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Standard Recommendation
S.R. CLC/TR 50173-99-2:2010

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

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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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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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Europäisches Komitee für Elektrotechnische Normung

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Foreword

This Technical Report was prepared by the Technical Committee CENELEC TC 215, Electrotechnical aspects of telecommunication equipment, in cooperation with experts from CENELEC TC 209/WG 4, System performance requirements.

The text of the draft was submitted to vote and was approved by CENELEC as CLC/TR 50173-99-2 on 2010-01-01.

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

Contents

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);

c) Command, Controls and Communications in Buildings (CCCB).

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 Technical Report 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 Technical Report 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 Technical Report and are covered by standards and regulations. However information given in this Technical Report may be of assistance in meeting these standards and regulations.