IEEE P802.22
Wireless RANs

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| Minute of IEEE 802.22b Enhancements for Broadband Services and Monitoring Applications Task Group Teleconference-5 |
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Abstract

This document presents the minute of IEEE 802.22b Enhancements for Broadband Services and Monitoring Applications Task Group teleconference-5 held on 24th April, 2012 9:00 pm EDT.

**IEEE 802.22b Task Group Teleconference-5 Minutes**

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**24th April, 0900-1030 PM EDT**

**Attendees:**

Apurva Mody (BAE System) , Bingxuan Zhao (Niigata University), Changwoo Pyo (NICT), Keat Beng Toh (Hitachi), Tim Godfrey (EPRI) , Xin Zhang (NICT), Mingtuo Zhou (NICT), Shigenobu Sasaki (Niigata University)

**Minutes:**

1. The meeting was called to order.

2. Attendance was marked.

3. Agenda of the meeting as contained in document 22-12-0041-02-000b was reviewed and discussed. No objection was heard. It was approved unanimously. IEEE patent policy was read out by the Chair.

4. Tim Godfrey from EPRI gave us an overview of smart grid application.

There are two possible broad applications: a. 2-way communication to metering, provide more functionality to the smart meters. b. Distribution of voltage between cities. There will be huge deployment of sensors and controlling equipment in the future. Reliability of the network is critical. Traditional liscenced frequency band, has to　change to switching band in TV whitespace. Private network can be considered in 802.22b together with 802.16

**Ask**: Is Tv whitespace possible to be applied in disaster scenario?

**Ans**: 802.22 covers suburban to rural area. Lack of mobile operator coverage is one thing. 2G coverage is another. Smart metering backhaul is very appropriate for TV whitespace, as well as power generation in disaster scenario.

**Ask**: What is the typical traffic to the smart grid network, very low, 1kbps.

**Ans**: The data vary widely from traditional use case to what they want to achieve nowaday, once a day or once a week. In some cases, utility need to read more frequent. Hence the data rate will go up.

**Ask**: Specrum efficiency and security

**Ans**: At the edge of network, meters are power off, no one aware. Smart meter solve this problem. Load balancing can be done by adding more switches, and improve power efficiency

**Ans**: smart grid applications have to meet a strict security requirement to provide a robust, secured link

5. Discussion of prediscussion of selection document.

Chair presented updated document 22-12-0036-01-000b.

There was a question about the number of H-CPE in the network. It is set to 100H-CPEs, what is the rational for choosing this value?

Ans: This is just one example. It is set to 100 for the sake of easy simulation.

6. Zhang Xin from NICT presented “Review of 802.16j traffic models” (document number: 22-12-0042-00-000b).

The following Q&A received:

Ask: Do you know which parameter to change?

Ans: At the moment, we don’t have clear idea on which parameter to be changed. But 802.16j may have larger amount of traffic compared to 802.22b, so we may relax some parameters, such as chaning the mean to a bigger value.

7. The plan in the upcoming face-to-face meeting is to finish the selection criterion document.

8. Chair reminded everyone about the registration and hotel booking of the face-to-face meeting in Atlanta. Teleconference was recessed till 8th May 9:00pm EDT.