



Tesco

In September 2019 Guardian Electrical Compliance Ltd – a constituent company of Premier Technical Services Group Ltd (PTSG) was invited by Tesco Maintenance Ltd to submit a tender price for fixed wiring inspection & test, including real time reporting for its entire estate. Specifically, the estate consists of circa 2,700 stores and 500 petrol filling stations, the latter to be tested on an annual basis, the former split over a five-year period.

Prior to the request for proposal (RFP) for the Tesco Estate outlined above, PTSG was awarded the smaller 770 Tesco One-Stop contract earlier in 2019, again over a five-year period. A monitoring and review process was implemented by Tesco in respect of One-Stop. Glowing feedback on this project regarding delivery and performance clearly paved the way for PTSG's participation in the main Tesco tender later in the year.

Digesting the specification for the main Tesco Estate, it was clear the client was looking for a detailed response in terms of a 'Complete Managed Compliance Service', by utilising the latest technology available. Ultimately this should lead to practical working efficiencies, and as a consequence life cycle cost savings, whilst maintaining compliance with the Electricity at Work Regulations 1989 (EaWR) and the IET Wiring Regulations, BS7671:2018.

With a number of PTSG staff working on the tender submission for the Tesco Estate, together with a knowledge of Tesco 'nice to have' requirements on the One -Stop project, it became clear that the technology and innovations already deliverable by PTSG (a unique interactive website called TraQit) would need further development to satisfy the requirements alluded to in the Tesco specification. The challenge for PTSG was to exceed client expectations and deliver a class beating service that also had the capability to evolve, based on future client requirements.

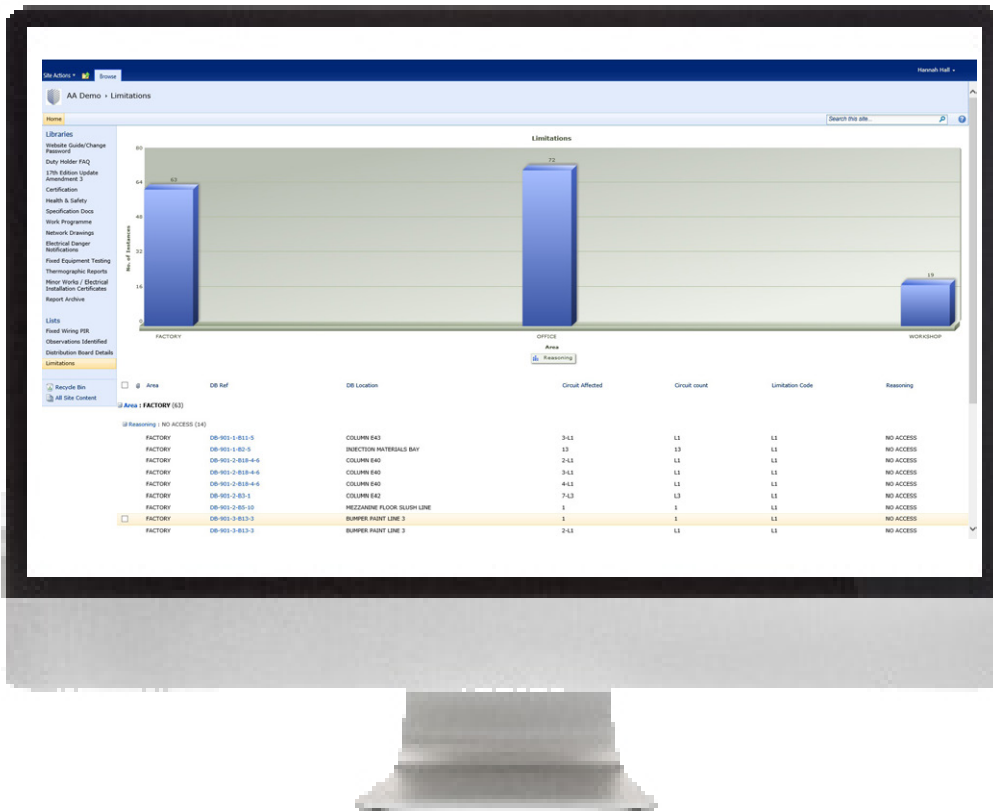
A selected team of directly employed experienced PTSG staff began working in earnest with the brief of:

Ensuring that once a site had been inspected and tested, the resulting records must at all times remain current, accurate, consolidated with a history of all certificated system changes stored in chronological order, so as to satisfy a potential audit from relevant bodies and more importantly, ensure compliance with both the EaWR 1989 and BS7671:2018.

Additionally, maintenance and contract staff employed by Tesco requiring instant site access to this information for the purpose of installation and maintenance activities, were able to do so, whilst complying with Tesco safe working procedures.



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Other than granting permissions to access information to maintenance and contracting personnel, Tesco did not want any of their staff involved in editing, maintaining or updating records, so a no-cost solution in terms of Tesco staff time.

The major problem for PTSG was whilst TraQit has the capability and functionality detailed above, instant site access to ‘real time’ information for tradesmen on site was proving a real problem.

The eventual solution was the deployment of QR or ‘quick response’ codes, a machine-readable code consisting of black and white squares, typically used for storing information such as URLs for reading by the camera on smartphones or similar devices. The TraQit App was developed and made available as a free download, allowing members of Tesco et al to log in to their information, i.e., records, schedules and drawings via their smartphones, satisfying the Tesco requirement for instant site access.

As agreed with Tesco, QR codes are affixed to distribution boards at the time of inspection and test. Once the App has been downloaded, the engineer simply scans over the QR code with the smartphone/device, pop up TraQit logon details are requested and the relevant current records/schedules etc are then instantly accessed.

Following subsequent meetings with Tesco, PTSG advised that by adopting the process of constantly updating, editing, recording and storing certificated system changes (achieved by TraQit) over 5 years, an alternative (justifiable in accordance with EaWR 1989) methodology to the standard electrical inspection and test cyclical approach could be implemented. In consequence, considerable cost savings could be made on future cycles of inspection and testing.

Nobody that we are aware of in our particular field, has ever developed the functionality and capability unique within TraQit, to work in tandem with the practical delivery of testing and recording requirements as suggested below in Paragraph 69 of EaWR 1989. The following wording has been around since the Electricity at Work Regulations 1989 was introduced in April 1990 and is actually mirrored in Reg 652.2 of BS7671: 2018:

‘Considerable cost savings could be made on future cycles of inspection and testing’



Paragraph 69 of The Electricity at Work Regulations 1989

“Records of maintenance, including test results, preferably kept throughout the working life of an electrical system, enables the condition of the equipment and the effectiveness of maintenance policies to be monitored. Without Effective Monitoring, Dutyholders cannot be certain that the requirement for maintenance has been complied with”

Relatively simple wording but difficult to implement until TraQit and QR codes came along. Paragraph 69 suggests that all electrical inspect and test records with certified corrective actions should be kept throughout the working life of an electrical system. Only then can the Dutyholder be confident that his legal responsibilities have been discharged as required by EaWR 1989 and if there was a breach of the regulations, a robust defence in law would be at hand. Ian Carnall, Managing Director of Guardian (one of the PTSG companies) states that throughout his 27 years working in the electrical safety arena, he can count on the fingers of one hand how many times he has actually come across companies that have developed such a consolidated system – and even then they were paper-based.

Contractors and clients generally look to Table 3.2 in Guidance Note 3 of BS7671:2018 for direction on the frequency of inspection and testing. However, this table focuses on ‘Recommended initial frequencies of inspection of electrical installations’ only, and not the frequency for repeat inspections over subsequent periods, which should be derived from the requirements of Reg 652.1 of BS7671:2018. This regulation is rarely, if ever, consulted and both contractor and client continue to follow for example a 20% inspect and test regime over 5 years. There’s nothing particularly wrong with this approach, other than it’s wholly unnecessary, is open to abuse, doesn’t comply with Paragraph 69 of EaWR 1989 and commercially, costs will continue to rise.

Tesco is now working with and monitoring PTSG’s practices and methodology closely throughout the next five years to ensure, via TraQit, that the requirements for Paragraph 69 can be met and in consequence records are always current, accurate, and consolidated with a history of certificated changes. Only then can compliance with the specific requirements of EaWR 1989 be truly achieved and a justifiable alternative life cycle cost saving approach be introduced.

Whilst we are in the early days of our collaboration with Tesco, other statutory electrical maintenance issues are being discussed purely because of the advantages that TraQit and QR codes bring to the party in terms of real time reporting, instant site access to records and future life cycle cost savings.



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