

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	TG1/PHY SAP Parameters	
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Re:		
Abstract	In response to comment 283 (Vladimir Yanover) a list of PHY specific parameters is supplied	
Purpose	To fill in Section 8.2.2 (Current draft as of Session #11)	
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PHY SAP Parameter Definitions

SCHED_PARAM_VECTOR

Parameter	Value
Symbol Rate	1 to 40 (in Msym/s)
Modulation density	2,4 or 6
FEC block size	0 to 511 bytes
FEC payload	0 to 255 bytes
Preamble length	16 to 256 Symbols
PHY Overhead	0 to 256 Symbols

DCD_PARAM_VECTOR

Parameter	Value
RF Channel number	0 to maximum number of channels allowed in the system
Symbol Rate	1 to 40 (in Msym/s)
Number of PHY burst profiles active	0-4
Start active region in frame	0-65535 (in symbols)
End active region in frame	0-65535 (in symbols)

Remark: if both start and end of active region in frame are zero this should be interpreted as frameless operation.

UCD_PARAM_VEC

Parameter	Value
RF Channel number	0 to maximum number of channels allowed in the system
Symbol Rate	1 to 40 (in Msym/s)
Number of PHY burst profiles active	0-4
Start active region in frame	0-65535 (in symbols)
End active region in frame	0-65535 (in symbols)

Remark: if both start and end of active region in frame are zero this should be interpreted as frameless operation. A start active region greater than zero indicates half duplex (i.e., TDD) operation.

RNG_REQ_VECTOR

Parameter	Value
Frequency change adjustment	(-1000...+1000) (in KHz)
Time alignment	(-32768...+32767) in quarter symbols
Power adjust	(-128...+127) number of 0.5 dB

RNG_IND_VECTOR

Parameter	Value
Frequency deviation	(-1000...+1000) In KHz

RSSI	(0 to RSSI_MAX) (in dB)
Relative symbol time deviation	-16...15 (in quarter symbols)
Receiver failure	(0=OK, 1=failure)

TXVECTOR

Parameter	Value
Symbol Rate	1 to 40 (in Msym/s)
Burst profile used	0-15
Start transmit in frame	0-65535 (in symbols)
End transmit in frame	0-65535 (in symbols)
Actual number of bytes transmitted	0-65535 (in bytes)

TXSTATUS

Parameter	Value
Overrun	(0-65535) in symbols, 0 indicates no-overrun
Underrun	(0-65535) in symbols, 0 indicates no-underrun

RXVECTOR

Parameter	Value
Symbol Rate	1 to 40 (in Msym/s)
Burst profile used	0-15
Start Receive in frame	0-65535 (in symbols)
End Receive in frame	0-65535 (in symbols)
Actual number of bytes expected	0-65535 (in bytes)

RXSTATUS

Parameter	Value
RSSI level	(0 to RSSI_MAX) in dB
Number of bytes received*	(0-65535) in bytes
Relative symbol time deviation	-16...15 (in quarter symbols)
Estimated number of byte errors	(0-65535) in bytes
Overrun	(0-65535) in symbols, 0 indicates no-overrun
Underrun	(0-65535) in symbols, 0 indicates no-underrun
Integrity	0 (valid data), 1 (invalid data)

*Not used in PHY Downstream mode A