Considerations on comment 590

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Comment 590

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Comment Type TR *Comment Status* X

This draft adds a reference to ITU-T G.652, 2016 in addition to the existing reference to ITU-T G.652, 2009.
While all of the references to G.652 in this draft have been changed to dated references to G.652-2016, this would leave the 27 existing references to G.652 in IEEE Std 802.3-2018 ambiguous as to which version is being referenced.

SuggestedRemedy

Either:
Change back to the D2.0 text which changes G.652-2009 to G.652-2016
or:
Bring the 27 existing undated references to G.652 in to the draft and make them all dated references.

Proposed Response *Response Status* O

Attenuation coefficient of 0.4 dB/km or 0.35 dB/km

The references to ITU-T G.652 in:
Table 52-25 footnote b
Table 53-14 footnote a
Table 58-15 footnote c
Table 59-16 footnote c
Table 60-19 footnote c
Table 75-14 footnote d

All refer to G.652 as the source of the 0.4 dB/km attenuation coefficient value at 1310 nm or 0.35 dB/km at 1550 nm.

These values are still present in ITU-T G.652, 2016.

Zero dispersion wavelength and dispersion slope

The references to ITU-T G.652 in:
Table 58-15 footnote d
Table 59-16 footnote e
Table 60-19 footnote d
Table 75-14 footnote e

All refer to G.652 for “correct use of zero dispersion wavelength and dispersion slope” or for the source of the zero dispersion wavelength limits.

The zero dispersion limits of 1300 to 1324 nm and explanation of zero dispersion wavelength and dispersion slope are still present in ITU-T G.652, 2016.

Test channel requirements

The references to ITU-T G.652 in:
53.8.1.1 a)
53.9.10.2
53.15.4.5 item OM24

All refer to ITU-T G.652 fiber or fibers to be used to generate worst case dispersion for a test channel.

This is still valid for ITU-T G.652, 2016.

Cabling characteristics 1

The references to ITU-T G.652 in:
58.9 and 58.9.2
59.9 and 59.9.2
Table 60-1
Table 60-14
60.11 and 60.11.2
75.9 and 75.9.2
Table 75-14
Table 75B-1
Table 75B-2

All refer to ITU-T G.652 with respect to the cabling characteristics.

These instances are considered in more detail in the following slides.

Cabling characteristics 2

58.9 contains: “The 100BASE-LX10 and 100BASE-BX10 fiber optic cabling shall meet the dispersion specifications of IEC 60793-2 and ITU-T G.652, or the requirements of Table 58–15 where they differ.”

59.9 contains: “The 1000BASE-BX10 and 1000BASE-LX10 fiber optic cabling shall meet the dispersion and modal bandwidth specifications defined in IEC 60793-2 and ITU-T G.652, or the requirements of Table 59–16 where they differ.”

60.11 contains: “The 1000BASE-PX fiber optic cabling shall meet the dispersion specifications defined in IEC 60793-2 and ITU-T G.652, or the requirements of Table 60–19 where they differ.”

75.9 contains “The 10GBASE–PR and 10/1GBASE–PRX fiber optic cabling shall meet the dispersion specifications defined in IEC 60793–2 and ITU–T G.652, or the requirements of Table 75–14 where they differ.

All of these instances are specific to dispersion specifications (in the case of 59.9, there are no modal bandwidth specifications in either the 2009 or 2016 versions of ITU-T G.652). Since they all have specific dispersion limits in the referenced local tables that are the requirements if the cited references differ, there is no effect for changing from the 2009 to the 2016 version of ITU-T G.652.

Cabling characteristics 3

The references to ITU-T G.652 in:
58.9.2
59.9.2
60.11.2
75.9.2

Are of the form:

“The fiber optic cable requirements … are satisfied by the fibers specified in … and ITU-T G.652 …, or by the requirements of Table XX–YY where they differ.”

These instances only say that the requirements are met by specific referenced documents. Changing the reference to ITU-T G.652, 2016 would not invalidate these statements and also would not preclude G.652.A or G.652.B fibers from being used as long as they meet the requirements of the referenced table.

Cabling characteristics 4

Table 60-1 is in the “Overview” subclause of Clause 60
Table 60-14 is “Illustrative 1000BASE-PX channel insertion loss and penalties

Clause 60 has specific subclauses providing the requirements on the cabling characteristics that are discussed on previous slides. The inclusion of “ITU-T G.652” in these informative tables does not override the specific subclauses providing cabling requirements.

Table 75-14 footnote b, Table 75B-1 footnote b, and Table 75B-2 footnote b are: “Other fiber types are acceptable if the resulting ODN meets channel insertion loss and dispersion requirements.”

Changing the reference to ITU-T G.652, 2016 would not preclude G.652.A or G.652.B fibers from being used as long as the resulting ODN meets the channel insertion loss and dispersion requirements.

Conclusion

All of the instances of “G.652” in IEEE Std 802.3-2018 have been examined with respect to the consequence of changing the reference for ITU-T G.652 to be for the 2016 version.

There are no references to G.652 in any of the approved amendments to 802.3 or any of the amendments ahead of P802.3ca in the assumed approval order.

Since there does not appear to be any need to preserve the reference to the 2009 version of ITU-T G.652 it is recommended to respond to Comment 590 with:

Change back to the D2.0 text which changes G.652, 2009 to G.652, 2016.

Thanks!