
**IEEE P802.11
Wireless LANs**

802.11d Sponsor Ballot Report

Date: March 1, 2001

Author: Bob O'Hara
Informed Technology, Inc.
1750 Nantucket Circle, Suite 138
Santa Clara, CA 95054
Phone: +1 408 986 9596
Fax: +1 408 727 2654
e-Mail: bob@informed-technology.com

Comment Resolution Summary

Number of editorial comments received	23
Number of editorial comments accepted	23
Number of editorial comments rejected	0
Number of technical comments received	32
Number of technical comments accepted	31
Number of technical comments rejected	0
Number of technical comments withdrawn	1

Comments

Commenter	Email	Phone	Fax
Clause	Comment type	Page	Line
Comment			
Suggested remedy			
Resolution			Vote

1 Introduction – ii, 10

Bob O’Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Introduction	Editorial	ii	10
Add a citation for the submission of the HCC/EHCC algorithm, crediting Darwin Engwer, Johnny Zweig, and Ken Clements			
Resolution: Accepted.			Vote

2 Introduction - ii, 6

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
Introduction	Editorial	ii	6
The list is empty. Nobody can check the entries.			
Make the list and include it in the next version. The database should permit you to reconstruct the people that were ctually voters at the time this was approved for sponsor ballot.			
Resolution: Accepted, though the list will be added by the editor upon completion of the sponsor ballot.			Vote

3 All

Bob O’Hara	bob@informed-technology.com	408 986 9596	408 727 2654
All	Editorial	All	All
Add appropriate heading text so that every clause that is modified shows up in the TOC			
Add Headings for every subclause			
Resolution: Accepted.			Vote

4 2 – 2, 7

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
2	Editorial	2	7
add space in "13may" such that sentence reads "[...] 13 may [...]"			
Resolution: Accepted.			Vote

5 2 – 2, 9

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
2	Editorial	2	9
the table seems to have an extra or unexplained row between order 11 and order 12. Delete empty row between order 11 and order 12			
Resolution: Accepted.			Vote

6 7.2.3.1– 2, 7

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
7.2.3.1	Technical Required	2	7
The sentence reads: "Optionally, the Beacon frame format may also include the information described in orders 12 and 13." To be correct the last part of that sentence ought to read "12 or 13" since we envision sending either 12 or 13, but not both.			
Change "12 and 13" to "12 or 13".			
Resolution: Do not change "and" to "or". Change the existing sentence to "Optionally, the Beacon frame format may also include the information described in <u>either or both of</u> orders 12 and 13." Add the sentence "If the information in both orders 12 and 13 are sent, they shall describe the same hopping pattern."			Vote

7 7.2.3.1 – 2, 7

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.2.3.1	Technical	2	7
Since the Beacon will contain either item 12 or 13, but not both, this line should not require that both be sent in the Beacon.			
Replace "12 and 13" with "12 or 13".			
Resolution: Same resolution as 6.			Vote

8 7.2.3.1 – 2, 9

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.2.3.1	Editorial	2	9
dot11MultipleDomainEnabled no longer appears in the draft, except here			
Replace dot11MultopleDomainEnabled with dot11MultiDomainCapabilityEnabled			
Resolution: Accepted.			Vote

9 7.2.3.1 – 2, 9

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
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7.2.3.1	Editorial	2	9
Eliminate the empty row in the table			
Eliminate the empty row in the table			
Resolution: Accepted.			Vote

10 7.2.3.1 – 2, 9

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.2.3.1	Editorial	2	9
The phrase "by the implementer" is items 12 and 13 of the table is redundant. Who else is going to include it?			
The phrase "by the implementer" from the Notes column of items 12 and 13.			
Resolution: Accepted.			Vote

11 7.2.3.9 – 3, 5

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.2.3.9	Editorial	3	5
Eliminate the empty row from the table			
Eliminate the empty row from the table			
Resolution: Accepted.			Vote

12 7.3.2.12 – 4, 11

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.3.2.12	Editorial	4	11
What does it mean to set a value to a value?			
Replace "set this value" with "set this field".			
Resolution: Accepted.			Vote

13 7.2.3.13 – 3, 5

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.13	Editorial	3	5
delete space between "Parameter" and "s" in order 11 information so that text read "Parameters"			
Resolution: Accepted.			Vote

14 7.3.2.13 – 3, 5

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.13	Editorial	3	5

the table seems to have an extra or unexplained row between order 11 and order 12. Delete empty row between order 11 and order 12	
Resolution: Accepted.	
	Vote

15 7.3.2.13 – 4, 28

chaim shenhav	cshenhav@nband.com	408-733-4238, x115	408-733-9498
7.3.2.13	Editorial	4	28
Reference to Figure 4, where the relevant text in the next page is captured in Figure 5.			
"Figure 4" should be changed to "Figure 5".			
Resolution: Accepted. (Figure and table numbering will be corrected throughout the document.			Vote

16 7.3.2.13 – 4, 28

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.3.2.13	Editorial	4	28
The reference to Figure 4 appears to be incorrect			
Correct the figure reference			
Resolution: Accepted. (Figure and table numbering will be corrected throughout the document.			Vote

17 7.3.2.13 – 5, 5

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.3.2.13	Editorial	5	5
Add a forward reference to the definition of the HCC and EHCC algorithms to aid comprehension			
Add a forward reference			
Resolution: Accepted.			Vote

18 7.2.3.14 – 5, 20

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.14	Technical	5	20
the length (octets) of the Flag field doesn't seem to be specified. If the following is true, then add sentence "The size of the Flag field is one octet."			
Resolution: Remedy accepted as suggested.			Vote

19 7.3.2.14 – 5, 22

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.14	Technical	5	22
The length (octets) of the Number Of Sets field doesn't seem to be specified. If the following is true, then add sentence "The size of the Number of Sets field is one octet."			
Resolution: Remedy accepted as suggested.			Vote

20 7.3.2.14 – 5, 22

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.14	Technical	5	22
The length (octets) of the Modulus doesn't seem to be specified. If the following is true, then add sentence "The size of the Modulus field is one octet."			
Resolution: Remedy accepted as suggested.			Vote

21 7.3.2.14 – 5, 23

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.14	Technical	5	23
The length (octets) and explanation of the Offset field appears to be missing. Add a sentence explaining the Offset field. If the following is true, then add sentence "The size of the Offset field is one octet."			
Resolution: Remedy accepted as suggested.			Vote

22 7.3.2.14 – 5, 25

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
7.3.2.14	Technical	5	25
The length (octets) of the Random Table field seems to be missing. Does the field have to be an even number of octets as indicated by Figure 5? If the following is true, then add sentence "The size of the Random Table field is n octets."			
Resolution: Add the sentence "The size of the Random Table field is found by subtracting 4 from the value of the Length field of this element."			Vote

23 7.3.2.15 – 6, 24

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
7.3.2.15	Technical	6	24
There seem to be some words missing here			
"is received" after "formed Request Information Element".			
Resolution: Append "of the probe response frame" to the last sentence.			Vote

24 9.9 – 6, 30

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
9.9	Editorial	6	30
Improper use of standards language			
Replace "may vary" with "can vary".			
Resolution: Accepted.			Vote

25 9.9 – 6, 30

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
9.9	Technical	6	30
It should be stated that this subclause (9.9) applies only to implementations where dot11MultiDomainCapabilityEnabled is true			
Add a statement that limits the effect of the subclause to only thos STAs and APs that have dot11MultiDomainEnabled true			
Resolution: Add "when the dot11MultiDomainCapabilityEnabled attribute is true" to the end of the last paragraph.			Vote

26 9.9 – 7, 5

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
9.9	Technical	7	5
The term "type acceptance" is unique to the United States and the FCC. A more internationally accepted term might be "equipment authorization" but there may be other terms as well. Suggest changing "type acceptance" to "equipment authorization"			
Resolution: Add ", regulatory approval, equipment authorization, or equipment certification" after type acceptance to try to cover all the bases.			Vote

27 9.9.2.1 – 9, 14

James Ivers	james@pangonetworks.com	(412) 621-7300x14	
9.9.2.1	Technical	9	14
This sentence indicates that Table 2 contains the value 1 on the diagonal from upper left to lower right, which the table does not. The results in the table match the described algorithm on page 10 though, so it appears that stating the diagonal consists of all 1's is incorrect.			

Correct the sentence, either removing the claim or replacing it with a correct one (e.g., the first N values along the diagonal...).	
Resolution: Change the two paragraphs below Table 2 to be: Table 2 now contains a near diagonal (upper left to lower right) consisting entirely of 1's. This is a necessary mathematical property of the result of removing the initial diagonal of (p-1)'s in the previous operation, and will be exhibited for any prime p. Extending the process, Table 3 shows a code family with a code length of 8 (constructed from Table 2 by removing the entry from each row that has a value of 1, subtracting 1 from each value remaining in the row, and discarding the last row).	Vote

28 11.1.3.4 – 11, 7

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
11.1.3.4	Technical	11	7
The sentence beginning "If the dot11RegDomainsSupportedEntry is set to other..." does not seem to have any clear meaning.			
Delete the sentence or clarify its meaning.			
Resolution: Same resolution as 29.			Vote

29 11.1.3.4– 11, 7

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
11.1.3.4	Technical Required	11	7
There is a sentence that reads "If dot11RegDomainsSupportedEntry is set to Other, then ...". This sentence has no meaning and can be stricken from the text with no adverse affects. Perhaps this sentence was intended to say something else, but as written I cannot discern it's meaning or relevance to the document.			
Remove the sentence, or correct it to say what is really intended.			
Resolution: Replace the sentence with "The dot11RegDomainsSupportedEntry shall be set to Other when the STA is operating using country code settings."			Vote

30 14.8.2.1.20 – 11, 14

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
14.8.2.1.20	Technical	11	14
The phrase "obtained from the hopping pattern table" is incorrect and should be replaced with "calculated from the hopping pattern parameters"			
Make the indicated replacement.			
Resolution: Same resolution as 31.			Vote

31 14.8.2.1.20– 11, 14

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
14.8.2.1.20	Technical Required	11	14

Incorrectly states the meaning of a zero value for dot11CurrentSet.	
The phrase "obtained from the hopping pattern table" is incorrect and should be replaced with "calculated from the hopping pattern parameters".	
Resolution: Adopt suggested remedy.	Vote

32 Annex A – 11, 16

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
Annex A	Technical Required	11	16
<p>There are no editor's instructions provided for the ANNEX A. Where should the table be added in the document? How should the Items be identified? 1, 2 ... n is not in line with the item numbering in the main standard.</p> <p>Do all devices (including the once in the field) have the items implemented if they are marked Mandatory?</p>			
<p>Add the editor's instructions in accordance with the place the group wants this table to be added.</p> <p>Add the heading "Item" in the first column. Decide on the correct identification of the Items.</p> <p>Make a main item that makes the 802.11d implementation an option.</p> <p>Qualify all items in the table as being subject to having the 802.11d standard implemented</p>			
<p>Resolution:</p> <ol style="list-style-type: none"> 1. Add the editor's instruction to add the table to Annex A as subclause A.4.10 2. Add "Item" to column 1. 3. Add "CF8" to the table in A.4.3 and make the items in the Status column conditional on CF8. CF8 description in the "IUT Configuration" column is "Multi-domain operation capability". Status is "O.3". Add references to 7.3.2.13, 7.3.2.14, 9.9.1, and 11.1.3.4. 			Vote

33 Annex A – 11, 16

Don Wright	don@lexmark.com	859-232-4808	603-963-8352
Annex A	Technical	11	16
<p>There are no editing instructions for the table contained on this page and spilling to the next page. What is to be done with this?</p>			
<p>Insert editing instructions.</p>			
Resolution: Resolution is the same as 32.			Vote

34 Annex A – 11, 17

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
Annex A	Technical	11	17

Instructions for what to do with the table appear to be missing.	
Resolution: Resolution is the same as 32.	
	Vote

35 Annex A – 11, 17

James Scott Marin	smarin@ix.netcom.com	1-972-516-5158	1-972-516-5130
Annex A	Technical	11	17
There seems to be lots of format problems (spaces, indentations) and missing information (status, references) in the table			
Resolution: Status and references have been added. Formating will be corrected.		Vote	

36 Annex A – 11, 17

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex A	Editorial	11	17
Item 1 uses a (misspelled) obsolete attrubute name			
Replace "dot11MutiDomainEnabled" with "dot11MultiDomainCapabilityEnabled			
Resolution: Accepted		Vote	

37 Annex A – 11, 17

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex A	Editorial	11-12	17 et seq
The items in the table are not numbered sequentially			
Number the items sequentially			
Resolution: Accepted.		Vote	

38 Annex A – 11, 17

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex A	Technical	11-12	17 et seq
Items 3, 7, 8, and 10 are indicated to be mandatory. They should be conditioned on the proper implementation options			
"M" in the Status column of items 3, 7, 8, and 10 with "CF3 or (CF7 and HRDS2):M"			
Resolution: Resolution is the same as 32 with suggested remedy here.		Vote	

39 Annex A – 11, 17

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
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boxes in the Support column

Add check boxes in the Support column

Resolution: Accepted.	Vote
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41 Annex A - 12, 0

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex A	Technical	12	0
Annex A: general: Some of these items ought to be conditional; for example, item 9 really refers only to MUs, APs do not need to be able to do passive scanning.			
Revisit all the items cited for inclusion in Annex A wrt making them conditional (based on the already defined conditional codes in 802.11-1999) where appropriate.			
Resolution: Resolution is the same as 32.			Vote

42 Annex A – 12, 0

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex A	Technical Required	12	0
Item 14: This item ought to be mandatory; otherwise STAs will not be able to interpret the dot11CurrentSet value and know which algorithm to use.			
Make item 14 mandatory.			
Resolution: Item 14 will be made “CF8:M”			Vote

43 Annex A - 12, 0

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex A	Technical Required	12	0
Item 10: there is no cited reference clause.			
I would suggest one but I'm not sure to what "8 of them" refers.			
Resolution: Change "(8 of them)" to "Hop Index Method without table, Hop Index Method with table, and HCC/EHCC" and insert the following references: 9.9.2.1, 7.3.2.14.			Vote

44 Annex A - 12, 0

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex A	Technical Required	12	0
Re item 9: Do all STAs need to be capable of "transmit probe request"?			
Afterall, a STA can just passively (wait) and listen for a beacon. The beacon may contain all the information that the STA needs.			
Make the "transmit probe request" portion of item 9 optional, or conditional upon the appropriate conditions.			
Resolution – Withdrawn by balloter.			Vote

45 Annex C – 12, 2

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
Annex C	Technical Required	12	2 and 3
There are no changes specified			
Insert the changes to the state machines			
Resolution: This editor’s instruction is superceded by more specific instructions below it. Delete line 2.			Vote

46 Annex C – 14

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
Annex C	Technical Required	14	
There are no changes specified			
Make the changes known			
Resolution – The editor’s instructions are hierarchical, not necessarily independent. All changes are correctly specified.			Vote

47 Annex D– 15, 20

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
	Technical Required	15	20
It seems to me that changes in a MIB description require the change of the version in the module entity.			
Contact MIB expert and make appropriate changes			
Resolution: The “Last-Updated” value will be updated to the correct date. The chair contact information will also be updated.			Vote

48 Annex D - 15, 21

Hayes, Vic	vichayes@agere.com	+31 30 609 7528	+31 30 609 7556
Annex D	Editorial	15	21
The instruction is not in accordance with the format			
Unbold and unitalicize the following part of the line: "Other=X'00"			
Resolution: Accepted.			Vote

49 Annex D – 17, 21

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex D	Technical	17	21
dot11MaximumTransmitPowerLevel is shown to be an "unsigned32" data type, yet the text describes the value as signed (see 7.3.2.12).			
One of these is incorrect. Fix the one that is wrong.			
Resolution: Type is changed to Integer32.			Vote

50 Annex D – 18, 3

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex D	Technical	18	3
The data type for dot11MaximumTransmitPowerLevel is shown as "unsigned32". But, earlier in the document this data is defined as a signed value. I think it is necessary to call it an unsigned32 because that's the closest ASN.1 data type??			
Perhaps the explanatory text could correctly describe the range of values as being both plus and minus and state how those values are encoded into the ASN.1 unsigned32 data type.			
Resolution: Resolution is the same as 49.			Vote

51 Annex D – 19,26

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex D	Technical Required	19	26
The dot11EHCCAlgorithmAdopted object (as stated) is NOT needed.			
Change the name to dot11HopAlgorithmAdopted, with valid values of: 0 - none (i.e. hopping patterns as defined in the existing standard) 1 - hop index method (with or without table) 2 - HCC/EHCC method			

<p>Resolution: Change the definition as follows:</p> <pre>dot11EHCCHopAlgorithmAdopted OBJECT-TYPE SYNTAX INTEGER MAX-ACCESS read-write STATUS current DESCRIPTION "This attribute, indicates which of the two algorithms will be used to generate the Hopping Patterns. Valid Values are: (0) None, (1) is the Hop Index Method using HCC, (2) is the Hop Index Method using EHCC. The default value of this attribute is (0). <u>0 - hopping patterns as defined in clause 14 of the current version of IEEE Std 802.11</u> <u>1 - hop index method (with or without table)</u> <u>2 - HCC/EHCC method</u> "</pre> <pre>::= { dot11PhyFHssEntry 12 }</pre>	<p>Vote</p>
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52 Annex D – 19, 26

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex D	Technical	19	26
<p>The dot11EHCCAlgorithmAdopted attribute is better suited to be the dot11hopAlgorithmAdopted attribute.</p>			
<p>Rename the attribute as described and replace the description with the following: Valid values are: 0 – none (i.e., as defined in 802.11-1999) 1 – hop index method (with or without table) 2 – HCC/EHCC method</p>			
Resolution: Resolved the same as comment number 51.			Vote

53 Annex D – 19, 38

Darwin Engwer	dengwer@nortelnetworks.com	408-495-7099	408-495-5615
Annex D	Technical	19	38
<p>These objects have names prefixed with "EHCC", but none of these objects have anything to do with the EHCC algorithm. Instead, these objects relate to the table based hopping sequence determination method.</p>			
<p>Change the names to reflect this fact, by removing the "EHCC" portion and inserting an appropriate replacement substring. For example, the first error could be changed from dot11EHCCFlag to dot11RandomTableFlag.</p>			
<p>These changes also require a corresponding change to the object enumeration list on pg 18 line 24 through line 27.</p>			
Resolution: Changes made as suggested.			Vote

54 Annex D – 19, 50

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex D	Editorial	19	50
<p>dot11EHCCNumber of HoppingSets has nothing to do with EHCC</p>			

Delete "EHCC" from the name	
Resolution: Resolution is the same as 53	Vote

55 Annex D – 20, 31

Bob O'Hara	bob@informed-technology.com	408 986 9596	408 727 2654
Annex D	Editorial	20-21	31 et seq
None of the attributes in the EHCC Hopping Pattern Table have anything to do with EHCC			
Delete "EHCC" from the names of these attributes			
Resolution: Resolution is the same as 53			Vote