



**SLOVENSKI STANDARD**  
**SIST-TS CLC/TS 50136-4:2004**

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**Alarmni sistemi - Sistemi in oprema za prenos alarma - 4. del: Oprema za javljanje za uporabo v sprejemnih centrih**

Alarm systems - Alarm transmission systems and equipment - Part 4: Annunciation equipment used in alarm receiving centres

Alarmanlagen - Alarmübertragungsanlagen und -einrichtungen - Teil 4: Anzeige- und Bedieneinrichtung

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Systèmes d'alarme - Systèmes et équipements de transmission d'alarme - Partie 4: Equipements d'annonce

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**ICS:**

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TECHNICAL SPECIFICATION

**CLC/TS 50136-4**

SPECIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

January 2004

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ICS 13.320

English version

**Alarm systems –  
Alarm transmission systems and equipment  
Part 4: Annunciation equipment  
used in alarm receiving centres**

Systemes d'alarme –  
Systemes et equipements  
de transmission d'alarme  
Partie 4: Equipements d'annonce

Alarmanlagen –  
Alarmübertragungsanlagen  
und -einrichtungen  
Teil 4: Anzeige- und Bedieneinrichtung

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**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

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## Foreword

This Technical Specification was prepared by the Technical Committee CENELEC TC 79, Alarm systems.

The text of the draft was submitted to the formal vote and was approved by CENELEC as CLC/TS 50136-4 on 2003-05-31.

The following date was fixed:

- latest date by which the existence of the CLC/TS  
has to be announced at national level (doa) 2004-04-08

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

- Part 1-1 General requirements for alarm transmission systems
- Part 1-2 Requirements for systems using dedicated alarm paths
- Part 1-3 Requirements for systems with digital communicators using the public switched telephone network
- Part 1-4 Requirements for systems with voice communicators using the public switched telephone network
- Part 2-1 General requirements for alarm transmission equipment
- Part 2-2 Requirements for equipment used in systems using dedicated alarm paths
- Part 2-3 Requirements for equipment used in systems with digital communicators using the public switched telephone network
- Part 2-4 Requirements for equipment used in systems with voice communicators using the public switched telephone network
- Part 3 (Free) <https://standards.iteh.ai/catalog/standards/sist/baff06ef-c839-455f-8e85-0004cb221538/sist-ts-clc-ts-50136-4-2004>
- Part 4 <sup>1)</sup> Annunciation equipment used in alarm receiving centres
- Part 5 (Free)
- Part 6 (Free)
- Part 7 <sup>1)</sup> Application guidelines

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<sup>1)</sup> This part is published as a Technical Specification.

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## Introduction

This Technical Specification describes the requirements for annunciation equipment used in alarm receiving centres.

It does not cover the operation (e.g. organisation, manning, construction of the building) of an alarm receiving centre.

The Technical Specification defines how messages, presented to the annunciation equipment by the receiving centre transceiver, should be secured.

The requirements of this specification apply to all messages received from an alarm transmission system used for fire alarm systems and any alarm system within the scope of CENELEC TC 79 (e.g. intruder systems and social alarm systems and access control systems and CCTV systems communicating with alarm receiving centres).

## 1 Scope

This Technical Specification specifies the requirements and test procedures for annunciation equipment located in an alarm receiving centre.

The annunciation equipment may be made up of one or more items of apparatus connected together (e.g. computers, electronic cards in separate housings, displays, keypads, printers, etc). The combination of the different apparatus is considered as one item of annunciation equipment which shall conform to the requirements of this specification.

NOTE These requirements do not apply to annunciation equipment, made up of more than one piece of apparatus, when one or more parts of the annunciation equipment are outside the alarm receiving centre at which message acceptance will be performed.

## 2 Normative references

This Technical Specification incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate place in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Technical Specification only when incorporated in it by an amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 50130-4	Alarm systems – Part 4: Electromagnetic compatibility – Product family standard: Immunity requirements for components of fire, intruder and social alarm systems
EN 50130-5	Part 5: Environmental test methods
EN 50134-1	Alarm systems – Social alarm systems – Part 1: System requirements
EN 50136-1-1	Alarm systems – Alarm transmission systems and equipment – Part 1-1: General requirements for alarm transmission systems
EN 60065	Audio, video and similar apparatus – Safety requirements (IEC 60065, mod)
EN 60073	Basic and safety principles for man-machine interface, marking and identification – Coding principles for indicators and actuators (IEC 60073)
EN 60950	Information technology equipment – Safety (IEC 60950, mod)
EN 61000-6-1	Electromagnetic compatibility (EMC) – Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments (IEC 61000-6-1:1997, mod)
EN 61000-6-3	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:1996, mod)

### 3 Definitions

For the purpose of this Technical Specification, the following definitions apply.

#### 3.1

##### **annunciation equipment**

equipment which presents, directly or after processing, information contained in messages

#### 3.2

##### **messages**

a series of signals which are presented to the annunciation equipment interface by the receiving centre transceiver

The messages are divided into four types:

#### 3.2.1

##### **alarm messages**

messages which contain a warning that a hazard (or a potential hazard) to life or property exists at one or more of the connected alarm systems

#### 3.2.2

##### **fault messages**

messages which contain information that a fault has been detected in the connected alarm systems

#### 3.2.3

##### **expected messages**

messages from an alarm system which confirm the occurrence of a scheduled event

#### 3.2.4

##### **other messages**

messages that are not alarm messages, fault messages or expected messages

#### 3.3

##### **operator**

person responsible for the handling of messages presented at the annunciation equipment

#### 3.4

##### **queue**

list of messages

#### 3.5

##### **message queue**

queue awaiting message acceptance

#### 3.6

##### **log queue**

list of messages waiting to be recorded in the log

#### 3.7

##### **log**

permanent record

#### 3.8

##### **message acceptance**

action, by an operator at the annunciation equipment, to indicate that a message has been accepted

**3.9****message acknowledgement**

automatic information sent back to the receiving centre transceiver interface, confirming that the message was passed correctly to the annunciation equipment

**3.10****secured message**

message which can not be lost (e.g. a message which can be retrieved in the event of power failure)

**3.11****alternative recording means**

temporary record capable of storing messages and local information waiting to be logged

**3.12****local information**

information generated within the annunciation equipment (e.g. message acceptance, operator actions, restart, fault conditions)

**3.13****fault condition**

event which prevents the annunciation equipment from functioning normally

**3.14****fault information**

information generated within the annunciation equipment resulting from a fault condition

**3.15****presentation of information**

information presented in an understandable format (e.g. names, addresses) for message acceptance

**3.16****annunciation equipment configuration data**

data which influences the processing, indication, presentation, logging of messages. (e.g. names and addresses, ...)

**3.17****alert indication**

means to draw attention to the operator (e.g. audible and/or visual)

**4 Requirements****4.1 Fault information****4.1.1 Generation of fault condition**

A fault condition shall be generated within the annunciation equipment following the corresponding fault.

**4.1.2 Presentation of fault information**

Fault information shall be presented within 10 s of the occurrence of the fault, unless otherwise specified.

A fault condition resulting from the monitoring requirements specified in 4.20 shall generate an alert indication

NOTE When the annunciation equipment is in the fault condition logging and/or presentation may be impossible.



## 4.2 Other functions

### 4.2.1 General case

When the annunciation equipment includes functions other than those required to receive and present local information and messages, these shall not influence the receiving and presentation of local information and messages.

### 4.2.2 Social alarms case

If the annunciation equipment is intended to be used as part of a social alarm system then it shall comply with EN 50134-1.

NOTE Reference to this standard has been made to include the specific requirements of social alarm systems differing from other types of alarm systems mainly because of the need for a 2-way speech communication facility.

## 4.3 Messages

### 4.3.1 Message acknowledgement

All messages shall be acknowledged by the annunciation equipment only after they have been secured (e.g. in a secured message queue or in the log). Messages shall not be processed until they have been secured. Timing relating to message acknowledgement shall be specified by the manufacturer in its documentation.

### 4.3.2 Alarm messages

When no other alarm messages are being processed, new alarm messages shall be presented within 5 s following their acknowledgement, to await message acceptance. An alert indication shall be generated simultaneously with presentation.

When other alarm messages are being processed, new alarm messages shall be presented as specified in 4.4.

NOTE When an alert indication is active, it may restart for each new acknowledged message presented.

### 4.3.3 Fault messages

Fault messages be processed in the same way as described in 4.3.2 for alarm messages.

### 4.3.4 Expected messages

Expected messages, received by the annunciation equipment within the agreed pre-planned time periods, need not be presented, provided that following acknowledgement, processing is carried out automatically by the annunciation equipment.

When expected messages are not acknowledged within the pre-planned time periods, a message shall be generated by the annunciation equipment and processed as specified in 4.3.2.

When the annunciation equipment does not have the facility to automatically process expected messages, they shall be processed and presented on demand.

### 4.3.5 Other messages

When the annunciation equipment is able to receive messages other than those described according to 4.3.2, 4.3.3 and to 4.3.4, it shall process and present them on demand.

#### 4.4 Message queue

The annunciation equipment shall include a message queue.

Messages shall be retrieved from the message queue in the order of their arrival except when the annunciation equipment includes means to prioritise inputs. When the means to prioritise inputs is included, messages shall be retrieved in the manner specified in 4.5.

An indication shall be provided when one or more messages are in the message queue. The annunciation equipment shall indicate the existence of multiple messages in the message queue within 5 s of them being acknowledged. This indication shall not interfere with the presentation of messages currently being handled or in the message queue awaiting message acceptance.

The indication of the change of status of the message queue, resulting from presentation and the subsequent message acceptance of a message, shall be carried out within 5 s of message acceptance.

The annunciation equipment shall have a facility to present, on demand, messages coming from a single alarm system. Messages from a single alarm system shall be presented in order of their arrival.

The capacity of the message queue shall be specified in the manufacturers documentation. An alert indication shall be given when the message queue is 90 % full.

When the message queue is full, the annunciation equipment shall no longer acknowledge incoming messages.

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#### 4.5 Input priorities

When the annunciation equipment provides a facility to set input priorities, the messages shall be retrieved according to the priority levels. The method of defining the input priorities shall be given by the manufacturer in its documentation (e.g. type of alarms, grade, etc ).

Where a number of messages of equal priority are in the queue they shall be retrieved in the order of their arrival.

#### 4.6 Alert indication

An alert indication shall be provided within the annunciation equipment. It may be integrated into any of the apparatus and/or provided as a separate unit. The alert indication shall activate within 5 s of a message being acknowledged or the generation of local information.

##### 4.6.1 Alert indication of messages

An alert indication shall be generated when messages are presented.

##### 4.6.2 Stopping the alert indication

Alert indication shall normally be stopped by message acceptance.

A means shall also be provided to stop alert indication resulting from the acknowledgement of messages other than alarm messages or the generation of local information. The means shall be restricted to access level 2.

##### 4.6.3 Disabling the alert indication

A means may be provided to enable and disable the activation of the alert indication when messages are received. This feature shall be automatically disabled when the queue does not contain alarm messages. Access to this feature shall be restricted to access level 3.

#### 4.7 Message acceptance

A means shall be provided to enable message acceptance. Message acceptance (of a message being presented) shall stop the alert indication. Message acceptance shall remove the message accepted from the message queue and allow the presentation of the next message in the message queue (if any).

A means to measure the period of time between message acknowledgement and message acceptance shall be provided. The time (which may be selectable by user) allowed between message acknowledgement and message acceptance shall be specified by the manufacturer. When this period is exceeded an alert indication shall be generated.

When the annunciation equipment provides a facility to set input priorities, a means to monitor the period between message acknowledgement and message acceptance shall be provided for each input priority. When the means to set the allowed period between message acknowledgement and message acceptance is selectable, it shall be restricted to access level 3.

#### 4.8 Information to be presented

##### 4.8.1 Information to be presented relating to messages

The following minimum information shall be presented prior to message acceptance, and shall be available on demand:

- a) the identity of the originating alarm system;
- b) the type of messages (e.g. fire, intrusion);
- c) the message content as specified in the manufacturers documentation. (e.g. alarm, fault, set-unset date and time);
- d) the date and time when the message was acknowledged by the annunciation equipment (to the nearest minute);
- e) the message priority level, when assigned, according to 4.5

NOTE 1 The type of messages can be included within the message content.

NOTE 2 Other information can be presented providing that this does not alter the presentation of information relating to messages or to fault information.

##### 4.8.2 Information to be presented relating to fault information

The following minimum information shall be presented in a fault information message:

- a) the type of fault (e.g. power failure);
- b) the fault event (e.g. prime power source);
- c) the date and time of the originating fault event.

#### 4.9 Coding of the presentation of information

The requirements EN 60073 shall be followed when designing facilities for the presentation of information