IEEE 802.11
Wireless Access Method and Physical Layer Specifications

Title: Direct Sequence PHY PICS Proforma

Presented by: **Mike Trompower**
Aironet Wireless Communications, Inc.
367 Ghent Road, Suite 300
Akron, Ohio 44333
Tel: (216) 665-7920
Fax: (216) 665-7301
Email: mtrom@aironet.com

Abstract: **This paper provides the necessary text aimed at providing conformance to the Direct Sequence PHY specification. This text should be included in a complete section which also contains the necessary instruction and vendor identification information. The information in this text does not provide any detail necessary for compliance to the MAC layer.**

Action: **Adopt the text in this paper for inclusion in the relevant portions of P802.11/D2.2 pertaining to conformance issues.**

This document has been accepted 4-0-0 by the DSSS subgroup.

Introduction

Using the IEEE 802.12 PICS Proforma as a guide, the following text and tables were created using section 12 of P802.11 draft 2.

Annex A. DSSS PHY PICS Proforma

A.1 Introduction

The supplier of a direct sequence physical layer implementation which is claimed to conform to this Standard shall complete the following Protocol Implementation Conformance Statement (PICS) proforma.

A.2 Abbreviations and Special Symbols

A.2.1 Status Symbols

M	mandatory
O	optional
O.n	optional, but support of at least one of the group of options labeled by the same numeral n is required

A.2.2 General Abbreviations

n/a	not applicable
PICS	Protocol Implementation Conformace Statement

A.3 Instructions for Completing the PICS Proforma

A.3.1 General Structure of the PICS Proforma

{as detailed in doc IEEE P802.11-95/194}

A.3.2 Additional Information

{as detailed in doc IEEE P802.11-95/194}

A.3.3 Exception Information

{as detailed in doc IEEE P802.11-95/194}

A.3.4 Conditional Status

A.3.4.1
A.3.4.2
{as detailed in doc IEEE P802.11-95/194}

A.3.5 Copyright Release for PICS Proformas

{as detailed in doc IEEE P802.11-95/194}

A.4 PICS Proforma -- P802.11: Identification

A.4.1 Implementation Identification
A.4.2 Physical Layer Support Summary

{as detailed in doc IEEE P802.11-95/194}

A.5 DSSS PHY Capabilities

Item	PHY Feature	References	Status	Support
	PLCP Sublayer Procedures	12.2		
	Preamble prepend on TX	12.2.1	M	YES _
	PLCP frame format	12.2.2, 12.2.3	M	YES _
	PLCP integrity check generation	12.2.3, 12.2.3.6	M	YES _
	TX Rate change capability	12.2.3.3, 12.2.5	M	YES _
	Supported Data Rates	12.1, 12.2.3.3	M	YES _
	1 Mb/s	12.1, 12.2.3.3	M	YES _
	2 Mb/s	12.1, 12.2.3.3	M	YES _
	Data whitener scrambler	12.2.4	M	YES _
	scrambler initialization	12.2.4	M	YES _
	Preamble process on RX	12.2.1	M	YES _
	PLCP frame format	12.2.2, 12.2.3	M	YES _
	PLCP integrity check verify	12.2.3, 12.2.3.6	M	YES _
	RX Rate change capability	12.2.3.3, 12.2.5	M	YES_
	1 Mb/s	12.1, 12.2.3.3	M	YES_
	2 Mb/s	12.1, 12.2.3.3	M	YES_
	Data whitener descrambler	12.2.4	M	YES _
	PN code sequence	12.4.6.3	M	YES _
	Chipping continue on power Down	12.2.6	O	YES _ NO _
	Operating Channel Capability	12.2.6, 12.4.6.2		
	North America (FCC)		O.1	YES _ NO _
	channel 1		M	YES _
	channel 2		M	YES _
	channel 3		M	YES _
	channel 4		M	YES _
	channel 5		M	YES _
	channel 6		M	YES _
	channel 7		M	YES _
	channel 8		M	YES _
	channel 9		M	YES _
	channel 10		M	YES _
	channel 11		M	YES _
	Europe (ETSI)		O.1	YES _
	channel 3		M	YES _
	channel 4		M	YES _
	channel 5		M	YES _
	channel 6		M	YES _
	channel 7		M	YES _
	channel 8		M	YES _
	channel 9		M	YES _
	channel 10		M	YES _
	channel 11		M	YES _
	Japan (RCR)		O.1	YES _ NO _
	Bits to Symbol Mapping	12.4.6.4		
	1 Mb/s		M	YES _
	2 Mb/s		M	YES _
	CCA functionality	12.4.8.4		
	Energy Only (RSSI above threshold)		O.2	YES _ NO _
	Identification of 802.11 DSSS signal by		O.2	YES _ NO _

	correlation both methods		 O.2	 YES _ NO _
	Transmit antenna selection	12.4.5.5, 12.4.5.6	O	YES _ NO _
	Receive antenna diversity	12.4.5.5, 12.4.5.6, 12.4.5.7	O	YES _ NO _
	antenna port(s) availability if available (50 ohm impedance)	12.4.6.9	O M	YES _ NO _ YES _
	transmit power level support if greater than 100mW capability	12.4.5.8, 12.4.7.3 12.4.7.3	O M	YES _ NO _ YES _
	radio type (temperature range) Type 1 Type 2	12.4.6.10	 O.3 O.3	 YES _ NO _ YES _ NO _
	Spurious Emissions conformance	12.4.6.5	M	YES _
	TX - RX turnaround time	12.4.6.6	M	YES _
	RX - TX turnaround time	12.4.6.7	M	YES _
	Slot Time	12.4.6.8	M	YES _
	ED reporting time	12.4.6.8, 12.4.8.4	M	YES _
	minimum transmit power level	12.4.7.2	M	YES _
	transmit spectral mask conformance	12.4.7.4	M	YES _
	transmitted center frequency tolerance	12.4.7.5	M	YES _
	chip clock frequency tolerance	12.4.7.6	M	YES _
	transmit power on ramp	12.4.7.7	M	YES _
	transmit power down ramp	12.4.7.7	M	YES _
	RF carrier suppresssion	12.4.7.8	M	YES _
	transmit modulation accuracy	12.4.7.9	M	YES _
	receiver minimum input level sensitivity	12.4.8.1	M	YES _
	receiver maximum input level	12.4.8.2	M	YES _
	receiver adjacent channel rejection	12.4.8.3	M	YES _