

SMARTER

The logo for EDIS, featuring the letters 'EDIS' in a bold, blue, sans-serif font. The 'E' and 'D' are connected, and there are three yellow diagonal lines crossing through the 'D'.The logo for E&I&T, featuring a large blue 'E' with three yellow diagonal lines crossing through it. To the right of the 'E' is the text '&I&T' in a bold, blue, sans-serif font, followed by a registered trademark symbol (®).

The prevailing approaches to electrical compliance management are broken!

Planning and managing electrical compliance in line with BS7671 is challenging due to the lack of correct information, the volume of information and the need to manually handle this electrical information. Facilities management teams across the country struggle with this situation daily. The solution to this challenge is an approach that that enables as much data automation as possible. Using a cloud based IT system to integrate the management of electrical information, the creation of electrical certificates and the planning of electrical compliance leads to a virtuous cycle of improving data quality and reduced effort in delivering the required electrical compliance.

In this article Michael Joubert, BSc Mech. Eng. (Industrial), MBA, Operations Director of EDIS, explains why electrical compliance management no longer needs to be a laborious and time consuming task and how estates managers in large hospitals are successfully addressing this situation.

www.electricalcertificates.co.uk

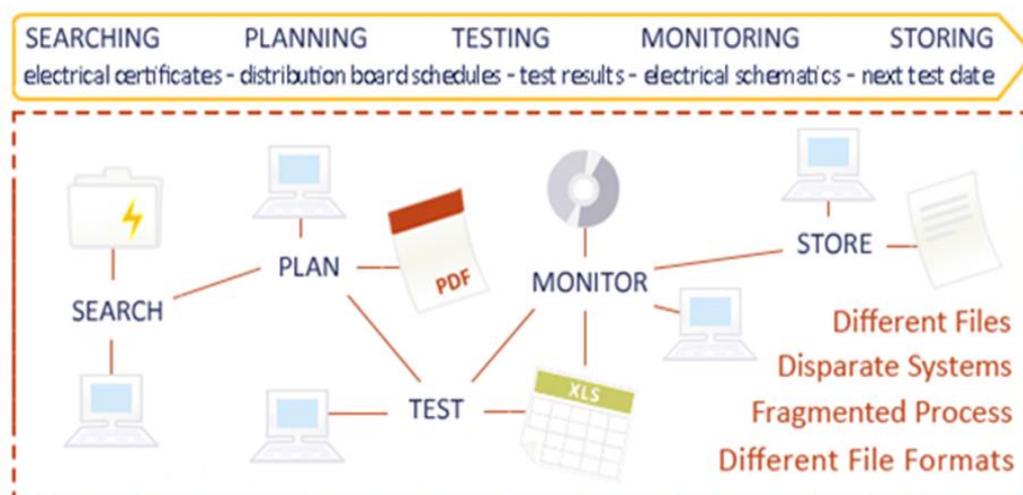
Questions? Call: 0333 772 0829

Email: support@electricalcertificates.co.uk



The Electricity at Work Regulations 1989 (EAWR) places a legal responsibility on employers and employees, as duty holders, to ensure that electrical systems used at work under their control are safe. This requires that all aspects of electrical compliance, including fixed wire Electrical, Inspection and Testing (EI&T) is suitably managed.

Planning and quantifying fixed wire Electrical Inspection and Testing programme is completely manual, while the delivery of the resulting information is via a range of different formats. This cycle of manual planning and inconsistent data formats perpetuates itself resulting in an inefficient process: Planning engineers need to trawl through historical documentation in order to work up a plan for electrical testing. This involves finding paper previously done. The volume of information is overwhelming and difficult to manage This approach is compounded by the manual receipt and storage of electrical certificates for new installations, minor works and condition reports. This fragmented process results in unnecessary effort, cost and risk.



The management of electrical compliance is made difficult by a fragmented processes and incompatible data and document formats.

Our database, developed over the past 10 years, shows that large technically complex buildings such as hospitals can have over 1,000 pages of distribution board schedules with more than 20,000 circuits that need to be monitored for compliance. This volume of data creates a significant challenge in tracking and identifying which boards were last inspected, which circuits were last tested, which circuits should be planned for testing, where the high risk items are, etc.

The planning process is forced into assuming that everything must be tested in order to ensure compliance; this is expensive, disruptive and unnecessary. Inevitably the engineering team reaches a compromise and a sample size to test is agreed on. When the test certificates are returned, any new information, observations schedules and test results are embedded in PDF's , excel spreadsheets, word documents or other format. These

documents need to be received, stored and made accessible when required. Electrical certificates received after extensions, renovations and other building changes, further adds to the documentation that needs to be managed.

During the testing process, the prevailing view is that only a high level reporting, if any, is possible, for example, only a rough statement of what sections or distribution boards have been tested is possible. A circuit by circuit report of what is planned and tested is not available, the result is that the progress and evaluation of work done cannot be easily monitored or costed.

On the completion of testing, the distribution board schedules and distribution board networks need to be updated and certificates stored. Again, these documents are manually updated, distributed and filed for future use. In large estates, disparate systems and formats of storing the electrical data results in the integrity of the electrical data deteriorating over time. This creates an ongoing challenge for reporting on the risk of the electrical system across the estate. The prevailing approaches cannot easily solve this key compliance requirement and some new form of reporting is imperative.

There is no doubt that the process of planning, managing and reporting on the electrical compliance is often broken! The result is the unnecessary cost, time and risk. Improving the process will reduce the time, effort and cost required to plan, monitor and track the electrical compliance. In an environment where budgets are under continuing pressure and reduced staff levels are the norm, any reduction in effort, cost and time must be a welcome relief.

The vicious cycle supported by a manual process with disparate systems and formats can be changed into a virtuous cycle supported by a process, system and governance that improves the cost, time and risks associated with the electrical compliance management.

The antidote to the problem is **SMARTER EI&T®**. SMARTER EI&T® is a holistic process, system and governance for reducing the cost, time and risk of planning and managing electrical compliance in line with the requirements of BS7671. The SMARTER EI&T® process aims to ensure that data is captured once and used many times over, including the automation of electrical compliance planning and reporting process.

The approach is proven and 'battle tested' a number of hospitals have chosen to manage and control the management of their electrical compliance by implementing SMARTER EI&T® powered by EDIS.

Over the past 5 years, EDIS has supported Guy's and St Thomas' to manage their electrical compliance programme – the system is used by electricians to capture electrical test data, providing monthly reports on the status of the electrical compliance and reducing the time and effort required to plan and complete electrical testing programmes.

Imperial College NHS Trust has implemented the EDIS system and incorporated it in their ongoing electrical certification processes. It has reduced the volume of paper certificates and enables designers, planners, compliance managers to efficiently plan and setup electrical compliance programmes and find, analyse and report on electrical compliance related.

Following a successful trial of the EDIS system, the Royal Free London NHS Foundation Trust has implemented the approach for their ongoing electrical compliance certification and reporting.

Adopting SMARTER EI&T[®] will result in:

- A well-defined process for planning, managing and reporting electrical compliance
- Effective governance to ensure the process and systems are used appropriately
- The EDIS system as a central repository for electrical information required by BS 7671
- Automatic detailed circuit level reports that compliment human engineering judgements
- Automated document management
- Tightly targeted, well designed risk based testing with visual inspections will allow for better risk management.
- Detailed circuit level reports can be easily provided
- Automated generation of electrical schematics
- Distribution board schedules are easily accessed and automatically updated throughout the life of the asset.

The SMARTER EI&T[®] powered by EDIS has been refined over the past 10 years and is used by large NHS Trusts, the BBC, local councils, public and private estate managers to reduce the costs and time of managing electrical compliance and shines a light on the otherwise too difficult to assess electrical compliance risk.

About the author:

Michael Joubert, the EDIS Operations Director has over 10 years of experience in working with electrical compliance programmes and ensuring the end-to-end process of planning, testing and reporting electrical compliance regimes is correctly managed.

About EDIS:



www.electricalcertificates.co.uk

Questions? Call: 0333 772 0829

Email: support@electricalcertificates.co.uk