

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Proposed Change on Ranging Purpose for Multicast Operation over IEEE 802.16n	
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Re:	“IEEE 802.16n-11/0020,” in response to Call for Comments on GRIDMAN AWD	
Abstract	Ranging purpose clarification on IEEE 802.16 GRIDMAN Amendment Draft Standard	
Purpose	To discuss and adopt the proposed text in the draft amendment document on GRIDMAN	
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Proposed Change on Ranging Purpose for Multicast Operation over IEEE 802.16n

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1. Introduction

In IEEE 802.16n[2] (i.e., over WirelessMAN-OFDMA[4]), Ranging is performed to support multicast operation to update multicast service flow.

In addition, ranging may be performed during receiving multicast service by an MS in the following cases:

- location update due to multicast zone change
- multicast security key update

This document provides the change on the ranging procedure (i.e., ranging purpose indication and its related-to parameter).

2. References

- [1] IEEE 802.16n-10/0048r2, 802.16n System Requirement Document including SARM annex, July 2011.
- [2] IEEE 802.16n-11/0024, P802.16n Draft AWD, October 2011.
- [3] IEEE 802.16n-11/0025, P802.16.1a Draft AWD, October 2011.
- [4] IEEE P802.16Rev3/D2, IEEE Draft Standard for Local and metropolitan area networks; Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems," October 2011.
- [5] IEEE P802.16.1TM/D2, [Draft] WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems, October 2011.

3. Proposed Text on the IEEE 802.16n Amendment Draft Standard

Note:

The text in **BLACK** color: the existing text in the IEEE 802.16 GRIDMAN AWD

The text in **RED** color: the removal of existing IEEE 802.16 GRIDMAN AWD

The text in **BLUE** color: the new text added to the IEEE 802.16 GRIDMAN AWD

[-----Start of Text Proposal-----]

[Remedy1: Change the text line 6-9 at page 10 in the 802.16n AWD as indicated:]

Bit 5: HR Multicast ~~service flow~~location update. When this bit is set to 1, it indicates the MS is currently attempting to perform location update for multicast operation. ~~the MS is currently a need to update multicast service flow management encodings for multicast transmission due to crossing Multicast Group zone.~~

[Remedy2: Add the following text into line 12 at page 10 in the 802.16n AWD as indicated:]

Insert the following text at the end of 6.3.2.3.6 RNG-REQ (ranging request) message:

The following parameter shall be included in the RNG-REQ message when the MS is attempting to perform HR multicast service flow update or location update due to crossing Multicast Group Zone or the MS is attempting to update multicast security key.

action code for HR multicast (see 11.5)

to indicate the ranging purpose of the MS during receiving multicast service

[Remedy3: Insert the following row at the end of Table 685, line 3 at page 33 in the 802.16n AWD as indicated:]

<u>action code for HR multicast</u>	<u>25</u>	<u>1</u>	<u>Bit0: multicast service flow update</u> <u>Bit1: multicast security key update</u> <u>Bit2: location update due to multicast zone change</u> <u>Bit3-7: Reserved</u>	=
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[-----End of Text Proposal-----]