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

Comment received on 802.11cD1.1 with the dispositions

Legend:

de = Darwin Engwer

jzw = Johnny Zweig

as = Anil Sanwalka

mho = Maarten Hoeben

tj = Tony Jeffree

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
1	2.	de	T	Y	The second paragraph appears to be a placeholder. 802.11 is the first 802 standard that uses positive acknowledgements and that has explicit provisions for communicating with a bridge (i.e. the Address3 field). Therefore, 802.11c can't simply say "use the 802.11 MAC" the way most of the other supplements to 802 standards do. We must be explicit in pointing out that when an Access Point implements the bridge function the bridged LAN is accessed through the Distribution System. In an IBSS, the bridge would have to "impersonate" the addressed station and ACK frames addressed to multiple destinations (the infrastructure architecture is designed to handle non-local traffic). We also ought to point out that a bridged 802 LAN may *be* the Distribution System. A collection of APs with the same ESSID that are all bridged to an 802 LAN (which may itself be bridged) can use bridging onto and off of that LAN as the Distribution System, as well as providing access to the bridged LAN itself.	Replace the paragraph beginning "A Bridge may only connect ..." with this text: An 802.11 Access Point (AP) may include a bridged LAN as part of its Distribution System. MSDUs transmitted by 802.11 stations that are associated with that AP and that also have the ToDS flag set to 1 may be bridged to another 802 LAN. MSDUs from the bridged LAN may be transmitted to associated stations with the FromDS flag set to 1. In no case are directed frames from a bridged LAN that are not addressed to one of the associated stations in the BSS transmitted on the 802.11 LAN medium. Group addressed frames from a bridged LAN may be transmitted on the 802.11 LAN medium with the ToDS flag set to 1. Bridging to or from an 802.11 IBSS is not possible.	**Accepted with modification**. A reference to the 802.11 architecture is to be included and the suggested text be modified to be more general.
2	2.	de	T	Y	The twelfth paragraph incorrectly specifies the maximum length of the MSDU. (ref 802.11-1997 clause 6.2.1.1)	Change "the length of the MSDU must be less than or equal to 2034 octets" to "the length of the MSDU must be less than or equal to 2304 octets".	**Accepted.**

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
1		as	E	N	Change the following sentence: The destination_address parameter is encoded in of the MAC frame as the DA described in Table 4 of Clause 7.2.2 of 802.11.	Into: The destination_address parameter is encoded in the MAC frame as the DA described in Table 4 of Clause 7.2.2 of 802.11.	**Accepted.**
1	title page	jzw	e		The draft obviously does not expire a year ago.	Change "January 30, 1997" to "January 30, 1998"	**Accepted.**
2	page 2	jzw	E		Be consistent and correct when referencing other IEEE 802 standards	Refer to 802.1D as "802.1D-1993" throughout.	**Noted.** References will be updated when 802.1P is sent for letter ballot.
3	2.	jzw	e		Fill in references	Change "2.5.x" to "2.5.6"	**Accepted.**
4	2.	jzw	T	Y	The second paragraph appears to be some kind of placeholder. 802.11 is the first 802 standard that uses positive acknowledgements and that has explicit provisions for communicating with a bridge (i.e. the Address3 field). Therefore, 802.11c can't simply say "use the 802.11 MAC" the way most of the other supplements to 802 standards do. We must be explicit in pointing out that when an Access Point implements the bridge function the bridged LAN is accessed through the Distribution System. In an IBSS, the bridge would have to "impersonate" the addressed station and ACK frames addressed to multiple destinations (personally, I think we should not allow bridging from an IBSS, since the infrastructure architecture is designed to handle non-local traffic). We should also point out that a bridged 802 LAN may *be* the Distribution System. A collection of APs with the same ESSID that are all bridged to an 802 LAN (which may itself be bridged) can use bridging onto and off of that LAN as the Distribution System, as well as providing access to the bridged LAN itself.	Strike paragraph beginning "A Bridge may only connect" and replace it with this text: An 802.11 Access Point may include a bridged LAN as part of its Distribution System. MSDUs transmitted by 802.11 stations associated with that AP with the ToDS flag set to 1 may be bridged to another 802 LAN, and MSDUs from the bridged LAN may be transmitted to associated stations with the FromDS flag set to 1. In no case are directed frames from a bridged LAN that are not addressed to one of the associated stations in the BSS transmitted on the 802.11 LAN medium. Group addressed frames from a bridged LAN may be transmitted on the 802.11 LAN medium with the ToDS flag set to 1. Bridging to or from an 802.11 IBSS is not possible.	**Accepted with modification**. A reference to the 802.11 architecture is to be included and the suggested text be modified to be more general.

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
5	2.	jzw	E		The fourth paragraph is incomplete and has a typo. (I know it is easy to get confused since 802.1D specifies "media access control" whereas 802.11 specifies "medium access control" — a bridge accesses more than one medium, thus the pluralization…	Replace ", and clause 9 specifies the media access control protocol." with ", Clause 9 specifies the medium access control sublayer function, and Clause 11 specifies the mandatory medium access control sublayer management function."	**Accepted.**
6	2.	jzw	E		The sixth paragraph has unspecified references.	Change "Clause XXX" to "Clause 9" and change "MA_UNITDATA.indication, constructed via Clause 7.1 MAC Frame Formats, IEEE STD 802.11-1997, Clause X , and annex C (Process MSDU_to_LLC)." to "MA_UNITDATA.indication, constructed ~~via Clause 7.1 MAC Frame Format~~s, according to IEEE STD 802.11-1997, Clause 7, Clause ~~X~~ 9, and ~~a~~Annex C (Process MSDU_to_LLC).".	**Accepted.**
7	2.	jzw	e		Typo in the seventh paragraph	Change "when generating MA_UNITDATA.indication primitive" to "when generating an MA_UNITDATA.indication primitive".	**Declined.** Other changes make this superfluous.
8	2.	jzw	t	Y	The seventh paragraph is insufficiently precise in describing how to translate "user_data_frame" to 802.11 frame type/subtype values.	Add this sentence after "and is explicitly encoded in MAC frames": The 802.11 MSDU will be transferred using frames with a type of "data" and a subtype that depends on whether the frame is transmitted during a Contention Free Period or during the Contention Period.	**Declined.** This comment simply duplicates requirements stated in 802.11 and is not necessary in the supplement.
9	2.	jzw	t	Y	The twelfth paragraph incorrectly specifies the maximum length of the MSDU (both in how it defines it and in the number of octets).	Change "the length of the MSDU must be less than or equal to 2034 octets" to "the number of octets in the Frame Body fields of the distinct MPDUs used to transmit the MSDU	**Declined.** This comment is contrary to the explicit requirement stated in 802.11 that the MSDU must be no larger than 2304 octets.

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						must be less than or equal to 2304".	
10	2.	jzw	e		(In the thirteenth paragraph) Q: What indefinite article ought to be used before "MA_UNITDATA"? Also, there is no such thing as "MA_DATAUNIT"	Change "a MU_DATAUNIT" to "an MA_UNITDATA".	**Accepted.**
1	2	mho	E	N	**Paragraph 12, last sentence reads;** . For 802.11 the length of the MSDU must be less than or equal to 2034 octets. **According to 6.2.1.1 of the 802.11 draft, the length of the MSDU must be less than or equal to 2304.**	**Change 2034 to 2304.**	**Accepted.**
2	2	mho	E	N	**Paragraph 2;** A Bridge may only connect to an 802.11 Distribution System but the Distribution system is not yet defined. But the SAP of the Distribution System is identical to the SAP of the MAC. **The second 'but' does not read very well.**	A Bridge may only connect to an 802.11 Distribution System but the Distribution system is not yet defined. **However,** the SAP of the Distribution System is identical to the SAP of the MAC.	**Accepted.** A different editorial change was made to correct this.
3	2	mho	T	Y	**Paragraph 13; The 802.11 standard does not separate data sent during the PCF from data sent during the DCF. It is made clear that data that could not be sent during the PCF may be sent during the DCF. (For example, clause 9.3 reads;** If the Data frame is not in turn acknowledged, the CF-Pollable station shall not re-transmit the frame unless it is polled again by the Point Coordinator, or it decides to retransmit during the Contention Period**). It is therefor not desired to make this distinction in the MA_DATAUNIT.indication by means of the priority mechanism because 802.11 itself mixes the two classes. It is also not explicitely stated that DCF traffic may not be sent during the PCF!**	**Either give PCF traffic the same priority as DCF traffic OR make the distinction between PCF and DCF traffic more explicit in the 802.11 standard and do not mix the two separate traffic classes.**	**Accepted.** No priority distinction will be made.
1		tj			In most of the references to 802.1D in the draft, the page numbering and clause numbering does not appear to correspond to any draft of 802.1p or 802.1D in my posession! Given that the revision of 802.1D is now (almost) out for sponsor ballot, you will need to re-cast the text as revisions to the new edition of 802.1D; see text of P802.1D/D15 on the 802.1 FTP server. The section numbers have all changed, as has	It will be published by IEEE and ISO under the ISO title of "Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Common specifications - Part 3: Media Access Control (MAC) Bridges". I will	**Understood.** References have been updated to correspond to 802.1D/d15. Once you guys stop changing the numbers, we will be able to hit the target.

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 title.	detail the changes needed in the subsequent comments.	
2	1.1	tj			Changes to "1.1 Scope" - page 2. In both P802.1p/D8 and P802.1D/D15, Scope is section 1.2. I could not find what this change related to.	Delete it.	**Declined.** The clause number where this belongs has changed to 3.4. The text will be inserted in that clause.
3	1.2	tj			Changes to "1.2 References" - page 2. The references are now in clause 2. Also, the title you give for the standard appears to be the ISO title, but you have given the IEEE standard number/publication date. Need to decide which you are going to cite, and then give the appropriate number/title.		**Accepted.** Reference is updated . The IEEE title will be used.
4	2	tj			Changes to "2. Support of the MAC service" - page 2:	- Support of the MAC service is clause 6; the new subclause for 802.11 should therefore be clause 6.5.7., and drop the publication date from the section title.	**Accepted.**
						- First para - seems a little difficult to specify that Bridges can connect only to some undefined entity. Is this supplement being defined prematurely?	**The SAP is defined to be the same as the 802.11 MAC. This is sufficient to define the bridging translation.**
						- Second para - (underlined text) - What are the management requirements, and are they relevant to this supplement? Either delete the comment or include the requirements.	**Accepted.** The text has been deleted.
						- Fourth and fifth paragraphs. This seems to be open to simplification, as follows:	
						"On receipt of an M_UNITDATA.request primitive	**Accepted.**

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 local MAC entity constructs and transmits a MAC frame, in accordance with the frame formats and procedures specified in IEEE Std. 802.11 clauses 6, 7, 9 and annex C, using the parameters supplied as specified below. On receipt of a valid MAC frame (see IEEE 802.11 clause XXX Receive MAC_FRAME), an M_UNITDATA.indication primitive is generated with parameter values derived from the frame fields as specified below." - Parameter definitions (Page 3). A cleaned up version follows: "The frame_type parameter only takes the value user_data_frame and is not explicity encoded in MAC frames. The mac_action parameter only takes the value request_with_no_response and is not explicitly encoded in MAC frames. The destination_address parameter is encoded in the MAC frame as the DA described in Table 4 of Clause 7.2.2 of IEEE Std. 802.11. The source_address parameter is encoded in the MAC frame as the SA described in Table 4 of clause	**Accepted.** **Declined.** The frame_type accepts only the value user_data_frame, but the frame type **is** explicitly encoded in the frame. **No change required.** **No change required.** **No change required.**

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						7.2.2 of IEEE Std. 802.11.	
						The routing information parameter (IEEE STD 802.11-1997, Clauses 6.2.1.1 and 6.2.1.2) is set to null.	**Accepted.**
						The mac_service_user_data parameter is encoded in the Frame Body field (IEEE STD 802.11-1997, Clause 7.1.3.5) of the MAC frame. The length of the MSDU must be less than or equal to 2034 octets.	**Accepted.**
						The user_priority parameter is not encoded in the MAC Frame. The user_priority parameter provided in a M_UNITDATA.indication primitive takes the value of zero when the indicated priority is Contention and the value of four when the indicated priority is ContentionFree, as defined in 6.2.1 of IEEE STD 802.11-1997.	**Partially accepted.**
						The frame_check_sequence parameter is encoded in the Frame Check Sequence (FCS) field of the MAC frame. The FCS is calculated over all the fields of the MAC header and the frame body field. The calculation is completed using a standard generator polynomial of degree 32 in accordance with IEEE STD 802.11-1997, 7.1.3.6 FCS.	**No change required.**
						The access_priority parameter is not encoded in the MAC frame.	**No change required.**

Seq. #	Clause number	your voter's ID code	Cmnt type E, e, T, t	Part of NO vote	Comment/Rationale	Recommended change	Disposition/Rebuttal
						No special action, above that specified in IEEE STD 802.12-1995, is required for the support of the MAC Internal Sublayer Service by the Wireless LAN access method."	**No change required.**
5	14.4.2.1.3	tj			Changes to "14.4.2.1.3 Outputs".	To be consistent with the other entries in this list, change the text insertion to simply "; 802.11". Similarly, drop the "-1997" from the PICS proforma reference.	**Accepted.**
6	3.4	tj			You will need to include 802.11 in the definition of a LAN in clause 3.4 of D.	Text as follows: "3.4 IEEE 802 Local Area Network (LAN) Page 21, line 40. Insert ', IEEE 802.11' before 'and ISO 9314-2'."	**Accepted.**

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