**Item Number:** 266
**Page Number** 90
**Line Number:** 21
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| How does the SS IP address differ from the TFTP Server Provisioned SS Address? | Clarity. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** referred to group
**Notes:** Text has to be revised.

---

**Item Number:** 267
**Page Number** 91
**Line Number:** 6
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Add bit numbers to figure 34 | Clarity for field lengths. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 268
**Page Number** 92
**Line Number:** 6
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| The REG-RSP message must contain CIDs for the service flows. | There are no DSA messages sent for these flows to associate CIDs. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** rejected
**Notes:**

---

**Item Number:** 269
**Page Number** 92
**Line Number:** 7
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Add reference to section 2.3.5.4 for service flow error encodings. | clarity |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 270
**Page Number** 92
**Line Number:** 22
**Commentor Name:** Stanwood Ken

**Description of Edi**

Move lines 22-34 to the RNG-RSP message.

**Reason for Edit:**

The concept of a basic CID and a secondary management CID separate from the user data CIDs is in the system for a reason. It was agreed that there are small, quick response messages (power adjustment, etc) that must be handled quickly but are short enough to not threaten the QoS of other connections (Basic CID). There are also higher level management messages that tend to be larger and more delay tolerant such as configuration file TFTP, SNMP, etc (secondary management CID). After meeting 7.5(?) in Boulder, there was an action to divide up management messages between these two categories, but it never happened.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-modified
**Notes:** Should be lines 22-29.

---

**Item Number:** 271
**Page Number** 92
**Line Number:** 39
**Commentor Name:** Hunter Wayne

**Description of Edi**

change the text from "As defined in 2.3" to read "As defined in section 2.3"

**Reason for Edit:**

Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 272
**Page Number** 92
**Line Number:** 55
**Commentor Name:** Stanwood Ken

**Description of Edi**

Insert space between "SS" and "capability"

**Reason for Edit:**

typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 273
**Page Number** 92
**Line Number:** 64
**Commentor Name:** Condie Mary

**Description of Edi**

Delete ", including MAC version". Insert "The MAC version is encoded as in Figure xx.".
Add figure number to MAC version encoding. Indicate bit numbers on figure.
Open Issue - how are MAC versions numbered?

**Reason for Edit:**

MAC Version is not in the Registration request as is mentioned in the sentence. MAC
version encoding is unclear.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** accepted
**Notes:** Table needs header (as in Table 15), Version Code. The current is Version 1.

**Item Number:** 274
**Page Number** 93
**Line Number:** 19
**Commentor Name:** Condie Mary

**Description of Edi**
Add bit numbers to this figure and all figures that require it.

**Reason for Edit:**
Clarity - need to know field sizes

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 275
**Page Number** 94
**Line Number:** 56
**Commentor Name:** Hunter Wayne

**Description of Edi**
change the text from "field is one octect." to read "field is one octet."

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 276
**Page Number** 95
**Line Number:** 36
**Commentor Name:** Eklund, Carl

**Description of Edi**
replace s by bytes

**Reason for Edit:**
wonders of word processing

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 277
**Page Number** 95
**Line Number:** 40
**Commentor Name:** Stanwood Ken

**Description of Edi**
eliminate TBD

**Reason for Edit:**
TBDs are evil

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** TBD
**Resolution Status:** unresolved
**Notes:**

---

**Item Number:** 278
**Page Number** 95
**Line Number:** 42
**Commentor Name:** Stanwood Ken

**Description of Edi**
We need to fix the way we define and reference TLVs.

**Reason for Edit:**
Most of the TLVs for the variants of this message are in section 2.16.
There is one TLV in 2.3 that appears appropriate, but defines nothing and points to section 2.16.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** General
**Resolution Status:** accepted-duplicate
**Notes:**

**Item Number:** 279
**Page Number** 97
**Line Number:** 21
**Commentor Name:** Stanwood Ken

**Description of Edi**
We need to fix the way we define and reference TLVs.

**Reason for Edit:**
The set defined starting on page 43 appears insufficient.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** General
**Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 280
**Page Number** 104
**Line Number:** 52
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "QohS" to "QoS"

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 281
**Page Number** 105
**Line Number:** 19
**Commentor Name:** Stanwood Ken

**Description of Edi**
Eliminate the 2 bytes of pad.

Also eliminate the 1 byte of pad in the DSD-RSP of figure 45, page 106.

**Reason for Edit:**
There is no requirement for message fields to be 32-bit word aligned just to make the pictures easier to draw.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 282
**Page Number** 107
**Line Number:** 26
**Commentor Name:** Eklund, Carl

**Description of Edi**
Delete text to line 48. Correct field in table on page 108 to read 3-255 .

**Reason for Edit:**
The information is contained in 2.5.20.1

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 283
**Page Number** 107
**Line Number:** 52
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "1" to "1 byte"

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

**Item Number:** 284
**Page Number** 107
**Line Number:** 52
**Commentor Name:** Hunter Wayne

**Description of Edi**
provde unit of measure for the type and length fields of the MCA-REQ TVL encodings, is it byte?

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments unit designation is missing

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** accepted
**Notes:** byte

---

**Item Number:** 285
**Page Number** 109
**Line Number:** 8
**Commentor Name:** Leiba Yigal

**Description of Edi**
Add a description of the ARQ ACK message containing the following fields,
MAC Management Header
One TLV encoded information element where
Type = ARQ-ACK message
Length = N, is two times the number of ACK sequence number carried by the TLV
Value = A list of N sequence number that where successfully received

**Reason for Edit:**
Define a TBD item

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** TBD **Resolution Status:** unresolved
**Notes:**

---

**Item Number:** 286
**Page Number** 109
**Line Number:** 36
**Commentor Name:** Stanwood Ken

**Description of Edi**
Replace "Modulation" with "DIUC".

Delete lines 46-57.

**Reason for Edit:**
Per previous comments, we change DL burst types, not just modulation.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 287
**Page Number** 109
**Line Number:** 40
**Commentor Name:** Hunter Wayne

**Description of Edi**
replace "(DMC-REQ)" with "(DBTC-REQ)"

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments mislabeling of figure 48

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

**Item Number:** 288

**Page Number** 110

**Line Number:** 1

**Commentor Name:** Stanwood
Ken

**Description of Edi**

Insert the following section (with updated subsection numbers) before section 2.6.

1 Logical Channels
A logical channel is defined as a logical communication pathway between two or more parties. The logical channels represent the interface between the protocol and the radio subsystem. There are three categories of logical channels: the traffic channels (TCHs) carrying speech or data information, the control channels (CCHs) carrying signaling messages and the synchronization channel for physical layer synchronization. The differentiation between the channel types and user destinations is determined through MAC header connection IDs (CIDs).

The following two TCHs are defined for IEEE 802.16.1 systems:

1. UTCH - Unicast Traffic Channel;
2. MTCH - Multicast Traffic Channel.

There is one SCH defined for IEEE 802.16.1 systems.

The following four CCHs are defined for IEEE 802.16.1 systems:

1. BCCH - Broadcast Control Channel;
2. UCCH - Unicast Control Channel;
3. RCCH - Ranging Request Channel;
4. BRCCH - Bandwidth Request Contention Channel.

1.1 Traffic CHannels (TCHs)
1.1.1 Unicast Traffic CHannel (UTCH)
The UTCHs are used to carry user information between a SS and the BS in either the upstream or downstream directions. The length of each UTCH in a downstream transmission and an upstream transmission is dynamically assigned by the BS. When the PHY is operating in Mode B, a map of the assignments is included in the BCCH.

1.1.2 Multicast Traffic CHannel (MTCH)
The MTCHs are used to carry user information between the BS and multiple SSs in the downstream direction. The length of each MTCH in a downstream transmission is dynamically assigned by the BS. When the PHY is operating in Mode B, a map of the assignments is included in the BCCH at the beginning of the downstream frame. It should be noted that a broadcast traffic channel is a special case of the MTCH that is addressed to an entire MAC domain.

1.2 Synchronization Channel (SCH)
The purpose of the SCH is synchronization, and it exists only in the downlink. It is unique to the PHY mode. For example, for PHY mode B, it consists of a preamble unique to the start of the downlink frame and appears at the beginning of every downlink frame. The SCH carries no data information.

1.3 Control CHannel (CCH)
The CCH shall carry signaling messages.

1.3.1 Broadcast Control CHannel (BCCH)
The BCCH is broadcast in the first slots of each downstream frame when the PHY is operating in Mode B. The BCCH is broadcast periodically in Mode A of the PHY. The purpose of this CCH is to carry broadcast MAC messages that containing information such as physical characteristics of the current downstream frame. The following MAC messages are transmitted over the BCCH:

1. Downlink Channel Descriptor (DCD) Message;
2. Uplink Channel Descriptor (UCD) Message;

**Reason for Edit:**

This section was an action item to Phil and I and supposed to get incorporated last time, but didn't.

3. Downlink MAP (DL-MAP) Message;
4. Uplink MAP (UL-MAP) Message;
5. Multicast Polling Assignment Request (MCA-REQ) Message.

1.3.2 Unicast Control CHannel (UCCH)
As mentioned above, a UCCH is a CCH that has a single destination. These logical channels are used for the transport of all MAC messages on the uplink and certain MAC messages on the downlink. The location of the UCCHs on the uplink and downlink can be arbitrary. The following lists the MAC messages that may be transported on a UCCH:

1. Ranging Request (RNG-REQ) Message;
2. Ranging Response (RNG-RSP) Message;
3. Registration Request (REG-REQ) Message;
4. Registration Response (REG-RSP) Message;
5. Registration Acknowledgement (REG-ACK) Message;
6. Privacy Key Management - Request (PKM-REQ) Message;
7. Privacy Key Management - Response (PKM-RSP) Message;
8. Dynamic Service Addition - Request (DSA-REQ) Message;
9. Dynamic Service Addition - Response (DSA-RSP) Message;
10. Dynamic Service Addition - Acknowledgement (DSA-ACK) Message;
11. Dynamic Service Change - Request (DSC-REQ) Message;
12. Dynamic Service Change - Response (DSC-RSP) Message;
13. Dynamic Service Change - Acknowledgement (DSC-ACK) Message;
14. Dynamic Service Deletion - Request (DSD-REQ) Message;
15. Dynamic Service Deletion - Response (DSD-RSP) Message;
16. Multicast Polling Assignment Request (MCA-REQ) Message;
17. Bandwidth Request (BW-REQ) Message (special version of MAC PDU);
18. Downlink Burst Type Change Request (DBTC-REQ) Message;

1.3.3 Ranging Request Contention CHannel (RCCH)
Periodically, a portion of the upstream channel is allocated for registration request messages on a contention basis. The RCCH allows unregistered users a portion of the upstream frame to attempt transmission of registration requests without interfering with ongoing traffic. The following MAC messages are transmitted over the RCCH:

1. Ranging Request (RNG-REQ)

1.3.4 Bandwidth Request Contention CHannel (BRCCH)
Periodically, a portion of the upstream burst may be allocated for bandwidth or connection requests. The BRCCH allows registered users a portion of the upstream to attempt transmission of bandwidth requests without interfering with ongoing traffic. The following MAC messages are transmitted over the BRCCH:

1. Bandwidth Request (BW-REQ) Message (special version of MAC PDU)

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** referred to group
**Notes:** Need not clear at the moment. Referred to Management Task Group.

**IPR2023-01416**
**Petitioners' Ex. 1030**
**Ex.1030.00072**

**Item Number:** 289
**Page Number** 110
**Line Number:** 41

**Commentor Name:** Condie Mary

**Description of Edi**

Replace the first paragraph with the following.

A burst FDD system refers to a system in which the upstream and downstream channels are located on separate frequencies but the downstream data is transmitted in bursts. This facilitates the use of different modulation types and allows the system to simultaneously support full duplex subscriber stations (ones which can tranmit and receive simultaneously) and optionally half duplex subscriber stations (ones which cannot transmit and receive simultaneously). If half duplex subscriber stations are supported,this mode of operation imposes a restriction on the bandwidth controller not to allocate upstream bandwidth for a half duplex subscriber station at the same time that the subscriber station is expected toreceive data on the downstream channel. Frequency separation is as defined in section 2.6.1.1.

**Reason for Edit:**

Current description is oriented towards half-duplex stations except for final note.
This is confusing. Also FSDD used to be separate from Burst FDD which separated
half duplex and full duplex terminals. Half duplex should be optional.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 290
**Page Number** 111
**Line Number:** 1

**Commentor Name:** Condie Mary

**Description of Edi**

Replace the 1st sentence with the following.

A full duplex subscriber station must always attempt to listen to the downstream channel. A half duplex subscriber stations must always attempt to listen to the downstream channel when it is not transmitting in the upstream channel.

**Reason for Edit:**

Sentence is oriented towards half-duplex only.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 291
**Page Number** 112
**Line Number:** 23

**Commentor Name:** Stanwood Ken

**Description of Edi**

Eliminate section 2.6.2 by moving its contents to the start of section 2.6.4 on line 54.

Delete the sentence starting towards the end of line 59.

Combine the first sentence of the paragraph starting on line 62 with the one starting on line 56.

Delete the sentence starting on line 64 through the end of the paragraph (on the next page).

**Reason for Edit:**

Combine redundant sections, eliminate info that should be in section 2.6.3, and remove redundant info from the combined section.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 292
**Page Number** 112
**Line Number:** 39
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change 2.6.3 heading to "PHY Continuous FDD Mode Support".
Eliminate subheading 2.6.3.1.

**Reason for Edit:**
cleaner document.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 293
**Page Number** 112
**Line Number:** 52
**Commentor Name:** Stanwood Ken

**Description of Edi**
Insert the sentence "A fixed modulation is used with PHY mode A." at the end of the paragraph.

**Reason for Edit:**
Move PHY mode A information from 2.6.4, where it doesn't belong, to 2.6.3, where it does belong.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 294
**Page Number** 113
**Line Number:** 2
**Commentor Name:** Eklund, Carl

**Description of Edi**
PS should be defined elsewhere, also section is very PHY specific (including figures).
Figure 52 is wrong.
Delete from p.114 l.61- p115.15

**Reason for Edit:**
Removal of PHY dependency. The talk about MAC control should have been removed based on decision in last meeting.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-modified
**Notes:** PS defined in the Definition section. Deleting = OK. Figure 52 will be provided by Ken

---

**Item Number:** 295
**Page Number** 113
**Line Number:** 4
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "multiplexing (TDM)" to "duplexing (TDD)".

On line 6 change "structurse" to "structure".

Add "and UCD" to end of paragraph at line 12.

**Reason for Edit:**
typos and completeness

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 296
**Page Number** 113
**Line Number:** 6
**Commentor Name:** Condie Mary

**Description of Edi**
Change "structurse" to "structures".

**Reason for Edit:**
Correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 297
**Page Number** 113
**Line Number:** 18
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "modulation order QPSK" to "robustness order. For modulations this means"

Add the following sentence at the end of the modified sentence. "If more than 1 FEC is defined (via DCD messages) for a given modulation, the more robust FEC/modulation combination appears first."

Replace Figure 51 with the file TDD_DLSubframe.vsd which will be separately mailed to the editors.

**Reason for Edit:**
reflect adaptive bursts, not just modulation

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 298
**Page Number** 113
**Line Number:** 19
**Commentor Name:** Hunter Wayne

**Description of Edi**
change "Transmission Gap" with "Transition Gap"

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 299
**Page Number** 114
**Line Number:** 1
**Commentor Name:** Stanwood Ken

**Description of Edi**
Replace Figure 52 with the file BurstFDD_DLSubframe.vsd which will be separately mailed to the editors.

Line 33, insert the sentence "As in the TDD case, the TDM portion of the downlink is ordered by decreasing robustness."

**Reason for Edit:**
Reflect adaptive bursts, not just modulation.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 300
**Page Number** 114
**Line Number:** 37
**Commentor Name:** Stanwood Ken

**Description of Edi**

Change "SSs" to "burst types".

At the end of this sentence, add the sentence "the TDMA portion does not need to be ordered by robustness."

Delete the next sentence, which starts "This data is"

**Reason for Edit:**

Make consistent with previous decision to eliminate CIDs from DL Map, and clarify ordering of TDMA section.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 301
**Page Number** 115
**Line Number:** 23
**Commentor Name:** Stanwood Ken

**Description of Edi**

Change "modulation order QAM-4, followed by QAM-16, followed by QAM-64."
with "in robustness order in the TDM portion."

Swap the order of the last two sentences of the paragraph, changing word "case" to "portion" and changing "SS specific" to "separately delineated".

**Reason for Edit:**

Consistency with previously implemented decisions regarding combining the two original burst FDD variants and eliminating the CID from the DL Map entries.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 302
**Page Number** 115
**Line Number:** 25
**Commentor Name:** McMullin Rod

**Description of Edi**

Remove "and symbol": The PHY Control portion of the Frame Control Header contains a map stating the PS and symbol at which modulation will change.

**Reason for Edit:**

The DL-MAP specifies the PS at the start of each burst. It is implied, but not
specified that the first symbol of the PS is where the modulation changes.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Technical
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 303
**Page Number** 115
**Line Number:** 52
**Commentor Name:** Stanwood Ken

**Description of Edi**

Eliminate extraneous table header.

**Reason for Edit:**

typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

**Item Number:** 304
**Page Number** 115
**Line Number:** 64
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change "individualSSs" to " individual SSs " | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** ? **Resolution Status:** unresolved
**Notes:**

---

**Item Number:** 305
**Page Number** 115
**Line Number:** 64
**Commentor Name:** Hunter Wayne

| Description of Edi | Reason for Edit: |
|---|---|
| change the wording "individualSSs" to "individual SSs" | Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 306
**Page Number** 116
**Line Number:** 42
**Commentor Name:** Lindh Lars

| Description of Edi | Reason for Edit: |
|---|---|
| Insert or TFM-modulation | TFM shall also be possible to use in registration and contention slots |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** rejected
**Notes:** Comment 555 rejected

---

**Item Number:** 307
**Page Number** 116
**Line Number:** 48
**Commentor Name:** Hunter Wayne

| Description of Edi | Reason for Edit: |
|---|---|
| change the wording of "in theUCD message" to read "in the UCD message" | Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 308
**Page Number** 116
**Line Number:** 48
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "theUCD" to "the UCD".

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Comment Type:** Editorial
**Date Resolved:**
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 309
**Page Number** 116
**Line Number:** 55
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "defined" to "defines"

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Comment Type:** Editorial
**Date Resolved:**
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 310
**Page Number** 117
**Line Number:** 34
**Commentor Name:** Hunter Wayne

**Description of Edi**
change the word "prevoius" to "previous"

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00
**Comment Type:** Editorial
**Date Resolved:**
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 311
**Page Number** 117
**Line Number:** 36
**Commentor Name:** Hunter Wayne

**Description of Edi**
chnge the word "lenfth" to "length"

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00
**Comment Type:** Editorial
**Date Resolved:**
**Resolution Status:** accepted
**Notes:**

**Item Number:** 312
**Page Number** 117
**Line Number:** 38
**Commentor Name:** Eklund, Carl

**Description of Edi**

Remove paragraph starting Each...

Also change Physical to Uplink on line 54

**Reason for Edit:**

Incorrect fluff. Redundant.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 313
**Page Number** 117
**Line Number:** 43
**Commentor Name:** Condie Mary

**Description of Edi**

At the end of the sentence insert "with a offset equal to the length of the previous
IE."

**Reason for Edit:**

The offset definition is very important to understand the length and therefore must be clearly
defined.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** rejected
**Notes:**

---

**Item Number:** 314
**Page Number** 117
**Line Number:** 52
**Commentor Name:** Stanwood Ken

**Description of Edi**

Delete the entire paragraph.

**Reason for Edit:**

The paragraph is an incorrect description conflicting with the correct description given in the following subsections.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 315
**Page Number** 117
**Line Number:** 55
**Commentor Name:** Hunter Wayne

**Description of Edi**

change the word "syncronous" to "synchronous"

**Reason for Edit:**

Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 316
**Page Number** 119
**Line Number:**
**Commentor Name:** Eklund, Carl

**Description of Edi**
Explanation of empty IE is missing.

Empty IE
The Empty IE specifies pauses in uplink transmissions. An SS must not transmit during an empty IE.

**Reason for Edit:**
Consistency

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Text will be provided

---

**Item Number:** 317
**Page Number** 121
**Line Number:** 57
**Commentor Name:** Stanwood Ken

**Description of Edi**
Insert space between period and open paranthesis.

**Reason for Edit:**
typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 318
**Page Number** 122
**Line Number:** 3
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "US-MAP" to "UL-MAP" in figure 60

**Reason for Edit:**
typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 319
**Page Number** 122
**Line Number:** 26
**Commentor Name:** Leiba Yigal

**Description of Edi**
The sentence 'The BS may allow collisions on either requests or maintenance PDUs.' does not specify clearly enough which PDUs may be transmitted in contention slots. Replace with 'The BS may allow collisions on the following PDUs: RNG-REQ, REG-REQ, PKM-REQ, DSA-REQ, DSC-REQ, DSD-REQ, DCC-REQ,
MCA-REQ,
DMC-REQ, Bandwidth request header.'

**Reason for Edit:**
Make the draft more clear.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-modified
**Notes:** correct text will be provided

**Item Number:** 320
**Page Number** 122
**Line Number:** 41
**Commentor Name:** Stanwood Ken

**Description of Edi**
Fix weird font in "UL-MAP"

**Reason for Edit:**
typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 321
**Page Number** 123
**Line Number:** 25
**Commentor Name:** Eklund, Carl

**Description of Edi**
Remove the word typically.
Also reword paragraph to suit better in a standards document.

**Reason for Edit:**
We need clear definitition of the number of transmit opportunities in an interval.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 322
**Page Number** 123
**Line Number:** 32
**Commentor Name:** Condie Mary

**Description of Edi**
Change "theCD" to "the UCD"

**Reason for Edit:**
Correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 323
**Page Number** 123
**Line Number:** 54
**Commentor Name:** Marks Roger

**Description of Edi**
Change "MSAP" to "SAP".

**Reason for Edit:**
"SAP" is more commonly used in document and is already defined.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 324
**Page Number** 123
**Line Number:** 54
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "a traffic" to "traffic".
Change "connecion" to "connection"

**Reason for Edit:**
typos

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 325
**Page Number** 125
**Line Number:** 1
**Commentor Name:** Stanwood Ken

**Description of Edi**
Delete the sentence that starts "Piggy-back" and add a sentence at the end of the second paragraph that states "The poll-me bit may be used to request to be polled for a different, non-USG, connection."

**Reason for Edit:**
Remove non USG concepts from USG section and make certain all USG concepts
are covered.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 326
**Page Number** 125
**Line Number:** 1
**Commentor Name:** Condie Mary

**Description of Edi**
Change "Piggy-back requests" sentence to the following.
"In the GPT mode, additional bandwidth for a different connection may be

requested using the Bandwidth Request Header."

**Reason for Edit:**
Clarity - piggy backs don't use bandwidth request.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** rejected
**Notes:**

---

**Item Number:** 327
**Page Number** 125
**Line Number:** 23
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "Bandwidth" to "Grant"

**Reason for Edit:**
typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 328
**Page Number** 125
**Line Number:** 61
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| delete the word "a" at the end of the line. | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 329
**Page Number** 125
**Line Number:** 61
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Change "request a" to "request" | correct typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 330
**Page Number** 127
**Line Number:** 23
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Insert space between sentences. | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 331
**Page Number** 127
**Line Number:** 52
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Insert "at" before "Registration" | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 332
**Page Number** 127
**Line Number:** 63
**Commentor Name:** Hunter Wayne

| Description of Edi | Reason for Edit: |
|---|---|
| add a "period" after the last sentence on the page after the words "in Figure 61" | Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 333
**Page Number** 128
**Line Number:** 39
**Commentor Name:** Condie Mary

**Description of Edi**
The word "untranmitted" in the bottom right box of the figure is not properly visible.

**Reason for Edit:**
Clarity

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 334
**Page Number** 128
**Line Number:** 55
**Commentor Name:** Stanwood Ken

**Description of Edi**
Change "certain connection" to "the SS".
On the next line, change "shorter or null opportunity to transmit" to "shorter transmit opportunity than expected"
On line 57, change "any case" to "all cases".

**Reason for Edit:**
clarity, correctness

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 335
**Page Number** 128
**Line Number:** 60
**Commentor Name:** Hunter Wayne

**Description of Edi**
add a "period" at the end of the last sentence on the page, after the words "in Figure 62"

**Reason for Edit:**
Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 336
**Page Number** 129
**Line Number:** 42
**Commentor Name:** Condie Mary

**Description of Edi**
In bottom right box in Figure 62, change "SDU" to "1st SDU"

**Reason for Edit:**
For clarity since two SDUs have been mentioned.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 337
**Page Number** 130
**Line Number:** 13
**Commentor Name:** Lindh Lars

**Description of Edi**
Insert or TFM

**Reason for Edit:**
TFM can also be used when responding to polling

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Technical
**Resolution Status:** rejected
**Notes:** Comment 555 rejected

---

**Item Number:** 338
**Page Number** 131
**Line Number:** 1
**Commentor Name:** Stanwood Ken

**Description of Edi**
Replace Figure 63 with UnicastPolling.vsd which is separately mailed to editors.

**Reason for Edit:**
Figure contains CPE instead of SS. Figure only shows adaptive modulation, not bursts.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 339
**Page Number** 132
**Line Number:** 4
**Commentor Name:** Stanwood Ken

**Description of Edi**
"CID" on lines 4, 8 (twice), and 39 appears to always have an extra preceding space.

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 340
**Page Number** 133
**Line Number:** 1
**Commentor Name:** Stanwood Ken

**Description of Edi**
Replace Figure 63 with Multicast_Polling.vsd which is separately mailed to editors.

**Reason for Edit:**
Figure contains CPE instead of SS. Figure only shows adaptive modulation, not bursts.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

**Item Number:** 341
**Page Number** 134
**Line Number:** 4
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Change "need polled" to "need to be polled" | Correct typo. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 342
**Page Number** 135
**Line Number:** 2
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change "CD" to "UCD" | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 343
**Page Number** 136
**Line Number:** 34
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Should add a "basic capability negotiation" step between ranging and IP connectivity. | We have SO MANY flexible PHY features in this system as well as explicitly optional features that it is unlikely that all SSs will implement all options. The BS needs to know an individual SSs capabilitites (Q64, ARQ, turbo codes, etc.) |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Deferred to Management Task Group

---

**Item Number:** 344
**Page Number** 136
**Line Number:** 58
**Commentor Name:** McMullin Rod

| Description of Edi | Reason for Edit: |
|---|---|
| Remove Section 2.11.1. | Duplicate text in Section 2.11.2. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 345
**Page Number** 137
**Line Number:** 8
**Commentor Name:** Hunter Wayne

**Description of Edi**

A reference is made to the TBD PHY specification paragraph on acquisition that does not exist yet. Recommend that a section is created in the PHY section that provides simple requirements on frequency and/or phase uncertainty as the definition of signal acquisition, given that the receiver estimates of these quantities are within some suggested bounds.

**Reason for Edit:**

Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments There is a need for a simple, non-implementation specific, definition on signal acquisition.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** referred to group
**Notes:** Text will be provided by Glen

---

**Item Number:** 346
**Page Number** 137
**Line Number:** 8
**Commentor Name:** Stanwood Ken

**Description of Edi**

resolve TBD

**Reason for Edit:**

TBD

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** TBD **Resolution Status:** unresolved
**Notes:**

---

**Item Number:** 347
**Page Number** 137
**Line Number:** 12
**Commentor Name:** Stanwood Ken

**Description of Edi**

Should either make this generic to all PHYs or add sections for how it's done with each PHY.

**Reason for Edit:**

Current text is only correct for PHY mode A.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 348
**Page Number** 137
**Line Number:** 18
**Commentor Name:** Leiba Yigal

**Description of Edi**

Remove lines (d) and (e) from the SS synchronization list. Insert new items
d) Synchronization of TC sub-layer (if it exists)
e) Recognition of the DL-MAP message

**Reason for Edit:**

MPEG packetization no longer exists, and PCD MAC messages are not defined in
this draft. The two suggested items are their replacement.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Deferred to TG3 discussion

**Item Number:** 349
**Page Number** 137
**Line Number:** 18
**Commentor Name:** McMullin Rod

**Description of Edi**

Remove, "d) synchronization of the MPEG packetization"

**Reason for Edit:**

Item d) was removed during the comment resolution process at Session 9.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 350
**Page Number** 137
**Line Number:** 23
**Commentor Name:** Hunter Wayne

**Description of Edi**

This would refer to the section suggesting specifications on the estimated frequency and phase of the incoming signal referenced in the comment just prior to this one.

**Reason for Edit:**

Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments There is a need to define acquisition success which would then enable data decoding to proceed

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** TBD **Resolution Status:** unresolved
**Notes:**

---

**Item Number:** 351
**Page Number** 137
**Line Number:** 25
**Commentor Name:** McMullin Rod

**Description of Edi**

Remove, "On detecting the well-known BWA PID, along with a payload unit start indicator per [H.222], it delivers the MAC frame to the MAC sublayer."

**Reason for Edit:**

PID and H.222 are not de-referenced anywhere in the document.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Text will be provided

---

**Item Number:** 352
**Page Number** 137
**Line Number:** 25
**Commentor Name:** Mollenauer Jim

**Description of Edi**

Delete sentence starting with "On detecting..."

**Reason for Edit:**

There is no BWA PID; this is a DOCSIS holdover. Also, we don't use H.222.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-duplicate
**Notes:**

**Item Number:** 353
**Page Number** 137
**Line Number:** 25

**Commentor Name:** Condie Mary

**Description of Edi**

BWA PID does not appear anywhere else in this document nor does H.222. What does
this sentence mean?

**Reason for Edit:**

Reduce confusion

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 354
**Page Number** 137
**Line Number:** 31

**Commentor Name:** Condie Mary

**Description of Edi**

Replace this section with the following.

The MAC sublayer shall search for the DL-MAP and DCD MAC messages. The CPE achieves
MAC synchronization for a channel once it has received at least one DL-MAP
message and one DCD message.

Add a new section after 2.11.4 called "Loss of Syncrhonization" with the

following contents.

The CPE MAC remains in sychronization as long as it continues to successfully
receive the DL-MAP, UL-MAP, DCD, and UCD messages. If at least one of these
messages is not received within the time intervals specified in Table 2, the CPE
shall not use the upstream and shall try to re-establish synchronization.

**Reason for Edit:**

This section is confusing. The first change is because the section is supposed to
be for obtaining downlink parameters.

The proposed change may not be completely correct.
Section 2.2 only specifies Lost Sync wrt the DL-MAP msg (e.g. it doesn't take into account other messages such as the UCD. The Time between UCDs is set to 2 seconds however is only 1 allowed to be lost? Need clarification!

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-modified
**Notes:** Correct text will be provided, taking the next comment into account

**Item Number:** 355
**Page Number** 137
**Line Number:** 35
**Commentor Name:** McMullin Rod

**Description of Edi**

Changes:
1. Add row to Table 2 (page 32)
| SS | Lost Sync Interval | max time expired since the last received UCD OR DCD message | | | 5 * the greater of the max UCD Interval or max DCD interval |
2. Add row to Table 2:
| BS | DCD Interval | time between transmission of DCD messages | | | 2 sec |
3. Change 'or' to 'and': "If the Lost SYNC Interval (refer to Section 2.2) has elapsed without a valid UCD and DCD message, a CPE shall not use the upstream and shall try to re-establish synchronization again."

**Reason for Edit:**

Section 2.2 does not define a "Lost Sync Interval" or a DCD interval.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 356
**Page Number** 137
**Line Number:** 40
**Commentor Name:** Stanwood Ken

**Description of Edi**

Change "Physical" to "Uplink"

**Reason for Edit:**

reflect correct message names.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 357
**Page Number** 137
**Line Number:** 41
**Commentor Name:** Condie Mary

**Description of Edi**

Change "Physical" to "Uplink"

**Reason for Edit:**

Match names.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 358
**Page Number** 137
**Line Number:** 62
**Commentor Name:** Hunter Wayne

**Description of Edi**

change the wording "fromUCD" to read "from UCD"

**Reason for Edit:**

Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 359
**Page Number** 137
**Line Number:** 62
**Commentor Name:** Hunter Wayne

| Description of Edi | Reason for Edit: |
|---|---|
| change the wording "fromUCD" to read "from UCD" | Hunter(M), Meyer(O), Robinson(M), Smith(N), Wang(N) team comments correct typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 360
**Page Number** 137
**Line Number:** 62
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| change "fromUCD" to "from UCD" | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 361
**Page Number** 137
**Line Number:** 62
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change both occurrences of "channel ID" with "upstream channel ID" | clarity |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 362
**Page Number** 137
**Line Number:** 65
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Insert. "If initial ranging is successful then the SS attempts to establish IP connectivity." | For clarity. Also Station Mtce in SDL is changed to Establish IP connectivity. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

**Item Number:** 363
**Page Number** 139
**Line Number:** 12
**Commentor Name:** Condie Mary

**Description of Edi**

Change Figure 67 as follows. Visio version has been emailed to the editor.
All instances of the word channel should be replaced with "uplink channel" for clarity.
Change scanning (line 12) to "Scanning for downlink channel"
Line 17 Change to "Wait for UCD for selected channel"
Add box on line 21 with decision box containing "Uplink channel suitable?"
Add no line to box going to the right to meet the other no line
Line 37, change to "Wait for UL-MAP which contains initial ranging interval
for selected uplink channel"
Line 41, change to UL-MAP for selected uplink channel
Line 58, change to "Establish IP Connectivity".

**Reason for Edit:**

Correct discrepancies in SDL and make less confusing.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:** Figure will be provided by Mary

---

**Item Number:** 364
**Page Number** 139
**Line Number:** 29
**Commentor Name:** Condie Mary

**Description of Edi**

What does the "Bandwidth for CIDx" decision box in the centre of the figure mean
in the context of grant per terminal? It appears as if this decision box is
redundant

**Reason for Edit:**

To remove confusion.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** referred to group
**Notes:** Comment is for Figure 62, page 129. Add a footnote explaining that the scheduler has to decide which connections will get the bandwith assigned.

---

**Item Number:** 365
**Page Number** 140
**Line Number:** 3
**Commentor Name:** McMullin Rod

**Description of Edi**

1. In Section 2.2 (page 32, line 7) change 'Sync Interval' to 'DL-MAP Interval'
and change 'SYNC messages' to 'DL-MAP messages'.
2. In Section 2.2 (page 32, line 24) change 'Sync message' to 'DL-MAP message'.

**Reason for Edit:**

Section 2.11.5 states a requirement for periodic transmission of DL-MAPs but Section 2.2 does not provide a DL-MAP Interval;... however, it looks like the
'Sync Message' referenced in Section 2 satisfies the intent. The 'Sync Interval'
and 'Sync Message' specified in Section 2.2 are not referenced elsewhere in the document.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:**

**Item Number:** 366
**Page Number** 140
**Line Number:** 8
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| All message flows should be labelled as Figures, not Tables. | Consistency |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 367
**Page Number** 141
**Line Number:** 26
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change "'s" to "SS's" | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 368
**Page Number** 141
**Line Number:** 33
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change "Physical" to "Uplink" | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 369
**Page Number** 141
**Line Number:** 33
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| Change "Physical" to "Uplink" | name changed |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 370
**Page Number** 142
**Line Number:** 11
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Change "successfully ranged," to "successfully ranged (Ranging request is within tolerance of the BS),"<br><br>Remove first sentence on page 143. | Somehow the idea ended up out of context on the next page. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 371
**Page Number** 142
**Line Number:** 23
**Commentor Name:** McMullin Rod

| Description of Edi | Reason for Edit: |
|---|---|
| Remove the word, "multicast". | ...not sure it makes sense to multicast an Initial Maintenance opportunity as the SS would need prior knowledge to associate itself with the CID. The only multicast service currently defined offers contention slots to SSs for bandwidth requests. (also applies to line 48) |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted
**Notes:** Remove "multicast" from lines 23 and 48. On line 30 change "Temporary" to "Basic and Secondary", and on 33 and 38 change "Temporary" to "Basic".

---

**Item Number:** 372
**Page Number** 143
**Line Number:** 1
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| This is a stray sentence. What does it mean? | Reduce confusion. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** accepted-modified
**Notes:** Lost footnote of Figure 68 on page 145.

---

**Item Number:** 373
**Page Number** 144
**Line Number:** 1
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| Combine the figures on page 144 and 145 and correct them. | They have situations where power is adjusted more often than it should be and where fewer retries happen than should. They also have redundant sections. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Delete the "Adjust Local Power" box on line 38. Mary will provide the corrected figures.

---

**Item Number:** 374
**Page Number** 144
**Line Number:** 1
**Commentor Name:** Leiba Yigal

| Description of Edi | Reason for Edit: |
|---|---|
| Combine the figure in this page and in the next page to one figure. | It is not clear how the two existing figures connect to each other |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** General **Resolution Status:** accepted-duplicate
**Notes:**

**Item Number:** 375
**Page Number** 145
**Line Number:** 3
**Commentor Name:** McMullin Rod

**Description of Edi**
Change "Broadcast" to "Unicast".

**Reason for Edit:**
typo

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** General
**Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 376
**Page Number** 146
**Line Number:** 1
**Commentor Name:** Stanwood Ken

**Description of Edi**
This drawing needs redrawn in a maintainable format rather than patched in Framemaker. This applies to all patched drawings.

**Reason for Edit:**
It looks bad where patched. Note 1 and 2 appear out of context and unlabeled on the next page.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

---

**Item Number:** 377
**Page Number** 146
**Line Number:** 40
**Commentor Name:** Condie Mary

**Description of Edi**
Note 1 is missing. Is it supposed to be the "Means ranging is within the tolerable limits of the BS" which is on the next page?

**Reason for Edit:**
Clarity

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** General
**Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 378
**Page Number** 147
**Line Number:** 1
**Commentor Name:** McMullin Rod

**Description of Edi**
Lines 1 through 8 are Notes 1 and 2 for the previous diagram. Identify as such.

**Reason for Edit:**
Clarify text.

**Date Received:** 29/10/00
**Date Resolved:**
**Comment Type:** Editorial
**Resolution Status:** accepted
**Notes:**

**Item Number:** 379
**Page Number** 147
**Line Number:** 2
**Commentor Name:** Condie Mary

| Description of Edi | Reason for Edit: |
|---|---|
| To what does this paragraph refer? | clarity |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** accepted-duplicate
**Notes:**

---

**Item Number:** 380
**Page Number** 147
**Line Number:** 12
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| replace "an" with "a". | typo |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 381
**Page Number** 147
**Line Number:** 36
**Commentor Name:** Stanwood Ken

| Description of Edi | Reason for Edit: |
|---|---|
| This should happen on the secondary management CID. So should all the actions through section 2.11.9.2. | This is the type of management task that CID is intended for. |

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Referred to Management Task Group.

**Item Number:** 382
**Page Number** 147
**Line Number:** 36

**Commentor Name:** McMullin Rod

**Description of Edi**

Add new paragraph. "Alternatively, the IP Address and Subnet Mask may be locally
configured at the SS."

**Reason for Edit:**

...sounds like DHCP is the only way to get an IP address, if this is not so, ignore this comment. In time, routers will incorporate the 802.16 MAC/PHY as just another port. DHCP is a host configuration protocol; it is not recommended for configuring routers. For such devices it is desirable to manually configure the address and mask. In order to use a permanent, 'designed' IP address, the DHCP server will need to be manually configured with the MAC addr and IP addr of the SS...may as well provide the option to skip the DHCP step and manually configure the device. DHCP does allow for devices to have their IP addresses externally configured but to still use DHCP to obtain additional parameters, via DHCPINFORM. However, it will
remain undesirable for a router to rely on a remote device to boot.

The use of DHCP_DISCOVER presents an implementation constraint: IP broadcasts
are constrained to a single network, therefore, the BS must accept and process DHCP_DISCOVER packets as a server or relay agent. Examining the IP convergence layer at the BS may shed some additional light here.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Technical **Resolution Status:** referred to group
**Notes:** Referred to Management Task Group. It needs to be clarified that this DHCP process applies only to the SS IP address, and that it is not mandatory.

---

**Item Number:** 383
**Page Number** 148
**Line Number:** 8

**Commentor Name:** Stanwood Ken

**Description of Edi**

Add RFC-868 to section 1.1.

**Reason for Edit:**

That's where normative references are listed.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

---

**Item Number:** 384
**Page Number** 148
**Line Number:** 45

**Commentor Name:** Stanwood Ken

**Description of Edi**

Change referenced section from 2.4 to 2.4.2.

**Reason for Edit:**

More explicit reference to TLVs.

**Date Received:** 29/10/00 **Date Resolved:**
**Comment Type:** Editorial **Resolution Status:** accepted
**Notes:**

**Item Number:** 385
**Page Number** 153
**Line Number:** 43

**Commentor Name:** Stanwood
Ken

**Description of Edi**

The Basic CID and secondary management CID need to be returned in the Ranging Response rather than a Temporary CID. Additionally, we actually have no current mechanism for getting the SS CIDs for the connections established in the registration request/response.

**Reason for Edit:**

The whole concept of TID and not needing CIDs for provisioned connections is a hold over from DOCSIS where it was OK for all management and all best effort user data to share 1 Ethernet flow devoid of any real QoS. The Basic CID and secondary management CID are intended to allow the entry into the system of additional SSs without threatening the QoS of previously established connections.

**Date Received:** 29/10/00
**Comment Type:** General
**Notes:** Text will be provided

**Date Resolved:**
**Resolution Status:** referred to group

---

**Item Number:** 386
**Page Number** 153
**Line Number:** 45

**Commentor Name:** Condie
Mary

**Description of Edi**

The use of CIDs after initialization is not completely clear in the document. This section is fairly clear on the use of CIDs during initialization, but I can't find anywhere in the document where it clearly defines how the basic CID and secondary CIDs are assigned, although they are provided to the SS in the REG-RSP msg (page 92)

Do the basic and secondary service flows need to be defined in the config file? page 151, line 1 implies that the config file need not contain any service flows. Page 166 line 26 implies that at least one service flow needs to be included in the config file. Or do the basic and secondary service flows use default values?

I have searched for the word "secondary" in the document and find no occurrences that explain how the secondary CID is used except for the high level statement on page 30 line 58. (Note another comment specifies that the CID used in the MAC header needs to be specified for each msg type).

**Reason for Edit:**

To reduce confusion

**Date Received:** 29/10/00
**Comment Type:** General
**Notes:** Referred to Management Task Group

**Date Resolved:**
**Resolution Status:** referred to group

---

**Item Number:** 387
**Page Number** 154
**Line Number:** 16

**Commentor Name:** Stanwood
Ken

**Description of Edi**

Insert space between sentences.

**Reason for Edit:**

typo

**Date Received:** 29/10/00
**Comment Type:** Editorial
**Notes:**

**Date Resolved:**
**Resolution Status:** accepted