



# INSPECTION & TESTING FOR ELECTRICAL VEHICLE SUPPLY EQUIPMENT (EVSE)



It is estimated that by 2030 there will be approximately 2 million private and 300,000 public Electric Vehicle Charging Equipment in the UK alone. The Electrical Vehicle Supply Equipment (EVSE) market is accelerating rapidly with new technology, safety standards and regulatory requirements changing constantly.

There are several misconceptions within the industry that left unmanaged can lead to electrical duty holders being unwittingly exposed. Following 18 months of research and our whitepaper presented to the IET, Guardian have spearheaded a unique solution to provide our existing and new duty holders with a service that will ensure they are protected should there be a breach of regulations.

Regulations and standards are rapidly evolving with many installations and installers failing to keep up. This presents a risk as Duty Holders are ultimately responsible for ensuring ALL electrical systems at ALL times are installed and maintained so as to prevent hazards, including fatal incidents.

24% of UK EVSEs are not operating correctly at any one time, according to research. Even more concerning, it was found that eight out of ten EVSEs were installed incorrectly. It is important to note that this frequently falls short of the inspection and testing requirements. Apart from the primary issue of not having a safe and reliable charging unit, having little or no test documentation also places owners in a vulnerable position when it comes to complying with the law.

## Equipment (EVSE) installed in the UK

The Electricity at Work Regulations 1989 (EAWR1989) defines electrical equipment from an “400KV overhead line to a battery powered hand lamp”. Therefore, an EVSE inspection and test is required to comply with the regulations.

All Guardian’s Electrical Inspectors are qualified and have received specialist training on EVSEs endorsed by leading equipment manufacturers and will carry out the I&T.



## POWER WITHOUT PAY: Identifying Faults in the EV Charge Point Software

EV charge points are often used as a revenue stream for our clients and will charge the end user to use their system.

For one client we highlighted the software was faulty which resulted in the end user not being charged for their time connected to the EVSE!



# Guardian

ELECTRICAL COMPLIANCE

SAFE PEOPLE | SAFE PLACES | SAFE SYSTEMS

**CALL 0114 257 2080 FOR MORE INFORMATION**



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## THE SOLUTION

In collaboration with the IET, Guardian Electrical Compliance have created a robust, compliant methodology and reporting standard to complete the inspection and test of EVSE. In essence your EVSE will be assessed against the latest standards and results uploaded to Guardians' award-winning portal, TraQ-it.

The Inspection and Testing offered is tailored and incorporates additional elements and best practices from all standards. Guardian Inspectors use specialist market leading instruments to simulate real conditions to ensure the equipment is certified safe against the current regulations. All results are listed on a bespoke EVSE report that follows BS7671 standards and uses the same language as EICRs. Observations will be recorded and with any C1, C2 or Further Investigations, an Electrical Danger Notice (EDN) issued. The report will be uploaded to TraQ-it and will have the same functionality as an EICR.

## EXAMPLE

A recent inspection highlighted that all mechanical interlocks for a particular brand of EVSE did not engage when energised. This left members of their staff and members of the public being able to disconnect with the charging lead live.

## BENEFITS

- Doing the right thing by having a compliance partner that can keep you updated with all the relevant electrical standards and requirements of a rapidly evolving sector.
- Having real-time digital access to all EVSE reports and close out observations in TraQ-it's award-winning portal to ensure your robust defence under Reg 29 of EaWR.
- Having access to consult with industry experts and, if required, a managed remedials service to address any non-compliances.
- Protecting not only the investment of the equipment but also the revenue they can generate when working correctly.

## FAQ's

### WHAT IS THE FREQUENCY OF I&T COMPLETIONS?

Guardian recommend a maximum 12 months interval inspection.

### IS THIS SERVICE PROVIDED BY OTHERS?

Whilst installers may provide 'support' and 'maintenance' packages, only Guardian's EVSE I&T package provides a comprehensive and documented inspection report with detailed recommendations.



## ENSURE YOUR SITE MEETS DEMANDS WITH OUR FEASIBILITY STUDY

Speak to our EVSE Team about how we can ensure you have a safe and reliable network of charge points.

Scan the QR code or contact our EVSE Team at [evse@guardianelectrical.co.uk](mailto:evse@guardianelectrical.co.uk) or on 0114 257 2080 for more information

