

PAR and 5C Responses

IEEE 802.3

Reduced Twisted Pair Gigabit Ethernet
PHY

Steven B. Carlson

High Speed Design, Inc.

San Antonio, TX, November 11 – 15, 2012

NESCOM Comment

“Subject: NesCom Comment for P802.3bp

Peter Balma on 1 Nov 2012 at 08:12 wrote:

It would apperar that the note in 8.1 is significant enough that it should be put in 5.2b? Also, fo clarification the titles of the standards in the note should be provided.”

This is a result of the change to the 5C responses made by the EC in March, which has created comment bait at NESCOM by members who are not familiar with 802 standards.

PAR and 5C Comment from 802.11

2.1 Title: suggest that the “amendment:” is missing.

Typically a title for an amendment has “amendment” in the title. E.g. the base title followed by “amendment: “ and then the amendment title.

8.1 – Delete the 5.2 note.

5C- in Compatibility, delete last bullet.

Proposed Response

Thank you for your comments on behalf of 802.11.

The title does contain the word “Amendment.” Please see below:

2.1 Title: Approved Draft Standard for Ethernet Amendment Physical Layer Specifications and Management Parameters for 1 Gb/s Operation over Fewer than Three Twisted Pair Copper Cable

The colon is missing, but we have no control over that, as you know.

We accept both of your changes:

8.1 – Delete the 5.2 note.

5C- in Compatibility, delete last bullet.

As you know, this returns our PAR and 5C to the version we had in July. We believe this also addresses the comment from Peter Balma of NesCom.

Motion #1

Move that the RTPGE SG adopt the response to comments on slide 2 and slide 3 as shown on slide 4, while granting the Chair editorial license in the formatting of the response.

M: Darshan

S: Tazebay

Technical, 75%

Y: 25 N: 0 A: 1

MOTION PASSES 10:05AM 11/14/12

PAR Comment from Paul Nikolich, 802 Chair

Subject: comments on the RTPG PAR

David,

I fully support the project.

However, ambiguous (at least it is to me) language is used in 5.5 Need for Project; specifically please explain (to me) what a "carbon footprint sensitive application" is or give a couple examples. Is there less ambiguous language that you can put in that section? If yes, please do so.

Regards,

--Paul

PAR Comment from Paul Nikolich, 802 Chair

5.5 Need for the Project: Adoption of Ethernet into new market areas in automotive, industrial controls and automation, transportation (aircraft, railway and heavy trucks) has generated a need for a 1 Gb/s solution that will operate over fewer than three twisted pair copper cables over a lower-performance channel as well as other applications, such as carbon footprint sensitive applications, that will benefit by a reduction in the number of wire pairs and magnetics. IEEE Std 802.3 does not currently support 1 Gb/s operation over fewer than four pairs of twisted copper cable.

Proposed Response

The phrase “carbon footprint sensitive applications” is used to indicate a production through disposal viewpoint of energy savings, not simply reduced power consumption of the electronics.

For example, RTPGE will reduce the amount of copper wire used in an application, saving all of the energy associated with the production and shipping of the wire. In the automotive or general transportation case, the reduced vehicle weight will result in increased fuel economy.

This phrase is becoming common in data center construction and LEED “Green Buildings” where all materials are considered from a front-to-back view towards reducing energy consumption.

Motion #2

Move that the RTPGE SG adopt the response to comments on slide 6 as shown on slide 8, while granting the Chair editorial license in working with Paul Nikolich in the implementation of the response.

M: Darshan

S:Parnaby

Technical, 75%

Y: 28 N: 0 A: 0