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AMENDMENT 1

Information technology - Generic cabling for customer premises - Part 1: General requirements

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AMENDMENT 1

FOREWORD

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Amendment 1 to ISO/IEC 11801-1:2017 has been prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The text of this Amendment is based on the following documents:

Draft	Report on voting
JTC1-SC25/3285/CDV	JTC1-SC25/3337A/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1, and the ISO/IEC Directives, JTC 1 Supplement available at www.iec.ch/members_experts/refdocs and www.iso.org/directives.

INTRODUCTION TO THE AMENDMENT

This document specifies single pair component Categories T1-A, T1-B, and T1-C, as well as cabling channels and link Classes T1-A, T1-B, and T1-C to support single pair applications. Balanced single pair channels and links specified in this document are not a replacement for the generic 4-pair channels in ISO/IEC 11801-1:2017. They are an additional media type intended for use in intelligent building and industrial automation devices (e.g. in network sensors, actuators, and controllers). Because of the different types and locations of these devices, single pair cabling will have distinct structures and distribution architectures that are detailed in other parts of the ISO/IEC 11801 series.

This document also provides modifications and corrections to ISO/IEC 11801-1:2017.

INTRODUCTION

Replace the existing Figure 1 with the following new figure:

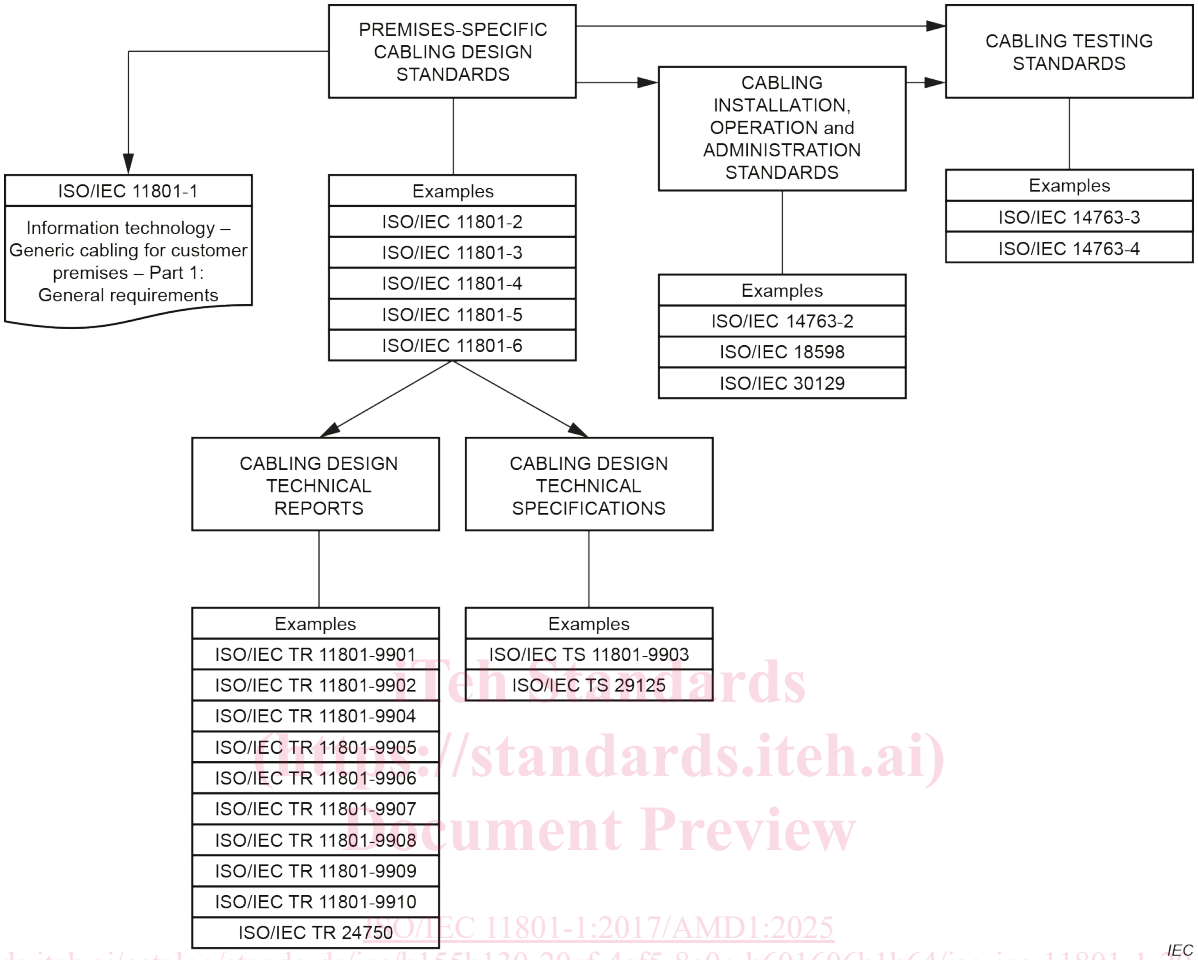

Figure 1 – Relationships between the generic cabling documents produced by ISO/IEC JTC 1/SC 25

1 Scope

Replace existing bullet b) with the following:

b) channel transmission, environmental and power delivery performance requirements;

2 Normative references

Add the following normative references at the end of the list:

IEC 60512-99-002, *Connectors for electrical and electronic equipment - Tests and measurements - Part 99-002: Endurance test schedules - Test 99b: Test schedule for unmating under electrical load*

IEC 61156-11, *Multicore and symmetrical pair/quad cables for digital communications - Part 11: Symmetrical single pair cables with transmission characteristics up to 1,25 GHz - Horizontal floor wiring - Sectional specification*

IEC 61156-12, *Multicore and symmetrical pair/quad cables for digital communications - Part 12: Symmetrical single pair cables with transmission characteristics up to 1,25 GHz - Work area wiring - Sectional specification*

IEC 61156-13, *Multicore and symmetrical pair/quad cables for digital communications - Part 13: Symmetrical single pair cables with transmission characteristics up to 20 MHz - Horizontal floor wiring - Sectional specification*

IEC 61156-14, *Multicore and symmetrical pair/quad cables for digital communications - Part 14: Symmetrical single pair cables with transmission characteristics up to 20 MHz - Work area wiring - Sectional specification*

IEC 61196-1-105, *Coaxial communication cables - Part 1-105: Electrical test methods - Test for withstand voltage of cable dielectric*

IEC 61935-4, *Specification for the testing of balanced and coaxial information technology cabling - Part 4: Installed balanced single-pair cabling as specified in ISO/IEC 11801-1 and related standards*[1]

IEC 63171, *Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests*

IEC 63171-1, *Connectors for electronic equipment - Part 1: Detail specification for two-way, shielded or unshielded, free and fixed connectors - Mechanical mating information, pin assignment and additional requirements for Type 1 copper LC style*

IEC 63171-6, *Connectors for electrical and electronic equipment - Part 6: Detail specification for 2-way and 4-way (data/power), shielded, free and fixed connectors for power and data transmission with frequencies up to 600 MHz*

ISO/IEC TS 29125, *Telecommunications cabling requirements for remote powering of terminal equipment*

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[1] First edition under preparation. Stage at the time of publication: IEC CDV 61935-4:2025.

3.2 Abbreviations

Add the following new abbreviations at the end of the list:

PON passive optical network
S-PoE single pair Power over Ethernet
SP single pair
SPE single pair Ethernet

5.3.1 Cabling subsystem 1

Replace the last paragraph with the following paragraph:

Although terminal equipment cords and equipment cords are used to connect terminal and transmission equipment respectively to the cabling subsystem, they are not considered part of the cabling subsystem because they can be application specific.

6 Channel performance requirements

6.3.3.4.1 General

Delete the existing second paragraph.

6.3.3.6 Direct current loop resistance

Replace the existing Table 17 with the following new Table 17:

Table 17 – DC loop resistance for a channel

DC loop resistance [a]		
Class	**Maximum DC loop resistance at 60 °C [b]** Ω	**Informative DC loop resistance at 20 °C [b]** Ω
A	560	472
B	170	143,3
C	40	33,7
D, E, E_A, F, F_A	25 [c]	21,1 [e]
BCT-B-L	4,0	3,4
BCT-B-M	6,9	5,8
I, II	6,4 [d]	5,4 [f]