

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
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Results of LMSC Ballot on Draft Standard 802.11 D5.0

Resolutions for Comments on Annexes

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1	A.4.4.1 11.4 A.4.4.1 PC15.1 PC15.2 PC15.3 Annex D	GMG	T	Y	<p>Currently the entire MIB is specified to be mandatory for Standard Compliance.</p> <p>Since the MIB is not required for interoperability between stations, this is considered far to restrictive.</p> <p>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.</p> <p>The intend of standardizing should be that when a MIB is provided it should use the definitions defined in the optional MIB.</p>	Make the Status of all items in PC15 Optional.	Accepted. The management function will be optional, but if implemented it shall be implemented using the MIB as described in the standard.
2	A.4.4.1 11.4 PC15.1 PC15.2 PC15.3 Annex D	WD	T	Y	<p>Currently the whole MIB is specified to be mandatory for Standard Compliance.</p> <p>This is considered far to restrictive.</p> <p>Since the MIB is not required for interoperability between stations, its support should be optional.</p> <p>This is also more in line with the other 802 standards, none of which define the MIB to be mandatory.</p> <p>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.</p>	Make the Status of all items in PC15 Optional.	Accepted.

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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	E		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 Change in the status column all occurrences of FH2 (prior called 14.2) into FH2.2	Accepted. TEXT_NOT_CHANGED
5	A.4.5	SB	E	N	For consistency Frequency Hopping PHY PICS items should have the formFHxx rather than 14.xx. Support column should have the form Yes <input type="checkbox"/> No <input type="checkbox"/> for mandatory items.	Renumber itemsFHxx; suggest grouping related items - such as 1M PMD such that the item numbering is FHxx.yy Support column should have the form Yes <input type="checkbox"/> No <input type="checkbox"/> for mandatory items.	Accepted.
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

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					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	
10	A.4.7	vh	e		The first item is included as part of the header	Remove the attribute header from this row	
11	A.4.7	SB	E	N	For consistency Infra Red PHY PICS items should have the form IRxx rather than 16.xx. Support column should have the form Yes <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> No <input type="checkbox"/> for mandatory items.	
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)	
14	A.4.7	SB	E	N	Style of IR PHY is very different to MAC, FH and DS.	Bring style into line.	
15	A.4.7	SB	E	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

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					in any conformant device. This is a ridiculous requirement.		supported geographical area, all 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 the write-up on item 16.1	Delete the second iteration of item 16.1 and connect the two parts of item 16.34	Accepted.
18	Annex A.4.4.1 PC8.2 6.1.3 9.8	GMG	T	Y	<p>The MSDU ordering provisions have been included in this standard to provide an optional alternative for those applications that do require strictly ordering service, for those cases where the type of frame reordering introduced by the Power Management buffering provisions will cause a problem.</p> <p>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.</p> <p>Therefore these sections should be deleted, or it should be made clear in the text that this is optional and not mandatory functionality.</p>	<p>Delete sections 6.1.3, 9.8 and PC8.2 in Annex. A.</p> <p>OR</p> <p>Mark this functionality as optional.</p>	Accepted.
19	Annex A.4.4.1 PC8.2 6.1.3 9.8	WD	T	Y	<p>The MSDU ordering provisions were included in this standard to provide an optional alternative method for those cases where the type of frame reordering introduced by the Power Management buffering provisions would yield a problem.</p> <p>Partly this statement was meant to end discussions on the question whether the re-ordering characteristics would comply to 802 frame reordering requirements.</p> <p>The intend of this provision was to have an alternative available, but it would be an option that would not affect the normal implementation.</p>	<p>Delete sections 6.1.3, 9.8 and PC8.2 in Annex. A.</p> <p>OR</p> <p>Mark this functionality as optional.</p>	Accepted.

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					<p>However the subject sections and the PICS does not list this provision as optional.</p> <p>Last thing I heard was that 802 is changing its requirement in this respect.</p> <p>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.</p>		
20	Annex A.4.4.1 6.1.3 9.8	MAF	T	Y	<p>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</p> <p>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.</p>	<p>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.</p> <p>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.</p>	Accepted.
21	Annex A: A.4.4.1 item PC15	MAF	T	Y	<p>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.</p>	<p>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.</p>	Accepted. GIGANTIC_AMOUNT_OF_EDITING_STILL_REMAINS
22	Annex D p.334	WD	E		<p>aProbeDelay</p> <p>What is the valid range of this value?</p> <p>Isn't this determined by the PHY MIB parameter that</p>	Provide the proper specification in the PHY MIB.	

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	section 13				specifies how long it takes to switch a channel. Although I could not find such a PHY MIB value.		
23	Annex C (also relates to clauses 8-11)	MAF	T	Y	<p>The MAC protocol is described solely in English prose, supported by a few diagrams. There is no formal description of the protocol behavior, either as state machines or as procedures in a programming language. This is a major impediment to interoperable implementations of the standard, especially by people who did not participate in the development of the standard. This commenter believes that, by D5.0, there is a great degree of common understanding of the desired MAC behavior among the people who have been active in the MAC group for the past several years, and that the protocol is both implementable and useful. However, there is little chance that a person (especially one for whom English is not their native language) who has not been involved in a recent meeting of the 802.11 MAC group, will interpret all of the text in clauses 8 through 11 in the same manner that the authors of that text, and the voters who approved D5.0, intended.</p> <p>Rather than attempt to catalog incomplete, ambiguous, or potentially conflicting text in the MAC description, this commenter prefers to concentrate on the development of a set of state machines which provide a more precise description of the desired behavior. Some of the areas which are most likely to be misinterpreted include the relationship among the various long-period intervals (beacon interval, contention free repetition rate, dwell time, listen interval); the interaction of</p>	<p>Include a precise description of the desired MAC behavior, either as a set of state machines (preferred) or in a procedural language (acceptable but less desirable). The author of this comment will bring to the 802 Plenary meeting in Vancouver a set of state machines which are an attempt to define the MAC behavior informally described in D5.0. These state machines, which will be in submission P802.11/96-132, could be incorporated directly to become the contents of Annex C.</p> <p>The simplest way to incorporate a formal description of the MAC protocol is to insert the state machines into the (presently empty) Annex C – MAC State Machines and to change this from an informative annex to a normative annex. This requires far less restructuring of the text in clauses 8 through 11 than placing the state machines in one or more of those clauses. A statement needs to be added early in the document and/or in the introductory paragraphs of each clause which describes MAC operation and the formal definition is the state</p>	<p>Proposal to MAC Group: Accept this comment by:</p> <ul style="list-style-type: none"> (a) Deleting Annex D (b) Making Clause 11 (GMDO description of MIB) correct and in agreement with draft and normative (c) Restrict GMDO to SNMP-compatible subset of possible data types (d) Have Clause 11 MIB grouped to agree with the new optionality criteria in the PICS

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					<p>indeterminate duration events (such as delivery of a fragmented MSDU when one or more MPDUs require retransmission) with time boundaries, boundaries, beacons, contention free periods or contention free medium occupancy limits); and the expected behavior at station and access point for power save poll generation and response.</p> <p>(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.)</p>	<p>machines in Annex C, and in the event of a conflict between the text and the state machines the state machines take precedence.</p>	
24	Annex D 11.4,	SB	t	N	<p>There are some inconsistencies between the MIB definitions in the body of the standard and the ASN.1 definition, particularly in the case of default values. The standard says that the ASN.1 definition takes precedence, but in most cases it seems that this is where the error is. My guess would be that the ASN.1 MIB is lagging the standard by at least one draft.</p> <p>Here are the items that I have spotted - there may be more:</p> <p>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</p>	<p>If the ASN.1 is to take precedence over the standard then make it correct.</p> <p>Correct all inconsistencies located and review thoroughly for others.</p>	See 23

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					<p>headers and possibly WEP.</p> <p>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.</p> <p>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.</p> <p>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</p> <p>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</p> <p>aFragmentationThreshold has a correct default value in 11.4 of 2346 and an incorrect default value in the ASN.1 of 2304.</p> <p>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.</p>		

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					<p>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.</p> <p>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.</p>		
25	Annex D A.4.4.1 11.4 PC15.1 PC15.2 PC15.3	WD	T	Y	<p>Currently the whole MIB is specified to be mandatory for Standard Compliance.</p> <p>This is considered far to restrictive.</p> <p>Since the MIB is not required for interoperability between stations, its support should be optional.</p> <p>This is also more in line with the other 802 standards, none of which define the MIB to be mandatory.</p> <p>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.</p>	Make the Status of all items in PC15 Optional.	Accepted, in principal.
26	Annex D 11.4 and	MAF	T		<p>The object groups in 11.4.2.1.1, MAC 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).</p>	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

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	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/undesirable objects include: aMaxMPDUTime aCTSSize aACKSize aACKTimeout	Replace with functional or procedural 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}	aCurrentAPMACAddress 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

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					specified scanning procedures while the group addresses are determined by higher layer protocols.		
31	Annex D A.4.4.1 11.4 A.4.4.1 PC15.1 PC15.2 PC15.3	GMG	T	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 principal.
32	Annex D. 11.2.2.1 & 11.4.4.1 .27 &	WD	t		The specification of the ATIM window is inconsistent between the subject sections. Section 11.4.4.1 specifies 4Kusec Annex D specifies 1000, while the units are not specified. Suggest to specify 4Kusec, which will suit the DS and FH Phy.	Update Annex. D accordingly.	Accepted TEXT_NOT_CHANGED
33	Annex. C p.312	WD	e		MIB-header Various imported definitions are not used. Suggest to remove those that are not used. SNMPv2-PARTY-MIB is not a valid standard anymore (its status is 'Historic'). The 802.11 MIB should not refer to that one.	Suggest to remove the definitions that are not used.	
34	Annex. C	WD	E		aActingasWirelessAPstatus This is a characteristic of a <u>system</u> , not of the MAC	Remove the MIB definition for this attribute.	

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	p.315				layer. The MAC layer may not be aware of this at all. In addition it only seems to be a GET parameter.		
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.	
36	Annex. C p.317	WD	E		aScanState This is a very transient attribute. It would depend on pure luck for a management system to read this as 'true'.	Remove the MIB definition for this attribute.	
37	Annex. D 11.4 PC15.1 PC15.2 PC15.3	WD	T E	y	<p>According to the current PICS we should support a full MIB, even when we do not implement the options like WEP and PCF.</p> <p>This is clearly not acceptable.</p> <p>The MIB and PICSproforma should be restructured such that it allows for exclusion of the MIB items that are associated with optional functionality in the standard.</p> <p>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.</p> <p>Part of the currently defined MIB (especially the PHY MIBs) are primarily there to provide relevant PHY dependent parameters for the MAC. These in particular are not relevant for Network Management purposes.</p> <p>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.</p>	<p>The MIB and PICS should be restructured to allow exclusion of items associated with optional functionality that is not implemented.</p> <p>This relates in particular to the WEP and PCF functionality.</p> <p>The MIB and PICS should be restructured to define subsets that are relevant for Network Management and Diagnostic purposes.</p> <p>In particular this relates to the following subset.</p> <p>Section 11.4.3.2.2agCountergrp</p> <p>aMaxRate, aManufacturerID, aProductID, aPrivacyOptionImplemented.</p>	Accepted (the optionality part TEXT_NOT_UPDATED) WILL_USE_AS_GUIDANCE_FOR_REFORMATTING

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					It would be desirable to specify a MIB subset that is relevant for Network Management purposes, especially those that provide statistic information.		
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	
39	p.315	WD	E		aBeaconPeriod What is the valid range of this value? "kmicroseconds" should be <u>K</u> microseconds" (3x).	"kmicroseconds" should be " <u>K</u> microseconds" (3x). Specify the valid range.	
40	p.316	WD	E		aPassiveScanDuration What is the valid range of this value? "kmicroseconds" should be <u>K</u> microseconds".	"kmicroseconds" should be " <u>K</u> microseconds" (3x). Specify the valid range.	
41	p.316	WD	E		aListenInterval What is the valid range of this value?	Specify the valid range.	
42	p.316	WD	E		aCFPMaxDuration What is the valid range of this value? "1024 microseconds" should be <u>K</u> microseconds" (consistency).	" change 1024 microseconds" into " <u>K</u> microseconds"	
43	p.317	WD	E		aDTIMPeriod What is the valid range of this value?	Specify the valid range.	
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.	
45	p.318	WD	E		aATIMWindow What is the valid range of this value? There are no units specified. The default value for thisparameter is far to low, assuming units ofusec.	Specify the valid range. Specify the units to beKmicroseconds. Specify a default value for this parameter of either zero (no Power Management) or 4Kmicroseconds.	

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46	p.318	WD	E		aMediumOccupancyLimit What is the minimum value? "1024 microseconds" should be <u>K</u> microseconds" (consistency).	Specify the minimum value. "1024 microseconds" should be " <u>K</u> microseconds"	
47	p.320	WD	E		aAuthenticationAlgorithm Typo: "algorithm <u>s</u> " should be "algorithm".	Typo: "algorithm <u>s</u> " should be "algorithm".	
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	
49	p.323	WD	E		aKnownAPs table What is the significance of this for management purposes? And why does it have ReadWrite access?	Remove the MIB definition for this attribute.	
50	p.326	WD	E		aExcludeUnencrypted Default should be specified. (presumably default is false)	Default should be specified to be false.	
51	p.330	WD	E		aGroupAddress Typo: "address <u>s</u> " should be "address". "from" should be "for"?	Typo: "address <u>s</u> " should be "address". "from" should be "for"	
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.	
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.	
54	p.332	WD	E		aMaxRate The description is incorrect (see also 11.4.4.2.21). "current" should be "maximum"? Should be in units of 100kbit/s?	"current" should be "maximum" Should be in units of 100kbit/s.	
55	p.332	WD	E		aRTSThreshold The default value (2305) is wrong. A MPDU can be up	Set default to 3000	

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Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
					to 2346 octets long. Section 11.4.4.2.22 specifies this as 3000.		
56	p.333	WD	E		aShortRetryLimit The description refers to aFragmentationThreshold; this should be aRTSThreshold? What is the valid range of this value?	Change aFragmentationThreshold into aRTSThreshold. Specify the valid range.	
57	p.333	WD	E		aLongRetryLimit The description refers to aFragmentationThreshold; shouldn't this be aRTSThreshold? What is the valid range of this value?	Change aFragmentationThreshold into aRTSThreshold. Specify the valid range.	
58	p.334	WD	e		aMinProbeResponseTime "kmicroseconds" should be <u>K</u> microseconds".	"kmicroseconds" should be " <u>K</u> microseconds".	
59	p.334	WD	e		aMaxProbeResponseTime "kmicroseconds" should be <u>K</u> microseconds".	"kmicroseconds" should be " <u>K</u> microseconds".	
60	p.334 & 335	WD	e		aMaxTransmitMSDULifetime What is the valid range of this value? "kmicroseconds" should be <u>K</u> microseconds".	Specify the valid range. "kmicroseconds" should be " <u>K</u> microseconds".	
61	p.335	WD	e		aMaxReceiveMSDULifetime What is the valid range of this value? "kmicroseconds" should be <u>K</u> microseconds".	Specify the valid range. "kmicroseconds" should be " <u>K</u> microseconds".	
62	p.336-340	WD	E		All counters (including p.326ICVErrorCount; 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.		
63	p.338	WD	E		aFailedCount The "retrymax value" should be specified, as "aShortRetryLimit or aLongRetryLimit".		

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64	p.340	WD	E		aErrorCount When is this counter to be updated?		
65	p.343 & 344	WD	E		aReourceInfo table Why do these objects have Read <u>Write</u> access? Should be Read-only.		
66	p.346	WD	E		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 interest for Management purposes.	
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.		
68	p.346	WD	E		aSlotTime The description refers to various incorrect attribute names.		
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. The value is fixed per PHY, and is of no interest for Management purposes.	
70	p.347	WD	E		aRxTxTurnaroundTime What is the significance of this for management	Remove this definition from Annex D, as it a PHY definition that is	

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					purposes?	being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
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 interest for Management purposes.	
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 interest for Management purposes.	
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 interest for Management purposes.	
74	p.347	WD	E		aSIFSTime 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 interest for Management purposes.	

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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 interest for Management purposes.	
76	p.347	WD	E		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 interest for Management purposes.	
77	p.347	WD	E		aRxTxTurnaroundTime The description refers to various incorrect attribute names.		
78	p.347	WD	E		aSIFSTime The description refers to various incorrect attribute names.		
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. The value is fixed per PHY, and is of no interest for Management purposes.	
80	p.348 & 349	WD	E		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	

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						section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
81	p.349	WD	E		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 multiplePHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
82	p.349	WD	E		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 multiplePHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
83	p.349	WD	E		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 multiplePHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
84	p.349	WD	E		aAirPropagationTime 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 multiplePHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	

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85	p.349	WD	E		aMPDUDurationFactor In what units is this to be specified?		
86	p.349	WD	E		aAirPropagationTime In what units is this to be specified?		
87	p.349	WD	E		aTempType In what units is this to be specified?		
88	p.350	WD	T	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 be GET only. This parameter is also in the PHY MIB, which is the correct place, because the parameter is different per PHY.	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 interest for Management purposes. It should be deleted from the MAC MIB, and its status should be GET only.	Accepted (will address in new Clause 11 Internal Values text) TEXT_NOT_IMPLEMENTED
89	p.350	WD	T	Y	aCWmax 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 be GET only. This parameter is also in the PHY MIB, which is the correct place, because the parameter is different per PHY.	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 interest for Management purposes. It should be deleted from the MAC MIB, and its status should be GET only.	See 88
90	p.350	WD	E		aRegDomainsSuprt		

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					Values are not in-line with the definition of aRegDomainsSuprtValue (p.351).		
91	p.351	WD	E		aRegDomainsSuprtValue The SYNTAX defines this as an Integer32, while the description defines this as an 8-bit integer. Please, define this as an enumerated integer.		
92	p.352 & 353	WD	E		aSuprtDataRatesRx Typo: "transmit" should be "receive". DEFVAL {NULL} ??.		
93	p.353	WD	E		aPrefMaxMPDUFrgmntLngh The description refers to its own name in an incorrect way (_s!).		
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 interest for Management purposes.	
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. The value is fixed per PHY, and is of no interest for Management purposes.	
96	p.357 - 359	WD	E		agPhyTxPwrGrp 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	

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					<i>(Note: agPhyFHSSGrp not analyzed)</i>	section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
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 interest for Management purposes.	
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 interest for Management purposes.	
99	p.363	WD	E		aCurrentChannel In what units is this to be specified? Please define.		
100	p.363 - p.366	WD	E		aCCAModeSuprt What values? aCurrentCCAMode What values? aEDThreshold What values? aCurrentPowerState What values?		
101	p.364	WD	E		aSynthesizerLocked What is the significance of this (group) for management	Remove this definition from Annex D, as it a PHY definition that is	

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					purposes?	being defined for multiple PHY's in section 13. The value is fixed per PHY, and is of no interest for Management purposes.	
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 interest for Management purposes.	
103	p.366	WD	E		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.		