# **IEEE 802.24 Smart Grid Group**

Project	IEEE 802.24
Title	IEEE 802.24 Smart Grid TAG Minutes, Orlando, FL, USA, March 18-20 2013
Date Submitted	March 20, 2013
Source	[James Gilb] E-mail: [last name at ieee dot org] [Tensorcom] []
Re:	
Abstract	IEEE 802.24 TAG Ad-Hoc Group minutes, March 2013, Orlando, FL, USA.
Purpose	
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## **IEEE Project 802.24**

Meeting Minutes: March 18-20, 2013

## Monday PM2 Session - March 18, 2013

Meeting called to order at 16:00 – by James Gilb

Secretary: Phil Beecher

Gilb briefly presents agenda 24-13-009-04 then changes his mind.

Gilb presents opening report 4-13-010-02. Is there a voter list? Gilb will put the list onto the website.

Gilb shows how to login to IMAT to claim voting rights and describes reciprocal credit rules.

Gilb shows and reads the Guidelines for IEEE-SA meetings. There are no questions or comments.

16:12 - Gilb presents the agenda 24-13-009-04

Question about the agenda format. Gilb states that it is in Open Office format (.ods)

No further discussion

Gilb asks if there are an objections to approving agenda 24-13-009-04

There are no objections, agenda is approved by unanimous consent.

Gilb shows opening report 4-13-010-02.

Motion to approve minutes: 24-13-008-00, 24-12-002-00

Moved Beecher, Wi-SUN Alliance

Second: Farrokh Khatibi, Qualcomm

No discussion or objections, approved by unanimous consent.

Gilb reviews the action items from previous meetings.

- Reference SG-Network requirements Matt Gillmore due- 02/08/2013 Finished
- Reference 1801 & 1450 document etc due- 02/08/2013: Khatibi to send to Gilb
- NIST matrix contributions for each wireless standard.
  - 802.11 Kraemer due- 02/08/2013: In process?

 802.15.4 – Ruben Salazar, George Flammer, John Buffington, Phil Beecher: Discuss during Tuesday lunch.

- 802.16 Doug Gray and Tim Godfrey due- 02/08/2013: Finished
- 802.20 Radhashksin Canchi due- 02/08/2013: Unknown status
- 802.21 Subir Das due- 02/08/2013: Gilb to find Das
- 802.22 Apurva Mody due- 02/08/2013: Gilb to find Mody
- Ballot the following
  - 802.22 SIF: Complete, passed, approved by EC
  - 802.11 SIF: Complete, passed, approved by EC
  - 24-12-0033-02, Catalog of standards Complete
  - Response to SGIP model: Take up at current meeting
- Start publicity committee:In process?

Email ballot on 24-12-0033-02: There were 2 no votes, both with comments

Bob Heile commented was that we should add 802.15.4 as a separate entry in addition to 4g and 4e.

Paul Nikolich commented that we should add approved amendments of 802.11, e.g., 802.11aa, 802.11ad, and 802.11ae.

Discussion about whether 802.15.4 be included in its entirety. Recommendation that we should add 802.15.4 as a separately numbered solution. Gilb asks for the consensus from the group as to whether this should be included.

Gilb calls for a straw poll:

All in favor of adding 802.15.4-2011 as a separate entry in the 802 catalog of standards.

Discussion ensues. View that adding base standard might add confusion because it ends up as circular reference. It may be better to reference the base standard and specify the relevant amendments.

Yes: 3, No: 16, Abstain: 11

There is not support to do this. How shall we resolve this?

Add text that says "802.15.4g-2012 and 802.15.4e-2012 are amendments to the 802.15.4-2011 base standard."

Will the amendments be superseded during a revision? They will be archived. Discussion ensues

Submission Page 3 James Gilb

Yes: 22, No: 0, Abstain: 7

Can we ask the commenter for a list of which PHYs/features should be included for Smart Grid context? This might be a waste of time, and maybe we should craft the text to save time.

Can we ask the commenter what might be acceptable? Yes

Straw Poll: All in favor of adding "the Q-QPSK PHY from IEEE Std 802.15.4-2011" as a separate entry.

Yes: 18, No: 0, Abstain: 10

Gilb moves to discussion concerning Nikolich comment on 802.11.

802.11aa – could be relevant for video apps in smart grid applications

802.11ad - likely not to be relevant for Smart Grid

802.11ae – prioritized management frames could be relevant to Smart Grid applications

17:43: Gilb reminds group that we will meet at 2pm tomorrow for PAP02. Gilb will forward applicability document for Mesh networks

17:44 Gilb recesses the meeting

### Tuesday PM1 Session – March 19, 2013

Joint session, conference call with PAP 2.

Called to order at 14:00. Nada Golmie chair PAP 2 meeting, Gilb chair of 802.24.

Secretary is Gilb

Agenda presented by Golmie

- 1. Review & Approve Today's Agenda
- 2. Approve March 5<sup>th</sup> minutes
- 3. Current Tasks
- Input from IEEE 802.24
- Current tool assessment with regards to IEEE 802.11 path loss models, power, and antenna heights.
- Latency modeling
- Review deadlines/schedule
- 4. New business& announcements

Agenda approved without objections.

Minutes from March 5<sup>th</sup> approved without objections

Doug Gray presents a response to comments forwarded by Bruce Kraemer. This document was uploaded to the 802.24 site as 24-13-0013-00.

Consensus among 802.24 members is that the current tool is appropriate for the first hop, but much more complicated tools are required in order to determine coverage in a mesh network.

AI: David Howard will send out to the 802.24 reflector a request for sample data of mesh development.

Suggestion to request that 802.24 members to review section 6 of draft NISTR7761 and respond by April 12 with comments, corrections, examples of tradeoffs in the mesh Smart Grid networks that affect latency, cost, number of hops. Ideally submissions would be modifications or additions to the current text. The intention of NIST PAP 2 is to complete this section and publish it as a final NISTR.

Suggestion is to review this during the Tuesday PM2 and Wednesday PM2 sessions instead. This has support, a modification to the agenda will be proposed at the beginning of the Tuesday PM2 meeting.

# Tuesday PM2 Session – March 19, 2013

#### Called to order at 1600

- Consider a modification to agenda. Now it is revision 6.
  - Discuss if 802.24 join SGIP 2.0?
  - review 6.3 of NISTR 7761
  - new business and publicity will be tomorrow.
  - Request to put on agenda item to finish review of 802 catalog of smart grid standards
  - Now agenda is revision 7. Chair asks if there are an objections to approve agenda (r7)? No objections, the modified agenda is approved.
- 802.24 and SGIP 2.0?
  - 802.24 cannot join on its own. IEEE-SA can and will join.
  - When discussed last time IEEE-SA was considering .. what made the decision to join? They had been waiting to decide the value of SGIP .. only \$3k was a reasonable cost to make sure IEEE interests are represented.
  - Who is the primary interface? 802.24 represents 802. Primary rep is Chuck Adams and Bill.
  - Which SGIP group will we have reps in? It will depend if we decide to send reps from 802.24.
  - From 802 point of view PAP02 is the most important group

 Chair suggests to point someone in the group to represent us in SGIP. They would need to attend appropriate meetings and provide reports to the 802.24 group at meetings and as needed

- Has IEEE-SA set any requirements on the representatives? no.
- There can only be 8 reps from each SGIP member.
- AI: Chair will send out request for volunteers to be an IEEE representative to SGIP 2.- to act as a point of contact for 802.24, closes in 2 weeks. PAP2 meets every other week electronically, Individual will need to attend calls and may attend face to face session. Individual will have an affiliation of IEEE and cannot also represent another interest. Nature of the relationship between SGIP 2.0 and IEEE 802.24 is as an observer through the appointed point of contact. Chair will appoint representative if more than one individual responds.
- Next SGIP f2f is in November, the PAPs can meet via calls or in addition to that.
- Reviewed 24-13-0014
  - reviewed 6.3 on mesh
    - reviewed network topologies
    - and the great wordsmithing of March 19, 2013 began
- 802.22 chair, Apurva Mody, BAE Systems, presented 802.22 input for the wireless capability matrix 2012.
  - AI: change 802.22b to P802.22b draft amendment throughout the capability matrix. (since P802.22b is still a project with draft and not approved amendment.)
  - AI: add details on the FEC
  - AI: add URL for broadcaster channel Model?
  - AI: search for 'detail' and make sure that there are details for those items. (line 51, 53, etc) although this isn't a show stopper
  - AI: post the document on the reflector so everyone can see the changes. Vote planned for tomorrow to accept

# Wednesday PM2 Session - March 20, 2013

Recorded by Kuor-Hsin Chang

Gilb called the meeting to order.

Gilb reviewed doc 22-13-0046-01 with the group again.

Motion is to approve 22-13-0046-01 as the 802.22 contribution to the SGIP PAP 2 Wireless Matrix, adding that "Please note that for a fixed device the total EIRP power limit is 36 dBm for a TVWS device and the conducted power limit is 30 dBm. This may also be achieved by using lower conducted power and higher antenna gain."

Moved by Mody, seconded by Kraemer

No dicussion.

There were no objections. Motion passes.

The group discussed resolutions to address comments from Kraemer and Heile regarding document 802.24-WG15-1. After some discussion, the Kraemer made the following motion:

Motion is to add to 24-12-0033-02 the title and scope for 802.15.4-2011 to the document as part of the 802.24-WG15-1 and add before the amendments the following text "Included in the above standard of particular interest to Smart Grid networks are the following amendments." Also add "The O-QPSK PHY specified in Clause 10 of this standard is widely deployed for home area networking and smart metering applications."

Moved by Kraemer and second by Waheed Khurram

After discussion, Gilb asked if there were any objections. Hearing none, the motion passed.

Motion is to endorse doc 24-12-0033-02 with the approved edits as the group of standards for Smart Grid network applications and request the EC to approve and forward to IEEE SA to be posted on appropriate IEEE Smart Grid web site; 802.24 chair is empowered to make editorial changes and corrections.

Moved by Beecher, seconded by Salazar.

Vote was 9 "YES" votes, 0 "No" vote, and 0 "Abstain", motion passes.

Khatibi reviewed changes in doc 24-13-0014-01-0000with the group. Salazar commented on the changes and the group discussed Salazr's comment. The group also discussed how to address the term "NAN" more accurate in the document and reached the consensus of adding the following text to the document:

Many considerations that are explained below with respect to NAN may also apply to mesh networks in Wide Area Networks (WAN) and Field Area Network (FAN).

Khatibi reviewed doc 24-13-0015-00-0000 with group and solicited inputs. The inputs can be submitted to either 802.24 TAG or PAP 2.

Motion is to approve document 24-13-0014-02 with editorial changes allowed as 802.24's review and comments on Draft section 6 of SGIP NISTR7761 v2.0 and submit to SGIP PAP02.

Moved by Khatibi and seconded by Kurram:

No discussion.

The motion was approved with unanimous consent.

The group discussed the publicity plan. The publicity plan includes four announcements per year that are aligned to relevant events, maintain list of relevant events, expand catalog of standards to include information on applicability and tradeoffs, and update catalog of standards. Relevant events include the following:

- GSC17 in Korea
- Distributech (annual, Jan-Feb). November
- Smart Grid World Forum (annual, December)
- ISGT (regionally)
- SGIP 2.0
- PES T&D (transmission and distribution)
- PES annual general meeting

Gilb reviewed the action items with the group. Buffington brought up that the Chair needs to schedule conference calls to review 802.15.4g and ZigBee submittal. Buffington also asked the Chair to update 802.24 website for voter information.

Bill Ash proposed that the 802.24TAG can work on documents thatoutline the IEEE 802 standards that are related to smart grid applications and briefly describe how these standards can be used in smart grid. Bill will create one-page document to summarize the proposed effort and scope and circulate it in the email reflector.

The meeting was adjourned at 6:00PM.

#### Attendees

Name Affiliation

William Ash IEEE Standards Association (IEEE-SA)

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Tuncer Baykas Tohoku University PHILIP BEECHER Wi-SUN Alliance

John Buffington Itron Inc.

Chris Calvert Landis Gyr Group Worldwide Radhakrishna Canchi Kyocera Communications Inc.

Kuor-Hsin Chang Elster Solutions

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