

IEEE P802.11 Wireless LANs

Proposed High Rate DSSS PICS for TGb Draft

Date: November 11, 1998

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This submission provides an initial cut at a PICS for inclusion within the 802.11 TGb High Rate draft text. This resolves comments 6, 7, and 295 on Letter Ballot 15.

High Rate Direct Sequence Physical Layer Functions

Item	PHY Feature	References	Status	Support
HRDS1	Long Preamble and Header Procedures	18.2	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.1	Long DS Preamble prepend on TX	18.2.1	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.2	Long PLCP integrity check generation	18.2.3, 18.2.3.6	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.3	TX Rate change capability	18.2.3.3, 18.2.5	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.4	Supported Data Rates	18.1, 18.2.3.3	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.5	Data whitener scrambler	18.2.4	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS1.6	Scrambler initialization	18.2.4	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS2	FH Preamble and Header Procedures	18.2	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS2.1	FH Preamble prepend on TX	18.2.2	HRDS2:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS2.2	FH Header transmission	18.2.2, 18.2.3.15	HRDS2:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS2.4	8 microsecond gap within transmission	18.2.2	HRDS2:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS2.5	Transmission of Short Preamble and Header after gap	18.2.2	HRDS2:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS3	Short Preamble and Header Procedures	18.2	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS3.1	Short Preamble prepend on TX	18.2.2	HRDS3:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS3.2	Short Header Transmission	18.2.8, 18.2.9,18.2.10, 18.2.11,18.2.12,18. .2.13,18.2.14,18.2. 15	HRDS3:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS4	Long Preamble process on RX	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS4.1	PLCP frame format	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS4.2	PLCP integrity check verify	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS4.3	RX Rate change capability	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS4.4	Data whitener descrambler	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS5	FH Preamble process on RX	18.2	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS5.1	FH Preamble and header reception	18.2.2	HRDS5:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS5.2	FH PLCP field processing	18.2.3.15	HRDS5:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

Item	PHY Feature	References	Status	Support
HRDS6	Short Preamble process on RX	18.2.7	O	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS6.1	PLCP frame format	18.2.7	HRDS6:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS6.2	PLCP integrity check verify	18.2.7	HRDS6:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS6.3	RX Rate change capability	18.2.7	HRDS6:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS6.4	Data whitener descrambler	18.2.7	HRDS6:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7	Operating channel capability			
* HRDS7.1	North America (FCC)	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	channel 1	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.1	channel 2	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.2	channel 3	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.3	channel 4	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.4	channel 5	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.5	channel 6	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.6	channel 7	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.7	channel 8	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.8	channel 9	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.9	channel 10	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.10	channel 11	18.4.6.2	HRDS7.1: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.1.11			M	
* HRDS7.2	Canada (IC)	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	channel 1	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.1	channel 2	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.2	channel 3	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.3	channel 4	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.4	channel 5	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.5	channel 6	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.6	channel 7	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.7	channel 8	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.8	channel 9	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.9	channel 10	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.2.10			M	

Item	PHY Feature	References	Status	Support
HRDS7.2.11	channel 11	18.4.6.2	HRDS7.2: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
* HRDS7.3	Europe (ETSI)	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.1	channel 1	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.2	channel 2	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.3	channel 3	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.4	channel 4	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.5	channel 5	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.6	channel 6	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.7	channel 7	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.8	channel 8	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.9	channel 9	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.10	channel 10	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.11	channel 11	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.12	channel 12	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.3.13	channel 13	18.4.6.2	HRDS7.3: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
* HRDS7.4	France	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.4.1	channel 10	18.4.6.2	HRDS7.4: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.4.2	channel 11	18.4.6.2	HRDS7.4: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.4.3	channel 12	18.4.6.2	HRDS7.4: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.4.4	channel 13	18.4.6.2	HRDS7.4: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
* HRDS7.5	Spain	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.5.1	channel 10	18.4.6.2	HRDS7.5: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS7.5.2	channel 11	18.4.6.2	HRDS7.5: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
* HRDS7.6	Japan (RCR)	18.4.6.2	HRDS7:O. 1	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS8	Hop Sequences	18.4.6.8	HRDS2:M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS9	CCK Bits to Symbol Mapping			
HRDS9.1	5.5 Mbit/s	18.4.6.5	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS9.2	11 Mbit/s	18.4.6.5	M	Yes <input type="checkbox"/> No <input type="checkbox"/>

Item	PHY Feature	References	Status	Support
HRDS10	PBCC Bits to Symbol Mappings	18.4.6.7	O	
HRDS10.1	5.5 Mbit/s	18.4.6.7	HRDS10: M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS10.2	11 Mbit/s	18.4.6.7	HRDS10: M	Yes <input type="checkbox"/> No <input type="checkbox"/>
*HRDS11	CCA functionality	18.4.8.4		
HRDS11.1	Energy Only (RSSI above threshold)	18.4.8.4	HRDS11:O .2	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS11.2	802.11 HRDSSS correlation	18.4.8.4	HRDS11:O .2	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS11.3	both methods	18.4.8.4	HRDS11:O .2	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS11.4	Hold CCA busy for packet duration of a correctly received PLCP but carrier lost during reception of MPDU	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS11.5	Hold CCA busy for packet duration of a correctly received but out of spec PLCP	18.2.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS12	Transmit antenna selection	18.4.5.5, 18.4.5.6	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS13	Receive antenna diversity	18.4.5.5, 18.4.5.6, 18.4.5.7	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
*HRDS14	antenna port(s) availability	18.4.6.9	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS14.1	if available (50 ohm impedance)	18.4.6.9	HRDS14: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
*HRDS15	transmit power level support	18.4.5.8, 18.4.7.3	O	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS15.1	if greater than 100mW capability	18.4.7.3	HRDS15: M	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
*HRDS16	radio type (temperature range)	18.4.6.14		
HRDS16.1	Type 1	18.4.6.14	HRDS16:O .3	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS16.2	Type 2	18.4.6.14	HRDS16:O .3	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
HRDS17	Spurious Emissions conformance	18.4.6.9	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS18	TX - RX turnaround time	18.4.6.10	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS19	RX - TX turnaround time	18.4.6.11	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS20	Slot Time	18.4.6.12	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS21	ED reporting time	18.4.6.8, 18.4.8.4	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS22	minimum transmit power level	18.4.7.2	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS23	transmit spectral mask conformance	18.4.7.4	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS24	transmitted center frequency tolerance	18.4.7.5	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS25	chip clock frequency tolerance	18.4.7.6	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS26	transmit power on ramp	18.4.7.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS27	transmit power down ramp	18.4.7.7	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS28	RF carrier suppression	18.4.7.8	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS29	transmit modulation accuracy	18.4.7.9	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS30	receiver minimum input level sensitivity	18.4.8.1	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS31	receiver maximum input level	18.4.8.2	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS32	receiver adjacent channel rejection	18.4.8.3	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS33	Management Information Base	13.1, 18.3.4, Annex C	M	Yes <input type="checkbox"/> No <input type="checkbox"/>
HRDS33.1	PHY Object Class	13.1, 18.3.4,	M	Yes <input type="checkbox"/> No <input type="checkbox"/>

