SLOVENSKI STANDARD
SIST EN 50173-5:2008/A2:2013

01-februar-2013

Informacijska tehnologija - Univerzalni sistemi pokabljenja - 5. del: Podatkovna središča - Dopolnilo A2

Information technology - Generic cabling systems - Part 5: Data centres

Informationstechnik - Anwendungsneutrale Kommunikationskabelanlagen - Teil 5: Rechenzentren

Technologies de l'information - Systèmes de câblage générique - Partie 5: Centres de données

Ta slovenski standard je istoveten z: **EN 50173-5:2007/A2:2012**

ICS:

33.040.50	Vodi, zveze in tokokrogi	Lines, connections and circuits
35.110	Omreževanje	Networking

SIST EN 50173-5:2008/A2:2013 **en**

EUROPEAN STANDARD

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EN 50173-5/A2

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ICS 33.040.50

English version

Information technology - Generic cabling systems - Part 5: Data centres

Technologies de l'information - Systèmes de câblage générique - Partie 5: Centres de données

Informationstechnik - Anwendungsneutrale Kommunikationskabelanlagen - Teil 5: Rechenzentren

This amendment A2 modifies the European Standard EN 50173-5:2007; it was approved by CENELEC on 2012-11-12. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 50173-5:2007/A2:2012 E

Foreword

This document (EN 50173-5:2007/A2:2012) has been prepared by CLC/TC 215 "Electrotechnical aspects of telecommunication equipment".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-11-12
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-11-12

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document introduces the intermediate distribution cabling subsystem as a new functional element to the topology of generic cabling in data centres.

Foreword

Add the following after EN 50173-5:

EN 50173-6 Information technology – Generic cabling systems – Part 6: Distributed building services

Introduction

Replace Figure 1 by the following figure:

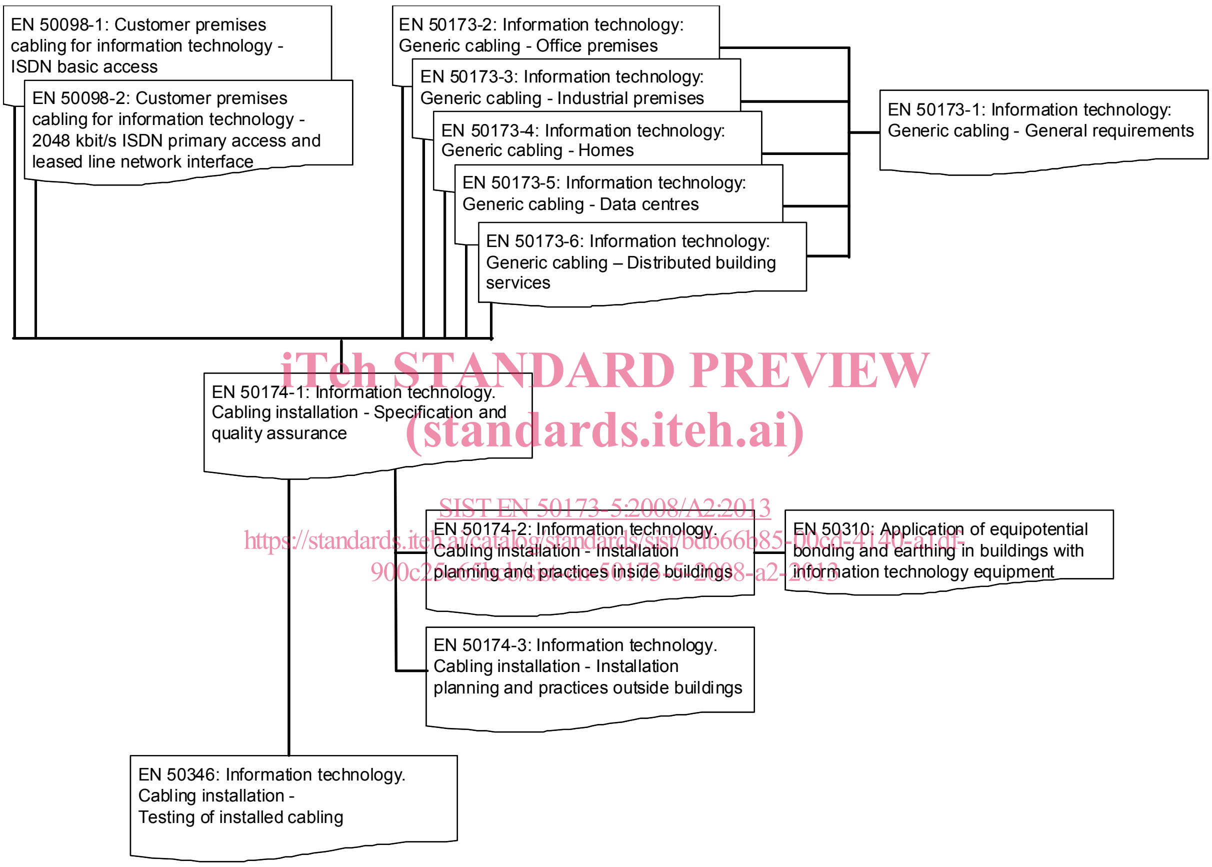


Figure 1 - Schematic relationship between the EN 50173 series and other relevant standards

2 Normative references

Replace the reference to EN 61754-20:201X by the following:

EN 61754-20:2012, *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 20: Type LC connector family (IEC 61754-20:2012)*

3 Definitions and abbreviations

3.1 Definitions

Insert the following definitions and **renumber** remaining definitions:

3.1.2
intermediate distribution cable
cable connecting the intermediate distributor to the zone distributor

3.1.3
intermediate distributor
distributor used to make connections between the main distribution cabling subsystem, intermediate distribution cabling subsystem, network access cabling subsystem, cabling subsystems specified in EN 50173-1 and active equipment

3.2 Abbreviations

Insert the following abbreviation:

ID Intermediate distributor

4 Structure of the generic cabling system in data centres

4.2 Functional elements

Insert the following note after bullet i):

NOTE This standard supports the addition of an additional functional element, the intermediate distributor. The requirements for this functional element and the additional cabling subsystem created by its inclusion are defined in Annex C.

4.3 General structure and hierarchy

Insert the following note after 1st paragraph:

NOTE This standard supports the addition of an additional cabling subsystem, the intermediate distribution cabling subsystem. The requirements for this functional element and the additional cabling subsystem created by its inclusion are defined in Annex C.

Amend the NOTE to Figure 3 to read:

NOTE Network access cabling is also used to connect distributors in accordance with EN 50173-1 to the ZD.

Insert the following new Annex C.

Annex C
(normative)

Intermediate distribution cabling subsystem

C.1 General

Larger data centres may require an additional subsystem in order to support a reasonable administration system that will allow for the interconnection of several main distributors. In such case the main distributor will become the common distributor, which now connects several intermediate distributors, which act as local main distributors.

This annex defines the additional requirements that are required for such implementations.

C.2 Structure

C.2.1 Functional elements

In addition to the distributors specified in 4.1, Annex C specifies the following functional element and interface of generic cabling:

– intermediate distributor (ID).

C.2.2 General structure and hierarchy

Generic cabling systems in accordance with this annex contain an additional cabling subsystem: the intermediate distribution cabling subsystem. Network access cabling subsystems may be connected directly to the intermediate distributor.

The cabling subsystems are connected together to create a generic cabling system with a structure as shown in Figure C.1. The composition of the intermediate distribution cabling subsystem is described in C.2.3. The functional elements of the cabling subsystems are interconnected to form a basic hierarchical topology as shown in Figure C.2.

Where the functions of distributors are combined (see 4.7.1) the cabling subsystems linking them are not required.

Connection to application-specific equipment at an ID adopts an interconnect or a cross-connect approach (see EN 50173-1). Passive connections between cabling subsystems adopt either a cross-connect approach, by way of either patch cords or jumpers, or an interconnect approach.

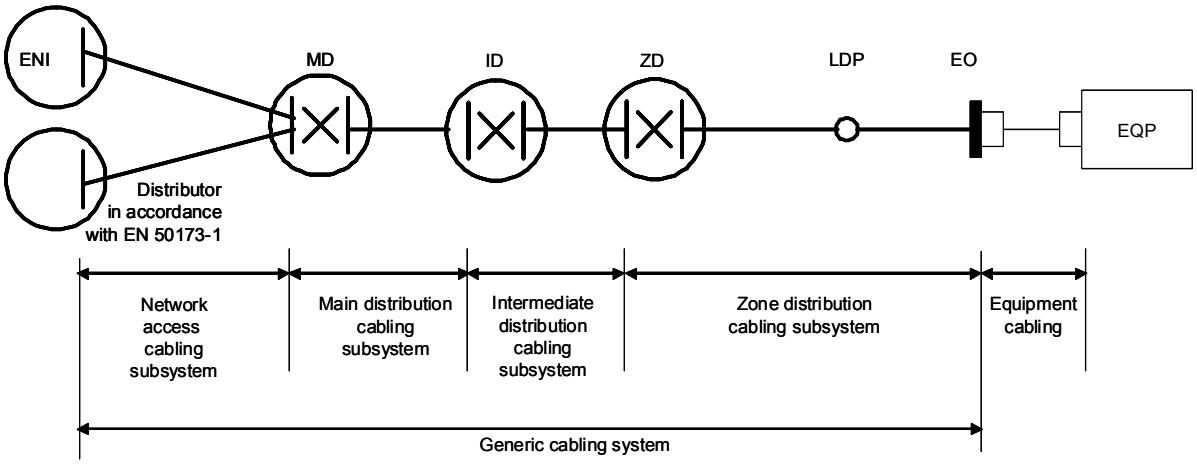
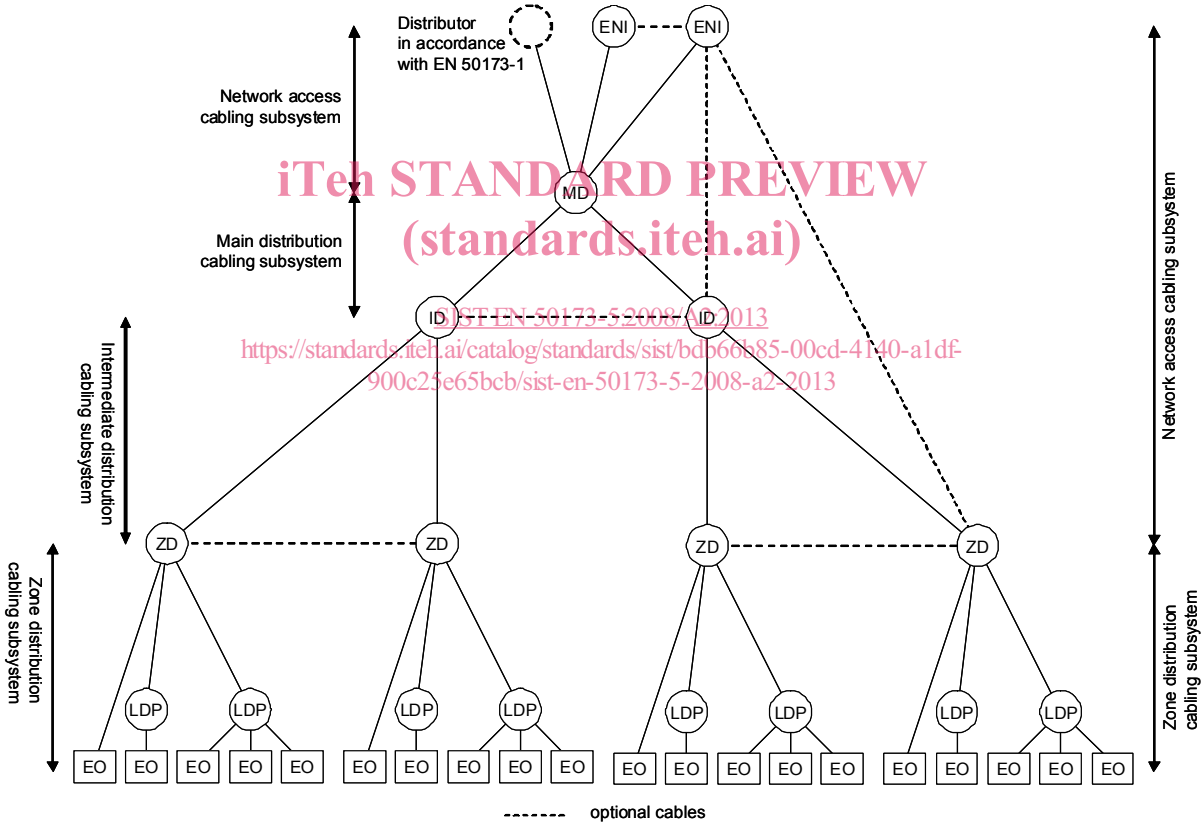


Figure C.1 – Structure of generic cabling



NOTE Network access cabling is also used to connect distributors in accordance with EN 50173-1 to the ID.

Figure C.2 – Hierarchical structure of generic cabling

C.2.3 Cabling subsystems

C.2.3.1 Main distribution cabling subsystem

The main distribution cabling subsystem extends from an MD to the IDs connected to it. The subsystem includes

a) the main distribution cables,

b) the mechanical termination of the main distribution cables at the MD together with associated patch cords and/or jumpers at the MD,

c) the mechanical termination of the main distribution cables at the ID.

Although equipment cords are used to connect the transmission equipment to the cabling subsystem, they are not considered part of the main distribution cabling subsystem because they are application-specific.

C.2.3.2 Intermediate distribution cabling subsystem

The intermediate distribution cabling subsystem extends from an ID to the ZDs connected to it. The subsystem includes

a) the intermediate distribution cables,

b) the mechanical termination of the intermediate distribution cables at the ID together with associated patch cords and/or jumpers at the ID,

c) the mechanical termination of the intermediate cables at the ZD.

Although equipment cords are used to connect the transmission equipment to the cabling subsystem, they are not considered part of the intermediate distribution cabling subsystem because they are application-specific.

C.2.4 Accommodation of functional elements

Figure C.3 shows an example of how the intermediate distributor is accommodated in a building (only a single floor of the building is shown for simplicity).

The ID shall be housed in permanent and accessible locations within the data centre.

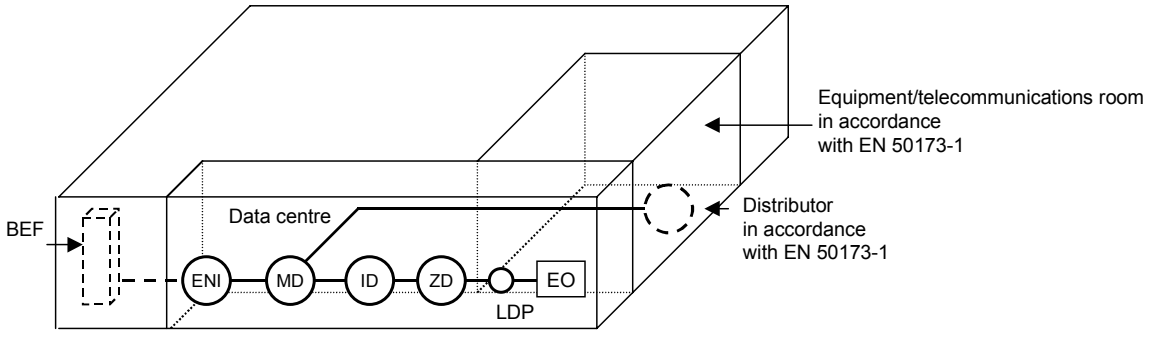


Figure C.3 – Example of accommodation of functional elements