Client Profile

Başkent EDAŞ is the largest electricity distribution companies in Turkey serving over 12 million users. Headquartered in the capital city of Ankara, Başkent Elektrik Dağıtım A.Ş. is comprised of 95 (154kV/MV) power substations with 14,500MVA total capacity, 29,000 distribution transformers (MV/LV) with total capacity of 12,000MVA and 12,500,000 MWh energy consumption.

Enerjisa is the parent company of Başkent EDAŞ and is a joint venture between the Sabanci Group and E.ON in Germany. Sabanci Holdings is a $17.6 billion Turkish industrial and financial conglomerate.

Project Overview

Başkent EDAŞ planned to invest in a new SCADA/DMS/OMS system to improve the service quality and fulfill the regulatory requirements. Key operational metrics included System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).

Actionable Strategies was engaged develop and overarching Smart Grid initiative. This included:

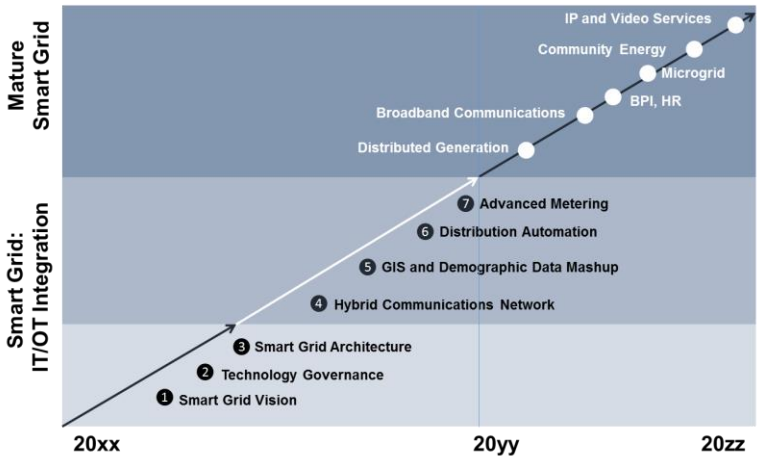
- Establish a Smart Grid strategy
- Develop a Smart Grid Roadmap
- Define pilot and implementation projects to prove the feasibility of technologies
- Create an IT archictecture to enable Smart Grid integration to Operational Technologies
- Brief regulators and obtain approval
- Define budgets and identify funding sources

Collaborating with stakeholders across the business, Actionable Strategies also worked with customer proxies, regulators and the state-run transmission company.

Key Approaches

While development of the strategic plan was critical, it was also essential that the roadmap addressed foundational requirements for a modern Smart Grid. These included a robust communications network which was a hybrid design to provide coverage in remote parts of the distribution territory. The roadmapping effort yielded a set of programs that built upon progress over time.

The planning process involved developing a portfolio of projects underneath the programs in the roadmap. These projects were sequenced based on resource, financial, customer, technical and regulatory factors. The illustration below shows how progression of projects enable Smart Grid maturity to evolve.



Key elements of the technical architecture covered all aspects of the IT operation:

- Integration with SAP IS/U
- Operational Technology data ingestion from the SCADA network
- Customer relationship management and customer master data
- GIS data acquisition and integration with workforce management
- Data integration via enterprise service bus
- Cybersecurity over operational and information technologies

Business Results

The successful project was celebrated with the client in Ankara who began successfully executingthe roadmap.