IEC 62949

Edition 1.0 2017-01

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

colour inside

## Particular safety requirements for equipment to be connected to information and communication networks

## Exigences de sécurité spécifiques pour les équipements destinés à être connectés aux réseaux d'information et de communication

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## Particular safety requirements for equipment to be connected to information and communication networks

## Exigences de sécurité spécifiques pour les équipements destinés à être connectés aux réseaux d'information et de communication

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

ICS 33.160; 35.020

ISBN 978-2-8322-3790-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

# PARTICULAR SAFETY REQUIREMENTS FOR EQUIPMENT TO BE CONNECTED TO INFORMATION AND COMMUNICATION NETWORKS

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

| FDIS | Report on voting |
|---|---|
| 108/664/FDIS | 108/676/RVD |

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

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

In this standard, the following print types are used:

- requirements proper and normative annexes: in roman type;

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- notes and other informative matter: in smaller roman type;
- normative conditions within tables: in smaller roman type;
- Terms that are defined in Clause 3: **bold**.

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

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# INTRODUCTION

This document is applicable for products intended to be connected as **communication terminal** to an **ICT network** not covered by the scope of IEC 62368-1. It is to be used in conjunction with other product safety standards, examples of which are listed in Annex A.

This document, in accordance with the 'principles of safety' given in the introduction of IEC 62368-1, covers the requirements and compliance criteria under three headings.

- Protection of equipment users from hazards in the equipment. The users are considered to be protected from hazards in the equipment if the equipment complies with a relevant safety standard, for example one of those listed in Annex A, but compliance with those standards is not part of this document.

  NOTE An equipment user could be an **ordinary person** or an **instructed person**.

- Protection of **skilled persons** or **instructed persons** working on an **ICT network** and other users of an **ICT network**, from hazardous conditions on an **ICT network** resulting from the connection of the equipment.
- Protection of equipment users from voltages on an **ICT network**.

Upper limits for **ICT networks** signals have been defined. They include also telephone ringing signals which have been defined taking into account voltages commonly used in the different networks. The electrical hazard criteria have been chosen to be in accordance with IEC TS 60479 (all parts).

Test levels used for the equipment take account of the possibility that overvoltages may occur on **ICT networks**. Special consideration has been given to equipment parts expected to be held or touched during normal use, e.g. telephone handsets.

It is recognised that in high overvoltages risk areas, requirements of this document may not be sufficient. Additional protective devices, not covered by this document, may be installed in the **ICT networks** to better meet extreme conditions.

A comparison of terms introduced in this document with existing IEC standards is given in Annex C.

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# PARTICULAR SAFETY REQUIREMENTS FOR EQUIPMENT TO BE CONNECTED TO INFORMATION AND COMMUNICATION NETWORKS

## 1 Scope

This document applies to the interface of equipment designed and intended to be connected as a **communication terminal** to an **information and communication technology (ICT) network** termination.

This document does not apply to:

- equipment covered by IEC 62368-1; and
- interfaces to other networks.

NOTE 1 An example of 'other networks' is a dedicated Home and Building Electronic Systems/Building Automation and Control Systems HBES/BACS network covered by EN 50491-3.

This document specifies the safety requirements of the interface to the **ICT network** only.

NOTE 2 See Annex D.

Requirements additional to those specified in this document may be necessary for

- equipment intended for operation while exposed, for example, to extremes of temperature, to excessive dust, moisture, or vibration, to flammable gases, to corrosive or explosive atmospheres,
- electro medical applications with physical connections to the patient.

The following requirements are not covered by this document:

- functional safety of equipment;
- functional reliability of equipment;
- communication facilities with remote supply using hazardous voltage;
- protection of equipment connected to **ICT networks** from functional damage.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE List of other related documents can be found in Annex A and in the Bibliography.

IEC 62368-1:2014, *Audio/video, information and communication technology equipment – Part 1: Safety requirements*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62368-1and the following apply.

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