IEEE P802.11 Wireless LANs

Tentative report of tele-conference on WG review result

Date:

April 1, 1997, 15:00-17:00 UTC

10 ports were available, only 6 were used

Present: Dave Bagby, Phil Belanger, Dean Chang, Michael Fischer, Vic Hayes, Don Sloan, Doug Smith, Mike Trompower and Johnny Zweig.

Objective: To decide what goes into LMSC recirculation ballot with IEEE P802.11 D5.3

Preparation of an Errata sheet

No comments were received before the meeting, but attendees had found some areas of concern. We reviewed by commenting person.

1) Dave Bagby for Simon Black:

Key of all zeros as NULL vs. zero as a valid key - will allow key of value zero No objection. Michael Fischer will make a change statement to page C27.

2) Johnny Zweig:

Rules for encoding duration field require duration to be set to protect frame you won't send (has to do with fragmentation etc.) - would lean toward making covered by duration optional. One sentence in clause 7 would be needed and corresponding change to state machines. - some discussion followed - 9.2.5.6 at end of 2nd paragraph. "When operating with a FH PHY a STA sending a fragment is not required to use a duration value that extends longer than the next dwell boundary - i.e. the duration may be set to a value that terminates within the current hop" - or some such language. 7.2.2 and 7.2.3 also refer duration field length.

No objections. Michael Fischer will make the change statement to clause 9.2.5.6.

(NOTE from maker of report: on hindsight 7.2.2 and 7.2.3 were not addressed in the errata sheet)

3) Michael Fischer

(2 points): (he intends to vote yes with comments in recirculation ballot)

a) in 8.3.2 - wep flow logic - problem distinguishing between multicast and unidirection frames - "the if statement problem" pg 81 - Line 999 in electronic draft copy - also needs to test for multicast or bcast frames - depends on BSS capability bit.

No objections. He will make the change statement.

b) we record in BSS descriptor the timestamp - and pass it up via MLME, but we don't send tsf timer so no reference for the time stamp - also need local time reference. Proposed fix is to add copy of local tsftimer to BSS descriptor. Means a change to the MLME interface which is an exposed interface - but from strict implementation view point it wouldn't matter... But from standard viewpoint it is part of an abstract interface which has insufficient info so we should fix it. Only an issue for Join - start does not use these values. In 10.3.2.2 MLME-SCAN.confirm is where change goes.

Will change time stamp element to a tuple that has both time stamp and local tsf timer value so both values are passed. State machines ok as they are already using the value we didn't pass - this is how bug was found.

No objections. He will make the change statement.

4) Vic Hayes:

RTS threshold: 11.4..4.2.15 -

attribute shall indicate # bytes in MPDU for which handshake is performed - should be MSDU asks vic? Will change to initial MPDU of frame exchange sequence - also change to C91 in state machines. No objections. Michael Fischer will make the change statements.

9.2.5.6 - end of 2nd paragraph, last sentence "larger the" to "larger than the".

5) Mike Trompower:

correction to 10.3.2.2 - data rates of 10 thru 255 - should be 10 thru 127 since quantum was changed in last meeting. Same change in 10.3.3.1 and 10.3.10.1.

Also change quantum from 100 kbit/s to 500 kbit/s in these sections. And in 7.3.2.2 in encodings. Data rate range is 0 to 63.5 Mbit/s as encoding is zero relative, but zero is not a useful data rate so it will be unlikely that the zero value will ever be used - and .5 is below IEEE 1-whatever limit. - 64-> 63.5 in 13.1.4.23 & 13.1.4.24

No objection. Mike will provide the change statements.

Miscellaneous errata stuff: blank table in clause 15 (DS PHY) - should have been deleted - editorial. page ii - change to 2400-2500 to cover Japan band.

Other miscellaneous editorial changes people saw (Michael Fischer and Mike Trompower) will be sent to Vic and Bob O - Bob O can fix before forwarding to IEEE editor.

List with "technical changes"

Vic: procedure is that comments supporting No votes could be on technical changes only and a list with what is constituted as a technical change needs to be given in the recirculation ballot. The reason being that the system has to converge.

What is definition of technical as we identify changes to recirculation ballot.

Mike F says things that effect interoperability between sponsor ballot and recirculation time are considered technical - others are not.

Reviewed Vic's technical change list as distributed in e-mail VH29 - group agrees on list as discussed (Vic wrote revised text during the call).

Additional technical changes to call out:

Addition of DS parameter set - this added a new element and renumbered some others.

"MLME service primitives and parameters were updated for consistency"

"Support for encrypting multicast frames has been added".

Any other business

Dave Bagby will write a venue for the May 7-9 meeting. Vic assumes that the meeting is actually needed, as there will at least be the material from Michael Fischer.

There was no other business and the meeting adjourned just before the bridges were withdrawn.

Appendix 1

e-mail VH29: t he list of technical changes, sent on March 30, 1997 to 802.11 reflector

We need to have a list of technical changes to accompany the sponsor recirculation ballot.

I request input from our members to make the list I propose below:

1. COMPLETE 2. MORE SPECIFIC

I need your input on Tuesday at the beginning of my business day, so I can circulate a new version before the conference call.

We will then make the list definitive during the call.

Thanks for your input.

Vic

The following editorial changes were made to the draft since the Sponsor Ballot:

1. The proposed update contains the formal description of the MAC and a description of the Management Information Base in ASN1 notation. The formal description uses the SDL from ITU-T Recommendation Z.100.

2. The Management Information Base (MIB) has been reduced to those elements needed by a network manager. The current CD contained many elements that were originally placed in the MIB as an internal communication means between functions in the MAC.

3. The document has been made consistent between various sections.

4. The Wired Equivalent Privacy (WEP) mechanism now also encrypts the Integrity Check Vector (ICV), which provides a better protection.

5. The PICS Proforma has been made internally consistent and consistent with the specification.

6. Direct peer-to-peer communication under and Extended Service Set (ESS) has been taken out.

7. Frames destined to multiple stations over the air may not be segmented anymore.

In addition we have made numerous editorial changes to remove typos, bring the text in line with OSI terminology, make definitions consistent and complete and the use better English.