



SmartSynch and AT&T: End-to-end cellular-based advanced metering infrastructure



Solution Overview

SmartSynch and AT&T have been offering integrated smart grid solutions to the utilities sector since March 2009. These consist of the SmartSynch's suite of smart grid products along with AT&T wireless data services on a single bill:

- AT&T provides the utility customers with two-way smart grid data communication between electric meters or routers and a utility's office, using its public cellular network;
- SmartSynch SmartMeter™ monitors power usage and wirelessly communicates day-to-day energy data as well as outage information back to the utility company
- SmartSynch GridRouter™ acts as a hub for smart grid data, allowing utilities to connect with any device over any network.
- Software that gives utilities the ability to automatically monitor millions of electric meters on a single, easy-to-use tool.

The latest offer from the two companies was introduced in September 2011, allowing utilities companies to prepay 10 years' worth of mobile data.

Current Status

The AT&T SmartSynch end-to-end b2b solutions for utilities customers are now commercially available and gaining market traction. SmartSynch has about 130 utilities clients for its cellular-based software and hardware systems, including nine out of the top ten utilities in the USA. Among the AT&T and SmartSynch's joint customers are Texas-New Mexico Power (TNMP) in the state of Texas, and the City of Griffin in the state of Georgia, both of which chose a cellular public network solution for their advanced metering infrastructure projects.

TNMP performed a 10,000 residential meter trial with SmartSynch and AT&T between September 2009 and March 2010. Following the trial, it decided to replace all of its 230,000 meters with SmartSynch

smart meters connected via AT&T's cellular network by January 2016. AT&T will provide its wireless communication network, while SmartSynch will act as the primary services contractor, including meter card installation, router management, and cellular network management. Outsourcing the deployment, configuration and management of the communication network means that TNMP does not need to hire and train its own staff for the job.



Benefits

For utilities companies like TNMP, the decision to use cellular is based on a range of factors:

- Low risk of deploying mature and stable cellular network technology;
- Extensive coverage of the public cellular network: AT&T, for example, covers nearly 100% of the population of Texas;
- Security: AT&T provides an additional managed security layer, the same as those it offers to its national security customers;
- Speed of provisioning smart metering end-points;
- Network performance: TNMP has experienced a 99.50% success rate on first time reads, and 100% read rate success within 12 hours;
- Affordability: Following some recent price changes, cellular is an affordable option for smart metering end-point connectivity. AT&T, for example, offers a special data plan for its m2m customers. Additionally, prepaid data option also makes the cost of running smart metering networks predictable.



Key Learnings

Public cellular networks are a time-proven communication solution for the utilities industry. Cellular is traditionally used to backhaul metering data from aggregation points, and has been deployed in C&I (commercial and industrial) smart metering projects for the last 20 years.

Recent partnerships, such as that between AT&T and SmartSynch, leverage the strengths of both companies to create a new range of end-to-end solutions for smart grids. While the majority of cellular-based projects are today for advanced metering infrastructure projects, the same cellular networks will be able to support future applications such as Time Of Use tariff demand response, and home energy management.

For more information:

About AT&T

For more information on AT&T's smart grid solutions, visit:

<http://go-att.us/smartgrid>

About GSMA

The GSMA represents nearly 800 mobile operators and over 6 billion connections worldwide. To accelerate the development and deployment of embedded utilities devices and solutions, we are engaging with the wider ecosystem and working with the key players to understand their needs and to reduce the barriers to adoption. For more information please contact:

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