



NJUG CASE STUDY

CASE STUDY 42: Bespoke Trailer

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities on street works issues. The 37 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 maximise 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:

Balfour Beatty Utility Solutions (BBUS) is one of the UK's leading utility solutions providers, with a strong position in international markets; dedicated to working in partnership with its clients to provide the best service in the industry. Partnering with blue chip clients, BBUS works across all utility sectors, providing a range of services that contribute to the maintenance and provision of essential utility assets.

As a core company value, Safety First is the number one priority to BBUS. As a result of this, one of the Health and Safety (H&S) Project team's main objectives is to continually review accident/incident data and current activities, to design out and reduce any risk to employees and members of the general public.

The aim of the new trailer initiative was to improve the safety and security of the highly regarded Ifor Williams GH94 trailer. The Ifor Williams trailer is utilised within BBUS to transport mini excavators and their accessories to and from its numerous streetworks locations across the country. However, feedback from Employee Forums and incident reports regarding employee injuries had raised the question, was it possible to improve the safety of this industry standard trailer?

Case study:

The BBUS Senior Management team received feedback via its Employee Forums and reported incidents that there were some issues related to the loading and unloading of mini excavators onto the trailers used for transporting them around the UK. As a result, it was agreed that a working group should be formed, together with key stakeholders and suppliers, to explore what improvements could be made to the trailers.

This was also an initiative undertaken in line with the Balfour Beatty Group challenge to 'design out risk' during 2008. Although the Ifor Williams trailer is safe by UK standards and has been in service for several years, it was BBUS' opinion that they should explore the design to take into account how the trailer is used within the utility sector.

¹ NJUG's current members are Energy Networks Association (representing electricity and gas), Water UK (representing all water and wastewater companies), National Grid, Openreach, and Virgin Media. Our associate members are Clancy Docwra, Skanska Utilities, Balfour Beatty, Morrison Utility Services, Morgan Est, NACAP, PJ Keary, First Intervention, Carillion, Enterprise, Laing O'Rourke and AMEC. Including members through trade associations, NJUG represents thirty-seven utility companies, and twelve utility contractors.

BBUS operates hundreds of mini excavators throughout the UK, which are transported to various street work sites during the day on the Lfor Williams trailers. The previous trailer had a loading incline of 16 degrees, which although does not make loading and unloading the mini excavator unsafe, it was considered that more could be done to improve this activity.

The H&S Project team were tasked with engaging internal and external stakeholders to form a working group, which would collectively be able to understand all aspects of loading and unloading mini excavators within the Utility sector. The Group also needed to be able to influence the trailer design to improve its usability.

The H&S Project team engaged the support of representatives from Lfor Williams (Trailer Manufacturer), JCB (Excavator Manufacturer), Kabota (Excavator Manufacturer), Failsworth (Training provider), and their own internal Plant and Transport department, all of whom have expert knowledge in this area to advise on what would be practicable to make this project successful.

There were several problems that were raised throughout the project with reference to practicalities of the trailer like weight load, space required and access and egress. However, all parties were encouraged to have an open discussion in great detail and with professional advice offered by all, these issues were consequently dealt with and ideas seen through. Once the working group had explored the design of the trailer which they felt would be practical to use, it was then time to actually get some of the operational staff who had not been working on the project to actually trial it. This allowed feedback on its use and permitted the working group to make any last minute changes. Feedback from the operational employees was extremely positive, allowing the roll out of the new trailers to be a success from the start.

As a result of the initiative, the trailer was redesigned giving the following additional safety features:

- The base is four inches lower and four degrees shallower to reduce the ramp angle;
- The ramps are longer with guided rails to ensure that mini-excavators are always aligned during loading / unloading operations;
- A strengthened steel tread plate mud guard allows the operator safer access and egress from the mini-excavator without the risk of falling from height;
- A secure storage area for stowing a hydraulic breaker machine allows easy access of the breaker, removing the need to manually lift it on and off the trailer;
- The additional length and lighter weight provides a safer centre of gravity and extra loading space behind the rear axle.

All BBUS operational teams, who have used the new trailers, have expressed their support for the new safety and security features and have welcomed the initiative. In conclusion, this initiative has produced the following benefits to both BBUS and its employees:

- Improved safety when loading and unloading mini excavators;
- Increased security of plant equipment / attachments;
- Improved manufacturer / customer communication and partnership; and
- Improved access to secure the mini excavator onto the trailer.

“This new mini excavator trailer design is a direct action taken by BBUS to minimise risk in the work place. Working closely with our clients and suppliers has proved to be an excellent way of achieving our goal of becoming the ultimate solutions provider.”

Anthony Murray, Health and Safety Project Manager at Balfour Beatty Utility Solutions



Balfour Beatty Utility Solutions

