

# Customer Focus - EDF Energy Networks

**Working with AMT-SYBEX, EDF Energy Networks has implemented an asset management and mobile working solution, delivering significant benefits to the working practices across the enterprise, and has enabled the company to attain a vital industry accreditation.**

## How the project was identified

In 2004, when EDF Energy brought together its London Power Networks, Seaboard Power Networks and Eastern Power Networks distribution businesses, it faced the prospect of having to deal with the management of over 1.8 million assets from across these 3 companies - each using separate and aging legacy processes and systems for asset management.

As part of EDF Energy's overall Integration Programme, a review was made of how the combined asset management knowledge and experience of the three networks could be used to develop best practice asset management strategies, policies and standards for the new organisation, along with the information systems that support them. This initiated a number of activities of which a key priority related to the management of electrical and civil plant, including planning and execution of work, capture of condition information and provision of information to support decisions.

For this activity AMT-SYBEX was brought in to work with the business on reviewing existing asset management processes that drive the collection and updating of asset information following asset replacement and inspection & maintenance activities. This was reviewed in the context of the integrated policies and standards that had been developed. This resulted in EDF Energy Networks identifying a major opportunity to significantly improve

**delivery of an end to end asset data management solution for electrical and civil plant, including mobile technology to protect the integrity of asset data.**

efficiencies by converging asset management across the whole business and completely re-working how asset management information was captured and processed - making it accessible and intuitive to all relevant employees, both in-sourced and outsourced, from the management to the field-force.

The main drivers were:

- delivery of an integrated Asset Management information strategy built from the experience and knowledge of 3 large legacy organisations;
- a more flexible set of tools to support changing information and asset management needs;
- the need to improve the accuracy and completeness of the information that supports future investment needs.

## The implementation method

A key thread in the implementation approach was to learn the lessons from similar projects that had designed processes and tools in the past.

Experience had clearly demonstrated the need for user friendly access to information to allow an intuitive approach to searching for information on assets e.g. work history, condition. In addition, the amount of paper records were to be reduced to improve the end to end processes for keeping the asset register up to date with work history and condition information. This helped to define the scope of the mobile solution to maintain data integrity.

Training and communication were areas for particular focus, and real data was used for training sessions, in a classroom environment set up with no more than 8 staff to a trainer. Help cards and documented procedures all played an important part in helping staff to understand what was required of them in using the new tools.

In terms of an implementation methodology, AMT-SYBEX has a tried and tested approach for asset management projects built up from nearly 20 years experience working alongside UK infrastructure businesses. With this extensive 'know-how' of

delivering real efficiencies from asset management processes, EDF Energy Networks worked closely with AMT-SYBEX in developing the solution.

The project started with a review of the business structure to ensure that data and information flows supported the organisation's asset management objectives. As part of the business change process, it was recognised at this stage that new roles and responsibilities would have to be defined and implemented.

Improving the quality of asset information along these data flows was also seen as critical. To ensure a successful long-term strategy for asset data management, EDF Energy Networks introduced a new team (Asset Registration) to reinforce a culture of realising the importance of maintaining data integrity when updating asset records. A key message of "no registration" means "no inspection or maintenance of assets" helped to drive home the importance of the task - particularly when concerning public safety!

When it came to creating asset management reports from the asset register, experience during the project showed that defining all aspects of a report on paper is very difficult. A Rapid Application Development (RAD) approach was trialled and used to document the information required and then demonstrate draft reports. The users were then consulted to improve the content and layout of the draft reports, providing a much improved end product. This approach was very successful and was utilised for all future report development.

Facilitating the overall convergence process involved using AMT-SYBEX's Enterprise Asset Management (EAM) solution - Ellipse, to develop a central asset register, providing a single source of truth of information relating to all EDF Energy Networks' electrical plant and civil structures across its distribution networks. Ellipse was chosen due to its proven reputation as a world class EAM system tailored specifically for infrastructure intensive industries, with significant implementations across the UK's utility and transport businesses.

## The scope and influence of the project

Following a review and integration of the asset management strategies and policies, the need for integrated information sources and tools to support them was evident.

The scope and influence of the project was to:

- Close gaps in supporting their information strategy and align with PAS 55 (The Publicly Available Specification 55) requirements;
- Have greater visibility of their asset base;
- Enable flexible aligned processes and tools that built in data cleansing and collection into the day to day processes to remain effective into the future;
- Improved data quality in terms of integrity, completeness and accuracy;
- Wider utilisation of the tools and processes by operational and office based staff; and
- Empowerment of their staff to all play a real part in supporting our strategies

Not only does the solution enable EDF Energy Networks to create detailed and tailored reports in a way that is highly intuitive to support management decision making, it also provides essential information to empower and improve the efficiency of staff right across the enterprise, even out into the field. Through the use of work planning and work dispatch tools, field engineers can now receive accurate instructions for inspection and maintenance duties on their ruggedised hand-held devices via the AMT-SYBEX Mobile Field Working Solution (FDGS). The field engineers can then in turn update central asset records remotely from the field.

This solution wasn't just implemented and 'pushed out' to the field, the project team ensured success through working closely with staff and field-workers to develop the solution according to their own specific needs. For example, visibility of asset information and the ability to change it in the field were requested, and indeed delivered.

## How success was measured

In accordance with the original objectives, the project successfully achieved the following:

An agreed single source of asset information - providing excellent visibility of the asset base right across the enterprise, from the management to the field. Convergence of all asset records into one intuitive system has achieved significant efficiencies in the areas of people empowerment, business processes and IT systems. This engages office and field staff in supporting our asset management strategies.

The new processes and tools are a major step forward in usability to operational and office staff, empowering them to make better decisions through easy access to information. The extensive work carried out by EDF Energy and AMT-SYBEX to integrate the 3 business units so that all the data and business processes are aligned to support the business and regulatory environment has supported EDF Energy Networks' PAS 55 certification - a significant benchmark of success in itself!

The use of the mobile technology provides a closed loop end to end process from the issue of work to returning it when completed. This reduces the risk of paper records building up improving the timeliness of data updates.

Through improved visibility of asset information financial benefits have been realised in ensuring assets to be replaced in the future are not included in the maintenance programme.

## The competitive advantage achieved

The competitive advantage for EDF Energy Networks is in demonstrating accurate and complete information when building investment cases and agreeing them with the stakeholders. It also gives EDF Energy a competitive edge when competing for work outside the current business parameters.

The solution delivered by the project played a major part in supporting their PAS 55 certification. During a surveillance visit by Lloyd's Register, the auditors, in June 2007 the project and solution were reviewed. The following comment is from Lloyd's Register.

"it is clear that much of the progress made by the organisation is as a direct result of the successful introduction, implementation and use of Ellipse and associated tools and reporting systems."

The solution provides the process and tools to reduce the risk of non-compliance with the various relevant statutory regulations e.g. ESQC Regulations 2002, for asset data and information through an asset register to support reporting of this information.

## The business benefit

The main financial benefits relate to the changes in working practices introduced by the integrated policy for Inspection & Maintenance activities, providing a common approach across the three networks. In addition, the processes and use of information in the annual investment planning cycle ensure the maintenance programmes co-ordinate with the asset renewal programmes, in the context of a rising asset renewal programme.

The projected pay back period is between 5 and 7 years which is typical where there are both strategic long term benefits alongside short term tactical benefits.

What was the customer/employee benefit?

There are two main benefits which helped to really engage with the user community. For office based staff the benefit is the ease by which they can access information on assets from the intranet. This has been a key success factor in buying people into the process changes. For field based staff the mobile solution, and the ability to view the asset register remotely from an office, has been a great success.

The solution assists the business in providing data to enhance our annual investment plans and processes thought better quality inputs, enabling improved confidence in investment plans, and clarity for delivery.

As part of the business case, a new team called the Asset Registration Team has been set up to input changes to asset records in Ellipse. This team is in place and is supporting all the directorates in asset updates. This takes the task away from project managers who would not regularly do this and in the past led to reduced data completeness. The benefits to both customer and employees can be far reaching in terms of accurate information and work and job costing.