IEEE P802.24 Smart Grid TAG

Project	IEEE P802.24 Smart Grid Technical Advisory Group
Title	Smart Grid TG scope
Date Submitted	[12 May, 2014]
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Re:	[Requests to add Task Groups (TGs) with new scope to IEEE 802.24 TAG]
Abstract	[This document provides the format for the scope of a new IEEE 802.24 TAG TG.]
Purpose	[This document is used to for the approval of a new TG and to guide the TG in its operation.]
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1. Scope – Provide a clear description of a specific application. The proposed application and area should be clearly bounded.

This group addresses the use of IEEE 802 standards in supporting the data link communications needs of Smart Grid systems. The Smart Grid TG

- Acts as a liaison and point of contact with regulatory agencies, industry organizations, other SDOs, government agencies, IEEE societies, etc., for questions regarding the use of IEEE 802 standards in those emerging applications.
- Develops white papers, guidelines, presentations and other documents that do not require a PAR that describe the application of IEEE 802 standards to those emerging applications
- Acts as a resource and knowledge base on IEEE 802 standards for certification efforts by industry bodies
- Identify technology gaps in Smart Grid communications and recommend standardization tasks to the appropriate IEEE 802 WG.

2. Customer – Who will benefit from the work product of the proposed TG? Is there a clear need for standards in this application space?

The customers for the activities of this TG include:

- Utilities
- Semiconductor vendors
- Component and equipment vendors who develop solutions for Smart Grid applications that need data link communications.
- Regulators
- Government agencies

3. Similar groups – What are the liaison opportunities?

Other SDOs in the Smart Grid space include:

- TIA TR51
- ETSI TG28
- IEEE 1900
- IEEE 1901
- IEEE 1905
- ARIB
- ISA 100
- SAE

Industry alliances with an interest in IEEE 802 Smart Grid standards

- WiSun Alliance
- ZigBee Alliance

- Wi-Fi Alliance
- Ethernet Alliance
- WiMAX forum
- Whitespace Alliance
- HomePlug Alliance

4. Broad market applicability – Will there be numerous users of the information? Does the application have broad applicability? Is it supported by multiple vendors?

Smart Grid applications affect all people who use power. The market for Smart Grid applications is currently \$300 billion USD (Navigant Research) and is forecast to reach over \$1 trillion USD in the next 10 years. There are multiple vendors in the Smart Grid space, many of whom have participated in developing IEEE 802 standards.

5. Will it identify new ways that 802 standards can be integrated or applied across WGs?

By analyzing the use cases for IEEE 802 technologies, the group will identify the ways in which multiple IEEE 802 standards can be combined with each other and other standards to create multiple end-to-end solutions for Smart Grid communications.

6. Distinct identity – Is this area something already being addressed in 802? Does it require cross WG support?

This area is not being address in an IEEE 802 cross group manner. To create an overview of IEEE 802 standards, contributions from multiple IEEE 802 WGs will be required. Groups that may contribute include 802.1, 802.3, 802.11, 802.15, 802.16, and 802.22.

7. Feasibility – The proposed work will serve the identified users. Initial work items have already been identified.

This work will serve to educate the customers on the applicability of IEEE 802 standards to support and enable Smart Grid applications. While the individual industry alliances promote specific standards and technologies, this TG will promote an active knowledge base for all appropriate IEEE 802 technologies.

Initial work items include:

- Catalog of IEEE 802 Smart Grid standards
- Whitepaper to describe how IEEE 802 standards can be used as a part of a Smart Grid network.
- Responses to regulatory actions, e.g., ITU-R question 236/1, PAP2 input to NIST
- Presentations at Smart Grid conferences, e.g., Globecom