Response to comment #246

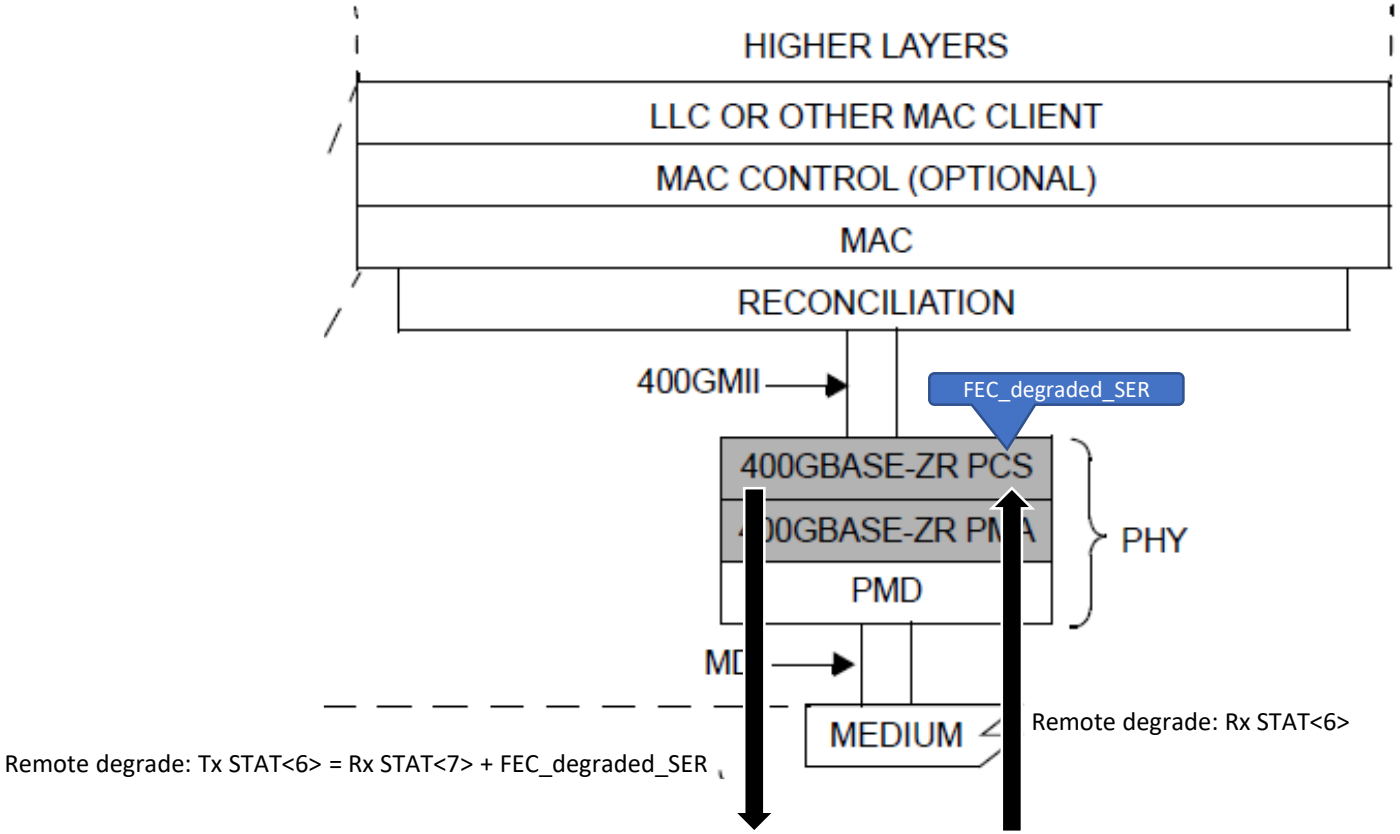
Leon Bruckman – Huawei

Comment #246 from Eric Maniloff

- Comment:
  - In addition to passing STAT<7> to tx_am_sf_1, degrade of the received CFEC is included

- Suggested remedy:
  - Update "and local degrade in STAT<7> is passed to tx_am_sf<1> in the transmit direction of the 400GXS sublayer" to indicate STAT<7> is OR'd with the degrade detected by CFEC.

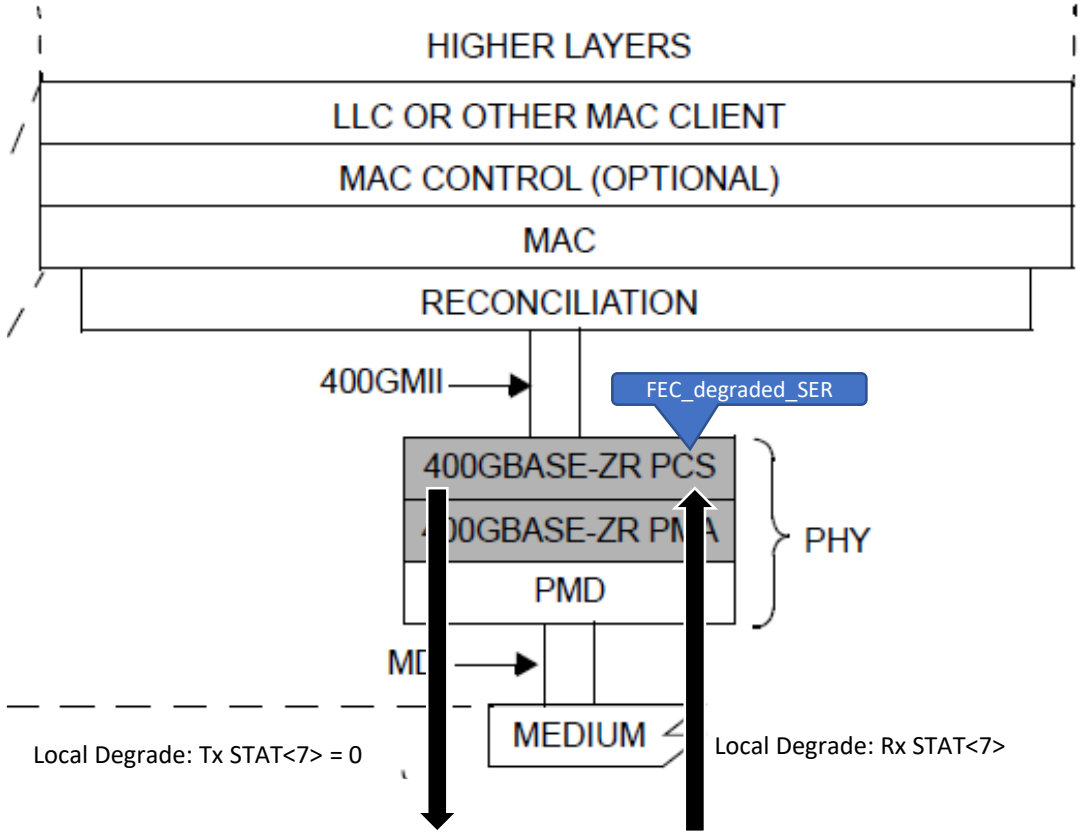
No extender STAT – Remote Degrade signaling



Note: Stat<6> = remote degrade

Ref: Figure 116-6

No extender STAT – Local Degrade signaling



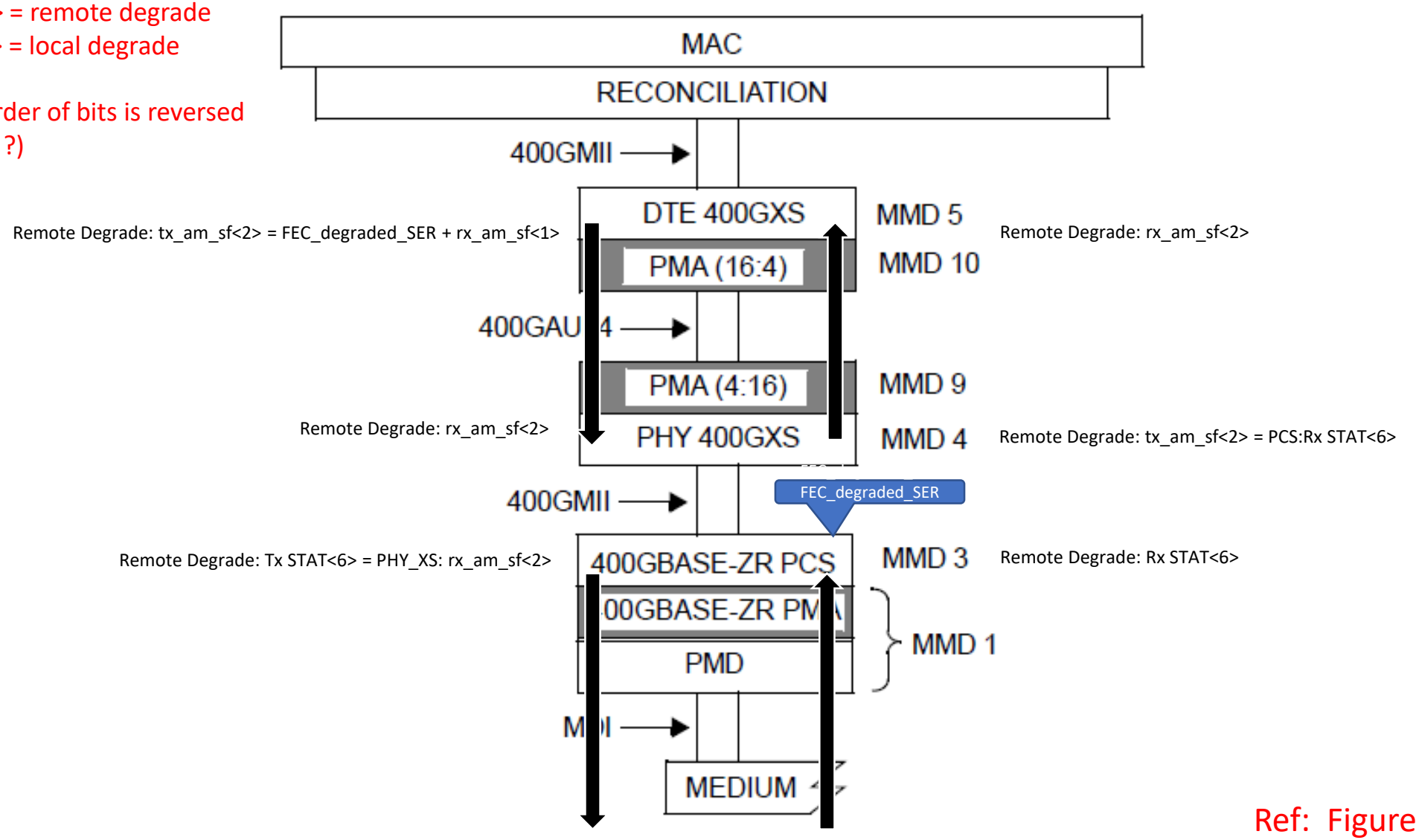
Stat<7> = local degrade

Ref: Figure 116-6

Extender STAT - Remote Degrade signaling

Note: Stat<6>, am_sf<2> = remote degrade
Stat<7>, am_sf<1> = local degrade

(note, interesting that order of bits is reversed
Between stat and am_sf ?)

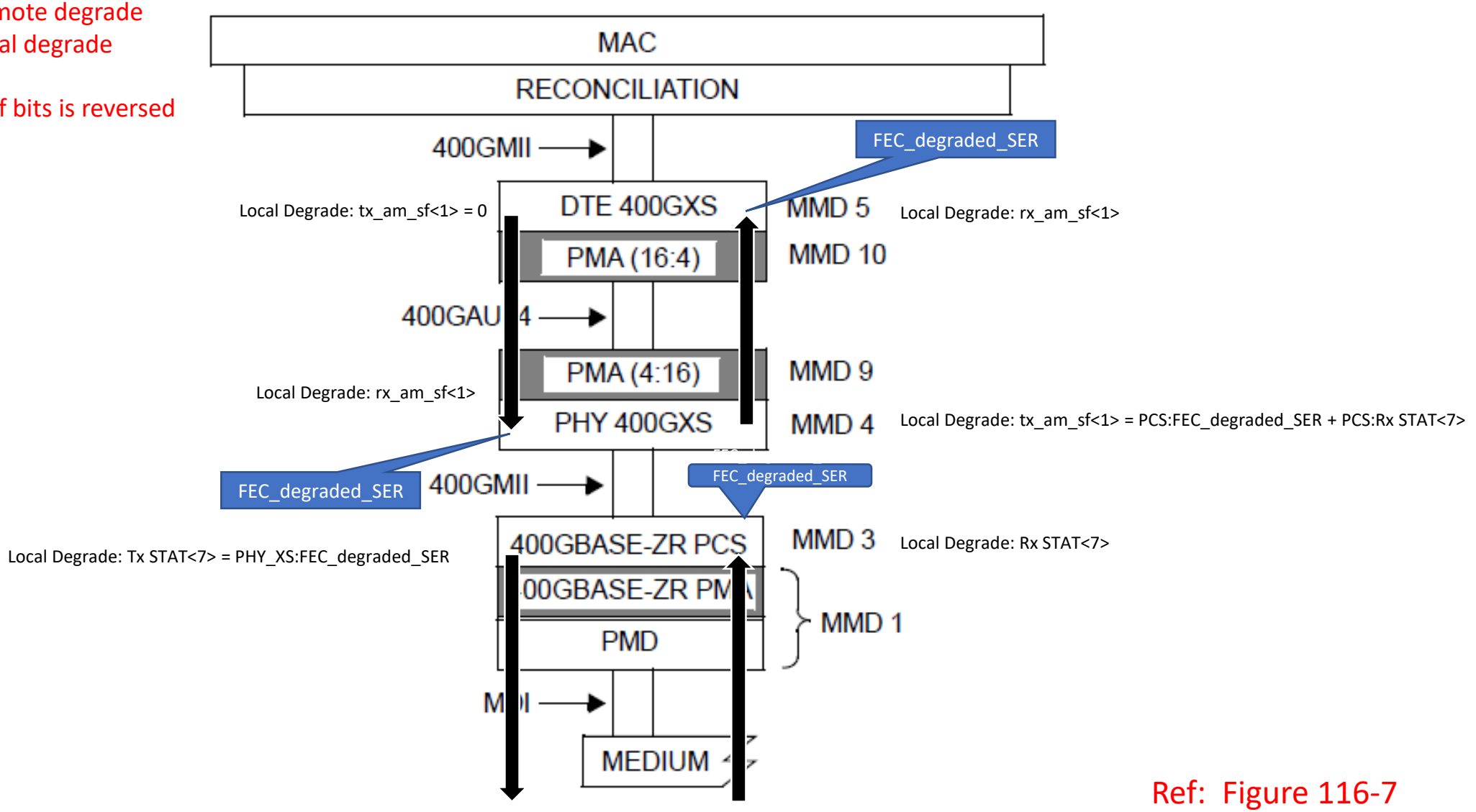


Ref: Figure 116-8

Extender STAT - Local Degrade signaling

Note: Stat<6>, am_sf<2> = remote degrade
Stat<7>, am_sf<1> = local degrade

(note, interesting that order of bits is reversed
Between stat and am_sf ?)



Ref: Figure 116-7

Proposed Response – Transmit

- **Actual text in 155.2.5.5.2:**

If there is an adjacent PHY 400GXS sublayer then the value of remote degrade in STAT<6> is equal to the value of rx_am_sf<2> from the 400GXS sublayer, and local degrade in STAT<7> is equal to the value of rx_am_sf<1> from the 400GXS sublayer.

If there is no adjacent PHY 400GXS sublayer, meaning that the 400GBASE-ZR PCS is directly connected to a MAC-RS, then the value of remote degrade in STAT<6> is set to the value of local degrade in STAT<6> of the received status octet in the receive direction of the 400GBASE-ZR PCS, and the value of local degrade in STAT<7> in the transmit direction is set to 0.

- **Change to:**

If there is an adjacent PHY 400GXS sublayer then the value of remote degrade in STAT<6> is equal to rx_am_sf<2> from the 400GXS sublayer, and the value of local degrade in STAT<7> is set if FEC_degraded_SER is set in the 400GXS sublayer, and to 0 otherwise.

If there is no adjacent PHY 400GXS sublayer, meaning that the 400GBASE-ZR PCS is directly connected to a MAC-RS, then the value of remote degrade in STAT<6> is set to one if STAT<7> of the received status octet in the receive direction of the 400GBASE-ZR PCS is set to 1 or FEC_degraded_SER is set, and to 0 otherwise, and the value of local degrade in STAT<7> is set to 0.

Proposed Response – Receiver

- **Actual text in 155.2.6.7.2:**

If there is an adjacent PHY 400GXS sublayer, then the value of remote degrade in the received STAT<6> is passed to tx_am_sf<2> in the transmit direction of the 400GXS sublayer, and local degrade in STAT<7> is passed to tx_am_sf<1> in the transmit direction of the 400GXS sublayer.

If there is no adjacent PHY 400GXS sublayer, meaning that the 400GBASE-ZR PCS is connected to a MAC-RS, then the value of remote degrade in STAT<6> is passed to the DTE management entity to indicate a remote degrade event, and local degrade in the received STAT<7> is passed to the remote degrade bit in STAT<7> in the transmit direction of the 400GBASE-ZR PCS.

- **Change to:**

If there is an adjacent PHY 400GXS sublayer, then the value of remote degrade in the received STAT<6> is passed to tx_am_sf<2> in the transmit direction of the 400GXS sublayer, and tx_am_sf<1> in the transmit direction of the 400GXS sublayer is set to one if local degrade in STAT<7> is set to 1 or FEC_degraded_SER is set, and to 0 otherwise.

If there is no adjacent PHY 400GXS sublayer, meaning that the 400GBASE-ZR PCS is connected to a MAC-RS, then the value of remote degrade in STAT<6> is passed to the DTE management entity to indicate a remote degrade event, and the value of remote degrade in STAT<7> is passed to the DTE management entity to indicate a local degrade event.