#### **KENYA BUREAU OF STANDARDS**

Document Type:	Adoption proposal		
Dates:	Circulation date Closing date		
	2022-02-10	2022-03-11	
TC Secretary	This form shall be filled, signed and returned to Kenya Bureau of		
	Standards for the attention of Zacheus Mwatha (zimwatha@kebs.org)		

The Kenya Bureau of Standards intends to adopt the International Standards as detailed in the attached list (**Table 1**).

We are therefore seeking views from potential users in respect of the same. The Standards are available at the Kenya Bureau of Standards Information Centre. Please tick and fill your preference of the listed options (**Table 2**), if there are varying options, otherwise where one option applies to all the 16 proposed standards tick below. Please complete **Table 3** for the standard proposed for withdrawal irrespective of your responses in table 2 or below. (If the spaces provided are not enough, please use the attached template).

Adoption acceptable as presented
Adoption proposal not acceptable because of the reason(s) below
Our Recommendations are as follows (indicate against each standard in table 2)
Name and Signature (of respondent):
Position (of respondent):
On behalf of (Name of organization)
Date

**NOTE:** Absence of any reply or comments shall be deemed to be an acceptance of the proposal for adoption and **shall constitute an approval vote**.

Table 1 – Detailed information of each standard

S/No.	IS NO.	TITLE AND SCOPE
S/No. 1.	IS NO. ISO/IEC 11801-1:2017	Title: Information technology - Generic cabling for customer premises - Part 1: General requirements  Scope: This part of ISO/IEC 11801 specifies requirements that are common to the other parts of the ISO/IEC 11801 series. Cabling specified by this document supports a wide range of services including voice, data, and video that may also incorporate the supply of power.  Abstract: This document specifies a multi-vendor cabling system which may be implemented with material from single or multiple sources. This part of ISO/IEC 11801 defines requirements that are common to the other parts of the ISO/IEC 11801 series. Cabling specified by this document supports a wide range of services including voice, data, and video that may also incorporate the supply of power.
		Hyperlink: info_isoiec11801-1{ed1.0}en.pdf
2.	ISO/IEC 11801-2:2017	Title: Information technology - Generic cabling for customer premises - Part 2: Office premises  Scope: This part of ISO/IEC 11801 specifies generic cabling for use within office premises, which can comprise single or multiple buildings on a campus. It covers balanced cabling and optical fibre cabling  This document is optimized for premises in which the maximum distance over which telecommunications services can be distributed is 2,000 m. The principles of this document can be applied to larger installations.  Cabling specified by this document supports a wide range of services including voice, data, and video that can also incorporate the supply of power  Abstract: This document specifies generic cabling within and between the buildings of office premises, or office spaces within other types of building. Additionally those premises can include industrial spaces (for which generic cabling is specified in ISO/IEC 11801-3) or data centre spaces (for which generic cabling is specified in ISO/IEC 11801-5)  Hyperlink: info_isoiec11801-2{ed1.0}en.pdf
3.	ISO/IEC 11801- 3:2017+AMD1:2021	Title: Information technology - Generic cabling for customer premises - Part 3: Industrial premises  Scope:. This part of ISO/IEC 11801 specifies generic cabling for use within industrial premises, or industrial areas within other types of premises, which can comprise single or multiple buildings on a campus. It covers balanced cabling and optical fibre cabling.

This document is optimized for premises in which the maximum distance over which telecommunications services can be distributed is 10,000 m. The principles of this document can be applied to larger installations. Cabling defined by this document supports a wide range of services, including automation, process control, and monitoring applications. That can also incorporate the supply of power. This document specifies generic cabling, which is critical for Abstract: providing robust services to the automation islands in industrial premises, or industrial spaces within other types of building. Additionally those premises can include office spaces (for which generic cabling is specified in ISO/IEC 11801-2) or data centre spaces (for which generic cabling is specified in ISO/IEC 11801-5). Hyperlink: info\_isoiec11801-3{ed1.1}en.pdf 4. ISO/IEC 11801-4:2017 Information technology - Generic cabling for customer premises -Title: Part 4: Single-tenant homes Scope:. This part of ISO/IEC 11801 specifies generic cabling for single-tenant homes. A home can contain one or more buildings or can be within a building that contains more than one home. It covers balanced cabling, optical fibre cabling and coaxial cabling Abstract: This document specifies generic cabling within a home and provides users with: - an application independent system capable of supporting a wide range of applications in a range of installation and operating environments; - a flexible scheme such that modifications are both easy and economical; - a multi-vendor supply chain within an open market for cabling components. Hyperlink: info\_isoiec11801-4{ed1.0}en.pdf ISO/IEC 11801-5:2017 5. Information technology - Generic cabling for customer premises - Part 5: Data centres **Scope**: This part of ISO/IEC 11801 specifies generic cabling within and to the computer room spaces of data centre premises, or data centre spaces within other types of buildings. It covers balanced cabling and optical fibre cabling This document is optimized for premises in which the maximum distance over which telecommunications services can be distributed is 2,000 m. The principles of this document can also be applied to larger installations. Cabling specified by this document supports a wide range of services including voice, data and video that can also incorporate the supply of power Abstract: This document specifies generic cabling within and to the computer room spaces of data centre premises, or computer room spaces within other types of building. Additionally those premises can include office

		spaces (for which generic cabling is specified in ISO/IEC 11801-2) or industrial spaces (for which generic cabling is specified in ISO/IEC 11801-3)  Hyperlink: <a href="mailto:info">info</a> isoiec11801-5{ed1.0}en.pdf
6.	ISO/IEC 11801-6:2017	<b>Title</b> : Information technology - Generic cabling for customer premises - Part 6: Distributed building services
		<b>Scope/Abstract</b> : This part of ISO/IEC 11801 specifies generic cabling within premises that comprise single or multiple buildings on a campus. It covers balanced cabling and optical fibre cabling.
		Hyperlink: info_isoiec11801-6{ed1.0}en.pdf
7.	ISO/IEC TR 11801- 9901:2014	<b>Title</b> : Information technology - Generic cabling for customer premises - Part 9901: Guidance for balanced cabling in support of at least 40 Gbit/s data transmission
		<b>Scope</b> : This Technical Report offers an assessment (see Annex A) of expected capacity and reach for the channels defined in Clause 4, Clause 5 and Annex B.
		All 30 m channels comprise a 2 m cord (50 % derated) attached at each end of a permanent link of 26 m length. These assumptions are for modelling only.
		ISO/IEC 11801 gives the freedom to use different configurations as long as the channel values are fulfilled.
		Specific component requirements are not addressed in this Technical Report.  Any inferred component requirements are not intended to be normative
		<b>Abstract</b> : covers the following channel descriptions constructed from components with a nominal impedance of 100:
		- Class I: 30 m channel based on upcoming Category 8.1 components. This channel provides increased margin compared to ISO/IEC 11801, Class EA channels, and an upper frequency limit of 1 600 MHz (2 000 MHz (ffs);
		- Class II: 30 m channel based on upcoming Category 8.2 components. This channel provides increased margin compared to ISO/IEC 11801, Class FA channels, and an upper frequency limit of 1 600 MHz (2 000 MHz ffs);
		- Channels based on Category 6A components of ISO/IEC 11801, length corrected to 30 m;
		- Channels based on Category 7A components of ISO/IEC 11801, length corrected to 30 m;
		- Channels based on Category 6A components of ISO/IEC 11801, length corrected to 30 m, characterized beyond the current upper frequency;
		- Channels based on Category 7A components of ISO/IEC 11801, length corrected to 30 m, characterized beyond the current upper frequency

		Hyperlink: info_isoiec11801-9901{ed1.0}en.pdf
8.	ISO/IEC TR 11801- 9902:2017	<b>Title</b> : Information technology - Generic cabling for customer premises - Part 99-2: End-to-end link configurations
		<b>Scope</b> : This part of ISO/IEC 11801, which is a Technical Report, provides definitions for, and examples of, cabling implementations described as end-to-end (E2E) links.
		In addition, this document provides performance specifications to support Class D and Class E balanced cabling channels of ISO/IEC 11801-1. These specifications amend those channel specifications of ISO/IEC 11801-1 by including the impact of the free connectors in accordance with the interfaces specified in ISO/IEC 11801-3 used to terminate the E2E link
		Test methods are provided in ISO/IEC 14763-4 End-to-end link configurations can include any type of connection
		·
		Abstract: This Technical Report provides definitions for, and examples of, cabling implementations described as end-to-end (E2E) links. The document also provides performance specifications to support Class D and Class E balanced cabling channels of ISO/IEC 11801-1. These specifications amend those channel specifications of ISO/IEC 11801-1 by including the impact of the free connectors in accordance with the interfaces specified in ISO/IEC 11801-3 used to terminate the E2E link. Test methods are provided in ISO/IEC 14763-4
		Hyperlink: info_isoiec11801-9902{ed1.0}en.pdf
9.	ISO/IEC TS 11801- 9903:2021	<b>Title</b> : Information technology - Generic cabling for customer premises - Part 9903: Matrix modelling of channels and links
		<b>Scope/Abstract</b> : This part of ISO/IEC 11801, which is a Technical Specification, establishes a matrix-model for formulating limits for mixed-mode parameters within and between two pairs of balanced cabling. This is for the purpose of supporting new, improved balanced cabling channel and link specifications.
		Hyperlink: info_isoiects11801-9903{ed1.0}en.pdf
10.	ISO/IEC TR 11801- 9904:2017	<b>Title</b> : Information technology - Generic cabling for customer premises - Part 9904: Assessment and mitigation of installed balanced cabling channels to support 2,5GBASE-T and 5GBASE-T
		Scope: This part of ISO/IEC 11801
		a) specifies the transmission performance for balanced cabling channels to support 2.5GBASE-T and 5GBASE-T,
		b) specifies the methods to assess whether installed Class D and Class E channels meet 2.5GBASE-T and 5GBASE-T requirements,

c) provides mitigation techniques to improve the performance of an existing installation to meet the 2.5GBASE-T and 5GBASE-T requirements. d) provides cabling recommendations for new installations Abstract: This technical report provides guidance on whether installed Class D and Class E channels specified in ISO/IEC 11801:2002 will support 2.5GBASE-T and 5GBASE-T. It also provides mitigation procedures to improve the perfomance of Class D and Class E channels to the point where these applications are supported. Higher classes according to ISO/IEC 11801:2002 will support 2.5GBASE-T and 5GBASE-T without mitigation up to 100 m Hyperlink: info isoiec11801-9904{ed1.0}en.pdf 11. ISO/IEC TR 11801-Title: Information technology - Generic cabling systems for customer 9905:2018 premises - Part 9905: Guidelines for the use of installed cabling to support 25GBASE-T application **Scope**: This part of ISO/IEC 11801, which is a Technical Report, a) provides guidance on how to select and assess installed channels which conform to ISO/IEC 11801-1, and clarify if they also support ISO/IEC/IEEE 8802-3:2017/AMD3 for 25GBASE-T: b) specifies the methods to assess whether installed channels constructed with Category 7A, 7, or 6A components meet the 25GBASE-T requirements; c) provides guidance to identify which channels are likely to meet the 25GBASE-T requirements to avoid unnecessary testing: d) provides mitigation techniques to improve the performance of installed channels to meet the 25GBASE-T requirements; e) provides cabling recommendations for new installations. This Technical Report provides guidance to determine Abstract: whether and which installed channels will support 25GBASE-T. It also provides mitigation procedures to improve the performance of installed channels to the point where the 25GBASE-T application is supported. Additionally, it recommends the use of Class I and Class II channels to support 25GBASE-T in new installations Hyperlink: info isoiectr11801-9905{ed1.0}en.pdf 12. ISO/IEC TR 11801-**Title**: Information technology - Generic cabling for customer premises - Part 9906: Balanced 1-pair cabling channels up to 600 MHz for single pair Ethernet 9906:2020 (SPE) **Scope**: This document covers channel specifications, for channels constructed from balanced 1-pair cabling components, primarily intended for use in industrial automation and process control applications.

**Abstract**: ISO/IEC TR 11801-9906:2020(E) covers channel specifications, for channels constructed from balanced 1 pair cabling components, primarily intended for use in industrial automation and process control applications.

The channel specifications are consistent with corresponding IEEE 802.3 single-pair Ethernet (SPE) applications and are referenced from link segment specifications in the following IEEE SPE physical layer specifications:

- ISO/IEC/IEEE 8802-3:2017/AMD4, 1 000 Mb/s: 1000BASE T1 Type A,  $\leq$  15 m, 1000BASE T1 Type B,  $\leq$  40 m;
- ISO/IEC/IEEE 8802-3:2017/AMD1, 100 Mb/s: 100BASE T1, ≤ 15 m;
- IEEE 802.3cg, 10 Mb/s: 10BASE T1S, ≤ 15 m; 10BASE T1L, ≤ 1 000 m.

The channel component specifications are referenced according to corresponding IEC balanced 1 pair cable and connector specifications.

Channel specifications include IL, RL, TCL, coupling attenuation, and alien crosstalk parameters specifications.

Channel EMC related specifications include electromagnetic isolation levels E1, E2 and E3, which are defined according to the MICE standard environmental characterization system specified in ISO/IEC 11801-1

Hyperlink: info\_isoiectr11801-9906{ed1.0}en.pdf

## **13.** ISO/IEC TR 11801-9907:2019

**Title:** Information technology - Generic cabling for customer premises - Part 9907: Specifications for direct attach cabling

**Scope/Abstract:** This part of ISO/IEC 11801, which is a Technical Report, provides definitions for, and examples of, direct attach cabling configurations.

This document provides performance specifications for Classes D, E, EA, F, FA, I and II direct attach cabling by reference to ISO/IEC 11801-1.

Informative limits for Class I direct attach cabling to support 5 m short reach mode application according to ISO/IEC/IEEE 8802-3:2017/AMD3, i.e. 25GBASE-T and 40GBASE-T, are provided in Annex A.

Test methods will be provided in the second edition of ISO/IEC 14763-4.

NOTE ISO/IEC 14763-4 is the test method for End to End (E2E) link. It can be also used for direct attach cabling. Test methods for Classes EA, F, FA, I, II will be provided in the second edition of ISO/IEC 14763-4.

Direct attach cabling connects two pieces of equipment, it has connectors at each end, and no intermediate connecting hardware.

Hyperlink: info\_isoiectr11801-9907{ed1.0}en.pdf

# **14.** ISO/IEC TR 11801-9908:2020

**Title:** Information technology - Generic cabling for customer premises - Part 9908: Guidance for the support of higher speed applications over optical fibre channels

		Scope/Abstract: This part of ISO/IEC 11801, which is a Technical Report,
		• provides a listing of the data centre application options currently available or in process of standardization utilizing duplex and parallel optical fibre channels;
		• identifies migration considerations when upgrading to higher speed applications.
		Hyperlink: info_isoiectr11801-9908{ed1.0}en.pdf
15.	ISO/IEC TR 11801- 9909:2020	<b>Title:</b> Information technology Generic cabling for customer premises - Part 9909: Evaluation of balanced cabling in support of 25 Gbit/s for reach greater than 30 metres
		<b>Scope/Abstract:</b> This part of ISO/IEC 11801, which is a Technical Report, covers evaluation and recommendations for achieving extended reach, greater than 30 m, for 25 Gbit/s applications over balanced cabling channels.
		This document covers channel reference implementations, based on Category 8.1 and Category 8.2, 2 000 MHz, components.
		The channel and component category specifications covered in this document are not intended to be normative
		Hyperlink: info_isoiectr11801-9909{ed1.0}en.pdf
16.	ISO/IEC TR 11801- 9910:2020	<b>Title:</b> Information technology Generic cabling for customer premises - Part 9910: Specifications for modular plug terminated link cabling
		<b>Scope/Abstract:</b> This part of ISO/IEC 11801, which is a Technical Report, provides definitions for, and examples of, modular plug terminated link configurations.
		This document provides performance specifications for Classes D, E, EA, F, FA, I and II modular plug terminated links.
		Test methods are provided in Clause 8 and are specified in ISO/IEC 14763-4
		Hyperlink: info_isoiectr11801-9910{ed1.0}en.pdf

### **ADOPTION PROPOSAL FORM**

Table 2 – Preferred option(s) and recommendation(s) where different options are recommended

S/No.	Standard Number	Our preferred option		Reasons the adoption proposal is not acceptable with preferred recommendation(s) (mandatory)
		Adoption acceptable as presented	Adoption proposal not acceptable because of the reason(s)	Our Recommendations are as follows (cite specific clauses and wording preferred)
1.	ISO/IEC 11801-1:2017			
2.	ISO/IEC 11801-2:2017			
3.	ISO/IEC 11801- 3:2017+AMD1:2021			
4.	ISO/IEC 11801-4:2017			
5.	ISO/IEC 11801-5:2017			
6.	ISO/IEC 11801-6:2017			
7.	ISO/IEC TR 11801-9901:2014			
8.	ISO/IEC TR 11801-9902:2017			
9.	ISO/IEC TS 11801-9903:2021			
10.	ISO/IEC TR 11801-9904:2017			
11.	ISO/IEC TR 11801-9905:2018			
12.	ISO/IEC TR 11801-9906:2020			
13.	ISO/IEC TR 11801-9907:2019			
14.	ISO/IEC TR 11801-9908:2020			
15.	ISO/IEC TR 11801-9909:2020			
16.	ISO/IEC TR 11801-9910:2020			

### WITHDRAWAL ITEM (Table 3)

Kenya Bureau of Standards intends to withdraw the following Kenya Standard for the reason given.

We are therefore seeking views from potential users in respect of the same. The Standard is available at the Kenya Bureau of Standards Information Centre. Please tick and fill your preference of the listed option. (If the spaces provided are not enough, please attach a separate sheet of paper).

			Our proposed action	
S/No.	Withdrawal item	Reason for Withdrawal	Withdrawal proposal acceptable as presented	withdrawal proposal not acceptable because of the reason(s)
1.	Title: KS ISO IEC 11801:2008 Information Technology Generic Cabling for Customer Premises.  Scope: ISO/IEC 11801 specifies generic cabling for use within premises, which may comprise single or multiple buildings on a campus. It covers balanced cabling and optical fibre cabling.	To be replaced by proposed series of KS ISO/IEC 11801 above		
	ISO/IEC 11801 is optimised for premises in which the maximum distance over which telecommunications services can be distributed is 2,000 m. The principles of this International Standard may be applied to larger installations.			
	Cabling defined by this standard supports a wide range of services, including voice, data, text, image and video.			
	This International Standard specifies directly or via reference the:  a) structure and minimum configuration for generic cabling,			

b) interfaces at the telecommunications	
outlet (TO),	
c) performance requirements for individual cabling links and channels,	
d) implementation requirements and options,	
e) performance requirements for cabling components required for the maximum distances specified in this standard,	
f) conformance requirements and verification procedures.	
Safety (electrical safety and protection, fire, etc.) and Electromagnetic Compatibility (EMC) requirements are outside the scope of this International Standard, and are covered by other standards and by regulations. However, information given by this standard may be of assistance.	
ISO/IEC 11801 has taken into account requirements specified in application standards listed in Annex F. It refers to available International Standards for components and test methods where appropriate	

Name and Signature (of respondent):

Position (of respondent):

On behalf of	(Name of organization)
	,
Date	

NOTE: Absence of any reply or comments shall be deemed to be an acceptance of the proposal for adoption and shall constitute an approval vote.