

English Version

## Information technology - Implementation of BCT applications using cabling in accordance with EN 50173-4

Technologies de l'information - Mise en oeuvre des  
applications BCT utilisant un câblage réalisé selon la EN  
50173-4

Informationstechnik - Realisierung von RuK-  
Netzanwendungen mit Verkabelung nach EN 50173-4

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Europäisches Komitee für Elektrotechnische Normung

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## European foreword

This document (CLC/TR 50173-99-2:2020) was prepared by the Technical Committee CENELEC TC 215, Electrotechnical aspects of telecommunication equipment.

This document supersedes CLC/TR 50173-99-2:2010.

The following major modification has been made compared to CLC/TR 50173-99-2:2010:

- a) Annex A.4 revised;
- b) Normative references updated.

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.

## Introduction

EN 50173-4 specifies generic cabling in homes, installed to support one or more of the following groups of applications and based upon balanced and coaxial cabling as appropriate:

- a) Information and Communication Technologies (ICT);
- b) Broadcast and Communication Technologies (BCT).

EN 50173-4 also provides requirements for backbone cabling subsystems within premises containing multiple homes by reference to:

- 1) EN 50173-1 for cabling to support ICT applications;
- 2) standards of the EN 50083 and EN 60728 series to support BCT applications.

EN 50083 and EN 60728 standards deal with cable networks including equipment and associated methods of measurement for headend reception, processing and distribution of television signals, sound signals and their associated data signals and for processing, interfacing and transmitting all kinds of signals for interactive services using all applicable transmission media including community antenna television (CATV) and master antenna television/satellite master antenna television (MATV/SMATV) networks.

This document describes the following:

- the functional elements and structure of the cabling, external to homes, supporting community antenna television (CATV) and master antenna television/satellite master antenna television (MATV/SMATV) networks in accordance with EN 60728-1;
- the location and accommodation of the home network interface (HNI) in accordance with EN 60728-1;
- requirements for additional cabling performance requirements (i.e. insertion loss slope between 47 MHz and 862 MHz) and necessary amendments of the reference implementations of generic cabling within the home in accordance with EN 50173-4 in order to support the CATV, MATV/SMATV networks in accordance with EN 60728-1.

## 1 Scope

This document describes the following:

- a) the functional elements and structure of the cabling, external to homes, supporting community antenna television (CATV) and master antenna television/satellite master antenna television (MATV/SMATV) networks in accordance with EN 60728-1;
- b) the location and accommodation of the home network interface (HNI) in accordance with EN 60728-1;
- c) requirements for additional cabling performance requirements (i.e. insertion loss slope between 47 MHz and 862 MHz) and necessary amendments of the reference implementations of generic cabling within the home in accordance with EN 50173-4 in order to support the CATV, MATV/SMATV networks in accordance with EN 60728-1.

Safety (electrical safety and protection, optical power, fire, etc.) and electromagnetic compatibility (EMC) requirements are outside the scope of this document and are covered by standards and regulations. However, information given in this document could be of assistance in meeting these standards and regulations.

## 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.

EN 50173-1:2018, *Information technology – Generic cabling systems – Part 1: General requirements*

EN 50173-4:2018, *Information technology – Generic cabling systems – Part 4: Homes*

EN 50174 (all parts), *Information technology – Cabling installation*

EN 60728-1:2014, *Cable networks for television signals, sound signals and interactive services – Part 1: System performance of forward paths*

EN 60728-1-1:2014, *Cable networks for television signals, sound signals and interactive services – Part 1-1: RF cabling for two way home networks (IEC 60728-1-1:2014)*

EN 60728-11, *Cable networks for television signals, sound signals and interactive services – Part 11: Safety*<sup>1</sup>

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<sup>1</sup> At the time of publication of this document, EN 60728-11:2017 + A11:2018 were applicable.