Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: TG3m November 2015 Report

Date Submitted: November 2015

Source: James Gilb

Contact: James Gilb

E-Mail: last name at ieee dot org

Re: TG3m report

Abstract: Report for the TG3m meeting in Dallas, TX

Purpose: 802.15.3 revision.

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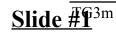
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Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
  - **"Shall inform the IEEE (or cause the IEEE to be informed)" of the identity of each "holder of any potential Essential Patent Claims of which they are personally aware" if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents**
  - **"Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of potential Essential Patent Claims" (that is, third parties that are not affiliated with the participant, with the participant's employer, or with anyone else that the participant is from or otherwise represents)**
- **The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6

IEEE-SA Standards Board Operations Manual

http://standards.ieee.org/develop/policies/opman/sect6.html#6.3

Material about the patent policy is available at

http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit http://standards.ieee.org/about/sasb/patcom/index.html

This slide set is available at https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt
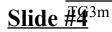
Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:

    - Either speak up now or
    - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
    - Cause an LOA to be submitted

Other Guidelines for IEEE WG Meetings

All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.

- **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**

- **Don't discuss specific license rates, terms, or conditions.**
  - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
    - Technical considerations remain primary focus

- **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**

- **Don't discuss the status or substance of ongoing or threatened litigation.**

- **Don't be silent if inappropriate topics are discussed … do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

Accomplishments

- Approve conditional submission to Sponsor ballot

- Approve liaising draft to ISO/IEC JTC1 under PSDO agreement

Conditional approval

- Date ballot closed: 22 October 2015

- Ballot tally: 74 yes, 2 no, 4 abstain (97% approve)

  - One no voter has changed to yes in current recirculation.

  - Remaining no voter has identified only one comment as remaining unsatisfied (see next page)

Comment supporting no vote

- Comment: As association request and response are not protected at all, what happens if the rogue PNC will assing joining member wrong DEVID, which is duplicate with someone already in the network. When the valid DEV then tries send authetnicated frames to the real PNC using wrong DEVID, there will be nonce collisions. Is there something in the system that will prevent this? As the security message frames are not authenticated either, that means that attacker can do address translation for them too, i.e., change the address of the frame from the one that DEV thinks he has to the one that real PNC thinks he has, and other way around. Unless the security protocol run over those messages specifically authenticate the DEVID of the device, and not the full 48-bit address of the device, this phase will not detect this attack. After the security protocol, I think the device moves to use the encrypted frames, thus it might cause collision.

- Suggested resolution: blank

- Response Rejected: The Security Message command was introduced to allow 4-way handshake key agreement protocols (or 3-way for key agreements like ECMQV). The frames are authenticated by the handshake process and at this point, the DEV does not have a symmetric key and therefore, authentication is meaningless. The key agreement protocol will ensure the identities of the DEVs.

- As for a rogue PNC assigning an invalid DEVID, the attempt to authenticate with the true PNC would fail (it checks the DEVID).

- No change required.

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Recirculation schedule

- Current recirculation ends 15 November 2015
- BRC conference
  - 18 November 2015
- Recirculation #2:
  - 20 November 2015 to 5 December 2015
- BRC conference call
  - 7 December 2015
- Recirculation #3
  - 9 December 2015 to 24 December 2015

WG motion

- 802.15 requests EC approval to forward P802.15.3RevA-DF2 to ISO/IEC JTC1 SC6, for information under the PSDO agreement, once Sponsor balloting begins.

- WG vote

  – Moved Gilb, seconded Alfvin

  –

TG motion

- Motion: 802.15.3m requests that 802.15 request conditional approval from the EC to submit 802.15.3RevA draft amendment to Sponsor Ballot pending recirculation.

- TG vote
  - Moved: Second:

BRC formation

- TG affirms the formation BRC members: James Gilb (Chair), Thomas Kuerner, Andrew Estrada, Ko Togashi, Pat Kinney.

- TG vote

  –

BRC conference call

- 18 November, 2015, 22:00-23:00 PDT
  - 29 October, 2015 6:00-7:00 CET, 14:00-15:00 JST
  - Agenda
    - Resolve comments from WG letter ballot

Meeting Accomplishments

- Resolved comments from comment collection

- Voted to go to WG Letter Ballot

- Voted to form BRC

WG motions

Motion for conditional approval

- Move that 802.15 WG start a WG Letter Ballot requesting approval to forward document 802.15.3RevA-D00.pdf, edited in accordance with the instructions in document 15-15-0715-02-003m, to Sponsor Ballot pending the completion and inclusion of the edits in the draft.
  - Moved: Gilb
  - Second: Alfvin

WG motion

- Motion: 802.15 requests conditional approval from the EC to submit 802.15.3RevA draft amendment to Sponsor Ballot pending recirculation.

- WG vote
  - Moved: , Second:
  - Yes: , No:, Abstain:

Motion to form BRC

- Move that 802.15 WG approve the formation of a Ballot Resolution Committee (BRC) for the WG balloting of the 802.15.3RevA draft standard with the following membership: James Gilb (Chair), Thomas Kuerner, Andrew Estrada, Ko Togashi, Pat Kinney. The 802.15.3m BRC is authorized to approve comment resolutions and to approve the start of recirculation ballots of the 802.15.3RevA draft on behalf of the 802.15 WG. Comment resolution on recirculation ballots between sessions will be conducted via reflector email and via teleconferences announced to the reflector at least 7 days in advance.
  - Moved: Gilb
  - Second: Alfvin