SLOVENSKI STANDARD
SIST EN 63002:2018

01-februar-2018

Postopek identifikacije in interoperabilnosti komunikacij zunanjih napajalnikov, ki se uporabljajo pri prenosnih računalniških napravah (IEC 63002:2016)

Identification and communication interoperability method for external power supplies used with portable computing devices (IEC 63002:2016)

Identifikation und Kommunikation Interoperabilitäts-Verfahren für externe Netzteile in tragbaren Computern (IEC 63002:2016)

Méthode d'identification et d'interopérabilité des communications des alimentations externes utilisées avec les dispositifs informatiques portatifs (IEC 63002:2016)

Ta slovenski standard je istoveten z: **EN 63002:2017**

ICS:

31.020	Elektronske komponente na splošno	Electronic components in general
35.020	Informacijska tehnika in tehnologija na splošno	Information technology (IT) in general

SIST EN 63002:2018 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 63002

March 2017

ICS 31.020; 35.200

English Version

Identification and communication interoperability method for external power supplies used with portable computing devices (IEC 63002:2016)

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This European Standard was approved by CENELEC on 2016-11-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 63002:2017 E

European foreword

The text of document 100/2595A/CDV, future edition 1 of IEC 63002, prepared by Technical Area 14 "Interfaces and methods of measurement for personal computing equipment", of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 63002:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-09-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-03-03

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Endorsement notice

The text of the International Standard IEC 63002:2016 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61000-4-11:2004	NOTE	Harmonized as EN 61000-4-11:2004 (not modified).
IEC 62623	NOTE	Harmonized as EN 62623.
IEC 62680-1-1	NOTE	Harmonized as EN 62680-1-1.
IEC 62680-1-2	NOTE	Harmonized as EN 62680-1-2.
IEC 62680-1-3	NOTE	Harmonized as EN 62680-1-3.
IEC 62680-2-1	NOTE	Harmonized as EN 62680-2-1.
IEC 62680-3-1	NOTE	Harmonized as EN 62680-3-1 [1)].
IEC 62684	NOTE	Harmonized as EN 62684.

1) To be published.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60950-1	-	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	-
IEC 62368-1	-	Audio/video, information and communication technology equipment - Part 1: Safety requirements	EN 62368-1	-
IEC 62680-1-2	-	Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification	EN 62680-1-2	-
IEC 62680-1-3	-	Universal serial bus interfaces for data and power - Part 1-3: Universal Serial Bus interfaces - Common components - USB Type-C™ cable and connector specification	EN 62680-1-3	-

IEC 63002

Edition 1.0 2016-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Identification and communication interoperability method for external power supplies used with portable computing devices

Méthode d'identification et d'interopérabilité des communications des alimentations externes utilisées avec les dispositifs informatiques portatifs

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IDENTIFICATION AND COMMUNICATION INTEROPERABILITY METHOD FOR EXTERNAL POWER SUPPLIES USED WITH PORTABLE COMPUTING DEVICES

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 63002 has been prepared by technical area 14: Interfaces and methods of measurement for personal computing equipment, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

CDV	Report on voting
100/2595A/CDV	100/2700/RVC

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

The objective of this International Standard is to support interoperability of external power supplies used with the increasing variety of portable computing devices that implement the IEC 62680-1-2: USB Power Delivery with the IEC 62680-1-3: USB Type-C™ [1] connector standards. Broad market adoption of this International Standard is expected to make a significant contribution to the global goals of consumer convenience and re-usability of power supplies by building on the global market ecosystem of IEC 62680 compliant devices and facilitating interoperability across different product categories.

IEC 62680-1-2 is expected to enjoy significant adoption in global markets for all kinds of portable computing devices requiring less than 100 watts including notebook computers, tablets, smartphones and other related devices. This International Standard enables the reporting of the identity and power characteristics of external supplies supported by IEC 62680-1-2 (USB Power Delivery) and specifies additional interoperability guidelines for external power. The method for identification of a specific external power supply (EPS) will enable equipment manufacturers to ensure compliant operation of an EPS using IEC 62680-1-2; and promotes data communication that can be used by the portable computing device to predict and mitigate interoperability concerns when an unfamiliar or incompatible external power supply is connected to the device by a user.

This International Standard specifies the minimum technical requirements for interoperability and includes recommendations for EPS functionality and the portable computing device. The approach taken by this International Standard, focusing on common charging interoperability, will allow manufacturers to innovate in aspects such as design, system performance, and energy efficiency.

This International Standard also provides important information regarding consumer safety, system reliability as well as relevant global standards and regulatory compliance.

Other international and regional standards, recommendations and regulatory policies for “universal adapters” or “common product chargers” that reference this International Standard should take into account open technical and regulatory compliance issues that are associated with untested or arbitrary combinations of EPS and devices such as those identified in Annex A. For clarity, this International Standard does not take the approach of specifying “universal” or “common product adapters” because of these open issues and limitations to satisfy market requirements. Instead, it focuses on interoperability specifications in order to support global industry in developing interoperable charging solutions that meet regulatory compliance and market requirements.

1 USB Type-C™ and USB-C™ are trademarks of the Universal Serial Bus Implementers Forum (USB-IF).