

**IEEE P802.11
Wireless LANs**

Report of and comments received on the 3rd Recirculation Ballot on 802.11rev

Date: January 6, 1999

Author: Vic Hayes, Chair
Lucent technologies
Zadelstede 1-10
3431 JZ Nieuwegein, the Netherlands
Phone: +31 30 609 7528
Fax: +31 30 609 7556
e-Mail: vichayes@lucent.com

The 3rd recirculation ballot closed on January 4, 1999. The approval rate is 100 %. One comment received from Vic Hayes (vh). The Chair did receive a file with comments from Michael Fischer, stating that the comments and ballot was also sent to the IEEE Ballot Service. However, the Ballot Service did not receive his vote nor comment.

The following comments were received in time at the IEEE Ballot service:

Seq. #	Clause number	your voter's id code	Comment type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
1	5.1.1	VH	E		The Ministry of Post and telecommunications of Japan has withdrawn MPT notice 759, 1992. To follow this change in the legal requirements, the sentence in parenthesis lost its base.	Remove the following: "(e.g., Japan in MPT notice No. 759,1992 for the content for identification signals as meant in Article 25 of the ITU Radio Regulations)"	

The following comments were received only at the Chair of the Working Group. They were not received at the IEEE Ballot Service:

Seq. #	Clause number	your voter's id code	Comment type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
1	8.2.5	Fmr	e	no	The next-to-last word in the "Note" under Figure 46 is misspelled.	change "filed" to "field"	
2	9.3.1	Fmr	e	no	In the left center of Figure 61 the acronym for Distributed Coordination Function is misspelled.	change "DFC" to "DCF"	

req. #	Clause number	your voter's id code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
3	9.3.3.4 and 9.7	Fmr	E	no	<p>The third sentence of the second paragraph of this clause is an artifact from the era before all station-to-station traffic in a BSS was required to go via the AP. While the polled CF-Pollable station may send a directed frame to any other station, the ToDS bit in the Frame Control field must be set to 1, as required by clause 7.1.3.1.3, so the RA (address 1) of that frame will be the BSSID, as required by clause 7.2.2, and the non-CF-Pollable station's address will be in the DA (address 3) field. Accordingly, the frame will be acknowledged by the AP/PC in accordance with the second sentence of this paragraph, and the third sentence is never able to operate.</p> <p>The same editorial artifact is present in the 8th row of Table 22 in clause 9.7. The frame sequence shown in this row does meet all DCF and PCF medium usage rules, but cannot occur because the frame control ToDS and data frame address field usage rules in clause 7 do not permit this sequence ever to occur – if a non-AP station were addressed with ToDS set to 1, the frame would not be acknowledged because the setting of ToDS would prevent the non-AP station from interpreting the frame.</p>	<p>Delete the third sentence of the second paragraph of 9.3.3.4.</p> <p>Delete the 8th row of Table 22.</p>	
4	9.6	Fmr	E	no	<p>The second paragraph refers to “the PHY mandatory rate set” which is not defined elsewhere (most importantly, not defined by the various PHYs).</p> <p>The same problem with PHY mandatory rates occurs in the 6th (last) paragraph.</p>	<p>In the 2nd paragraph, delete the portion of the sentence which reads “or at one of the rates in the PHY mandatory rate set”</p> <p>In the 6th paragraph, delete the portion of the sentence which reads “if this rate belongs to the PHY mandatory rates,”</p>	

Seq. #	Clause number	your voter's id code	Comment type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
5	9.6	Fmr	E	no	The constraints on response rate in the 6 th (last) paragraph are ambiguous (even after deleting the reference to "PHY mandatory rates" addressed in my comment sequence #4). In particular, it is unclear when to use the "or else" provision, and the mis-use of this provision could result in a control response being sent at a higher rate than was used to send the previous frame in the frame exchange sequence.	Replace the portion of the sentence following "(either CTS or ACK)" with "at the highest rate belonging to the BSSBasicRateSet which is less than or equal to the rate of the immediately previous frame in the frame exchange sequence (as defined in 9.7)."	
6	10.4.3.2	Fmr	T	no	<p>The definition of aMPDUDurationFactor is incorrect, because this parameter is a scaling factor, and the actual overhead added by the PHY is calculated using this factor and the actual length of the MPDU.</p> <p>Also, the equations shown for calculating the total time and time to the beginning of any octet are incorrect because of misplaced parentheses – the quantity aMPDUDurationFactor x 8 x PSDU length is what should be divided by data rate. Furthermore, since the scaling factor for the one existing PHY which does expand the MPDU is 33/32, and aMPDUDurationFactor is listed as an integer, this is more than just an editorial oversight. Also, the units of "data rate" should be specified as Mbit/s.</p> <p>Also, the representation of aMPDUDurationFactor is inconsistent with the (unmodified) one already present in Annex C (definition of MPDU Duration Factor support sort on diagram RateAndDurationSorts(31), page 319).</p>	<p>At the end of the first sentence in the description column, add "expressed as a scaling factor applied to the number of bits in the MPDU. The value of aMPDUDurationFactor is generated by the following equation: Truncate[((PPDubits/PSDubits)-1) x 10⁹]."</p> <p>Replace the equation for the total time to transmit a PPDU with: "aPreambleLength + aPLCPHeaderLength + ((aMPDUDurationFactor x 8 x PSDUoctets) / 10⁹) + (8 x PSDUoctets)) / data rate where data rate is in Mbit/s"</p> <p>Replace the equation for the time to the beginning of any octet in the PPDU with: "Truncate[aPreambleLength + aPLCPHeaderLength + ((aMPDUDurationFactor x 8 x N) / 10⁹) + (8 x N)) / data rate] + 1, where data rate is in Mbit/s and" <leave definition of N unchanged></p>	

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7	14.9	Fmr	E	no	The value listed for aMPDUDurationFactor in Table 57a is the correct arithmetic factor, but is not an integer, as specified in 10.4.3.2, nor using the representation as specified on page 319 (see my comment sequence #6).	Change the value listed for aMPDUDurationFactor to 31250000. Change the Notes to include "... calculated as $((33/32)-1) \times 10^9$ to account for ..."	
8	15.3.3	Fmr	E	no	The value listed for aMPDUDurationFactor in Table 58a is the correct arithmetic factor, but does not use the representation as specified on page 319 (see my comment sequence #6).	Change the value listed for aMPDUDurationFactor to 0.	
9	16.4	Fmr	E	no	The value listed for aMPDUDurationFactor in Table 58a is the correct arithmetic factor, but does not use the representation as specified on page 319 (see my comment sequence #6).	Change the value listed for aMPDUDurationFactor to 0.	