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| 8802-3/802.3 REVISION REQUEST 1097 |
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DATE: 24th September, 2002
NAME: Dhiraj N. Manvar
COMPANY/AFFILIATION: Intel Corporation
E-MAIL: dhirajl.n.manvar@intel.com

REQUESTED REVISION:
STANDARD: 802.3ae-2002
CLAUSE NUMBER: 47
CLAUSE TITLE: XGMII Extender Sublayer (XGXS) and 10 Gigabit Attachment Unit Interface (XAUI)

PROPOSED REVISION TEXT:

See IEEE P802.3aj draft.

RATIONALE FOR REVISION:

To correct the equation in 802.3ae-2002.

The IEEE standard 802.3ae-2002, section: 47.3.3.4, page-275, indicates that, for Tx output driver, the :

- (1) for freq range of 312.5MHz to 625MHz,
differential return loss should exceed -10 dB
- (2) for freq range of 625 MHz to 3.125 GHz,
differential return loss should exceed
 $-10 + 10 * \log (f / 625)$

For case -2 above,
if we do the calculation for $f = 3.125$ GHz value,
it turn out to be + 56.989 dB (!!!)
or
if we modify above equation for inclusion of 10^{**6} (for MHz)
as below:
 $-10 + 10 * \log (f / 625 * 10e6)$ then,
loss = - 3 dB (for 3.125 GHz)

Below is a another reference for above subject, which agrees for modified equation.

http://grouper.ieee.org/groups/802/3/ae/public/jan02/taborek_2_0102.pdf

Does this mean that, there is a typo error in published (802.3ae-2002, section: 47.3.3.4) standard?

1 IMPACT ON EXISTING NETWORKS:

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3 Current 47-1 equation is not valid or gives wrong numbers.
4 Corrected equation would suffice the intended purpose for 10GE.
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8 | Please attach supporting material, if any
9 | Submit to:- Bob Grow, Chair IEEE 802.3
10 | E-Mail: Bob.Grow@intel.com
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12 | +----- For official 802.3 use -----+
13 | REV REQ NUMBER: 1097
14 | DATE RECEIVED: 24th September, 2002
15 | ~~EDITORIAL/TECHNICAL~~
16 | ACCEPTED/~~DENIED~~
17 | BALLOT REQ'D YES/~~NO~~
18 | COMMENTS: 26-Sep-03 Ver: D2.2 Status: P
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20 | For information about this Revision Request see -
21 | http://www.ieee802.org/3/maint/requests/revision_history.html#REQ1097
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