

CASE STUDY:

Ensuring ESQC compliance and a risk based approach to Electrical Safety

UK Electricity Distribution Utility

Overview

In early 2010, there was a priority need to review the strategy to manage and comply with ESQC (Electricity Safety Quality & Continuity) Regulations. This resulted in a significant risk exposure with HSE with a 1 in 3 probability of an improvement notice being served on the networks, in the event of no improvement action.

Highlights

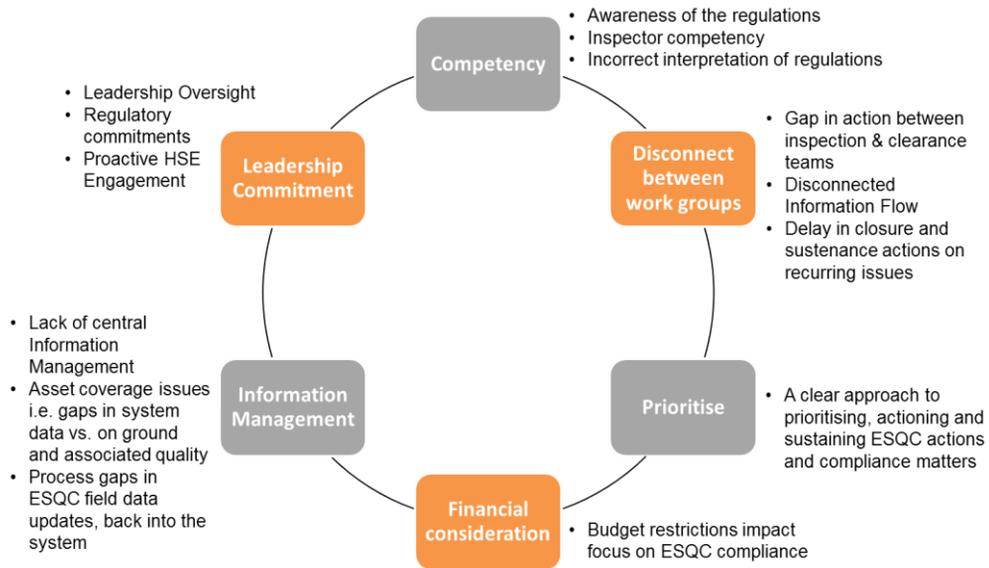
- Driving the data diagnostics & process evaluation piece to help identify root cause issues that are detrimental to ESQC compliance. This has delivered savings that are being retained within the business.
- Collaboration & synergy in developing a joint training & competency framework for business
- Review and updating of ESQC Risk Profile Indicators to meet the timescales set by the HSE
- Finalisation of a new reporting framework and up to date list of poles requiring inspection

ESQC Compliance - Risk based approach to Electrical Safety

Electrical Safety, Quality and Continuity (ESQC) regulations were introduced in UK in 2002 and have seen continuous update over the years. With the increased regulatory oversight from HSE, there is an increased pressure on Distribution Network Operators (DNO) to comply with the regulations in a cost effective manner to ensure maximum public and worker safety. The last few years have seen multi fold increases in safety audits followed by improvement notices on DNOs. Within the DNOs inspection and maintenance teams, the full awareness of ESQC regulations, its implications and compliance requirements remain less than satisfactory.

With heightened focus from OFGEM on cost efficiencies, ensuring ESQC compliance in a cost efficient manner remains a challenge. Some aspects of ESQC compliance has a timescale bound implementation plan agreed by the DNOs with the Regulator. As the target date for these approaches, DNOs are coming under increased pressure to meet the seemingly conflicting goals of ESQC compliance and cost efficiencies.

Enzen has been working with leading DNOs in the UK on ESQC compliance. Enzen brings domain expertise, regulatory knowledge and its operational efficiency practices to deliver a cost efficient ESQC compliance. Enzen employs a risk driven approach to assess the overall risk to the networks to prioritise and deliver compliance.



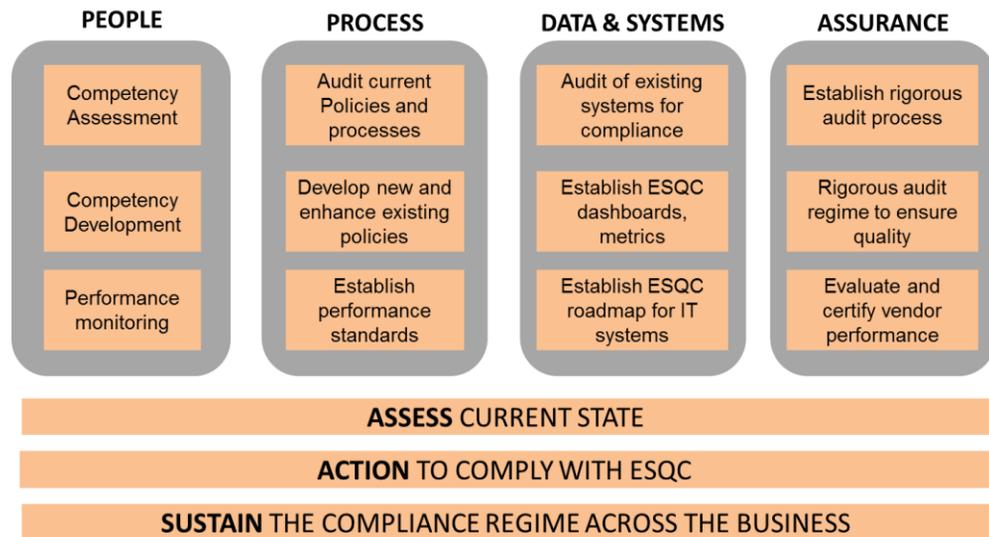
ESQC Compliance – Compliance with efficiency

The Enzen approach included identification of focus areas where compliance can be driven through competency assessment and enhancement, development of work packages in non compliance areas, operational planning and co-ordination with network operations.

## Key Benefits

- Achieving control and stability; with all stakeholders aligned and understanding the scale of the challenge and the plans moving forward
- Clarifying the challenge in terms of quantifying investment and outstanding ESQC related defects; investment of £260mil over 5 years to clear a total of 120,000 ESQC related defects in the system
- Identified £50mil of avoidable investment due to broken processes in this area
- Identifying that contractor processes were not working e.g. 43,000 pole test results and 5 years of ABC and D pole replacement identified and uploaded into asset register
- Re-writing the ESQC Risk Assessments policy; a major deliverable for the HSE to ensure we correctly identify and mitigate ESQC risks.
- Identifying opportunities to reduce UCI's with the potential to save a further £10mil

With sponsorship from the senior management and key stakeholders at the customer end, the prioritised delivery of initiatives with intent to ensure compliance was initiated.



Enzen reviewed and baselined the current capability in inspector competency, developed and executed training packages to improve competency followed by a rigorous competency assessment program. We facilitated the delivery with progress dashboards on outcome and assurance of the work developing and executing a rigorous audit regime conducted by senior asset engineers. The learning from inspection and audits were used to fine-tune policy, training manuals and handbooks. We established an annual competency development and assurance mechanism to ensure sustainable ESQC compliance.

Enzen provides an **end to end management of ESQC compliance** including:

1. Assess current state of ESQC compliance across People, Process, Data and System dimensions.
2. Define and develop programs on improving people competency, system capability and process improvement.
3. Establishing leadership metrics and dashboards to provide enhanced visibility to ESQC compliance and define plans of action.
4. Monitoring the performance on an ongoing basis and establish rigorous audit regime to ensure quality.
5. Assurance Audits in the area of ESQC Compliance in the sustenance BAU phase.

Enzen has delivered an effective compliance program that has resulted in HSE appreciating the efforts of the DNOs and improved relationships between the regulator and the network operator. HSE has also indicated that the level and the manner of compliance achieved will be used as a model to benchmark and evaluate other DNO's.

