Draft 1.5

IEEE 802.3bn EPON Protocol over Coax (EPoC) TF 5th Task Force review comments

Proposed Responses

| C/ 101 | SC 101.4.1.1 | P 170 | L 11 | # | 3610 |
|---------------|--------------|--------------|------|---|------|
| Remein, Duane | | Huawei | | | |

Comment Type E Comment Status D

Given that ModTypeSC(n) are the only variables we are defining as part of a Profile Table 101-7 seems unnecessary.

SuggestedRemedy

Delete Table 101-7, replace the first and second paragraph with "In the EPoC upstream and downstream link the OFDM profile is defined by the DS_ModTypeSC(n) and US_ModTypeSC(n) variables, respectively. Two copies of each profile variable set exist; an active copy and an inactive copy. During a profile switch (see 102.2.3.1) the network switches operation from the currently active profile to the inactive profile. Note that for the downstream profile there are five ODM channels; the channel referred to by the DS_ModTypeSC(n) variable set is determined by the DS_OFDM_ID variable."

| Proposed Response | Response Status | w |
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PROPOSED ACCEPT.

| C/ 101 | SC 101.4.2.4.1 | P 175 | L 51 | # 3615 |
|---------------|----------------|--------|-------------|--------|
| Remein, Duane | | Huawei | | |

Comment Type T Comment Status D

This paragraph is not clear. It states that Nulled SC are not required to be used as pilots ("may be") but requires that they are modulated using the 13-bit linear feedback S/R that is exclusively "for the pilot modulation Pseudo-Random Sequence". It is not clear if this is the same S/R or another instantiation of the S/R. "Nulled subcarriers do not carry MAC or PHY Link data but may be used as pilots. Nulled subcarriers are BPSK modulated using the pseudo-random sequence generated by the 13-bit linear feedback shift register, illustrated in Figure 101-25 except when being used as a scattered pilot in the downstream direction (see 101.4.2.6.1)."

SuggestedRemedy

Change para to read: ""Nulled subcarriers do not carry MAC or PHY Link data but are used as pilots and are BPSK modulated using the pseudo-random sequence generated by the 13-bit linear feedback shift register, illustrated in Figure 101-25 and are boosted as per 101.4.2.10.1. "

Proposed Response Response Status W

PROPOSED ACCEPT.

The real question here is do we consider nulled SC's as additional pilots or not. The proposed text assumes the answer is yes.

| C/ 101 | SC 101.4.3.2.3 | P 201 | L 7 | # 3613 |
|---------------|----------------|--------|------------|--------|
| Remein, Duane | | Huawei | | |

Comment Type T Comment Status D

What is the real meaning of this double requirement? "The CNU shall implement the upstream timing so that the OFDMA clock timing error (with the mean error subtracted out) relative to the CLT master clock as measured at the CLT shall be within +/-10 ns in each burst measured within 35 s measurement duration."

SuggestedRemedy

Change to read:

"The CNU shall implement the upstream timing so that the OFDMA clock timing error (with the mean error subtracted out) relative to the CLT master clock as measured at the CLT is within +/-10 ns in each burst when measured within any give 35 second measurement period."

Update PICS OT9 (pg 233 line 34) to read:

"OFDMA clock timing error relative to the CLT master clock as measured at the CLT within \pm 10 ns in each burst measured within any 35 second measurement period."

| Proposed | Response | Response Status | w | |
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| PROF | POSED ACCEPT. | | | |
| C/ 102 | SC 102.4.1.4 | P 2 | 71 <i>L</i> | |

| C/ 102 | SC 102.4.1.4 | P 271 | L 21 | # 3614 |
|------------|--------------|--------------|-------------|--------|
| Remein, Du | ane | Huawei | | |

Comment Type T Comment Status D

This para describe power incrementing for an off-line CNU. What prevents a CNU with a faulty receiver from eventually transmitting every Discovery Response at max power level? What will this do to the stability of the network?

SuggestedRemedy

Add teh following at the end of the para.

"If the CNU has transmitted four PHY Discovery Responses without acknowledgement from the CLT it reverts to the power level indicated by PdRespInitPwr and begins incrementing its output power as described above."

Proposed Response Response Status W

PROPOSED ACCEPT.

This does create the potential for regular interference from a faulty CNU trying unsuccessfully to join the network. The period of the interference will depend on the configuration of the CLT regarding issuing Discovery Windows. However, this avoids locking out a CNU that is having problems joining the network due to issues outside the CNU's control.

C/ 102 SC 102.4.1.4 Page 1 of 2 6/23/2015 1:29:35 PM

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Proposed Responses

| <i>Cl</i> 103 Remein, Dı | |)1.3.2.1.2 | P1 Huaw | | L 21 | # 3616 |
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| | m "contr | | <i>Comment Status</i> " is not defined. Els Probe Control Hea | sewhere in the | e draft this phras | e is used |
| Suggestedi I believ | | | to the Sync Head b | it. Change to | read: "64B/66B | sync header bit" |
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| C/ 45 | | 5.2.7.1.7 | P 3 | - | L 1 | # 3611 |
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