TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

CLC/TS 50136-9

August 2017

ICS 13.320; 33.040.40

Supersedes CLC/TS 50136-9:2013

English Version

Alarm systems - Alarm transmission systems and equipment - Part 9: Requirements for common protocol for alarm transmission using the Internet Protocol (IP)

Systèmes d'alarmes - Systèmes et équipements de transmission d'alarme - Partie 9 : Exigences pour le protocole commun de transmission d'alarme utilisant le protocole Internet (IP)

Alarmanlagen - Alarmübertragungsanlagen und -einrichtungen - Teil 9: Anforderungen an standardisierte Protokolle zur Alarmübertragung unter Nutzung des Internetprotokolls (IP)

This Technical Specification was approved by CENELEC on 2017-05-29.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

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

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

Contents

Page

Tables

European foreword

This document (CLC/TS 50136-9:2017) has been prepared by CLC/TC 79 "*Alarm systems"*.

This document supersedes CLC/TS 50136-9:2013.

This technical specification specifies a common IP transport protocol for alarm transmission. The published version (2013, first version) required solving both technical and security issues identified during the first actual implementations of the protocol. The working group was working closely with the early adopters of the protocol and has a very clear and complete list of issues and solutions. This revision supersedes the previous version.

EN 50136 will consist of the following parts, under the general title "Alarm systems - Alarm transmission systems and equipment":

— Part 1 General requirements for alarm transmission systems

— Part 2 General requirements for Supervised Premises Transceiver (SPT)

— Part 3 Requirements for Receiving Centre Transceiver (RCT)

— Part 4 Annunciation equipment used in alarm receiving centres

— Part 5 (Free)

— Part 6 (Free)

— Part 7 Application guidelines

— Part 8 (Free)

— Part 9 Requirements for a common protocol for alarm transmission using the Internet Protocol (IP)

1 Scope

This Technical Specification specifies a protocol for point-to-point transmission of alarms and faults, as well as communications monitoring, between a Supervised Premises Transceiver and a Receiving Centre Transceiver using the Internet Protocol (IP).

The protocol is intended for use over any network that supports the transmission of IP data. These include Ethernet, xDSL, GPRS, WiFi, UMTS and WIMAX.

The system performance characteristics for alarm transmission are specified in EN 50136-1.

The performance characteristics of the supervised premises equipment should comply with the requirements of its associated alarm system standard and applies for transmission of all types of alarms including, but not limited to, fire, intrusion, access control and social alarms.

Compliance with this Technical Specification is voluntary.

2 Normative references

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.

EN 50136-1:2012, *Alarm systems - Alarm transmission systems and equipment - Part 1: General requirements for alarm transmission systems*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50136-1:2012 apply.

3.2 Abbreviations

For the purposes of this document, the following abbreviations apply.

AES	Advanced Encryption Standard
ARC	Alarm Receiving Centre
ATP	Alarm Transmission Path
ATS	Alarm Transmission System
CA	X.509 Certificate Authority
CBC	Cipher Block Chaining
CRC	Cyclic redundancy check
DNS	Domain Name System
DTLS	Datagram Transport Layer Security
HL	Header Length
IP	Internet Protocol
IV	Initialization Vector
MAC	Media Access Control
MTU	Maximum Transmission Unit
NAT	Network Address Translation
NIST	National Institute of Standards and Technology
NTP	Network Time Protocol