Submission to:
IEEE P802.11
Wireless LANS

Title: **SG on MAC Enhancements Report 09/13/99 to 09/17/99 Santa Rosa, CA**

Date: Sept.,   1999

Author: John Fakatselis
                                             Intersil corp.
                                           2401 Palm Bay Road
                                           Palm Bay, Florida
                                                 32905
                                                  USA
                                          Tel: (407)-724-7000
                                          Fax: (407)-724-7886
                                       email: jfakat01@intersil.com

IEEE802.11 Study Group ,
On MAC Enhancements
Sept. 13-17 , 1999 Santa Rosa CA.

AGENDA

- Secretary Appointment
- Call to Order
- Policies overview
    - Voting Rights
    - Debates
    - Key Motions
        - Point of order
        - Point of information
        - Parliamentary inquiry
- Study/ schedule overview
- Call for Papers
- 5- Criteria Overview
- PAR
- Presentation of papers
        - Discussions
- New Business
- Presentation to WG Plenary.

STUDY AUTHORIZATION & CHARTER
Moved: To approve the Working Group Study Group initiated by 802.11
for 802.11 enhancements with the charter to Investigate for QoS and CoS

metrics, Enhanced Security mechanisms for supporting long keys, key negotiation & distribution and investigate enhancements to the authenication process with the aim to submit the related PAR(s) and 5 criteria. The goal is to approve the PAR at the March 2000 meeting.

For information, the chair is John Fakatselis.

SG SCHEDULE TO COMPLETION

- September 99: Generate Candidate Enhancement Projects
  - Initial Draft on Objective

- November 99 : Generate Candidate Enhancement Projects
  - Initial PAR Draft .

- January 00 :   Finalize Enhancement Projects List
  - Update PAR Draft

- March 00:   Finalize PAR
  - Submit PAR to EXCOM

SG MEETING SCHEDULE
Thues. 8:30-12:00
Wed.   10:30- 12:00
Thur: 8:30-10:30
         DSRC1:30-4:30

PAPERS

Enhancing 802.11 with QoS Marteen   20   99-197
Requirements for IAPP   Richard   30   99-198
Multimedia transport over wireless Amar 30   99- 196
Greater than 40-bit WEP Richard   10   99- 208
Voice over IP Bob   20 99- 228
Load Balancing and Beacon customization Maarten   10 99-227

CANDIDATE PROJECT	PROPOSER	COMMENTS/ SCOPE
QoS	Maarten	Enhance the 802.11 MAC to perform quality of service based on PCF or DCF. Soft real time services. Ways to prioritize traffic. Integration of IETF in wireless.
Enhanced Security	Richard	Enhance the 802.11 MAC to implement stronger security protection. Scalable mechanisms for security as applicable and required form users and within regulatory restrictions. Eliminate existing algorithm flaws that compromise security. Enhance MAC management functions in the areas of key management, length, negotiation , distribution and algorithm selection to accommodate a more secure 802.11 system. Note: evaluate other existing schemes i.e. IETF, BT
IAPP	Richard, Maarten	Enhance the 802.11 MAC to establish an inter AP protocol to maintain connectivity and ensure smooth hand off and continuity of services between Aps AP to server authentication protocol with privileged classes.
Multimedia over wireless	Amar	Enhance the 802.11 MAC to define and accommodate multimedia applications. Emphasis of enhancements in the areas of Latency, BW, Priority, channel protection, data streams.
Load Balancing	Maarten	Enhance the 802.11 MAC to accommodate load balancing and avoid interoperability issues.
Extend the Beacon to include proprietary vendor specific information.	Maarten	Enhance the 802.11 MAC to include proprietary vendor information without compromising interoperability.
	Bob	Enhance the 802.11 MAC to
		Enhance the 802.11 MAC to
		Enhance the 802.11 MAC to
		Enhance the 802.11 MAC to
		Enhance the 802.11 MAC to

Five Criteria

1. Broad Market Potential

A standards project authorized by IEEE Project 802 shall have a broad market potential. Specifically, it shall have the potential for:

a) Broad sets of applicability.
b) Multiple vendors, numerous users.

2. Compatibility with IEEE Standard 802

IEEE Project 802 defines a family of standards. All standards shall be in conformance with 802.1 Architecture, Management and Interworking.

All LLC and MAC standards shall be compatible with ISO/IEC 10039, MAC Service Definition at the LLC/MAC boundary. With the LLC Working Group there shall be one LLC standard, including one or more LLC protocols, with a common LLC/MAC interface.

3. Distinct Identity

Each IEEE Project 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other 802 Projects

b) One unique solution per problem (not two solutions to a problem).

c) Easy for document reader to select the relevant specification.

4. Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

a) Demonstrated system feasibility.

b) Proven technology, reasonable testing.

c) Confidence in reliability.

5. Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated), for its intended applications. At a minimum, the proposed project shall show:

a) Known cost factors, reliable data.

b) Reasonable cost for performance.

c) Consideration of installation costs.