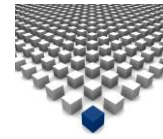


Engage's Smart Grid Credentials



Our Smart Background

Engage are established expert advisors. Our clients trust us to advise them on strategic, operational, project and programme roles focusing on general market operations, settlement arrangements, revenue and margin assurance, industry design, regulation, smart metering and smart grids.

We have played a key role within Great Britain's (GB's) smart initiatives since 2005. We have built an unrivalled proficient expertise in the smart energy market to complement our wider energy market knowledge through our work across the supply chain. This has included work for trade associations, energy suppliers, network companies, central market organisations, regulators, government, agents, meter manufacturers and smart technology and service providers. Engage also has global experience in smart metering and smart grids, with clients from other parts of Europe, North America, Asia and Australia. We also have global experience in smart metering and smart grids, with clients from other parts of Europe, North America, Asia and Australia.

Our industry leading smart metering and smart grids expertise allows us to assist clients in achieving business readiness for the smart world, delivering confidence in the solution along with value for money. We are at the heart of national developments and have an in-depth understanding of global smart developments, standards, technology and commercial opportunities. We consistently deliver robust and perceptive business knowledge and insight to our clients enabling them to develop business cases, strategies and operational processes to support market penetration, market growth and differentiation in the smart energy world.

Summary of our Smart Grid Work

-  **We delivered the smart grid project for a trade association, capturing smart grid network requirements and Use Cases for smart metering.**
-  **Engage provided analysis and modelling to a DNO on the commercial and cost implications of proposed demand side response models.**
-  **Supported a DNO with their Low Carbon Network Funding bid, involving a smart grid trial of technical and commercial innovations.**
-  **Via a trade association, we facilitated workshops between suppliers and DNOs on demand response and demand side management.**
-  **Produced a research paper into behavioural impacts of demand-side stimuli during international smart meter trials for an energy authority.**
-  **Facilitated development work on a "Smart Demand Response: A Discussion Paper", with a trade association and its members.**
-  **Reviewed regulatory recommendations for data safety, data handling and data protection for the Smart Grids Task Force .**

Smart Grid Credentials

Demand Side Response Market Models – Engage assisted a Distribution Network Operator (DNO) in assessing demand side response market models that are applicable, and most likely to achieve success, in a specific sub-set of their operating region. The outcomes of the project will be included in the network operator’s business plan for the area. We provided analysis and modelling of the commercial and cost implications of proposed demand side response models and designed and defined the process and system changes required for implementation of a selected demand side response model.

Low Carbon Network Fund (LCNF) Bid Support – In 2012, Engage supported a Distribution Network Operator with the preparation of a bid for Low Carbon Network Funding, which was associated with an ambitious smart grid trial involving both technical and commercial innovations, which aimed to accelerate the connections process for renewable generation. We provided specialist input, participated in workshops and prepared sections of the bid document.

Network Requirements and Smart Grid – We delivered the [smart grid project for a trade association](#), capturing their smart grid network requirements and Use Cases for Smart Metering. We ensured that the trade association’s specific business needs and concerns were addressed and positioned them to influence Government and Ofgem developments. We managed the multi-stakeholder work-streams to deliver: Smart Metering System Requirements and Use Case definitions specifically with respect to the functionality required; Data Traffic Analysis; Security and Privacy requirements; and cost benefit analysis.

Smart Grid Industry Development – Through our work with a trade association, we have facilitated joint workshops between suppliers and network operators on demand response and demand side management, both key elements to the smart grid of the future.

Smart Demand Response – Engage facilitated development work on a “Smart Demand Response: A Discussion Paper” on behalf of a trade association, in conjunction with another trade association and its members. The paper investigated the drivers, benefits and requirements for smart demand response for networks, retailers and customers and considered the potential market models for smart demand response.

Customer Behaviour: Engage was commissioned by an energy authority to produce a research paper into the behavioural impacts of demand-side stimuli during international smart meter trials, particularly where these stimuli were used in combination with time-varying tariffs. The report collated, benchmarked and published the conclusions of the various methodologies and technologies that were used in international smart metering trials to measure customer behaviour impact. The stimuli covered included: IHDs; Customer consumption information and profiles, both web-based and printed reports; Plug-in displays on individual appliances; Critical Peak Pricing Alerts; and Pre-Payment metering. The report assisted the client in the design of their smart meter trials/pilots and ensured robust design and the identification of the most effective ways to influence customer response.

Smart Grid Task Force – Provided support to [Expert Group 2](#) that included considering Regulatory recommendations for data safety, data handling and data protection for the [Smart Grids Task Force](#). We also supported the development of the draft mandate to be issued by European Commission to the ESOs to develop relevant smart grid standards.

Smart Grids Standards – Through work with a trade association, we have been monitoring and participating in the M/441 process. This includes membership of the relevant British

Standards Institution (BSI) committees mirroring the European Standards Bodies committees and forming part of the British delegation to full plenary and working group sessions of the European Gas, Electricity and Communications technical committees (CENELEC TC13, CEN TC237 and CEN TC294). On a wider perspective, we have supported new interoperability standards initiatives and since 2009 we have represented the trade association as a stakeholder in the standards based Open Meter project. Our personnel have also represented BSI at European Standards Groups sessions on smart grids standards activities.

European Smart Standards Development – We undertook an assignment to support the development of [Mandate M/441 for ESMIG](#) from the European Commission to European Standards Organisations (ESOs) to develop appropriate smart meter standards for Europe.

Smart Grid Workshops – We have run workshops across the supply chain in Europe and Asia on smart grids. In Malaysia, we delivered a workshop on 'Distribution Management and Metering Solutions for Smart Grids'. In the UK, we delivered a suite of workshops to finalise Smart Grid Network Requirements for Smart Meters for the ENA and for a central agent, we delivered a workshop that gave an overview of the smart grid landscape and highlighted the potential opportunities.

Smart Grid European Market Research Reports – We have produced bespoke smart market research for key agents and operators on regulatory structures, commercial frameworks and technical and industry change.