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Title	Errata in 802.16 specification	
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Re:	Call for Contribution 802.16c-02/01	
Abstract	List of errata and proposed resolutions.	
Purpose	For incorporation in amendment produced by TGc.	
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Errata in 802.16 Specification

Ken Stanwood Ensemble Communications

Errata to be incorporated into TGc amendment

Errata ID	Type	Description
1	technical	Errata: There is no TLV specified for the Secondary Management CID in the REG-RSP message.
		Discussion: Since the REG-RSP message already contains a number of common encodings, a common encoding should be used for the Secondary Management CID. Also, since no services are provisioned in a REG-RSP message, there can be no confusion between the Secondary Management CID and transport CIDs.
		Solution:
		On page 53, after "Secondary Management CID" insert "(see 11.4.8.2)".
		On page 298, add "REG-RSP" to the scope column for the Connection Identifier TLV.
		On page 298, to the end of the first paragraph of section 11.4.8.2 add "This field is also present in the REG-RSP message where it represents the SS's assigned Secondary Management CID."
2	editorial	Errata: The HMAC Tuple for the REG-RSP message doesn't reference a section of chapter 11 like all the other message TLVs do.
		Discussion:
		Solution:
		On page 53, insert "(see 11.4.10)" at the end of the HMAC Tuple line.
3	technical/ editorial	Errata: Somehow the message sequence chart for the transfer of operational parameters got dropped, causing an incorrect reference to Figure 52 in section 6.2.9.12 on page 115.
		Discussion:
		Solution:
		On page 115, add a message sequence chart for the transfer of operational parameters to section 6.2.9.12 and replace the reference to Figure 52 with a reference to the new figure.
4	technical	Errata: Section 11.4.8.2 gives an incomplete and, therefore, misleading description of the Connection Identifier usage.
		Discussion: The description is only correct for GPC SSs.
		Solution:
		On page 298, section 11.4.8.2, replace the sentence "This is used in the bandwidth allocation map to assign uplink bandwidth." with "The 16-bit value of this field is used in bandwidth requests and in MAC PDU headers. It is also used in the UL-MAP to assign uplink bandwidth to GPC SSs."

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ID	Type	Description
5	technical	Errata: There are no service flows in the REG-REQ/REG-RSP messages any more, so there are no Packet CS specific REG-REQ/REG-RSP specific encodings.
		Discussion: This is a left over from when services were set up initially with the REG-REQ and REG-RSP messages. All TLVs in the REG-REQ and REG-RSP are already in teh Common Encodings section.
		Solution:
		Delete section 11.4.9.3.2 on page 307.
6	editorial	Errata: There are 2 different "Dynamic Service Change Action" TLVs in the packet CS.
		Discussion: One is for Classifier changes, and one is for PHS changes.
		Solution:
		On page 307, in the title of section 11.4.9.3.4, change "Dynamic Service Change Action" to "Classifier Dynamic Service Change Action". On page 313 change "DSC Action" to "PHS Dynamic Service Change Action"
7	editorial	Errata: DSC Action and PHS error parameter set are not sub-TLVs of Packet Classification Rule.
		Discussion:
		Solution:
		On page 313 promote section 11.4.9.3.6.15.
		On page 314 promote section 11.4.9.3.6.16.
8	technical	Errata: The Frequency Adjust Information parameter is required in RNG-RSP messages and should be optional.
		Discussion: With frequency locked physical layers, this parameter is meaningless. So, it should be moved to optional just like the Uplink Channel ID Override parameter.
		Solution:
		On page 51, section 6.2.2.3.6 move "Frequency Adjust Information" from the shall list at the bottom of the page to the may list at the top of page 52.
9	technical	Errata: During periodic ranging, the SS's Tx timing advance should not be allowed to vary by the full scale of the Timing Adjust parameter in the RNG-RSP message.
		Discussion: With frequency locked physical layers, the timing adjustment should vary extremely slowly based on the accuracy of the SS's oscillator.
		Solution:
		On page 278, in the Value column of the Timing Adjust encoding, insert the sentence "During periodic ranging, the value of this parameter shall be limited to +/- 2 modulation symbols."
10	technical	Errata: The SA Add message is performing a security function that should be authenticated.
		Discussion:
		Solution:
		On page 56, add a row for the HMAC-Digest (as in Table 30) to the bottom of Table 26.

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Errata ID	Type	Description
11	technical	Errata: Privacy is always enabled, but text still remains indicating that it can be disabled.
		Discussion: SA's can be set up with the encryption method set to don't encrypt, but privacy is always enabled.
		Solution:
		On page 62, section 6.2.2.3.10, delete the line starting "If privacy is enabled"
		On page 64, section 6.2.2.3.11, delete the line starting "If privacy is enabled"
		On page 65, section 6.2.2.3.12, delete the line starting "If privacy is enabled"
		On page 66, section 6.2.2.3.13, delete the line starting "If privacy is enabled"
		On page 67, section 6.2.2.3.14, delete the line starting "Regardless of success of failure, if privacy is enabled"
		On page 68, section 6.2.2.3.15, delete the line starting "If privacy is enabled"
		On page 69, section 6.2.2.3.16, delete the line starting "If privacy is enabled"
		On page 70, section 6.2.2.3.17, delete the line starting "If privacy is enabled"
		On page 134, section 6.2.13.8.1, in the last sentence of the paragraph after Figure 67, change "If privacy is enabled, both" to "Both"
12	technical	Errata: Service Flow Scheduling Type should be a downlink parameter as well as an uplink parameter.
		Discussion: SSs may need to know the scheduling type for egress port QoS during congestion.
		Solution:
		On page 304, change the type field for Service Flow Scheduling Type, in section 11.4.8.11, from "24.15" to "[24/25].15"
13	technical	Errata: The ATM CS case needs to be able to add, delete, and change classifiers as in the Packet CS case.
		Discussion:
		Solution:
		To section 11.4.9.4 on page 317 add a "ATM Classifier Dynamic Service Change Action" analogous to the classifier dynamic service change action of section 11.4.9.3.4.
		Need to add specific text of change.
14	technical	Errata: VCI classifiers can't stand alone. There needs to be a way to associate zero or more VCI classifiers with each VPI classifier for an ATM service.
		Discussion: VP-switched connections would typically be classified solely on VPI, while VC-switched connections (and maybe some VP-switched connections) would be classified on VPI/VCI pairs, but connections would never be classified solely on VCI.
		Solution:
		Add an ATM classifier TLV to section 11.4.9.4 on page 317 which is a compound TLV made up of one VPI classifier and 0 or more VCI classifiers. The VPI and VCI classifiers should be demoted to be subordinate to this new compound TLV as is done with the Classifier error parameter set on page 307.
		Need to add specific text of change.
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Errata ID	Type	Description
15	technical	Errata: There is no way for the Dynamic service change action of section 11.4.9.3.4 to identify exactly which classifier it is replacing or deleting.
		Discussion:
		Solution:
		In section 11.4.9.3.6 on page 309, add a Packet Classifier ID TLV, analogous to the payload Header Suppression Index of section 11.4.9.3.7.1 on page 315. An ATM Classifier ID TLV should also be added to the ATM Classifier of errata 14 in this document.
		Need to add specific text of change.
16	technical	Errata: If a service has more than one classifier, there is no way to identify which classifier had an error.
		Discussion:
		Solution:
		On page 307, section 11.4.9.3.5, mention that the Packet Classifier ID (see errata 15) must be included in the Classifier error parameter set compound TLV.
		Need to add specific text of change.
17	technical	Errata: If a service has more than one payload header suppression rule, there is no way to identify which rule had an error.
		Discussion:
		Solution:
		On page 314, section 11.4.9.3.6.16, mention that the Payload Header Suppression Index must be included in the PHS error parameter set compound TLV.
		Need to add specific text of change.
18	editorial	Errata: The TLVs of section 11.1.5 on page 279 only apply to the MCA-REQ message, not the MCA-RSP message.
		Discussion:
		Solution:
		On page 279, delete "and MCA-RSP" from the title of section 11.1.5.
19	Technical	Errata: The discussion on page 328 lines 1-8 is incorrect (D5).
		Discussion: The REG-REQ/RSP explains the parameters usage in the messages, it is used as a subfield of the e.g. Vendor specific QoS parameters" (11.4.8.10).
		Solution:
		Replace page 328 lines 1-8 with "When used as a sub-field of the Vendor Specific Information, Vendor Specific QoS Parameters, Vendor Specific Classifier Parameters or Vendor Specific PHS Parameters TLVs this identifies the Vendor ID of the SSs which are intended to use this information." also redefine the scope to also include: "DSx-REQ,DSX-RSP,DSx-ACK and Configuration File"