Background information on OSNR in P802.3cw draft 2.0 Supporting discussion on comments #334, #516 and #550

Peter Stassar, Huawei CW interim teleconference 29 September 2022

Introduction

During the P802.3cw comment resolution meeting on 12 & 13 September 2022, in association with comments #334, #516 and #550, the parameter name "Receiver OSNR (min)" was discussed and whether it wouldn't be appropriate to rename it to "Minimum OSNR".

IEEE 802.3 (2022), clause 154, ex 802.3ct, contains similar parameter names.

This presentation contains some information on the background of OSNR related parameter names in in-force clause 154.

"Minimum OSNR(193.6)" versus "Receiver OSNR(193.6) (min)" in 802.3CT

Original parameter name in D1.0 up to D2.0:

Minimum OSNR(193.6) [amplified]

Via comment #68 to D2.0 (by myself), modified to:

Receiver OSNR(193.6) [amplified] (min)

Following up on discussions in the CT Taskforce March - June 2020.

Related to presentation:

https://www.ieee802.org/3/cw/public/tf_interim/20_0611/stassar_3cw_01_200611.pdf

Related comment in 802.3ct

C/ 154 SC 154.7 P107 L # 68

Stassar, Peter Huawei

Comment Type ER Comment Status A

Several of the parameter namings are not consistent with previously used conventions and should therefore be modified. This has already been discussed during the TF interim teleconference meeting on 11 June 2020 as shown in

http://www.ieee802.org/3/cw/public/tf_interim/20_0611/stassar_3cw_01_200611.pdf. In this context it is strongly desirable to use consistent naming between 100GBASE-ZR and 400GBASE-ZR draft specifications

SuggestedRemedy

Implement the changes as proposed in

http://www.ieee802.org/3/cw/public/tf_interim/20_0611/stassar_3cw_01_200611.pdf, except "Average receive power [amplified] (max)" which should be "Average receive power [amplified] (min)"

Response Status C

ACCEPT IN PRINCIPLE.

At this time there is no P802.3cw draft and the proposed naming has not been adopted by the P802.3cw task force, it is anticipated that the proposed text will be followed and that the P802.3ct draft should reflect this naming nomenclature. Implement the changes shown as noted in the presentation

http://www.ieee802.org/3/cw/public/tf_interim/20_0611/stassar_3cw_01_200611.pdf except "Average receive power [amplified] (max)" which should be "Average receive power [amplified] (min)". With editoral license.

"Minimum OSNR(193.6)" versus "Receiver OSNR(193.6) (min)" in 802.3CW

Topic discussed in CW call on 7 May 2020 in:

https://www.ieee802.org/3/cw/public/tf_interim/20_0507/sluyski_3cw_0 1_200507.pdf

Updated by TF discussion to:

https://www.ieee802.org/3/cw/public/tf_interim/20_0507/sluyski_3cw_0 2_200507.pdf

Decision on change to "Receiver OSNR (min)" in 802.3CW

The decision on a similar change in 802.3CT on 11 June 2020 was made after this decision in 802.3CW on 7 May 2020.

802.3CW decision on 7 May 2020

Strawpoll #1 - I would support updating the parameter list on slides 4 to 6 of stassar_3ct_02_0719

with the parameter list and values specified on slides 11 – 14 of

sluyski 3cw 02 200507.

Yes 29

No 1

Abstain 4

Motion #1 - Adopt updating the parameter list on slides 4 to 6 of stassar_3ct_02_0719 with the

parameter list and values specified on slides 11 – 14 of sluyski_3cw_02_200507.

Moved Mark Nowell

Second Eric Maniloff

Technical >=75%

Results (802.3 Voters) Passed by voice vote without objection

Thanks!