
**IEEE P802.11
Wireless LANs**

Title

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Abstract

Minutes of Task Group D – Regulatory Domains for the week of September 13, 1999.

Bob O'Hara – Chair

September 13, 1999 3:30pm Bob O'Hara opened the TGd meeting session.

Bob started the meeting noting the items on the agenda.
Victoria Poncini secretary for TGd session.
Bob opened the meeting outlining the objective for the meeting
Agenda approval
Presentations
Meeting 99154 minutes approval from July 99 meeting
Old business

Three submissions for TGd:
99/195 Algorithmically Derived Hop Sequences Darwin Engwer/Johnny Zweig – Nortel Networks
99/xxx Algorithmic determination of Hop Sequences – Dean Kawaguchi Symbol Technologies (presentation delayed until next meeting.)
99/191 Universal Channelization of DS. – Bob O'Hara
99/xxx paper on international mobility - Bob O'Hara (paper not presented)

Bob asked if there was any objection to adopting the agenda?
Victor Hayes moves to approve the agenda
Richard Paine seconds
Any discussion on the agenda? Hearing None.
Motion passes.
Agenda approved by 17/0/0

Second item of business: Bob moved to approve the minutes from July meeting contained in doc: 99/154 TGd minutes
Victor Hayes: moves to approve the minutes
David Skellern seconds the motion
Any discussion? None.
Motion to approve July minutes
Motion to approve doc: 99/154

Approved 14/0/1

Following the minute approval Bob issued a call for additional papers? No additional papers.
Old business: None

Bob started the presentations with 99/195 by Darwin Engwer of Nortel Networks.
Credit to Ken Clements for the deletion of the diagonals. After discussion of the paper Darwin made a recommendation that 802.11 contact Edward Titlebaum to do some work to create a frequency hopping algorithms.

Contact information for Ed Titlebaum. Tbaum@ee.rochester.edu

Bob O'Hara Presentation on Extension of Direct Sequence
Doc number 99/191

Dean general comment: what are we trying to get out of TGd?

- 1) Defining what the standard frequencies or hop sequences are?
- 2) Given an AP how does it know what country it is in? Whatever country it is in?
- 3) Mobile unit how does it know what hop sequence or frequency to use? What about ad-hoc network which frequencies? How does mobile behave in an international environment?

Dean will have paper tomorrow: to address the third case but does not address the ad-hoc case.

Need to address all questions before we are done with Task Group D.

When all questions are answered: Jan Boer

We still have to certify the product in each of the countries in which we plan to operate?

Dean says that Bluetooth working on a greater certification, E1, USA and Canada.

Bob reiterated what needs to be accomplished for TGd to create a draft document:

- o Mechanism to define hop sequences and channels in 2.4GHz
- o Mechanism for providing info to mobiles to run hop or DS channel algorithm to run within
- o Changes to MAC management how a mobile operates that is different and is compliant to 802.11d that can roam internationally rather than operates in only one regulatory domain.
- o How to configure an access point that allows it to pass information on to the mobiles.

Bob suggests that we recess until Tuesday afternoon. Dean will have a presentation on international mobility.
No motion on any additional business. Session broke for the evening.

September 14, 1999 Tuesday Session

At 1:00 pm Bob O'Hara suggested that TGd break up to work in separate subgroups to work on FH and DS channelization.

Nothing formal on the table to discuss for FH and DS extensions

Reconvene at 3:30 to discuss international mobility.

Richard asked that TGd include a discussion concerning 5GHz worldwide spectrum allocation.

No one for FH in the room.

Bob asked if there was any objection to proceeding this fashion? None mentioned. Bob recessed the TGd meeting until 3:30 pm. The meeting broke into discussion group to look at FH and DS channelization

3:30pm resumption of the TGd discussion of international mobility.

Bob asked if any FH discussion took place. None reported.

Report on the DS discussion:

DS PHY summary – create a new information element. Good enough for all but FH hopping requirements.

New Information Element from the DS channelization discussion was presented to the group:

Regulatory domain Identifier, (2 octets)

Lifetime unit (seconds) (1 octet)

Length of sub-elements to follow (length) (1 octet)

Each sub-element contains

First Channel center (2 octets)
Channel spacing (1 octet)
Number of channels (2 octets)
Occupied bandwidth per channel (1 octet)
Max transmit power allowed (2 octets)

Also presented was station Safe default behavior (of power level of 1mW) and IBSS behavior and responsibility and traceability of frequency assignments.

Dean Kawaguchi stated that in the Symbol FH proposal they decided to create another Management Frame. DS was Bob stated that the DS channelization idea was to include the information within the Beacon.

Wideband FH with each 1, 3, 5 each require it's own sub element within the band.

Need to define safe default station behavior for international roaming stations – for non-configured.
-Defined maximum transmit power limitation

Another new info element required for the frequency hopper stuff.
Bob asked for someone to draft up text describing the new information element no one volunteered. Peter asked if anyone knew of information exists in HiperLAN. Peter suggests that we could look at and can copy.

Bob suggests that we recess until 8:30am Wednesday 9/15/99.
Tomorrow move on to new business of 5GHz band and lobby the WRC for a second unlicensed global band.
Meeting recessed until Wednesday 8:30am.

September 15, 1999 Wednesday Session

Bob opened Wednesday morning meeting.
Bob asked if there was any insights or additional suggestions/inputs into international mobility.
Hearing none, Bob moved the meeting to new business.
First order of new business Richard Paine presentation of Worldwide 5GHz adoption.
99/xxx Adoption of Worldwide 5GHz band.
Boeing going to Study Group 8 in November. Boeing requesting 802.11 supports via a letter to SG8 the expansion of the 5GHz band to be another global unlicensed band. Peter asked Tomoki Ohsawa if MMAC would support 5GHz dual use or multi-use of 5GHz band. Tomoki indicated that they would. Bob stated that Richard make motion move that 802.11 submit letters to support the 5GHz unlicensed frequencies.

Richard moved to make motion to have 802.11 send a letter to the US delegation to ITU SG8, and/or WRC supporting the global allocation of the 5 GHz band for unlicensed use.

Second by Peter Ecclesine.

No discussion on motion.

Motion passes

Approval: 10/0/0

Any other new business? None.

Bob will review the TGd session report with the TGd task group.

Bob reviewed report.

Peter Ecclesine made the motion to adopt the report from TGd.

Seconded by Victoria Poncini

Any discussion? None.

Any objection to adopting the report for TGd? Seeing none the report is adopted by unanimous consent to present to the 802.11 Working plenary. Bob adjourned TGd at 09:10am.

