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

Submission Title: TG4i March 2011 Closing report

Date Submitted: March 2011

Source: James Gilb

Contact: James Gilb

E-Mail: last name at ieee dot org

Re: TG4i March closing report

Abstract: Closing report for the TG4i meeting in Singapore, Singapore

Purpose: 802.15.4 revision.

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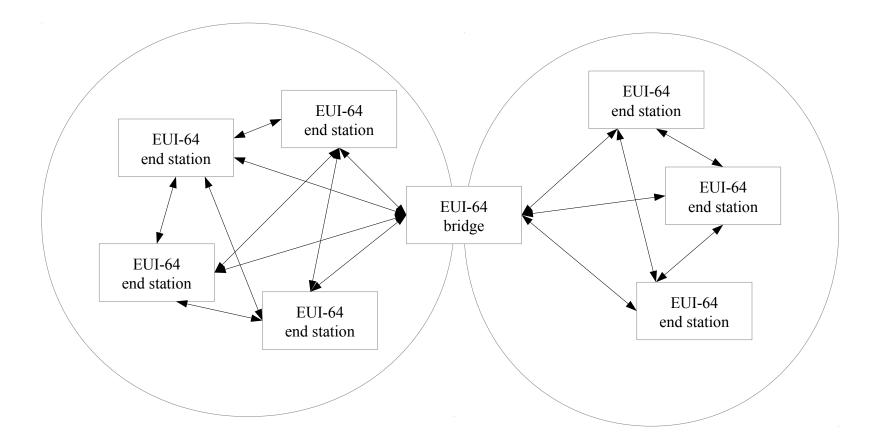
What is the issue

- The current EUI-64 use is not supported by 802.1 standards
- But:
 - "there should be opportunities for 802.15 to leverage the existing Bridging work, rather than creating something new and potentially incompatible with Bridging." (from 802.1 ad-hoc response to 802.15.10 PAR in July 2013).

Bridging between 802.15 DEVs

- Re-use of existing 802.1 Bridging technology would make a great deal of sense
 - rather than inventing something new and potentially incompatible.
- Probably result in changes to existing 802.1 standards (802.1AC and/or 802.1Q) in order to accommodate different MAC address lengths in the Bridging standards.

Example of EUI-64 bridging



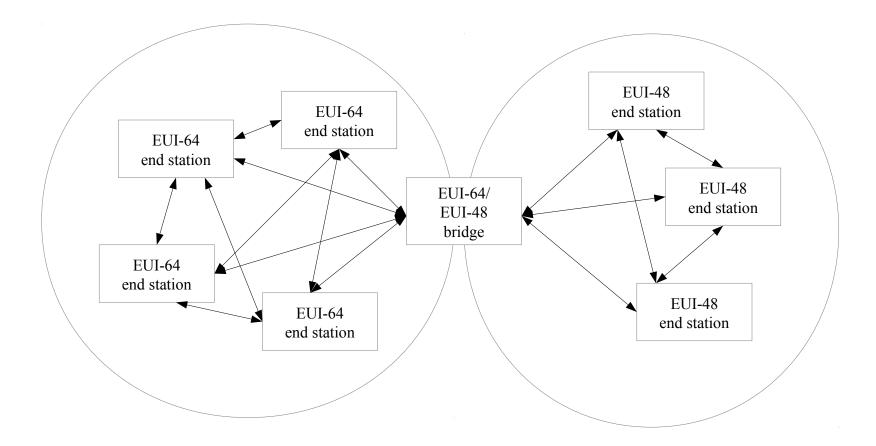
EUI-64 bridging PAR

- Motion: request that the PAR and 5C contained in documents 15-13-0576-01 and 15-13-0579-01, respectively, be approved by the 802.15 WG and that the 802 EC be requested to forward the revised PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and 5C as needed to reflect EC discussion at its closing meeting.
- Moved: Gilb, Second: Beecher

EUI-48 to EUI-64 bridging

- Encode a 48-bit address in the 64-bit address fields of the 802.15 MAC?
- Have special bridge that embeds EU-64 in frame?
- Use special Ethertype?

Example of bridging between EUI-48 and EUI-64



Motion for EUI-48/64 bridging

- Motion: Request that the PAR and 5C contained in documents 15-13-0580-01 and 15-12-0581-00, respectively, be approved by the 802.15 WG and that the 802 EC be requested to forward the revised PAR to NesCom. The 802.15 working group chair and technical editor are authorized to make additional modifications to the PAR and 5C as needed to reflect EC discussion at its closing meeting.
- Moved: Gilb, Second: Beecher