Project	t IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16		
Title	Reported Errata in IEEE Std 802.16, for Incorporation in P802.16c		
Date Submitted	2002-05-07		
Source(s)	Roger B. Marks NIST Strict S		
Re:	IEEE 802.16c-02/01 and its specific request for errata in IEEE Std 802.16.		
Abstract	This document indicates errors in IEEE Std 802.16, along with proposed corrections. The content is extracted from reported submitted by various people through a notice on the 802.16 web site. The list of errors and corrections, along with the names of the original submitters, are listed at the web page http://ieee802.org/16/tg1/errata.html . The submitted comments and corrections have been reviewed for accuracy and edited for clarity.		
Purpose	For incorporation (in appropriately revised editorial format) into P802.16c/D1.		
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.		
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.		
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) http://ieee802.org/16/ipr/patents/policy.html , including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard."		
	Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site http://ieee802.org/16/ipr/patents/notices>.</mailto:r.b.marks@ieee.org>		

Page	Line	Sub- clause	Comment	Remedy
1	1	1.2.1	The air interface needs a name in order to accommodate new air interface names under development in P802.16a.	Insert a second paragraph: "The single-carrier modulation air interface specified herein for 10-66 GHz shall be known as the "WirelessMAN-SC" air interface.
2	5	3.3	Error in definition of "Basic Connection", per 6.2.9.5.	In definition of "Basic Connection", change "initial subscriber station registration" to: "ranging".
3	34	6.1.1.1 1.2	"CS pass through" is not defined or referred to elsewhere in the text.	Delete "CS pass through," [Line 9]
4	36	6.2.1		Paragraph 1, Line 3: change "registration" to "initial ranging"
5	36	6.2.1		Paragraph 3, Line 1: change "higher layers of the BS set up" to "BS initiates the set-up of"
6	44	6.2.2.3	There is an inconsistency about the Connection ID of the MCA-REQ and MCA-RSP messages. In Table 13, the MCA-REQ and MCA-RSP messages use the Basic CID. But on page 98, line 27 and page 99, line 4 the MCA-REQ and MCA-RSP messages use the Primary Management CID.	In Table 13, Lines marked "21" and "22", in the column "Connection": change "Basic" to "Primary Management"
7	85	6.2.6	CIDs are	Paragraph 1, Line 1: change "at registration" to: ", in initial system access,"
8	95	6.2.7.5	The sentence "The UL-MAP defines the uplink usage in terms of the offset from the previous IE start (the length) in numbers of minislots." Incorrectly reflects the actual definition of the offset, which is detailed in 8.2.6.1.2.	Paragraph 1 Line 1:
9	131	6.2.13. 7.1		Paragraph 1, Line 2: Change "Configuration of provisioned Service Flows follows the Registration process." to: "Configuration of connections enabling Service Flows for provisioned services follows the transfer of the operational parameters, as shown Fig. 45."
10	132	6.2.13. 7.2		Paragraph 1, Line 2: change "Registration process outlined above" to "procedure outlined in 6.2.13.7.1."
11	154	6.2.13. 8.4		Paragraph 8, Lines 5-7: Change "If a Service Flow that was provisioned during registration is deactivated, the provisioning information for that Service Flow shall be maintained until the Service Flow is reactivated." to "If a Service Flow for a provisioned service is deactivated, the provisioning information for that service is maintained until the

				Service Flow is reactivated."
<u> </u>				
12	165	6.2.13. 8.5		Paragraph 1, Lines 3-6: Change "reregister. Also, if a Service Flow that was provisioned during registration is deleted, the provisioning information for that Service Flow is lost until the SS reregisters. However, the deletion of a provisioned Service Flow shall not cause an SS to reregister. Therefore, care should be taken before deleting such Service Flows." to: "re-initialize. Also, if a Service Flow for a provisioned service is deleted, the ability to re-establish the Service Flow for that service is network management dependent. Therefore, care should be taken before deleting such Service Flows. However, the deletion of a provisioned Service Flow shall not cause an SS to re-initialize."
13	185	7.2.5.5	Item [5-E](a) is a copy-and-paste typo. It makes no sense to clear Key Request retry timer in step (a), since it is set to Operational Wait Timeout in (c) anyway. Instead, when TEK Invalid message is sent, "TEK refresh timer" needs to be cleared (just as in Line 23) so that it will not cause unnecesary timeout.	Correct [5-E](a) to read "a) clear TEK refresh timer".
14	221	8.2.5.1	The phrase "modulation scheme in use" is ambiguous. There may be many modulation schemes in use. Presumably, this refers to the burst following the preamble. If so, then we still have an ambiguity in the case of the Frame Start Preamble, since the burst may contain several modulation schemes. While this ambiguity should be resolved for the sake of clarity, the resolution has no technical implications. In the constant peak power scheme, what matters is not the "modulation scheme in use" but the power of the "outermost constellation points of the modulation scheme in use". That's the same for all modulation schemes. Likewise, in the constant mean power scheme, all that matters is the "mean power of the constellation points of the modulation scheme in use", and that is the same for all modulation schemes.	
			The next to last sentence of 8.2.5.4.3 implies that the randomization is	Next to last sentence of 8.2.5.4.3: Change "The seed value shall be used to calculate the
15	231	8.2.5.4	applied only to the first bit of each burst. This is definitely not the case, as is clear from the remainder of the	randomization bit, which is combined in an XOR with the first bit of data of each burst." to "The seed value shall be used to calculate the randomization bits, which are combined in an XOR operation with the serialized

			a randomization. Clearly, the intent was for the randomization to be applied to each bit, beginning with the first.	bit stream of each burst."
16	249	.2	Description of Null IE requires clarification, parallel to statement regarding downlink (Table 91).	In Table 108, under "Description" column of "Null IE" row, change text to: "Ending offset of the previous grant. Indicates the first minislot after the end of the UL allocation. The burst profile is well known and shall not be included in the UCD message. Used to bound the length of the last actual interval allocation."
17	296	11.4.5. 1		Delete "Bit#:". Also, change "9-15" to "9-255"
18	306	11.4.9. 2		Paragraph 1, Line 1: change "type" to "pcst" Table Header, Line 1: change "Type" to "pcst" Table: delete "[24/25]" from all 5 rows Add 4 rows to end of table: 104 Packet IPV4 over 802.3 105 Packet IPV6 over 802.3 106 Packet IPV4 over 802.1Q VLAN 107 Packet IPV6 over 802.1Q VLAN
19	307	11.4.9. 3		Change second and third sentences to: "The packet convergence sublayer specific type is denoted in the tables in the following sections by the variable "pcst", which takes its value from the table in 11.4.9.2 (e.g., 100, 101,) depending upon the exact packet CS used for the service."
20	307	11.4.9. 3		In all tables of 11.4.9.3: change ".100." to ".pcst."
21	321	12.1	ARQ cannot be an option since 6.2.4 disallows ARQ.	Next to last line: Delete line "ARQ is optional."
22	6	3.25	Definition of "management connection" is obsolete.	Delete definition of "management connection" (3.25).
23	8	3.42	Definitions of "service flow class" and "service flow name" are obsolete.	Delete definitions of "service flow class" (3.42) and "service flow name" (3.44).
24	74	6.2.2.3 .24	There is no need for Confirmation Code in Table 50. All capabilities are encoded as bit masks and the text below (under Bandwidth Allocation Support) confirms that it is considered sufficient for the handshake between SS and BS: "The BS response to the subset of SS capabilities present in the SBC-REQ message". The BS responds to the SS capabilities to indicate whether they may be used. If the BS does not recognize an SS capability, it shall return this as "off" in the SBC-RSP. Only capabilities set to "on" in the SBC-REQ may be set "on" in the REG-RSP as this is the handshake indicating that they have been successfully negotiated.	Remove Confirmation Code from Table 50.

25	296	11.4.3		(a) Replace the first paragraph on Page 296 with: "When used as a subfield of the TLVs Vendor-specific information, Vendor-specific QoS parameters, Vendor specific classifier parameters, or Vendor-specific PHS parameters, the Vendor ID encoding identifies the Vendor ID of the SSs which are intended to use this information." (b) In the table, change the scope to: "REG-REQ (see 6.2.2.3.7), DSx-REQ, DSX-RSP, DSx-ACK, and Configuration File"
26	115	6.2.10	Note 2 is confusing because of bad grammar.	Add the word "If" to the start of the note.
27	115	6.2.9.1 3	There is a typo in "the BS shall send DSA-REQ messages to the BS".	Change "to the BS" to "to the SS".
28	116	6.2.10	In Figure 55, "Remote SS" must be a typographical error. If the RNG-RSP responds with success, the BS should remove the SS from the polling list.	
29	147	6.2.13. 8.3.2	"DSC-Remote Begin" is the wrong name for the top state symbol because Figure 76 deals with DSA - Local DSA-RSP Pending and should continue Figure 75.	Change name of top state symbol from "DSC-Remote Begin" to "DSA - Local DSA-RSP Pending".
30	147	6.2.13. 8.3.2	"DSC-Local Holding Down" is the wrong name for the bottom state symbol because Figure 76 deals with DSA."	Change name of bottom state symbol from "DSC- Local Holding Down" to "DSA - Local Holding Down"
31		6.2.13. 8.4.3	"DSC-Remote Begin" is the wrong name for the top state symbol because Figure 85 deals with DSC - Local DSC-RSP Pending and should continue Figure 84.	Change name of top state symbol from "DSC-Remote Begin" to "DSC - Local DSC-RSP Pending"
32	151	6.2.13. 8.3.2	Poor alignment of vertical line/arrow in Figure 80.	Move arrow to the right for better alignment.
33	251	7.2.5.1	Typo in third paragraph of subclause: "is in the in the middle"	Change to "is in the middle".
34	169	6.2.13. 8.5.3	The "DSD - Remotely Initiated Transaction Holding State Flow Diagram" is missing from the document.	Insert new figure: "DSD - Remotely Initiated Transaction Holding Down State Flow Diagram" (see IEEE C802.16c-02/01).
35	211	7.2	RXSTATUS missing in the relevant "Semantics of the service primitive" under general subclause 8.1.3. Currently it is not clear in all the PHY SAP management definition subclause how the RXSTATUS reaches the MAC layer. Therefore intuitively the full information held in the PHY is actual at the moment the RX ends.	Insert new line between the opening and closing parenthesis with the content "RXSTATUS". Effectively, MAC layer will then receive as returned status all Rx status information as defined in Table 83 ("RXSTATUS for 10-66 GHz PHY").
36	101	6.2.9	Lettered list beginning after "phases:"	After "phases:", "Scan for downlink channel and

	is improperly formatted.	establish synchronization with the BS" should be item
		(a). Following items [(c)-(k)] should be re-lettered as
		(b)-(j).