INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2017-2020

SG15-LS150

STUDY GROUP 15

Original: English

Question(s): 6, 11/15 Geneva, 8-19 October 2018

LS

Source: ITU-T Study Group 15

Title: LS/r - SG15 work on G.709.3 and G.698.2 (reply to IEEE 802.3-LS70)

LIAISON STATEMENT

For action to: -

For comment to: -

For information to: IEEE 802.3 Ethernet Working Group
IEEE P802.3cn Task Force

Approval: ITU-T SG15 (Geneva, 19 October 2018)

Deadline: -

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Thank you for your liaison regarding the new IEEE 802.3 50 Gb/s, 100 Gb/s, 200 Gb/s, and 400 Gb/s over Single-Mode Fiber and DWDM Task Force.

Q11/15 has recently developed an OTU4 long reach Recommendation based on the Staircase FEC described in Recommendation ITU-T G.709.2. The Flexible OTN (FlexO) frame format for flexible use of this approach is specified in Recommendation ITU-T G.709.3, which is attached for information. Note that the OIF 400ZR project largely used the G.709.3 frame format as the basis for the 400ZR frame format. We encourage you to consider the applicability of this for your Task Force work.

Q6/15 has recently developed a revised version of Recommendation ITU-T G.698.2 with sets of parameters and associated values for 100 Gbit/s application codes, appropriate for 80 km distances, not precluding 120 km, and without OADMs. In addition, some further application codes are included appropriate for 200 – 450 km distances and 2 – 3 OADMs, not precluding 6 – 7 OADMs. SG15 is pleased to share the consented version of revised G.698.2 with the IEEE 802.3 Working Group, because some modifications to the version previously shared with IEEE 802.3 were agreed.

Furthermore, Q6/15 has made provisional agreements on a DP-16QAM modulation format for 400 Gbit/s applications appropriate for 80 km distances, not precluding 120 km, and without OADMs, as well as applications appropriate for 200 – 450 km distances and 3 – 4 OADMs, not precluding 6 – 7 OADMs. Also, first contributions on maximum spectral excursion characteristics and EVM for 400 Gbit/s 16QAM have been considered, demonstrating that those parameters, with

potential modifications, seem to be suitable candidates for specifying the quality of a 400 Gbit/s DP-16QAM transmitter.

As Q6 progresses its work on future revisions of Recommendation ITU-T G.698.2, to include 200G and 400G application codes, we will be happy to continue to liaise with IEEE 802.3 about the progress made.

Best regards,

Steve Gorshe

ITU-T Q11/15 Rapporteur

Peter Stassar

ITU-T Q6/15 Rapporteur

Attachments: In-force version of G.709.3 and its consented amendment (TD301R1/P), and G.698.2 (TD293R1 PLEN)

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