Insert new subclause 142.4.3:

142.4.3 PMA transmit clock

The data conveyed by PMA_UNITDATA.request() is a 257-bit vector representing a single data-unit which has been prepared for transmission by the PMA client. For the PMA devices transmitting at 25.78125 Gb/s, the PMA transmit clock is equal 25.78125 / 257 GHz. For the PMA devices transmitting at 10.3125 Gb/s, the PMA transmit clock is equal 10.3125 / 257 GHz. In PMA devices supporting multiple transmit channels, the transmit clocks for all channels are phase aligned.

Insert new subclause 142.4.4:

142.4.3.1 Loop-timing specifications for ONUs

ONUs shall operate at the same time basis as the OLT, i.e., the ONU PMA transmit clock tracks the ONU PMA receive clock. Jitter transfer masks are defined in 141.6.2. For the ONUs supporting 10G transmission (i.e., 25/10G-EPON and 50/10G-EPON ONUs), the PMA transmit clock is derived from the PMA receive clock by dividing the latter by 2.5. In the ONUs supporting multiple receive channels, the PMA transmit clock tracks the received clock of the active (enabled) receive channel with the lowest index.

In 142.2.5.2, modify definitions of ClkOut and ClkXfer as follows:

ClkOut

Type: Boolean
Description: The clear on read variable *ClkOut* is set to true once for each 257-bit~~s of data~~ block output by the ~~PMD~~PMA, i.e., the *ClkOut* tracks the transmit clock of the corresponding PMA channel (see 142.4.3).

ClkXfr

Type: Boolean
Description: The clear on read variable *ClkXfr* is set to true once for each 257-bit~~s of data~~ block output by the ~~PMD~~PMA, i.e., the *ClkXfr* tracks the transmit clock of the corresponding PMA channel (see 142.4.3).