IEEE P802.22
Wireless RANs

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| Minutes of the teleconference on July 11, 2011 on regional area smart grid and critical infrastructure monitoring |
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Abstract

This document presents the minutes of the teleconference on July 11, 2011 on regional area smart grid and critical infrastructure monitoring.

**WG teleconference meeting minutes**

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**July 11, 9-10:30 PM ET**

**Attendees:**

Apurva Mody (BAE Systems), Winston Caldwell (Fox), Jerry Kalke (CBS), Gerald Chouinard (CRC), Anthony Franklin (ETRI), Guangzeen Ko (ETRI), Sung Hyun Hwang (ETRI), Upkar Dhaliwal (InvisiTrack), Russ Markhovsky (InvisiTrack), Nancy Bravin (Bravin Consulting), Ivan Reede (AmeriSys Inc), Chang Woo Pyo (NICT), Zhang Xin (NICT), M. Azizur Rahman (NICT)

**Minutes:**

1. Meeting called to order by Apurva Mody
2. The group reviewed the IEEE P802.15.4m PAR and 5C that were prepared by IEEE 802.15 SG4TV and submitted to EC for approval in July 2011 meeting. The group also reviewed few relevant documents i.e., 802.15-10-529-00-leci, 802.15-11-0215-02-04TV and 802.15-11-0279-01-04TV.
3. There was opinion in the group that, from the IEEE P802.15.4m PAR/5C along with other reviewed relevant documents, it seems that the range and coverage of the proposed 802.15.4m PAR is unclear. While the supporting number of user terminals is huge, it doesn’t seem convincing that such huge quantity of user terminals may be available in the 10’s of meters that is usually the range of WPAN. This could be a comment from 802.22 WG and a suggested resolution would be to insert a range (e.g. 500 m) in both the scope and broad market potential sections of the PAR/5C.
4. There were discussions on whether 802.15.4m could work at ranges longer than normal personal area networks (WPAN). While it could work up to several hundred meters, it could be difficult to have long delay spread and round trip delay supported by MAC/ PHY etc. for longer ranges. However, there was also disagreement in the group about this point. There was also opinion that the range would be defined only by power. This could result in distinct identity conflict with 802.22, especially with the proposed study group on smart grid and critical infrastructure monitoring.
5. The interference from narrow band (NB) systems such as 802.15.4m that might use 100 kHz BW could be detrimental to 802.22 as 802.15.4m might be able to use relaxed spectral masks. However, rules in different parts of the world could be different.
6. There was opinion that the claim of reliability in 802.15.4m 5C only stands in short range. Reliability cannot be claimed in long range as 802.15.4 isn’t designed for long range, no such use is known as well. Also the claim by 802.15.4m 5C on demonstrated operation in TVWS by complying with FCC rules lacks support.
7. There was discussion on working cooperatively with 802.15. The possibility of investigating interoperability between 802.22 and 802.15.4 was also discussed. This may be difficult but could be studied if there is enough interest.
8. Meeting adjourned by Apurva Mody