

Project	IEEE 802.16 Broadband Wireless Access Working Group	
Title	IEEE 802.16 MAC & Task Group 1 Meeting Minutes for Session # 11	
Date Submitted	2001-01-22	
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Re:	This contribution is to provide the minutes of the MAC task group for Session #11.	
Abstract	Session # 11 MAC task group minutes.	
Purpose		
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IEEE 802.16 TG1 & MAC Meeting Minutes for Session #11

Acting Secretary: Juan-Carlos Zuniga
(Harris Corporation)

Session # 11

Monday, **January 22, 2001**

15:30	Carl	Call to order
15:35	Stanley Wang	Presentation of ATM Convergence Layer
		Group discussion
16:55	Ken Stanwood	Presentation of Packing Multiple Higher Layer SDUs into a Single MAC PDU
		Group discussion
	Carl	Discussion about having an idea about people's thinking about packing
	Carl	The issue of packing will be raised tomorrow in the joint TG1-TG3 meeting.
18:20		Adjournment

Tuesday, **January 23, 2001**

8:15	Carl	Call to order
	Stanley Wang (for Robert Johnson)	Packet Convergence Sublayer Presentation
		Group discussion The scheme makes sense for Ethernet-type networks. For suppressing IETF protocols, a note should be added in the IP Convergence Sublayer explaining that the IETF protocol itself will take care of the header suppression for whatever protocol resides on top of Ethernet. The protocol that will take care of the definition of classifiers is accepted and will be defined in the document.
9:45	Break	
10:00	Carl	Comment resolution process
	Carl	Comment 371: To accept with clarifications from the PHY Group given by Jay to Carl. This comment has to be implemented before all others.
12:10	Lunch break	
13:30	Carl	Comment resolution process resumed
16:50	Break	
15:20	Ken	Presentation on Basic and Secondary Management Connection usage
	Group	The necessity of different QoS connections for Management purposes was identified. After discussing, the resolution was to use 3 CIDs for Management purposes instead of 2 (i.e. Basic and Secondary).
16:20		Adjournment

Wednesday, January 24, 2001

8:10	Carl	Call to order
	Group	Comment resolution process
12:00	Lunch break	
13:30	Jay, Carl	MAC-PHY joint meeting
	Comment resolution	The PHY-SAP parameters could not be identified. Vladimir Hannover to provide the correct set of parameters.
		8.2.4.3.2.1 section will be removed from the document, since it does not apply for PHY Mode A.
		Mandatory and optional parameters to be defined and provided by Jay
		Comment 302: Remove 64QAM from UL optional modulations 1 Favour 7 Opposed Comment rejected
		Comment 373: Capability of the MAC to set-up the gaps between bursts. This is a system wide parameters dependent expressed in PS units.
14:30	Carl	MAC Comment resolution resumed
	Group	Carl to redraw Figure 62 to correct several mistakes in the diagram
18:00	Carl	Session adjourned

Thursday, January 25, 2001

8:25	Carl	Call to order
	Ken	Revised changes for comment 11-81
	Group	Comment resolution process
10:00	Break	
10:30	Roger	Letter Ballot questions and answers
11:00	Group	Comment resolution process
12:00	Lunch break	
13:15	Group	Comment resolution process
		Discussion about specifics of the ATM Convergence Sublayer was carried out. The contribution will be modified to reflect the need to support different ATM services, specifying which of them are to be compulsory and which are not.
		Discussion about how to handle fragmentation and packing was carried out. The document, including MAC header fields are going to be modified as per a document that Ken will provide.
14:35	Break	
		Discussion about Payload Header Suppression. IP: The compression will be IETF defined, meaning that it'll be out of the scope of the MAC Convergence Sublayer. No PHS included.
		Discussion on Classifiers. Classifiers will be defined in the standard. They can be transported by the Configuration File, DSx messages and SNMP messages. Each protocol will have a different set of classifiers that may or may not be implemented by the manufacturer. They will be ordered as TLVs per protocol and not related to any specific Convergence Sublayer.

		MAC-PHY Discussion and resolution of comments related to PHY-SAP
17:45	Carl	TG1-TG3 Packing discussion. Three Fragmentation fields are proposed by TG1: (2 bits) Fragmentation Control (3 bits) Fragmentation Sequence (11 bits) Length. These fields would be added after the MAC header and before each specific SDU included in the PDU. The scheme was generally accepted, provided that any future ARQ contribution will be self-contained in terms of specific header definition, sequence number field, etc.
18:15	Carl	MAC Session adjourned

19:45	Roger	<p>TG1,TG3 and TG4 MAC session TG1 enhancements were presented by the TG1 to the Group.</p> <p>MAC Header</p> <ul style="list-style-type: none"> <input type="checkbox"/> Alternative format for the GM field <p>Concatenation/Fragmentation scheme</p> <ul style="list-style-type: none"> <input type="checkbox"/> Concatenation + Fragmentation simultaneously <input type="checkbox"/> Predictable overhead estimation <input type="checkbox"/> Low overhead <input type="checkbox"/> Efficient recovery for errors <input type="checkbox"/> Flexibility in delimiter field (for ACK/NACK inclusion) <p>ARQ</p> <ul style="list-style-type: none"> <input type="checkbox"/> Separate upstream ACKs <input type="checkbox"/> Downstream ACKs in MAP <input type="checkbox"/> Options for GBN and SR in signalling <input type="checkbox"/> Option to piggyback on MPDU <input type="checkbox"/> Cumulative ACKs supported <input type="checkbox"/> Robustness against error conditions <p>Map packet related issues</p> <ul style="list-style-type: none"> <input type="checkbox"/> Relevance of Map messages <input type="checkbox"/> Additional IE types <p>Timing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Time Stamp definition <input type="checkbox"/> Mini-slot count issues <p>Parallel polling</p> <ul style="list-style-type: none"> <input type="checkbox"/> Exchange of information in-between BS and SS for implementing this sort of scheme in an OFDM-type of system. <p>TG3 and TG4 will give specific comments on how to implement ARQ, packing and Frame schemes, in order for TG1 to evaluate and add to the present document their proposals.</p> <p>TG3 and TG4 showed a big interest in adding a Type field to the current MAC header. TG3 proposed a 5 bit Type field, whereas TG4 proposed a 8 bits field. Vladimir showed one imaginary scenario where a type field makes sense from the H/W point of view for making the MAC header constant-part common for all the different MAC messages, while leaving the options variable as indicated by this type field.</p>
21:00	Roger	Session adjourned

Friday, January 26, 2001

8:10	Carl	Call to order
	Group	Resolution of pending comments from Session #10 in Tampa.
9:00	Carl	Session adjourned