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[add variables to 77.2.2.3:]
byteTime
TYPE: 32 bit unsigned
A clock that advances by 1 after every 8 bit times. After reaching the value of *FEC_CODEWORD_SIZE*, this variable resets to zero. In the OLT, this variable initialized to 0 at system initialization. In the ONU, this variable is assigned in the GATE Processing ONU Activation state diagram.

grantStart
TYPE: Boolean
This variable indicates beginning of a grant transmission. It is set to true in the GATE Processing ONU Activation state diagram (see Figure 77-29) when a new grant activates. It is reset to false after the transmission of the first frame in the grant (see Figure 77-13). This variable is defined in ONU only.

[Modify Figures 77-13 and 77-29 as shown in 3av_0809_joint_2.pdf]

[add constants to 77.2.2.1:]

FEC_PAYLOAD_SIZE
This constant represents the size of FEC codeword payload in octets.
Value: 216

FEC_PARITY_SIZE
This constant represents the size of FEC codeword parity field in octets.
Value: 32

FEC_CODEWORD_SIZE
This constant represents the size of FEC codeword in octets (FEC_PAYLOAD_SIZE + FEC_PARITY_SIZE).
Value: 248

[remove blockSize, colSize, parityRatio, ipgLen, and preLen from 77.2.2.1:]

[Replace definition of FEC_Overhead_min() (and associated table 77-1) in 77.2.2.4 with the following:]

FEC_Overhead (length)
This function calculates the amount of time (in octet times) that the MPCP control multiplexer must wait following transmission of a frame of size *length* so as to allow the insertion of parity data into the frame by the PHY layer. As described in 76.2.2.4, FEC

encoder adds 32 parity octets for each block of 216 data or control octets. *FEC_Overhead* () returns the number of octets that the PHY will insert during transmission of a particular packet and its subsequent IPG. Parameter *length* represents the size of an entire frame including preamble, SFD, DA, SA, Length/Type, FCS, and IPG. The following formula is used to calculate the overhead:

FEC_Overhead (length)
{
return FEC_PARITY_SIZE × ⌊*(byteTime + length) / FEC_PAYLOAD_SIZE*⌋
}

NOTE–The notation ⌊.⌋ represents a *floor* function, which returns the value of its argument *x* rounded down to the nearest integer.

[Delete definition of FEC_Overhead_max() in 77.2.2.4]

[Replace all occurrences of FEC_Overhead_Min() and FEC_Overhead_Max() with FEC_Overhead()]