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Review of Draft D5.2 - Resolutions

Seq. #	Section number	your voter's id code	(M)ajor or (m)inor	Comment/Rationale	Recommended change	Disposition/Rebuttal
1	4; 15	VH		**use of MSB and LSB while lsb and msb are to be used to refer to bits**	change acronyms and clause 15 all over.	**Upper vs lower case left for IEEE ed's to decide & correct.**
2	5.7.6; 8	VH		**The initiator and responder for authentication is only mentioned in clause 5. It is not menetioned in the protoccol description in clause 8.**	Add in both 8.1.1 and 8.1.2 the following sentence: In an independent BSS environment either station may be the initiating STA (STA 1). In an ESS environment STA 1 shall be the mobile STA and STA 2 shall be the AP.	**Fixed**
3	5.8: Fig 11, 9.1.4	VH		**2 occurrences of "MAC Layer"**	**Change MAC Layer into MAC Sublayer**	**Fixed**
4 5	6.2.3	VH		**wireless has only on medium**	**change media into medium**	**Fixed**
6	7	VH		**Dispositions have not been correctly stated**	**Make the corrections to comment numbers Cl 5/C32 Cl 7/ C 26 Cl 11 / many, many blank dispositions Cl Annex / C 7**	**Fixed**
7	7.1.1	VH		**The definition limits the bit numbering to 0-7, whereas the fields themselves use b0-bn where n is bigger than 7**	Change the second sentence in the third paragraph into: The least significant bit of each octet is depicted with the lowest bit-number within ~~defined as bit 0~~ for that octet and is pictured as the leftmost bit of the oct~~et~~in figures. In tables, the bits are depicted with the lowest bit number to the right.	**Fixed**
8	9	VH		**The specification uses directed frames and unicast versus broadcast/multicast as if they are of the same type. This leads to unnecessary restrictions and unclearness:** 9.1.4 Fragmentation/Defragmentation Overview, p80-	**Distinguish between a qualification for MSDUs (unicast, broadcast and multicast) and one for MPDUs (unidirected and multi-directed)**	**Fixed**

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				line33: "Only directed frames shall be fragmented. Broadcast/multicast frames shall not be fragmented even if their length exceeds aFragmentationThreshold." **A frame directed to the AP, even though is multicast) could easily be fragmented without limitations thus raising the QOS.** 9.2 Distributed Coordination Function (DCF), p82-line12: "The RTS/CTS mechanism cannot be used for broadcast and multicast frames because there are multiple destinations for the RTS,..." Again, a frame directed to the AP could be protected by the RTS/CTS mechanism, thus enlarging the QOS 9.6 Multirate Support, p106-line25: "All Multicast and Broadcast Frames shall be transmitted at one of the rates included in the BSSBasicRateSet, regardless of their type." **In this case the efficiency could be improved by allowing higher speeds for the traffic to the AP.** **In addition, the definition of Unicast is not clear: it could be meant for both the destination address as well as the immediat recipient. Also Multicast has not been defined and seems to be used to specify MSDUs with Group and Broadcast addresses.**	**Redefine 9.1.4 by the following: "Only unidirected frames shall be fragmented. Multi-directed frames shall not be fragmented."** **Redefine 9.2 by the following: "The RTS/CTS mechanism cannot be used for multi-directed frames because there are multiple destinations for the RTS……."** **Redefine 9.6 by the following: "All multi directed frames shall be transmitted at one of the rates included in the BSSBasicRateSet, regardless of their type."** **Redefine Unicast to refer to MSDUs with station addresses. Define Multicast to refer to MSDUs with Group and Broadcast addresses.**	
9	10.3.2.1 , 10.3.2.2			SSID (Service Set Identifier) as of Type "octet string". The SSID is / will be a configuration parameter, one way or the other (to define the ESS or the IBSS, or as Desired	We could limit this parameter to e.g. a PrintableString (letters, digits, and some special characters), but we may	**declined - author accepts.**

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	, and 10.3.10.1			SSID). Having an octet string on the user interface is very inconvenient. Either the display and entry is in hex format, which is user unfriendly, or the associated utilities must have extra functionality to switch between ascii and hex.	hit an interoperability issue then (if a user has defined an ID with other special characters because some other product allowed that). It would help if 802.11 would limit the type of the SSID to e.g. a PrintableString or maybe GraphicString. (these are defined in the ASN.1 std) *(**NO PROPOSAL MADE IN VHSEC files**)*	
10	10.3.4.1 , 10.3.6.1 , 10.3.7.1			AuthenticationFailureTimeout, AssociateFailureTimeout, and ReassociateFailureTimeout. All these have a "nominal" value of 1 Kmicroseconds!? This seems wrong, as a frame transfer on the medium could already delay the Response longer; let alone the processing delays in a (s/w) AP.	To be discussed	**Fixed**

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11	11	VH		The term "frame" is ambiguous, especially in relation to fragmentation. This can be clarified by using the terms MSDU, and MPDU.	*(NO PROPOSAL MADE IN VHSEC files)* Note: Per counter the current std text is given, followed by my comments. aWEPICVErrorCount (11.4.4.1.13) "This counter shall increment when a frame is received with the WEP subfield of the Frame Control Field set to one and the value of the ICV as received in the frame does not match the ICV value that is calculated for the contents of that frame."; Comment: Suggest "frame" = MPDU. aWEPExcludedCount (11.4.4.1.14) "This counter shall increment when a frame is received with the WEP subfield of the Frame Control Field set to zero and the value of aExcludedUnencrypted causes that frame to be discarded."; Comment: Suggest "frame" = MPDU. aWEPUndecryptableCount (11.4.4.1.15) "This counter shall increment when a frame is received with the WEP subfield of the Frame Control Field set to one and the WEPOn value for the key mapped to the TA's MAC address indicates that the frame should not have been encrypted or that frame is discarded due to the receiving station not implementing the privacy option."; Comment: Suggest "frame" = MPDU.	**Clauses 11.4.4.2.10 11.4.4.2.12 fixed. Other clauses declined as the suggested changes would be incorrect - author accepts decision after discussion.**

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					aTransmittedFragmentCount (11.4.4.2.3) "This counter shall be incremented for each successfully delivered fragment of type Data or Management." Comment: It is not clear what "fragment" means here. Is a MSDU/MMPDU sent in one MPDU considered a fragment? If so, suggest to replace "fragment" by "MPDU". It is also not clear what "successfully delivered" means. Does this mean "acknowledged", so applies to directed MPDUs only, or does it include non-directed MPDUs as well? aMulticastTransmittedFrameCount (11.4.4.2.4) "This counter shall increment only when the multicast/broadcast bit is set in the destination MAC address of a transmitted frame."; Comment: Suggest "frame" = MSDU. aFailedCount (11.4.4.2.5) "This counter shall increment when a frame is not transmitted due to the number of transmit attempts exceeding either the aShortRetryLimit or aLongRetryLimit."; Comment: Suggest "frame" = MSDU. aRetryCount (11.4.4.2.6) "This counter shall increment when a frame is successfully transmitted after one or more retransmissions."; Comment: Suggest "frame" = MSDU. I	

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					assume this counter applies to the total of all fragments of an MSDU. aMultipleRetryCount (11.4.4.2.7) "This counter shall increment when a frame is successfully transmitted after more than one retransmission."; Comment: Suggest "frame" = MSDU. I assume this counter applies to the total of all fragments of an MSDU. aACKFailureCount (11.4.4.2.10) "This counter shall increment when an ACK is not received in response to a unicast Data frame."; Comment: Assume "unicast" must be "directed". Assume "frame" must be "MPDU". Suggest to redefine this to ".. when an ACK is not received when expected.". aReceivedFrameCount (11.4.4.2.12) Comment: Description missing! Suggest: "This counter shall increment when a MSDU is received successfully."; aMulticastReceivedFrameCount (11.4.4.2.13) "This counter shall increment when a frame is received with the multicast/broadcast bit set in the destination MAC address."; Comment: Suggest "frame" = MSDU. aFCSErrorCount (11.4.4.2.14) "This counter shall increment when an	

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					FCS error is detected in a received frame."; Comment: I assume this applies to the FCS in the MPDU only, and not to the CRC in the PLCP-header. Suggest "frame" = MPDU.	

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12	14.3.2.2.2	VH		sequence of bit numbering inconsistent with LSB and MSB	change 1:3 into 3:1	Fixed
13	14.3.2.2.3	VH		Rejected comment from TLP should have been accepted	Change disposition to say: indeed the coding is not differential, so we do not have to change.	Fixed
14	A.4.4.1; 11.4	VH		The MIB is still defined as Mandatory in the PICS. To my understanding the MIB is optional, but when implemented, it needs to be done in accordance with Mandatory elements.	Change PICS PC15 to be O in stead of M	Fixed
15	7.2.1.4 in figure 19; figure 31; annex C pages C31 (3 times) and C103			Use of SID where it should have been AID	Change sid or SID ito aid or AID	Fixed