Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

# Results of LMSC Ballot on Draft Standard 802.11 D5.0

#### **Resolutions for Comments on Annexes**

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
1	A.4.4.1 11.4 A.4.4.1 PC15.1 PC15.2 PC15.3 Annex D	GMG	Т	Y	Currently the entire MIB is specified to be mandatory for Standard Compliance.  Since the MIB is not required for interoperability between stations, this is considered far to restrictive.  Therefore its support should be optional, which brings this standard more in line with the other 802 standards, none of which define the MIB to be mandatory.  The intend of standardizing should be that when a MIB is provided it should use the definitions defined in the optional MIB.	Make the Status of all items in PC15 Optional.	Accepted, in part. Due to comment processing in clause 11, the MIB was significantly revised. Much of the MIB has been deleted and other portions have been put into optional packages. However, there are portions of the MIB that are mandatory.
2	A.4.4.1 11.4 PC15.1 PC15.2 PC15.3 Annex D	WD	Т	Y	Currently the whole MIB is specified to be mandatory for Standard Compliance.  This is considered far to restrictive.  Sinse the MIB is not required for interoperability between stations, its support should be optional.  This is also more in line with the other 802 standards, none of which define the MIB to be mandatory.  By defining the MIB to be optional, the intend of standerdizing its use when implemented is met, because it means; When a MIB is supported then this is to be its definition.	Make the Status of all items in PC15 Optional.	Accepted.

Seq	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			_
		s ID	E, e,	NO			
		code	T, t	vote			

	1	ı	T.	1			
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
3	A.4.5	vh	E		The item identification column is inconsistent with the majority of other MIB item identifications. The change in the next column will make it will make consistent	Change in the Item column all occurrences of "14." into "FH". Change in the status column all occurrences of 14.2 into FH2	Accepted. TEXT_NOT_CHANGED
4	A.4.5	vh	Е		The definition of the option of 2 Mbit/s is not specified according to what I understand as the rule. The next column will bring correction	Replace FH2 (prior called 14.2) into the following 2 rows: FH2.1//TXVECTOR parameter: PLCPBITRATE= 1//14.2.2.2//M//yes * FH2.2//TXVECTOR parameter:PLCPBITRATE=2//14.2. 2.2//O//yes no	Accepted. TEXT_NOT_CHANGED
						Change in the status column all occurrences of FH2 (prior called 14.2) into FH2.2	
5	A.4.5	SB	Е	N	For consistency Frequency Hopping PHY PICS items should have the form FHxx rather than 14.xx. Support column should have the form Yes \(\sigma\) No \(\sigma\) for mandatory items.	Renumber items FHxx; suggest grouping related items - such as 1M PMD such that the item numbering is FHxx.yy	Accepted.
						Support column should have the form Yes $\square$ No $\square$ for mandatory items.	
6	A.4.5	SB	t	N	Item 14.2 'TXVECTOR parameter: PLCPBITRATE' is marked as being mandatory. It is actually optional in the body of the standard (14.2.2.2).	Change item to Optional (O)	Accepted. refer to comment A4.5 by VH Ron/George (6-0-0)
7	A.4.5	SB	e	N	Grouping of items and tabulation in FH and IR PICS needs to be addressed	Bring style into line.	Deferred to editor. (intend to Accept)
8	A.4.7	vh	E		The item identification column is inconsistent with the majority of other MIB item identifications. The	Change in the Item column all occurrences of "16." into "IR".	Accepted TEXT_NOT_CHANGED

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

		coae	1, t	vote	I	I	
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					change in the next column will make it will make consistent	Change in the status column all occurrences of 16. into IR	
9	A.4.7	vh	E		Non conventional use in row IR23	Change C: in the status column into IR5a	Accepted
10	A.4.7	vh	e		The first item is included as part of the header	Remove the attribute header from this row	Accepted
11	A.4.7	SB	Е	N	For consistency Infra Red PHY PICS items should have the form IRxx rather than 16.xx. Support column should have the form Yes $\square$ No $\square$ for mandatory items.	Renumber items IRxx; suggest grouping related items such that the item numbering is IRxx.yy  Support column should have the form Yes  No  for mandatory items.	Accepted
12	A.4.7	SB	t	N	Regarding IR PICS items 16.25 and 16.26. My understanding is that you can conform to emitter radiation mask 1, or 2 (but you must conform to one or the other).  In this case the correct PICS status is O.1 for both items rather than M.1.	Change status from M.1 to O.1 for both items.	Accepted
13	A.4.7	SB	t	N	IR PICS item 16.23 is marked a status C:M. I think this item is conditional on 16.5a (should be renamed item IRxx as noted in a separate comment).	Change status to 16.5a:M  (Change 16.5a to IRxx when PICS reformatted)	Accepted
14	A.4.7	SB	Е	N	Style of IR PHY is very different to MAC, FH and DS.	Bring style into line.	Accepted
15	A.4.7	SB	Е	N	I seem to have spurious items 16.1 and another row with no reference in the IR PICS between items 16.34 and 16.35	Delete spurious rows.	Accepted.
16	A4.5	JMZ	t		The FH PHY PICS Proforma does not make it clear that support for any given regulatory domain is optional. The implication is that all N of them must be implemented	Correct the PICS to indicate that support for any given regulatory domain is optional.	comment accept Supporting any one geographical area is optional. For any

	viai (ii .	1//I		I _	T	I	1 002.11-90/130-9/K2
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
					in any conformant device. This is a ridiculous		supported geographical area, all
					requirement.		relevant technical requirements in
							14.6.3 through 14.6.9 must be met
							Ron/Carl (4-0-0)
17	A4.7	PMK	e		Item 16.34. This item is interrupted by a duplication of	Delete the second iteration of item	Accepted.
					the write-up on item 16.1	16.1 and connect the two parts of item	-
					-	16.34	
18	Annex	GMG	T	Y	The MSDU ordering provisions have been included	Delete sections 6.1.3, 9.8 and PC8.2	Accepted.
	A.4.4.1				in this standard to provide an optional alternative for	in Annex. A.	·
	PC8.2				those applications that do require strictly ordering	OR	
	6.1.3				service, for those cases where the type of frame	Mark this functionality as optional.	
	9.8				reordering introduced by the Power Management	,	
					buffering provisions will cause a problem.		
					81		
					The intent of this provision was to have an		
					alternative available, but it would be an option that		
					would not affect the normal implementation.		
					However the PICS does not list this provision as		
					optional.		
					Therefore these sections should be deleted, or it		
					should be made clear in the text that this is optional		
					and not mandatory functionality.		
19	Annex	WD	T	Y	The MSDU ordering provisions were included in this	Delete sections 6.1.3, 9.8 and PC8.2	Accepted.
	A.4.4.1				standard to provide an optional alternative method	in Annex. A.	<u>'</u>
	PC8.2				for those cases where the type of frame reordering	OR	
	6.1.3				introduced by the Power Management buffering	Mark this functionality as optional.	
	9.8				provisions would yield a problem.	a specific	
	7.0				Partly this statement was meant to end discussions on		
					the question whether the re-ordering characteristics		
					would comply to 802 frame reordering requirements.		
					The intend of this provision was to have an		
					alternative available, but it would be an option that		
	1				arter matric available, but it would be all option that		

would not affect the normal implementation.

	iviai cii .	 I	1	Cmnt Part Comment/Dationale		T T T T T T T T T T T T T T T T T T T	1 002:11 70/150 7/1C2
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
Seq. #	Clause number	your voter' s ID	Cmnt type E, e,	Part of NO	Comment/Rationale	Recommended change	Disposition/Rebuttal
		code	T, t	vote	However the subject sections and the PICS does not list this provision as optional.  Last thing I heard was that 802 is changing its requirement in this respect.  Therefore these sections should be deleted, or at least it should be made clear in the text that this is optional and not mandatory functionality.		
20	Annex A.4.4.1 6.1.3 9.8	MAF	T	Y	The strictly ordered service class was included in this standard to provide an alternative method to handle those cases where the type of frame reordering possible when using Power Management buffering might cause a problem for a higher layer protocol.  The intent of this provision was to provide a strictly ordered alternative for the applications which may require one, but not to make this facility mandatory for all implementations. Unfortunately, the cited sections and the PICS do not list this facility as optional.	Change PC8.2 from status "M" to status "O". Add a sentence to 6.1.3 and 9.8 to indicate the strictly ordered service is optional.  Note that, in 6.2.1.3, the transmission status of "unavailable service class" is already specified to be returned if strictly ordered service is requested but is not available.	Accepted.
21	Annex A: A.4.4.1 item PC15	MAF	Т	Y	The whole MAC management information base is mandatory according to this PICS entry. This is the opposite from the other 802 MAC/PHY standards, where the management facilities are either wholly or mostly optional. In addition, there is no recognition of the options in the protocol — the management facilities for WEP (privacy) and the point coordination function, are mandatory even though both of these facilities are optional according to both the text and the PICS.	The recommendation is to change the "status" of PC15, PC15.1, PC15.2 and PC15.3 from "M" to "O". A further improvement would be to set up separate sub-groups, supported by separate object classes, for WEP and PCF, and to tie these object groups to the optional WEP and PCF functionality respectively.	Accepted. GIGANTIC_AMOUNT_OF_ EDITING_STILL_REMAINS
22	Annex D p.334	WD	E		aProbeDelay What is the valid range of this value? Isn't this determined by the PHY MIB parameter that	Provide the proper specification in the PHY MIB.	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of		C	•
		s ID	E, e,	NO			
		code	T, t	vote			
	section				specifies how long it takes to switch a channel.		
	13				Although I could not find such a PHY MIB value.		
23	Annex	MAF	T	Y	The MAC protocol is described solely in English	Include a precise description of the	Accepted.
	C				prose, supported by a few diagrams. There is no	desired MAC behavior, either as a	State machines or other
	(also				formal description of the protocol behavior, either as	set of state machines (preferred) or	formal description of the
	relates				state machines or as procedures in a programming	in a procedural language (acceptable	protocol will
	to				language. This is a major impediment to	but less desriable). The author of	be included.
	clauses				interoperable implementations of the standard,	this comment will bring to the 802	
	8–11)				especially by people who did not particpate in the	Plenary meeting in Vancouver a set	
					development of the standard. This commenter	of state machines which are an	
					believes that, by D5.0, there is a great degree of	attempt to define the MAC behavior	
					common understanding of the desired MAC behavior	informally described in D5.0. These	
					among the people who have been active in the MAC	state machines, which will be in	
					group for the past several years, and that the	submission P802.11/96–132, could be	
					protocol is both implementable and useful. However,	incorporated directly to become the	
					there is little chance that a person (especially one for	contents of Annex C.	
					whom English is not their native language) who has		
					not been involved in a recent meeting of the 802.11	The simplest way to incorporate a	
					MAC group, will interpret all of the text in clauses 8	formal description of the MAC	
					through 11 in the same manner that the authors of	protocol is to insert the state	
					that text, and the voters who approved D5.0,	machines into the (presently empty)	
					intended.	Annex C – MAC State Machines and	
						to change this from an informative	
					Rather than attempt to catalog incomplete,	annex to a normative annex. This	
					ambiguous, or potentically conflicting text in the	requires far less restructuring of the	
					MAC description, this commenter prefers to	text in clauses 8 through 11 than	
					concentrate on the development of a set of state	placing the state machines in one or	
					machines which provide a more precise description	more of those clauses. A statement	
					of the desired behavior. Some of the areas which are	needs to be added early in the	
					most likely to be misinterpreted include the	document and/or in the introductory	
					relationship among the various long-period intervals	paragraphs of each clause which	
					(beacon interval, contention free repetition rate,	describes MAC operation than the	
					dewll time, listen interval); the interaction of	formal definition is the state	

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

a	CI		G 4	D (	G (MD d)	D 111	D: 44 /D I // I
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
					indeterminite duration events (such as delivery of a	machines in Annex C, and in the	
					fragmented MSDU when one or more MPDUs	event of a conflict between the text	
					require retransmission) with time boundaries (dewll	and the state machines the state	
					boundaries, beacons, contention free periods or	machines take precedence.	
					contention free medium occupancy limits); and the		
					expected behavior at station and access point for		
					power save poll generation and response.		
					(As an example, read clause 9.2.5.2, then try to find		
					all the exceptions and/or modifications to the backoff		
					rules "defined" therein — this is not a particularly		
					bad definition, but if all stations do not implement		
					backoff in an identical manner, the distributed		
					coordination function upon which this entire protocol		
					is based will not operate fairly, and may not operate		
					correctly! A backoff function in a MAC control state		
					machine can provide a single place where all of the		
					relevant backoff behavior, can be clearly defined.)		
24	Annex	SB	t	N	There are some inconsistencies between the MIB	If the ASN.1 is to take precedence over	See 23
	D				definitions in the body of the standard and the ASN.1	the standard then make it correct.	
	11.4,				definition, particularly in the case of default values. The		
					standard says that the ASN.1 definition takes	Correct all inconsistencies located and	
					precedence, but in most cases it seems that this is where	review thoroughly for others.	
					the error is. My guess would be that the ASN.1 MIB is		
					lagging the standard by at least one draft.		
					Here are the items that I have spotted - there may be		
					more:		
					aRTSThreshold default value is 3000 in 11.4 and 2304		
					in the ASN.1 definition. The ASN.1 definition is		
					incorrect since this is the maximum MSDU size and the		
					fragmentation threshold is over the MPDU which has		

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

		code	Ι, ι	vote			
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					headers and possibly WEP.  AATIMWindow has a default value in 11.4 of 4Kus and in the ASN.1 definition of 1000us. Again the ASN.1 definition is incorrect.  ACFPRate is defined in 11.4 as a number of DTIM intervals between beacons that start a CF Period. The default is 1 (one). In the ASN.1 definition, aCFPRate is defined as the number of beacon intervals between beacons that start a CF Period. The ASN.1 definition is inconsistent with the body of the standard -both 9.3.1 and the MIB definition - and is incorrect.  ACFPMaxDuration has different definitions in 11.4 and in the ASN.1. The definition in 11.4 is correct and needs to be moved to the ASN.1  aMaxRate has different definitions and default values in 11.4 and in the ASN.1. The definition in 11.4 is correct and needs to be moved to the ASN.1  aFragmentationThreshold has a correct defualt value in 11.4 of 2346 and an incorrect default value in the ASN.1 of 2304.  aShortRetryLimit has a default value of 7 in 11.4 and is related to frames shorter than or equal to aRTSThreshold. In the ASN.1 definition it takes a default value of 5 and applies to frames shorter than or equal to aFragmentationThreshold in length. The 11.4 definition is correct and consistent with clause 9.2.5.3.		

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

		code	Ι, ι	vote			
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
25	Annex D A.4.4.1	WD	T	Y	aLongRetryLimit has a default value of 4 in 11.4 and is related to frames longer than aRTSThreshold. In the ASN.1 definition it takes a default value of 7 and applies to frames longer than aFragmentationThreshold in length. The 11.4 definition is correct and consistent with clause 9.2.5.3.  aACKTimeout has different definitions in 11.4 and in the ASN.1 including different reference points - PHYTXEND.confirm in 11.4 and PHYDATA.confirm in the ASN.1. There is not a lot of difference here - but things need straightening out.  Currently the whole MIB is specified to be mandatory for Standard Compliance. This is considered far to restrictive.	Make the Status of all items in PC15 Optional.	Accepted, in principal.
	PC15.1 PC15.2 PC15.3				Sinse the MIB is not required for interoperability between stations, its support should be optional.  This is also more in line with the other 802 standards, none of which define the MIB to be mandatory.  By defining the MIB to be optional, the intend of standardizing its use when implemented is met, because it means; When a MIB is supported then this is to be its definition.		
26	Annex D 11.4 and	MAF	Т		The object groups in 11.4 (oSMT in 11.4.2.1.1, oMAC in 11.4.2.2.1) are defined according to ISO/IEC 10165–2, whereas the Annex D uses SNMP v2. These should be consistent (unless 11.4.2.x is removed due to another comment).	Use SNMPv2 in 11.4.2.x	See 23 above
27	Annex	MAF	t		There are a number of management objects which	Remove these from the MIB.	Accepted

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
	D 11.4 and				are actually derived values needed by the MAC, but not useful, nor desirable, as managed objects. This commenter believes that most of these objects exist because the procedures to derive the values (mostly from the characteristics of the PHY in use) are difficult to specify using the text approach of clauses 8 through 11. These derived values are defined as functions in the state machines to be submitted as document P802.11/96–132, and should be removed as managed objects whether or not those state machines are incorporated into the standard. These unnecessary/undesriable objects include:  aMaxMPDUTime aCTSSize aACKSize aACKTimeout	Replace with functional or proecdural definitions in the relevant clauses and/or Annex C.	TEXT_NOT_CREATED_ FOR_NEW_CLAUSE_11_ TEXT_DEFINING_USAGE
28	Annex D 11.4 and	MAF	E	{na}	aCurrenAPMACAddress and aCurrentBSSID are really the same thing, "current AP MAC address" is an artifact from an earlier version of the MAC	Remove aCurrentAPMACADDress, replace any references to this with references to aCurrentBSSID	Accepted
29	Annex D 11.4 and	MAF	t		actInitializeSMT and actInitializeMAC are rather dangerous — normally an external network management entity cannot reinitialize the MAC or SMT during operation of the station. If these are really necessary, their applicability should be restricted to occur when not associated (or to force an end to all active communication and require reassociation before communication can resume).	Recommend deleting these actions, otherwise restrict their applicability and effect to times when not associated.	Accepted
30	Annex D 11.4 and	MAF	t		aKnownAPs table and aGroupAddresses table may be worth having as readable objects, but should not have read—write access. These are not things which should be set via an external management entity — the APs are discovered by the station using the	make both of these tables read-only remove actAddGroupAddress and actDeleteGroupAddress	Accepted

			1	i			1 002:11 /0/150 //102
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			
					specified scanning procedures while the group		
					addresses are determined by higher layer protocols.		
31	Annex	GMG	Т	Y	Currently the entire MIB is specified to be	Make the Status of all items in PC15	Accepted in principal.
	D				mandatory for Standard Compliance.	Optional.	
	A.4.4.1				Since the MIB is not required for interoperability	o pulonani	
	11.4				between stations, this is considered far to restrictive.		
	11.4				· ·		
					Therefore its support should be optional, which		
	A.4.4.1				brings this standard more in line with the other 802		
	PC15.1				standards, none of which define the MIB to be		
	PC15.2				mandatory.		
	PC15.3				The intend of standardizing should be that when a		
					MIB is provided it should use the definitions defined		
					in the optional MIB.		
					•		
32	Annex	WD	t		The specification of the ATIM window is inconsistent	Update Annex. D accordingly.	Accepted. Due to
	D.				between the subject sections.	1	resolution of other
	11.2.2.1				Section 11.4.4.1 specifies 4 Kusec		comments, the specified
	&				Annex D specifies 1000, while the units are not		attribute has been deleted
	11.4.4.1				- '		from the MIB. It is now
					specified.		
	.27				Suggest to specify 4 Kusec, which will suit the DS and		a parameter of MAC
	&				FH Phy.		Management service
							primitives. It is
							consistent in all places
							that it appears.
33	Annex.	WD	e		MIB-header	Suggest to remove the definitions	partially accepted. The MIB has
	C				Various imported definitions are not used. Suggest to	that are not used.	been significantly reduced in size
	p.312				remove those that are not used.		and many of the attributes have
	1				SNMPv2-PARTY-MIB is not a valid standard anymore		been moved to the parameters of
					(its status is 'Historic'). The 802.11 MIB should not		the MLME primitives. In
					refer to that one.		addition, a large number of
					icici to that one.		
							attributes have been placed in
							optional packages. The

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
							remaining attributes are felt to be required for proper operation and management of the 802.11 MAC
34	Annex. C p.315	WD	E		aActingasWirelessAPStatus This is a characteristic of a <u>system</u> , not of the MAC layer. The MAC layer may not be aware of this at all. In addition it only seems to be a GET parameter.	Remove the MIB definition for this attribute.	See 33
35	Annex. C p.316	WD	E		aScanMode Is it not up to the vendor's implementation to determine what scan mode is used? Why must the user be given management control over this?	Remove the MIB definition for this attribute.	See 33
36	Annex. C p.317	WD	E		aScanState This is a very trancient attribute. It would depend on pure luck for a management system to read this as 'true'.	Remove the MIB definition for this attribute.	See 33
37	Annex. D 11.4 PC15.1 PC15.2 PC15.3	WD	E	У	According to the current PICS we should support a full MIB, even when we do not implement the options like WEP and PCF.  This is clearly not acceptable.  The MIB and PICS proforma should be restructured such that it allows for exclusion of the MIB items that are associated with optional functionality in the standard.  The prime purpose of the MIB definitions is to provide a common understanding of objects for Network Management and diagnostic purposes.  However the vast majority of the MIB definitions are not relevant for Network Management purposes.  Part of the currently defined MIB (especially the PHY MIBs) are primarily there to provide relevant PHY dependent parameters for the MAC. These in	The MIB and PICS should be restructured to allow exclusion of items associated with optional functionality that is not implemented.  This relates in particular to the WEP and PCF functionality.  The MIB and PICS should be restructured to define subsets that are relevant for Network Management and Diagnostic purposes.  In particular this relates to the following subset.	Accepted (the optionality part TEXT_NOT_UPDATED) WILL_USE_AS_GUIDANCE_ FOR_REFORMATTING

particular are not relevant for Network Management purposes.

Section 11.4.3.2.2 agCountergrp

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					Furthermore the control of most controllable MIB parameters will be very implementation specific, and do fully depend on the actual configuration and configuration mechanism provided by the vendor of the end product.  It would be desirable to specify a MIB subset that is relevant for Network Management purposes, especially those that provide statistic information.	aMaxRate, aManufacturerID, aProductID, aPrivacyOptionImplemented.	
38	p.314 5.2.3	WD	E		agStationConfigGrp Items related to Contention Free operation (aCFPRate, aCFPMaxDuration, aMediumOccupancyLimit, and maybe aCFPollable?) should be in a separate optional group	Create separate group for the MIB definitions relevant for this option group, containing: aCFPRate, aCFPMaxDuration, aMediumOccupancyLimit, and maybe aCFPollable	See 33
39	p.315	WD	E		aBeaconPeriod What is the valid range of this value? "kmicroseconds" should be "Kmicroseconds" (3x).	"kmicroseconds" should be "Kmicroseconds" (3x). Specify the valid range.	See 33
40	p.316	WD	E		aPassiveScanDuration What is the valid range of this value? "kmicroseconds" should be "Kmicroseconds".	"kmicroseconds" should be "Kmicroseconds" (3x). Specify the valid range.	See 33
41	p.316	WD	E		aListenInterval What is the valid range of this value?	Specify the valid range.	See 33
42	p.316	WD	Е		aCFPMaxDuration What is the valid range of this value? "1024 microseconds" should be "Kmicroseconds" (consistency).	"change 1024 microseconds" into "Kmicroseconds"	See 33
43	p.317	WD	E		aDTIMPeriod What is the valid range of this value?	Specify the valid range.	See 33
44	p.318	WD	E		aMaxMPDUTime What is the significance of this for management purposes? The MAC can use a derived value from the PHY MIB.	Remove the MIB definition for this attribute.	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
45	p.318	WD	Е		aATIMWindow What is the valid range of this value? There are no units specified. The default value for this parmeter is far to low, aassuming units of usec.	Specify the valid range. Specify the units to be Kmicroseconds. Specify a default value for this parameter of either zero (no Power Management) or 4 Kmicroseconds.	See 33
46	p.318	WD	E		aMediumOccupancyLimit What is the minimum value? "1024 microseconds" should be "Kmicroseconds" (consistency).	Specify the minimum value. "1024 microseconds" should be " <u>K</u> microseconds"	See 33
47	p.320	WD	E		aAuthenticationAlgorithm Typo: "algorithm <u>s</u> " should be "algorithm".	Typo: "algorithms" should be "algorithm".	See 33
48	p.322	WD	E		aCurrentAPMACAddress and aCurrentBSSID What is the difference between these two objects? Do we really need these two?	Suggest to delete aCurrentAPMACAddress	See 33
49	p.323	WD	E		aKnownAPs table What is the significance of this for management purposes? And why does it have Read-Write access?	Remove the MIB definition for this attribute.	See 33
50	p.326	WD	E		aExcludeUnencrypted Default should be specified. (presumably default is false)	Default should be specified to be false.	See 33
51	p.330	WD	E		aGroupAddress Typo: "address <u>es</u> " should be "address". "from" should be "for"?	Typo: "address <u>es</u> " should be "address".  "from" should be "for	See 33
52	p.332	WD	E		aCTSSize What is the significance of this for management purposes? It is a derived parameter from the PHY MIB, so why is it needed?	Remove the MIB definition for this attribute.	See 33
53	p.332	WD	E		aACKTimeout What is the significance of this for management purposes? It is a derived parameter from the PHY MIB, so why is it needed?	Remove the MIB definition for this attribute.	See 33
54	p.332	WD	E		aMaxRate	"current" should be "maximum"	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					The description is incorrect (see also 11.4.4.2.21). "current" should be "maximum"? Should be in units of 100kbit/s?	Should be in units of 100kbit/s.	
55	p.332	WD	E		aRTSThreshold The default value (2305) is wrong. A MPDU can be up to 2346 octets long. Section 11.4.4.2.22 specifies this as 3000.	Set default to 3000	See 33
56	p.333	WD	E		aShortRetryLimit The description referes to aFragmentationThreshold; this should be aRTSThreshold? What is the valid range of this value?	Change aFragmentationThreshold into aRTSThreshold. Specify the valid range.	See 33
57	p.333	WD	E		aLongRetryLimit The description referes to aFragmentationThreshold; shouldn't this be aRTSThreshold? What is the valid range of this value?	Change aFragmentationThreshold into aRTSThreshold. Specify the valid range.	See 33
58	p.334	WD	e		aMinProbeResponseTime "kmicroseconds" should be "Kmicroseconds".	"Kmicroseconds" should be "Kmicroseconds".	See 33
59	p.334	WD	e		aMaxProbeResponseTime "kmicroseconds" should be "Kmicroseconds".	"kmicroseconds" should be "Kmicroseconds".	See 33
60	p.334 & 335	WD	e		aMaxTransmitMSDULifetime What is the valid range of this value? "kmicroseconds" should be "Kmicroseconds".	Specify the valid range. "kmicroseconds" should be "Kmicroseconds".	See 33
61	p.335	WD	e		aMaxReceiveMSDULifetime What is the valid range of this value? "kmicroseconds" should be "Kmicroseconds".	Specify the valid range. "kmicroseconds" should be "Kmicroseconds".	See 33
62	p.336- 340	WD	Е		All counters (including p.326 ICVErrorCount; see also top of p.314): It is better to define counters as Read-only. This is common practice in SNMP-based network management. Writing (resetting) a counter may interfere with an analysis done from another management station.		See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
63	p.338	WD	E		aFailedCount The "retrymax value" should be specified, as "aShortRetryLimit or aLongRetryLimit".		See 33
64	p.340	WD	E		aErrorCount When is this counter to be updated?		See 33
65	p.343 & 344	WD	E		aRecourceInfo table Why do these objects have Read-Write access? Should be Read-only.		See 33
66	p.346	WD	Е		aSlotTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
67	p.346	WD	E		aPHYType The SYNTAX defines this as an Integer32, while the description defines this a an 8-bit integer. Please, define this as an enumerated integer.		See 33
68	p.346	WD	E		aSlotTime The description refers to various incorrect attribute names.		See 33
69	p.346 & 347	WD	E		aCCAAsmntTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13.	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

C	CI		G 4	D 4	C 4/D 4: 1		D: '': /D.1 // 1
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						The value is fixed per PHY, and is of no interrest for Management purposes.	
70	p.347	WD	Е		aRxTxTurnaroundTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
71	p.347	WD	E		aTxPLCPDelay What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
72	p.347	WD	E		aRxTxSwitchTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
73	p.347	WD	E		aTxRampOnTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
74	p.347	WD	E		aSIFSTime	Remove this definition from Annex	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID	Cmnt type E, e,	Part of NO	Comment/Rationale	Recommended change	Disposition/Rebuttal
		code	T, t	vote	What is the significance of this for management purposes?	D, as it a PHY definition that is being defined for multiple PHY's in section 13.  The value is fixed per PHY, and is of no interrest for Management purposes.	
75	p.347	WD	E		aRxRFDelay What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
76	p.347	WD	Е		aRxPLCPDelay What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
77	p.347	WD	E		aRxTxTurnaroundTime The description refers to various incorrect attribute names.	<b>,</b> , ,	See 33
78	p.347	WD	E		aSIFSTime The description refers to various incorrect attribute names.		See 33
79	p.347 & 348	WD	E		aTxRFDelay What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13.	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						The value is fixed per PHY, and is of no interrest for Management purposes.	
80	p.348 & 349	WD	Е		aTxRampOffTime What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
81	p.349	WD	Е		aPreambleLngth What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
82	p.349	WD	Е		aPLCPHdrLngth What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
83	p.349	WD	Е		aMPDUDurationFactor What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
84	p.349	WD	E		aAirPropagationTime	Remove this definition from Annex	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

		coue	Ι, ι	vote	L		
Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					What is the significance of this for management purposes?	D, as it a PHY definition that is being defined for multiple PHY's in section 13.  The value is fixed per PHY, and is of no interrest for Management purposes.	
85	p.349	WD	Е		aMPDUDurationFactor In what units is this to be specified?		See 33
86	p.349	WD	E		aAirPropagationTime In what units is this to be specified?		See 33
87	p.349	WD	Е		aTempType In what units is this to be specified?		See 33
88	p.350	WD	Т	Y	aCWmin What is the significance of this for management purposes?  Further this parameter is still specified to be Get-REPLACE in the MAC MIB section 11.4, which should	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management	Accepted (will address in new Clause 11 Internal Values text) TEXT_NOT_IMPLEMENTED
					be GET only. This parameter is also in the PHY MIB, which is the correct place, because the parameter is different per PHY.	purposes.  It should be deleted from the MAC MIB, and its status should be GET only.	
89	p.350	WD	Т	Y	aCWmax What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13.	See 88
					Further this parameter is still specified to be Get- REPLACE in the MAC MIB section 11.4, which should	The value is fixed per PHY, and is of no interrest for Management	

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					be GET only. This parameter is also in the PHY MIB, which is the correct place, because the parameter is different per PHY.	purposes.  It should be deleted from the MAC MIB, and its status should be GET only.	
90	p.350	WD	E		aRegDomainsSuprt Values are not in-line with the definition of aRegDomainsSuprtValue (p.351).		See 33
91	p.351	WD	E		aRegDomainsSuprtValue The SYNTAX defines this as an Integer32, while the description defines this a an 8-bit integer. Please, define this as an enumerated integer.		See 33
92	p.352 & 353	WD	E		aSuprtDataRatesRx Typo: "transmit' should be "receive". DEFVAL {NULL} ??.		See 33
93	p.353	WD	E		aPrefMaxMPDUFrgmntLngth The description refers to its own name in an incorrect way (_s!).		See 33
94	p.353 - 355	WD	E		agAntennaList What is the significance of this whole group for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33 See 33
95	p.355 - 356	WD	E		agPhyAntennaGrp What is the significance of this whole group for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13.	See 33

Seq.	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						The value is fixed per PHY, and is of no interrest for Management purposes.	
96	p.357 - 359	WD	E		agPhyTxPwrGrp What is the significance of this whole group for management purposes? (Note: agPhyFHSSGrp not analyzed)	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
97	p.363	WD	E		aCCAModeSuprt What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
98	p.363	WD	E		aCurrentCCAMode What is the significance of this for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
99	p.363	WD	E		aCurrentChannel In what units is this to be specified? Please define.		See 33
100	p.363 - p.366	WD	E		aCCAModeSuprt What values? aCurrentCCAMode What values? aEDThreshold		See 33

Seq	Clause	your	Cmnt	Part	Comment/Rationale	Recommended change	Disposition/Rebuttal
#	number	voter'	type	of			
		s ID	E, e,	NO			
		code	T, t	vote			

Seq. #	Clause number	your voter' s ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale  What values?	Recommended change	Disposition/Rebuttal
					aCurrentPowerState What values?		
101	p.364	WD	E		aSynthesizerLocked What is the significance of this (group) for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
102	p.365 - 367	WD	E		agPhyPwrSavingGrp What is the significance of this (group) for management purposes?	Remove this definition from Annex D, as it a PHY definition that is being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interrest for Management purposes.	See 33
103	p.366	WD	Е		aDozeTurnonTime through agPhyPwrSavingGrpStatus. aDozeTurnonTime is defined as { agPhyPwrSavingGrpEntry 4 } while there is no '3'. This object and all following in the group should be renumbered.		See 33