Adherence to Permit Conditions / Timing directions</b>	Inability to communicate with stakeholders (e.g. utilities, road users, etc.) on road occupancy	<ul style="list-style-type: none"> <li>• Issue FPNs</li> <li>• Increased inspection to identify breach of permit conditions</li> </ul>	<ul style="list-style-type: none"> <li>• FPN liability</li> <li>• Admin cost in management of FPN process</li> </ul>	<ul style="list-style-type: none"> <li>• Have clear communication channel &amp; protocol with HA's / Notice admin team / Planning / Scheduling / Contractors</li> </ul>
<b>Reduction in road occupancy for end to end work</b>	Congestion; impact on road users; political visibility and associated damage	<ul style="list-style-type: none"> <li>• Duration Challenges</li> <li>• Issue FPNs and/or S74s</li> <li>• Implement Permits/ Lane Rental scheme</li> </ul>	<ul style="list-style-type: none"> <li>• FPN and/or S74 liability</li> <li>• Permit / Lane rental costs</li> <li>• Admin cost in monitoring / action of duration challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor road occupancy vs. site occupation; drive first time permanent reinstatements</li> </ul>
<b>Defect free reinstatements</b>	Poor Quality Reinstatements resulting in re- planning work and additional road occupancy	<ul style="list-style-type: none"> <li>• Trend analysis and increase in number of inspections</li> <li>• Trend analysis and increase in number of coring samples</li> </ul>	<ul style="list-style-type: none"> <li>• Defect inspection fees</li> <li>• Admin cost resulting in planning / scheduling jobs</li> <li>• Add on Permit/ Lane rental costs</li> <li>• Cost of carrying out remedial work</li> <li>• Risk exposure to S74s / FPNs</li> </ul>	<ul style="list-style-type: none"> <li>• Target defect free reinstatements;</li> <li>• sample audit inspections;</li> <li>• evidence a quality management system to assure HAs of alignment to common goal</li> </ul>

## Key Benefits

- Optimal total cost of delivery of street works
- Improve customer satisfaction of undertaking works
- Ability to meet current and future regulatory challenges
- Address HA issues and complaints
- Being the best in class for street works

## Street Works – Efficiency Vs Compliance

The Enzen approach entailed a customer buy-in on potential areas where efficiencies may be driven via a balanced risk vs. outcome model. With sponsorship from the senior management and key stakeholders at the customer end, the prioritised delivery of initiatives with intent to transform the street works business was initiated.

We reviewed the end to end process, understood as-is street works operating mechanics i.e. processes, stakeholder hand-offs, use of systems, data & its use, structure, people involved and their role, ownership & accountability. We facilitated process redesign based on outcome from the gap analysis of as-is to the desired efficient to-be world. We also identified gaps in skill set and formulated / delivered change programmes aimed at impacted user groups.

The process redesign was supported by data management initiatives that oversaw integrity and ownership of data and its action/inaction by relevant stakeholders throughout the end to end process. This was critical in supporting the process redesign elements as both aspects in conjunction, drive the effective delivery of the street works business via removal of wastage, blocks in process, proactive monitoring of outcomes, etc.

We have delivered a double digit % total cost reduction in the street works process, handed over a sustained business as usual environment back to the customer and enhanced reputation.

## What may the future of street works look like?

### Environment

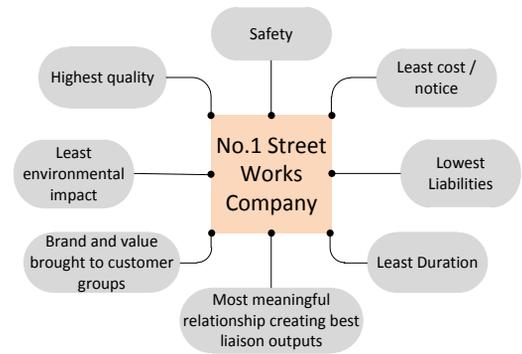
1. Prioritising on road class and creating their own permits process which is more quality based
2. Smaller carbon footprint (end to end)
3. More multi-purpose vehicles
4. More recycling

### Working Together

1. Working 'with' and not 'for' the client
2. Effective utilities liaison, not lip service
3. Cradle to grave job installation and re-instatement by 1 company
4. Open discussions and transparent working
5. Liaise with customer and describe what we are doing; focus on quality standards; ask for their patience and understanding

### Reduction on Congestion

1. Congestion levels will increase
2. 24/7 working accepted as norm
3. Minimising the time at site by coming up with standard ways of restoring the highway at the earliest time
4. Geography based work contracts and delivery, enhancing co-ordination and maximising benefits for all



## Key Enzen Differentiators

- Risk Managed approach
- Branded integrated business process bound by all of the same measures as the core business processes
- Drive engagement strategy with HA's
- Quality of work with company kite mark
- New focus from measuring time when no work is happening on site
- Enhanced performance minimising dead time and double input
- Drive innovation on recycling to the next level by combining our environmental capabilities and targeting IFI bonus payments
- Create collaborative relationships by working more closely with the clients and educating them to play their part – 40% of data provided by their key client is currently inaccurate
- Work to eradicate liabilities through most of the above

