TENTATIVE MINUTES FOR THE MAC GROUP
IEEE 802.11 PLENARY - JULY '94
ORLANDO

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FOR SOME INEXPLICABLE REASON, MINUTES FOR THE MORNING SESSION WERE NOT TAKEN. (CJZ VOLUNTEERED AFTER LUNCH)

IEEE 802.11 TUES. AFTERNOON
START AT 1:30

DAVE: CURRENT MPDU IS PER BSS. SHOULD IT BE PER STATION INSTEAD.

MOVED THAT THE 'CURRENT MPDU SIZE' SHALL BE A MANAGED OBJECT PER STA RATHER THAN PER BSS AS PREVIOUSLY DECIDED.
        DAVE ROBERTS
        2ND - TOM

DISCUSSION:
        GEOGRAPHIC AREA ?
        WHEN IS IT CHANGED AND HOW ?
        MAC MANAGEMENT ? HOW IT KEEP IT CONSISTENT ACROSS BSS
                SYNCHRONIZED.
        BSS HAS KNOWLEDGE ABOUT AREA
                PASS INFO DURING ASSOCIATION.
        BSS IS NOT HOMOGENEOUS. SHOULD NOT PENALIZE WHOLE BSS.
                SOME DISAGREE WITH ABOVE
        DOES THIS MEAN A TABLE FOR EACH STATION ?
                NO, BUT IT COULD.
        SEMANTICS "CURRENT MAX. MPDU SIZE". EACH STATION COULD DO ITS OWN
        THAT WAS LESS THAN THE BSS VALUE.
        CHANGED MOTION TO:
MOVED THAT THE 'ACTIVE MAX. MPDU SIZE' SHALL BE A MANAGED OBJECT PER STA RATHER THAN PER BSS AS PREVIOUSLY DECIDED.
        DON'T WANT DATA BASES BUILT FOR THIS.

VOTE: 19 FOR, 1 AGAINST, 7   ABSTAIN

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PAPER ON WINDOWING WILL NOT BE PRESENTED

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NEXT PHIL AND WIM, 94/120
        PRESENT FRAME RELAY, CLARIFY SOME ISSUES WITH ORIGINAL DFWMAC.

DISCUSSION:
        MICHAEL PROPOSED A SIMPLIFICATION, BUT ONLY VERBALLY
        SEQUENCING CONTINUES TO BE A PROBLEM
        ISO DOCUMENT WILL BE IN PIGEON HOLES RE MAC REQUIREMENTS
        BROADCAST - BENEFIT - GOES FIRST TO AP THEN TO THE WHOLE BSS
               WORRY ABOUT TRAFFIC
        SOMETHING ABOUT BEERS?
        INVITATION TO AUTHORS TO WRITE TEXT FOR THE DRAFT STANDARD

MOVED THAT TEXT FOR A MORE COMPLETE DESCRIPTION OF THE TO/FROM AP BITS BE CREATED AND INCLUDED IN THE NEXT REVISION OF THE DRAFT.
        MIKE FISHER
        2ND SAROSH VESUNA

DISCUSSION:
        DAVE MADE IT CLEAR THAT THIS SIMPLY CLARIFIES THE EXISTING DRAFT
        WITH BETTER TEXT.
        FRIENDLY AMENDMENT: EXPLAIN OPERATION ?
        OPEN ISSUE ABOUT FRAME RELAY THAT MAY COVER SOME OF THIS
        MODIFY MOTION:

MOVED THAT TEXT FOR A MORE COMPLETE DESCRIPTION OF THE TO/FROM AP BIT BE <u>DERIVED FROM 94/120</u> AND INCLUDED IN THE NEXT REVISION OF THE DRAFT.
        TO BIT DESCRIBED, BUT NOT FROM BIT, SECTION 4.1.4
               NEEDS CLARIFICATION

VOTE: 30 FOR, 0 AGAINST, 1 ABSTAIN

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AFTERNOON BREAK

BACK AT 3:20

PAPER ON DISTRIBUTED TIME BOUNDED SERVICE, 94/150
"DCF PROPOSAL WITH ACTIVE PRIORITY SIGNALING"
        WIM DIEPSTRATEN
        TIM PHIPPS

DISCUSSION:
        NOTED THE ADDITION OF THE TIME FOR THE PULSE
        THE PULSE JUST NEEDS TO BE DETECTED BY THE CCA LOGIC
        PULSE FROM AP WORKS, BUT HOW ABOUT HIDDEN STATIONS
               LEAKAGE BETWEEN PRIORITIES, NOT CATASTROPHIC
        STILL NOT TRYING TO HAVE PERFECT DELIVERY OF TBS
        NEED TO TALK TO PHY ABOUT PULSE.
        IS THERE A SUGGESTED BIT PATTERN, RESOLVE FROM INTERFERENCE

WHAT IS HIPERLAN USING FOR A PULSE.
> THEY HAVE A CLEAR BAND, MORE DIFFICULT FOR US.

CCA TAKES TIME, PULSE IS SHORT.
> PULSE IS EQUAL TO SLOT TIME

NEED TO GET NUMBERS FROM THE PHY GROUPS AS TO IMPACT.
ISSUE WHEN A STA THINKS THERE ARE 3 LEVELS AND ANOTHER THINKS 5
COULD A STA LEARN ABOUT PRIORITIES.
> ENVISAGE A NUMBER FOR EACH PHY AS DEFAULT

GAP BETWEEN PULSE AND CONTENTION WINDOW
> A SLOT TIME FOR ASSESSMENT

IF ONLY LOW PRIORITY THEN OVERHEAD IS 2 SLOT TIMES
> YES

GAP IS JUST TX TO RX
> DISAGREE, NEED TO TAKE IT OFF LINE

90/95 % NUMBERS ARE APPLICABLE TO DS? THEN WHY DIVERSITY?
> YES,.....

NAV TAKES INTO ACCOUNT THE ACK SO NO NEED TO MODIFY DIFS DEFINITION?

WILL PICK IT UP IN THE MORNING

ANOTHER MAC PHY MEETING THIS EVENING AT 8:00
> TIME FOR DINNER, LOTS OF CLAPPING

ADJOURN AT 5:00

WEDNESDAY 7/13
START AT 8:45

WIM DIEPSTRATEN PICKS UP WHERE HE LEFT OFF

MOVE THAT 802.11 SHOULD ADOPT THE "PRIORITY BASED DCF" PROPOSAL AS DOCUMENTED IN 94/150.

DISCUSSION:
> WANT THIS PRESENTED TO PHY GROUPS
>> SHOULD PASS THIS ON TO GET INDICATION FROM MAC GROUP.
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> NEED SOMETHING THAT CANNOT BE IMITATED, PULSE NOT GOOD
> MANY QUESTIONS ABOUT HIPERLAN, CO-EXISTENCE ETC.
> WHY CAN'T WE ELIMINATE THE SINGLE PDP PULSE FOR LOW PRIORITY TRAFFIC ONLY.
> WHAT IS DIFFERENCE BETWEEN OLD SCHEME AND NEW
>> OLD WAS 16 SLOTS, NEW IS 2
>
> PDP IS A MIB MANAGED OBJECT
>> WIM SAYS NO, FIXED FOR A GIVEN PHY
>
> WANT IT TO BE A MIB OBJECT
> MAJOR CONCERN ABOUT PULSE, IS THERE AN ALTERNATIVE, WHAT IS THE FALL BACK POSITION.
>> KERRY MIGHT HAVE ONE
>
> HOW RELIABLE IS THIS SERVICE, CONCERN THAT PULSE IS NOT HEARD BY ALL
> RATIONAL FOR 16/32 SLOTS IN DOC 94/58
>> JUST EXAMPLES

VOTE: 16 FOR, 11 AGAINST, 8 ABSTAIN   PASS

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ADJOURN FOR BREAK AT 10:20

BACK AT 10:45

PAPER 94/98A PRESENTED BY BOB O'HARA

DISCUSSION:
      COULD THERE BE A STA CONNECTED TO MULTIPLE BSS'
          YES AND THE MIB COULD BE CHANGED TO "SET OF INTEGERS" FOR BSS ID
      THIS SPEC. IMPLIES ONLY CMALL ETC. AND NOT SNMP
          LIKE SPEC. TO ALSO HAVE SNMP SUPPORT
      NON-TRIVIAL TASK TO KEEP THIS DATA (KNOWN AP'S)
      WHAT WAS THE BASIS FOR CHOOSING THE VARIABLES
          INCLUDED EVERYTHING THAT SEEMED APPLICABLE
      DO WE NEED ALL OF THIS STUFF AS A MANAGED MIB VARIABLE
          ALL ARE CURRENTLY MANDATORY, WE CAN ADJUST THIS
      "ENSEMBLE" IS A MIB MODEL THAT CAN HELP DEFINE THE MIB VARIABLES
      WE SHOULD THINK SNMP

MOTION: I MOVE THAT THE DEFINITION OF THE MAC AND SMT PORTIONS OF THE MIB AS DESCRIBED IN 94.98A BE ADOPTED AND PLACED IN THE DRAFT STANDARD AND SUPERSEDE THE RECOMMENDATION MADE IN THE CLOSING PLENARY IN MAY TO USE 94/98 AS A WORK IN PROGRESS FOR THE FRAMEWORK FOR THE MIB DEFINITION.
      BOB O'HARA
      2ND: GREG ENNIS

DISCUSSION:
      DOES THIS NEED TO BE IN THE FIRST DRAFT
          BETTER TO HAVE SOMETHING TO SHOOT AT
      MOTION AT OSHUA IN CONFLICT WITH CURRENT MOTION RE 94/98 (NOT 98A)

VOTE: 25 FOR, 1 AGAINST, 6 ABSTAIN

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ADJOURN FOR LUNCH AT 11:55

BACK FROM LUNCH AT 1:35

PAPER ON BIT ORDER 94/155 BY TIM PHIPPS

**MOTION: THAT THE CHANGES WITHIN 94/155 SECTION 2.1 BE INCORPORATED INTO THE 802.11 DRAFT AND THAT OCTETS ARE TRANSMITTED IN ASCENDING ORDER.
(2.1 SAYS: EACH OCTET OF THE MAC FRAME, WITH THE EXCEPTION OF THE CRC IS TRANSMITTED LOW ORDER BIT FIRST, WHICH IS BIT 0.)**
      SIMON BLACK
      2ND: DAVE ROBERTS

DISCUSSION:

      THIS MOTION REFLECTS WHAT IS CURRENTLY IN THE DRAFT STANDARD.

      THE BIT FIELDS ARE STILL AN OPEN ISSUE

      WHAT DOES ASCENDING ORDER MEAN

VOTE: 26 FOR, 1 AGAINST, 1 ABSTAIN

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MOTION: THAT THE FINAL FRAME FORMATS ADOPTED BY 802.11 SHALL BE AN INTEGRAL NUMBER OF OCTETS.

      SIMON BLACK

      2ND: MIKE FISHER

DISCUSSION:

      NONE, ALL IN CRAFTING THE PROPOSAL

VOTE: 29 FOR, 0 AGAINST, 0 ABSTAIN

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DISCUSSION:

      HOW DOES THIS EFFECT THE PHY GROUPS GIVEN THAT THEY GET A PACKET.

MOVED: THAT AT THE MAC/PHY INTERFACE ALL INFORMATION SHALL BE IN CANONICAL BIT ORDER.

      JON ROSDALE

      2ND: PAUL EASTMAN

DISCUSSION:

      HAS WHAT WE HAVE DONE HAVE TEETH.

      GIVEN THAT PHY GETS A PACKET WHAT HAPPENS

      THE PHY CANNOT PRACTICALLY FLIP THE BITS BACK

VOTE: 27 FOR, 1 AGAINST, 2 ABSTAIN

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ADJOURN AT 2:30

BACK AT 8:30 THURSDAY MORNING

MOVED: THAT IFF THE PRECEDING MOTION RE. FULL 94/150 DCF ADOPTION FAILS IN THE JULY PLENARY THAT:
1) 802.11 ADOPT THE PRIORITY BASED DCF PROPOSAL AS DOCUMENTED IN 94/150 <u>EXCEPT</u> FOR THE PrP MECHANISM (WHICH IS FOR FURTHER STUDY), AND

2) THE MAC GROUP IS DIRECTED TO FURTHER INVESTIGATE ALTERATIONS TO 94/150 THAT COULD RESULT IN EQUIVALENT FUNCTIONALITY, AND
3) THE RESULTS OF THOSE INVESTIGATIONS ARE TO BE EVALUATED DURING THE SEPT MAC MEETING.

DISCUSION:
    GENERAL AGREEMENT WITH MOTION.
    WIM SHOWED A DIAGRAM FOR AN ALTERNATIVE MECHANISM THAT DID NOT REQUIRE THE PULSE.
    TALK ABOUT TBS IN/OUT. WHAT IS THE RAMIFICATIONS.

MOTION WITHDRAWN

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REQUEST FOR VOLUNTEERS TO WRITE UP MULTI-RATE CONCERNS FROM MAC STANDPOINT.
    MIKE FISHER
    WIM DIEPSTRATEN

ISSUE CLOSING:
    SECTION 5
    ISSUE 5.9: HOW TO FIND AP'S
        FOR THE DETAILS OF HOW A STATION LEARNS ABOUT WHAT AP'S ARE PRESENT, SEE SECTION 7.1.3 ON SCANNING
    VOTE: 19 FOR, 0 AGAINST, 5 ABSTAIN

    ISSUE 5.6: ASSOCIATION DIRECTION
        ASSOCIATION IS ALWAYS INITIATED BY THE STA
    VOTE: 24 FOR, 0 AGAINST, 3 ABSTAIN

    ISSUE 5.7, 5.8 EXPLICIT REASSOCIATION DIRECTION
        REASOCIATION IS ALWAYS INITIATED BY THE STA
    VOTE: 24 FOR, 0 AGAINST, 2 ABSTAIN

    ISSUE 5.3B: WHAT INFRASTUCTURE SERVICES ARE NEEDED
        THIS IS MOOT, COVERED BY 5.3A TEXT
    VOTE: 25 FOR, 0 AGAINST, 2 ABSTAIN

    ISSUE 5.5: WHAT PERFORMANCE REQUIREMENTS OF THE DISTRIBUTION SYSTEM
        ALT 1
        DISCUSSION:
            QUESTIONS ABOUT TBS SUPPORT BY DS
            MORE WORK REQUIRED
            NEED VOLUNTEERS
    WITHDRAWN

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NOTE TO ISSUES LIBRARIAN
    ISSUE ABOUT HOW TO GET SOME METRICS BACK FROM THE DS TO HELP RESOLVE ISSUE 5.5

DISCUSSION:
ARE THERE ANY FRAGMENTATION ISSUES THAT CAN BE CLOSED?

ISSUE 20.6: FRAGMENTATION
CLOSED VIA PLENARY VOTE ON 7/11/94

JULY CUT DISCUSSION:

DISCUSSION:
THE PROBLEMS LIE WITH THE CURRENT MAC/PHY INTERFACE SPECIFICATION.
WITH THE CURRENT WAY IT IS WRITTEN, IT IS IMPOSIBLE TO COMPLETE THE
MAC DESCRIPTIONS OF APPROVED MAC FUNCTIONALITY.

TBS, WILL IT BE COMPLETED
ITS UP TO THE PHY, CAN IT SUPPORT THE PULSE

QUESTION, DRAFT MUST BE DONE BY MON OF NOV. PLANARY?
YES/NO, WE CAN VOTE TO INCLUDE STUFF WITH THE DRAFT IN NOV.

CHANDOS PROPOSES TO SUSPEND WORK ON ALL BUT ASYNCH SERVICE FOR NOW
STRAW POLE: 6, 15, 8

SHOWED THE GROUP THE REPORT

WORKED ON THE GOALS FOR THE SEPT MEETING

NEXT: GO THROUGH THE DRAFT TO IDENTIFY THE AREAS THAT NEED WORK AND
POSSIBLY ASSIGN SOMEONE TO DO THE WORK.

ADJOURN AT 12:05