

802.3 Proposed Baseline Text

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Telephonic

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60950, 60950-1 Where Used (IEEE 802.3-2018)

Normative References: 2 references (60950:1991, 60950-1)

Isolation Requirements - 14 references (Each references the spec more than 1x)

- **8.3.2, 9.9.3.1, 12.10.1**, 14.3.1.1, 15.3.4, **23.5.1.1, 23.12.4.12 (PICS)**, 25.4.6, **32.6.1.1, 32.13.5.8 (PICS)**, **33.4.1**, 40.6.1.1, 40.12.7 (PICS), 55.5.1, 113.5.1, 126.5.1

General Safety - 63 references

- **8.7.1, 8.8.6.11 (PICS)**, 14.7.123.12.4.16, 14.10.4.5.15 (PICS), **23.9.1, 23.12.4.12 (PICS), 23.12.4.16 (PICS), 27.5.1, 27.7.4.11 (PICS), 32.10.1, 32.13.5.11 (PICS), 33.4.1, 33.7.1, 33.8.3.9 (PICS)**, 38.7.1, 38.12.4.5 (PICS), 40.9.1, 40.12.10 (PICS), 41.4.1, 41.6.4.11 (PICS), 52.10.1, 52.15.3.11 (PICS), 53.10.1, 53.15.4.5 (PICS), 55.9.1, 55.12.9 (PICS), 58.8.1, 58.10.3.6 (PICS), 59.8.1, 59.10.3.6 (PICS), 60.10.1, 60.12.4.12 (PICS), 68.10.3.5 (PICS), 70.9.1, 70.10.4.5 (PICS), 71.9.1, 71.10.4.6 (PICS), 72.9.1, 72.10.4.7 (PICS), 75.8.1, 75.10.4.19 (PICS), 84.10.1, 84.11.4.5 (PICS), 86.9.1, 86.11.4.5 (PICS), 87.9.1, 87.13.4.6 (PICS), 88.9.1, 88.12.4.6 (PICS), 89.8.1, 89.11.4.5 (PICS), 93.10.1, 93.11.4.5 (PICS), 94.5.1, 94.6.4.6 (PICS), 95.9.1, 95.12.4.5 (PICS), 96.9.1, 96.11.4.9 (PICS), 97.9.1, 97.11.13 (PICS), 100.5.1, 100.7.3.3 (PICS), 112.8.1, 112.11.4.5 (PICS), 113.9.1, 113.12.10 (PICS), 126.9.1, 126.12.9 (PICS), 83A.6.1, 83A.7.7 (PICS), 83B.3.1, 83B.4.6 (PICS), 86A.7.1, 86A.8.4.4 (PICS)

Regulatory requirements

- **10.8.3**

Amendments in progress

- P802.3ca: 141.8.1 General safety
 - P802.3cg: 146.9.1/147.10.1 General safety
 - P802.3ch: 149.9.1 General safety
 - P802.3cm: 150.9.1 General safety
 - P802.3cn: 122.12.4.8 Environmental specifications
- These will need comments submitted during comment resolution to modify once final text has been accepted. Also, PICs should be modified accordingly

Accepted Modified Isolation Text:

- This electrical isolation shall withstand at least one of the following electrical strength tests:
 - a) 1500 V rms at 50 Hz to 60 Hz, applied as specified in Section 5.4.9.1 of IEC 62368-1:2018.
 - b) 2250 V dc, applied as specified in Section 5.4.9.1 of IEC 62368-1:2018.
 - c) A sequence of ten 2400 V impulses of alternating polarity, applied at intervals of not less than 1 s. The shape of the impulses is 1.2/50 μ s (1.2 μ s virtual front time, 50 μ s virtual time or half value), as defined in Annex D of IEC 62368-1:2018.

There shall be no insulation breakdown, as defined in Section 5.4.9.1 of IEC 62368-1:2018, during the test. The resistance after the test with the replacement of any components removed for AC or DC voltage testing shall be at least 2 M Ω , measured at 500 V dc as specified in Table 23 of IEC 62368-1:2018.

Proposed replacement text

- Replace current Isolation text in each clause with the following:
 - “The PHY shall meet the Isolation requirement as specified in Annex J”
- Add a corresponding single PICS statement to each clause pointing to the Annex J PICS

General Safety

- Current Example Text:

113.9 Environmental specifications

113.9.1 General safety

All equipment meeting this standard shall conform to IEC 60950-1.

Proposed General Safety

- All Equipment meeting this standard shall conform to the general safety requirements as specified in Annex J
- Add a corresponding single PICS statement to each clause pointing to the Annex J PICS for General Safety

Regulatory Requirements

- Current (Only location in 802.3-2018):

10.8.3 Regulatory requirements

The MAU and medium should consider IEC 60950 in addition to local and national regulations. See IEC 60950 and MIL-C-17F-1983 [B51].

NOTE:

- NOTE—This MAU is not recommended for new installations. Since September 2011, maintenance changes are no longer
- being considered for this clause.

Proposed Change to 10.8.3

- Add Note to 10.8.3:
- NOTE: Since September 2011, maintenance changes are no longer being considered for this clause. Given this IEEE P802.3cr made no changes to this text, however, considerations for the latest safety standards should be made for any new design or installation. General safety information may be found in Annex J.