

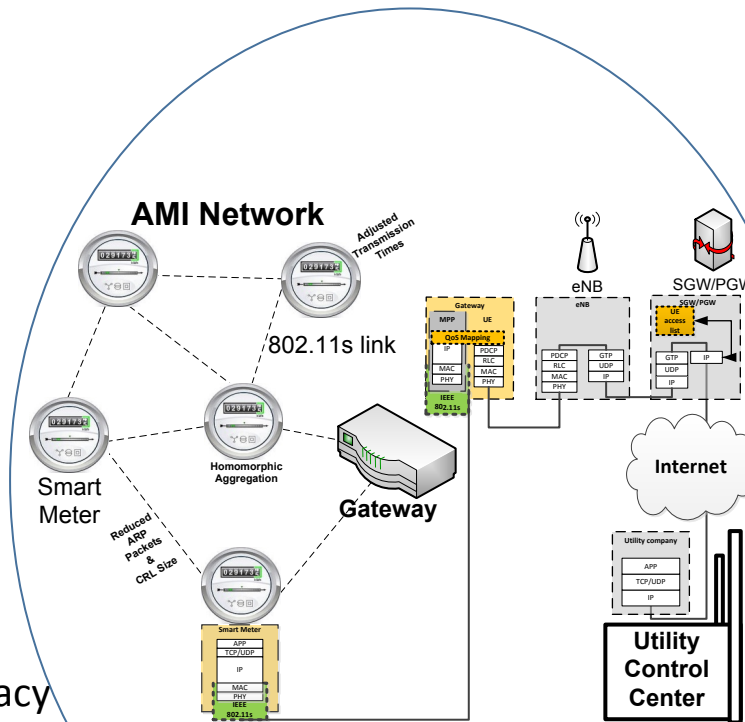
TWC TTP: Small: Collaborative: Privacy-Preserving Data Collection and Access for IEEE 802.11s-Based Smart Grid Applications

Challenge:

- Trade-offs involved in privacy-preservation on Smart Grid Advanced Metering Infrastructure using IEEE 802.11s-based wireless networks

Solution:

- Various wireless network optimizations to better accommodate security/privacy
- Novel data transmission strategies, reduction of control packet and CRL overheads, attribute based signcryption & multicast



An AMI network optimized for privacy-preserving operations

Scientific Impact:

- Striking the balance between security/privacy and performance in AMI applications
- Trigger more attention to security & privacy research in more applied settings

Broader Impact:

- Increased awareness among smart meter users
- AMI Testbed to be adopted by utilities and used for realistic research experiments
- Outreach to faculty and students via testbed

Project #: 1550313

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