

**P802.15.9**

This PAR is valid until 31-Dec-2015.

**PAR Extension Request Date:** 07-Jun-2015

**Extension Request Submitter Email:** [bheile@ieee.org](mailto:bheile@ieee.org)

**Number of Previous Extensions Requested:** 0

**1. Number of years that the extension is being requested:** 1

**2. Why an Extension is Required:** Project is nearly complete but will not be done by the current expiration date which is the end of this year unless Sponsor Ballot can be completed with only two recirculations (possible but unlikely). Draft has completed Working Group letter ballot. Sponsor Ballot is expected to begin in August 2015 and submission to RevCom is expected during Q1 2016. We are close but not close enough to finish with absolute certainty without the extension.

**3.1. What date did you begin writing the first draft:** 15-Jan-2014

**3.2. How many people are actively working on the project:** 100

**3.3. How many times a year does the working group meet?**

**In person:** 6

**Via teleconference:** 6

**3.4. How many times a year is a draft circulated to the working group via electronic means:** 3

**3.5. What percentage of the Draft is stable:** 100%

**3.6. How many significant work revisions has the Draft been through:** 3

**4. When will/did sponsor balloting begin:** 01-Aug-2015

**When do you expect to submit the proposed standard to RevCom:** 01-Feb-2016

**Has this document already been adopted by another source?:** No

For an extension request, the information on the original PAR below is not open to modification.

**Submitter Email:** [bheile@ieee.org](mailto:bheile@ieee.org)

**Type of Project:** New IEEE Standard

**PAR Request Date:** 02-Oct-2011

**PAR Approval Date:** 07-Dec-2011

**PAR Expiration Date:** 31-Dec-2015

**Status:** PAR for a New IEEE Standard

**1.1 Project Number:** P802.15.9

**1.2 Type of Document:** Recommended Practice

**1.3 Life Cycle:** Full Use

**2.1 Title:** Recommended Practice for Transport of Key Management Protocol (KMP) Datagrams

**3.1 Working Group:** Wireless Personal Area Network (WPAN) Working Group (C/LM/WG802.15)

**Contact Information for Working Group Chair**

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**Contact Information for Working Group Vice-Chair**

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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 12/2012

**4.3 Projected Completion Date for Submittal to RevCom:** 08/2013

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 100

**5.2 Scope:** This Recommended Practice defines a message exchange framework based on Information Elements as a transport method for key management protocol (KMP) datagrams and guidelines for the use of some existing KMPs with the IEEE Std 802.15 and IEEE Std 802.15.7. This Recommended Practice does not create a new KMP.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** Yes

**If yes please explain:** This proposal uses facilities provided by amendment IEEE 802.15.4e. This standard has passed its first Sponsor ballot and is expected to be completed in early 2012.

**5.4 Purpose:** This Recommended Practice describes support for transporting KMPs datagrams to support the security functionality present in IEEE Std 802.15.4 and IEEE Std 802.15.7.

**5.5 Need for the Project:** IEEE Std 802.15 and IEEE Std 802.15.7 have always supported datagram security, but have not provided a mechanism for establishing the keys used by this feature. Lack of key management support in IEEE Std 802.15.4 and IEEE Std 802.15.7 results in weak keys which is a common avenue for attacking the security system. Adding KMP support is critical to a proper security framework. This project will provide a Recommended Practice for the transport of KMP datagrams within these standards. It will also provide guidelines for KMPs like IETF's HIP, IKEv2, IEEE Std 802.1X, and 4-Way-Handshake.

**5.6 Stakeholders for the Standard:** The stakeholders include implementers and those who deploy IEEE Std 802.15.4 and IEEE Std 802.15.7 that need network security and thus need a mechanism for initiating and maintaining the security keys. The stakeholders include consumer electronics manufacturers, building automation, and utilities.

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#### Intellectual Property

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** Yes

**If yes please explain:** It is anticipated that a registry may be needed for KMP IDs. An initial list of KMPs and assigned IDs will be provided within the Recommended Practice. Over time, new KMPs will be developed, vetted elsewhere, then be added as supported KMPs through either an addendum to this Recommended Practice or through a KMP ID registry process.

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**7.1 Are there other standards or projects with a similar scope?:** No

#### 7.2 Joint Development

**Is it the intent to develop this document jointly with another organization?:** No

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**8.1 Additional Explanatory Notes (Item Number and Explanation):** 5.2 and 5.3:

P802.15.4-2011 Title: Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LRWPANs)

P802.15.4e Title: Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs)

Amendment to the MAC sub-layer

P802.15.7 Title: Standard for Short-Range Wireless Optical Communication using Visible Light