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| Project | **IEEE 802.16 Broadband Wireless Access Working Group <**<http://ieee802.org/16>**>** | |
| Title | **Modification of AAI-RNG-ACK Message** | |
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| Source(s) | Jaesun Cha, Soojung Jung, Eunkyung Kim, Anseok Lee, Wooram Shin, Kwangjae Lim  ETRI | E-mail: [jscha@etri.re.kr](mailto:jscha@etri.re.kr)  \*<<http://standards.ieee.org/faqs/affiliationFAQ.html>> |
| Re: | Sponsor Ballot Recirculation on P802.16.1b/D3 | |
| Abstract | This contribution proposes some changes of AAI-RNG-ACK Message format. | |
| Purpose | For discussion in M2M TG and adoption into 16.1b draft | |
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**Modification of AAI-RNG-ACK Message**

Jaesun Cha, Soojung Jung, Eunkyung Kim, Anseok Lee, Wooram Shin, Kwangjae Lim

ETRI

# Introduction

According to the current draft, some parameters are included in AAI-RNG-ACK message to support M2M Group Delegate operation. However, those parameters are almost same as ones included in AAI-RNG-ACK message to support legacy devices. Only the difference is that ranging adjustment parameters are included in AAI-RNG-ACK message only when Ranging Status is set to 0b10 (continue). But, the same operation can be implemented without defining additional parameters because the inclusion of ranging adjustment parameters is already optional.

Another problem is that the current format of AAI-RNG-ACK message is still incomplete. The newly added parameters are included in AAI-RNG-ACK message without corresponding ranging channel index and ranging code index. So, M2M devices which receive the AAI-RNG-ACK message can’t recognize which Ranging Status corresponds to the ranging code that it transmitted.

In this contribution, we propose to reuse the legacy ranging parameters in AAI-RNG-ACK message to support M2M Group Delegate operation instead of defining redundant parameters. We also propose to add some texts to clarify when ranging adjustment parameters are included in case that the same parameters are used to support M2M Group Delegate operation.

# Proposed Texts

----------------- Start of the text proposal --------------------------------------------------------------------------------------

**[*Remedy 1: Modify subclause 6.2.3.3 as follows*]**

**6.2.3.3 AAI-RNG-ACK**

***Add the following texts at the end of 6.2.3.3.***

AAI-RNG-ACK message shall also be used during initial ranging of M2M device group (See 6.2.18.7.4) For initial ranging of M2M groups, if the ABS receives a ranging preamble code dedicated for an M2M group and a ranging status of the detected ranging preamble code is equal to ‘success’, it does not include UL transmission parameter adjustments which corresponds to the detected ranging preamble code in AAI-RNG-ACK message.

**[*Remedy 2: Remove Table 29*]**

----------------- End of the text proposal ---------------------------------------------------------------------------------------