

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

Murias, Ronald

Membership Status:

Date: 24-Feb-2012

Comment # i-1

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☒ Satisfied ☐ Page 15 Line 28 Fig/Table# Subclause 6.3.9.5.1

In the baseline document, 6.3.9.5.1, "If the SS does not receive a response, the SS shall resend the RNG-REQ at the next appropriate initial ranging transmission opportunity and adjust its power level."

The large number of devices involved dramatically increase the likelihood of collision and therefore unnecessary power increase on re-transmission. The SS/MS/AMS needs to know whether the failure was due to lack of power or to collisions so that it only increases transmit power on retries when absolutely necessary.

Suggested Remedy

Include a broadcast message from the BS indicating that a collision has occurred. This will allow MSs to perform backoff without adjusting transmit power.

GroupResolution

Decision of Group: Rejected

Reason for Group's Decision/Resolution

The commenter does not provide a complete remedy.

Group's Notes

Vote

Favor: 0

Against: 3

Editor's Notes

Editor's Actions

b) none needed

Comment by:

Turner, Michelle

Membership Status:Date: 28-Feb-2012Comment # i-2Document under Review: IEEE P802.16p/D3Ballot ID: sb000p

<u>Comment</u>	<u>Type</u> Technical	<u>Part of Dis</u> <input type="checkbox"/>	<u>Satisfied</u> <input type="checkbox"/>	<u>Page</u> 0	<u>Line</u> 0	<u>Fig/Table#</u>	<u>Subclause</u> 0
----------------	-----------------------	---	---	---------------	---------------	-------------------	--------------------

Clause 1, the draft includes a scope and purpose. There is no need to include it if it's not modifying the scope and purpose of the base. If it is modifying the base then please include editorial instructions as per IEEE style.

Suggested RemedyGroupResolutionDecision of Group: Revised

<insert>

1.7 Support for Machine-to-Machine (M2M) Communications

The M2M communication is referred to as the information exchange between devices through a base station, or between a device and a server in the core network through a base station that may be carried out without any human interaction.

M2M communications is a very distinct capability that enables the implementation of the "Internet of things".

Some of the typical use cases that the M2M communication enables are secured access and surveillance, tracking and tracing, public safety, payment, healthcare, remote maintenance and control, metering, consumer devices and retailing.

In order to enable a range of Machine-to-Machine applications in which the device communications require wide area wireless coverage in licensed bands, and are automated rather than human-initiated or human-controlled for purposes such as observation and control, some MAC protocols and PHY specifications have been changed for enhancement. MAC enhancements and minimal PHY modifications include support of lower power consumption at the device, support by the base station of significantly larger numbers of devices, efficient support of small burst transmission, and improved device authentication.

</insert>

<delete>

1.1 Scope

This amendment specifies IEEE Std 802.16 medium access control (MAC) enhancements and minimal orthogonal frequency division multiple access (OFDMA) physical layer (PHY) modifications in licensed bands to support lower power consumption at the device, support by the base station of significantly larger numbers of devices, efficient support for small burst transmissions, and improved device authentication.

1.2 Purpose

This amendment describes enhancements to enable a range of Machine-to-Machine applications in which the device communications require wide area wireless coverage in licensed bands, and are automated rather than human-initiated or human-controlled for purposes

such as observation and control.
</delete>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Bims, Harry Membership Status: Date: 3-Mar-2012

Comment # **i-3** Document under Review: **IEEE P802.16p/D3** Ballot ID: **sb000p**

Comment Type **Technical** Part of Dis ☒ Satisfied ☐ Page **5** Line **14** Fig/Table# Subclause **6.3.1**

the text uses "may only be" which does not indicate that this is a recommended action

Suggested Remedy

Change "may only be" to "should be"

GroupResolution Decision of Group: **Accepted**

Change to:
<delete>may only be</delete><insert>should be</insert>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

Bims, Harry

Membership Status:

Date: 3-Mar-2012
21:01:12 EST

Comment # i-4

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 9 Line 17 Fig/Table# Subclause 6.3.2.3.5

When an M2M device does not know the new M2M Group Zone, this condition is serious enough for it to be recommended that RNG-REQ message include the TLV parameter

Suggested Remedy

Change "may be included" to "should be included"

GroupResolution

Decision of Group: Revised

Change to:

<delete>may be included</delete><insert>shall be included</insert>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

soojung Jung

Membership Status:

Member

Date: ?

Comment # 1001

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 5 Line 24 Fig/Table# Tabl Subclause 6.3.2.1

DL MAC PDU without payload is defined in Table 29c and Table 29d.
Table 8a and Table 9a are wrong table numbers.

Suggested Remedy

[Modify Reference table in Table 4 on page 5 as follows]

Table 8, Table 9, Table 10-Table 15

<insert>[Table 29c, Table 29d](#)</insert><delete>Table 8a, Table 9a</delete>

[Modify MAC PDU type volume in Table 4 on page 5 as follows]

DL:This encoding is not defined. DL M2M MAC signaling header type I. MAC PDU without data payload, with a 3-bit type field. see
<insert>[Table 29c](#)</insert><delete>Table 8a</delete> for type encoding definitions

GroupResolution

Decision of Group: Accepted

(1) Modify Reference table in Table 4 on page 5 as follows:

Table 8, Table 9, Table 10-Table 15

<insert>[Table 29c, Table 29d](#)</insert><delete>Table 8a, Table 9a</delete>

(2) Modify MAC PDU type volume in Table 4 on page 5 as follows:

DL:This encoding is not defined. DL M2M MAC signaling header type I. MAC PDU without data payload, with a 3-bit type field. see
<insert>[Table 29c](#)</insert><delete>Table 8a</delete> for type encoding definitions

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions

a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1002

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 5 Line 27 Fig/Table# 4 Subclause 6.3.2.1

The superscript notation for footnote in Table 4 should be corrected from "a" to "*". Also, the corresponding footnote is currently missing.

Suggested Remedy

Adopt the proposed text in contribution 16-12-0168-00-000p or its latest version.

GroupResolution

Decision of Group: Rejected

Reason for Group's Decision/Resolution

The same description already exists in the reference standard (REV3/D3)

Group's Notes

Vote:

Favor: 0

Against: 1

Editor's Notes

Editor's Actions b) none needed

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: soojung Jung

Membership Status: Member

Date: ?

Comment # 1003

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 6 Line 25 Fig/Table# Subclause 6.3.2.1.2.2.3

connected state is not defined in REV3 system.

Suggested Remedy

[modify texts on page 6, line 25 as follows]

When an M2M device in <insert>Normal Operation mode</insert><delete>connected state</delete> detects an abnormal power down event, it sends an M2M abnormal power down report signaling header indicating that an abnormal or involuntary power down has occurred. The M2M abnormal power down report signaling header is defined in Table 29b.

GroupResolution

Decision of Group: Accepted

Modify texts on page 6, line 25 as follows:

When an M2M device in <insert>Normal Operation mode</insert><delete>connected state</delete> detects an abnormal power down event, it sends an M2M abnormal power down report signaling header indicating that an abnormal or involuntary power down has occurred. The M2M abnormal power down report signaling header is defined in Table 29b.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1004

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 8 Line 15 Fig/Table# Subclause 6.3.2.3.5

The text in Section 6.3.2.3.5 requires some clean-up for consistency. In particular, the descriptions for the 8 bits of ranging purpose indication should be written in a consistent fashion.

Suggested Remedy

Adopt the proposed text of contribution 16-12-0157-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted-Modified

Adopt proposed texts in IEEE802.16-12-0157-01-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

soojung Jung

Membership Status: Member

Date: ?

Comment # 1005

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Editorial

Part of Dis ☐ Satisfied ☐

Page 10

Line 12

Fig/Table# Tabl

Subclause 6.3.2.3.9.31

syntax error

Suggested Remedy

The identifier of the M2M device group of which the M2M device is a member <delete>of</delete>

GroupResolution

Decision of Group: Accepted

Modify texts as follows:

The identifier of the M2M device group of which the M2M device is a member <delete>of</delete>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: soojung Jung

Membership Status: Member

Date: ?

Comment # 1006

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 10 Line 28 Fig/Table# Subclause 6.3.2.3.9.32

Clarification of the sentence

Suggested Remedy

The BS sends this message to the M2M device to provide security information <insert>[that the M2M device uses](#) </insert>to derive the currently used multicast security key, M2MGTEK.

GroupResolution

Decision of Group: Accepted

Modify texts as follows:

The BS sends this message to the M2M device to provide security information <insert>[that the M2M device uses](#) </insert>to derive the currently used multicast security key, M2MGTEK.

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: soojung Jung

Membership Status: Member

Date: ?

Comment # 1007

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 10 Line 49 Fig/Table# Tabl Subclause 6.3.2.3.9.32

Since M2MGTEK_COUNT is used by M2M device, 'MS' should be changed to 'M2M device'.

Suggested Remedy

The current M2MGTEK_COUNT value that the <delete>MS</delete><insert>[M2M device](#)</insert> uses to derive the M2MGTEK

GroupResolution

Decision of Group: Accepted

Modify texts as follows:

The current M2MGTEK_COUNT value that the <delete>MS</delete><insert>[M2M device](#)</insert> uses to derive the M2MGTEK

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

Jaesun Cha

Membership Status:

Member

Date: ?

Comment # 1008

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment

Type Technical

Part of Dis

☐

Satisfied

☐

Page 11

Line 9

Fig/Table#

Subclause 6.3.2.3.10

M2M multicast traffic reception timer is included in DSA-REQ and DSC-REQ. But, it should be also included in DSA-RSP and DSC-RSP if they are transmitted by BS.

Suggested Remedy

Adopt texts in IEEE 802.16-12-00xx-00-000p-Clarification of M2M Multicast Traffic Reception Timer.docx

GroupResolution

Decision of Group:

Accepted-Modified

Adopt proposed texts in IEEE 802.16-12-0205-01-00p

Reason for Group's Decision/Resolution

Group's Notes

reopen (Wed 11:08 AM)

Editor's Notes

Editor's Actions

a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: soojung Jung

Membership Status: Member

Date: ?

Comment # 1009

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 12 Line 15 Fig/Table# Subclause 6.3.2.3.26

M2M paging parameters defined in section 11 and ranging backoff start are included in MOB_PAG-ADV message, not in DREG-CMD message

Suggested Remedy

<delete>

The following TLV may be included when paging an M2M device:

M2M Paging Parameter (see 11.17.7)

The following TLV may be included when paging an M2M device:

Ranging backoff start (see 11.17.8)

</delete>

GroupResolution

Decision of Group: Accepted

Adopt the following change:

<delete>

The following TLV may be included when paging an M2M device:

M2M Paging Parameter (see 11.17.7)

The following TLV may be included when paging an M2M device:

Ranging backoff start (see 11.17.8)

</delete>

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

Comment by: soojung JungMembership Status: MemberDate: ?Comment # 1010Document under Review: IEEE P802.16p/D3Ballot ID: sb000pComment Type Technical Part of Dis ☐ Satisfied ☐ Page 12 Line 62 Fig/Table# Subclause 6.3.2.3.51

TLV name is wrong.

Suggested Remedy

M2M device group paging parameter is a compound TLV that provides a group paging method of paging all M2M devices belonging to an M2M device group. Each M2M device group paging parameter TLV contains <insert>M2MCID</insert><delete>M2M-device-group ID</delete> TLV identifying an M2M device group paged and Action code TLV which identifies the operation of M2M devices after receiving the MOB PAG-ADV. According to the value of Action code TLV, other TLVs (e.g., Multicast transmission start time TLV in Action code 0b10) may be included in this M2M device group paging parameter TLV.

GroupResolutionDecision of Group: Accepted

Modify texts as follows:

M2M device group paging parameter is a compound TLV that provides a group paging method of paging all M2M devices belonging to an M2M device group. Each M2M device group paging parameter TLV contains <insert>M2MCID</insert><delete>M2M-device-group ID</delete> TLV identifying an M2M device group paged and Action code TLV which identifies the operation of M2M devices after receiving the MOB PAG-ADV. According to the value of Action code TLV, other TLVs (e.g., Multicast transmission start time TLV in Action code 0b10) may be included in this M2M device group paging parameter TLV.

Reason for Group's Decision/ResolutionGroup's NotesEditor's NotesEditor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by:

soojung Jung

Membership Status: Member

Date: ?

Comment # 1011

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 13 Line 31 Fig/Table# Subclause 6.3.2.3.98

Clarification of boradcast and multicast transmission of MAC control message.

Suggested Remedy

The BS shall send a MOB MTE-IND message to a group of M2M devices to indicate the end of multicast transmission by using either broadcast manner or multicast manner. In case of broadcast manner, M2M management CID ~~will be~~<insert>is</insert> used for sending the MOB MTE-IND message<insert> and the MOB MTE-IND message is not encrypted</insert>. If <insert>a MOB MTE-IND message is multicast and </insert>the Multicast SA is established for the group of these M2M devices then the MOB MTE-IND shall be encrypted using the established Multicast SA (see 7.2.2.2.14 for details on encryption method).

GroupResolution

Decision of Group: Accepted

Modify texts as follows:

The BS shall send a MOB MTE-IND message to a group of M2M devices to indicate the end of multicast transmission by using either broadcast manner or multicast manner. In case of broadcast manner, M2M management CID ~~will be~~<insert>is</insert> used for sending the MOB MTE-IND message<insert> and the MOB MTE-IND message is not encrypted</insert>. If <insert>a MOB MTE-IND message is multicast and </insert>the Multicast SA is established for the group of these M2M devices then the MOB MTE-IND shall be encrypted using the established Multicast SA (see 7.2.2.2.14 for details on encryption method).

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1012

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 14 Line 34 Fig/Table# 229b Subclause 6.3.2.3.99

According to the decision in the last meeting, the information regarding Num_M2MCID in MGMC message is defined by 4 bits, instead of TBD.

Suggested Remedy

Adopt the proposed text in contribution 16-12-0167-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted

Adopt proposed texts in IEEE802.16-12-0167-00-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1013

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 19 Line 11 Fig/Table# Subclause 6.3.22.11.3.1

The current text in Section 6.3.22.11.3.1 is not properly written as several grammatical errors can be identified.

Suggested Remedy

Adopt the proposed text in contribution 16-12-0161-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted-Modified

Adopt proposed texts in IEEE802.16-12-0161-01-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1014

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Editorial Part of Dis ☐ Satisfied ☐ Page 20 Line 44 Fig/Table# Subclause 6.3.34

The term "machine to machine" in the title of Section 6.3.34 should be abbreviated as "M2M" for consistency.

Suggested Remedy

Adopt the proposed text of contribution 16-12-0158-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted

Adopt proposed texts in IEEE802.16-12-0158-00-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1015

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 21 Line 33 Fig/Table# Subclause 6.3.35

The text of Section 6.3.35 is written in improper standard language. In particular, the word "tries" should be replaced by certain modal verbs.

Suggested Remedy

Adopt one of the options suggested in contribution 16-12-0159-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted-Modified

Adopt Option 2 in IEEE802.16-12-0159-00-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1016

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Editorial Part of Dis ☐ Satisfied ☐ Page 27 Line 13 Fig/Table# 464 Subclause 8.4.5.4.4.1

For consistency with IEEE 802.16e, the spacing between words in "Usage" column of Table 464 should be underscored.

Suggested Remedy

Adopt the proposed text in contribution 16-12-0165-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted-Modified

Change all the occurrence of Table number 464 to 465

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Lei Zhou

Membership Status: Member

Date: 2012/03/04

Comment # 1017

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 30 Line 29 Fig/Table# 654 Subclause 11.13.49

In current P802.16p/D3, T32 timer is used for backup procedure of network reentry based on GD when group member can't hear any confirmation from BS. But detail value of T32 timer is TBD. This comment proposes to set detail value for T32 timer.

Suggested Remedy

Adopt the proposed text in IEEE802.16-12-0149-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted-Modified

Adopt proposed texts in IEEE802.16-12-0149-02-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: Ping-Heng Kuo

Membership Status: Member

Date: 2012/03/05

Comment # 1018

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 39 Line 54 Fig/Table# Subclause 11.17.5

The value of New M2MCID has been changed to 16bits, but it has not been updated correspondently in the TLV description.

Suggested Remedy

Adopt the proposed text in contribution 16-12-0169-00-000p or its latest version.

GroupResolution

Decision of Group: Accepted

Adopt proposed texts in IEEE 802.16-12-0169-00-000p

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done

2012/04/05

802.16-12-0206-03-Gdoc

Comment by: soojung Jung

Membership Status: Member

Date: ?

Comment # 1019

Document under Review: IEEE P802.16p/D3

Ballot ID: sb000p

Comment Type Technical Part of Dis ☐ Satisfied ☐ Page 55 Line 8 Fig/Table# Subclause 11.18.4

Neighbor M2M Group Zone Indication TLV does not include neighbor BSIDs. So, it's better to add additional texts into value column to clarify the order of neighbor BSs included in this TLV.

Suggested Remedy

[Modify texts in value column as follows]

<insert>[M2M_GROUP_ZONE_ID supported by neighbor BSs. The order of neighbor BSs included in this TLV is same as the order of neighbor BSs included in MOB_NBR-ADV message](#)</insert>

```
Bits 0-7: N_NEIGHBORS
for(i=0; i< N_NEIGHBORS; i++) {
M2M_GROUP_ZONE_ID (16bits)
}
```

GroupResolution

Decision of Group: Accepted

Modify texts in value column as follows;

<insert>[M2M_GROUP_ZONE_ID supported by neighbor BSs. The order of neighbor BSs included in this TLV is same as the order of neighbor BSs included in MOB_NBR-ADV message](#)</insert>

```
Bits 0-7: N_NEIGHBORS
for(i=0; i< N_NEIGHBORS; i++) {
M2M_GROUP_ZONE_ID (16bits)
}
```

Reason for Group's Decision/Resolution

Group's Notes

Editor's Notes

Editor's Actions a) done