



SLOVENSKI STANDARD

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Nadzorni in sprejemni centri za alarme - 1. del: Zahteve za lokacijo in konstrukcijo

Monitoring and alarm receiving centre - Part 1: Location and construction requirements

Notruf- und Serviceleitstellen (NSL) - Teil 1: Örtliche und bauliche Anforderungen

Centre de contrôle et de réception d'alarme - Partie 1: Exigences pour l'emplacement et la construction

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 50518-1

April 2010

ICS 13.320

English version

Monitoring and alarm receiving centre - Part 1: Location and construction requirements

Centre de contrôle et de réception
d'alarme -
Partie 1: Exigences pour l'emplacement
et la construction

Notruf- und Serviceleitstellen (NSL) -
Teil 1: Örtliche und bauliche
Anforderungen

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This European Standard was approved by CENELEC on 2010-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 79, Alarm systems. It was submitted to the formal vote and approved by CENELEC on 2010-04-01.

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.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-04-01

EN 50518 will consist of the following parts, under the generic title “*Monitoring and alarm receiving centre*”:

- Part 1: Location and construction requirements;
- Part 2 1): Technical requirements;
- Part 3 1): Procedures and requirements for operation.

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1) At draft stage.

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Introduction

This European Standard applies to Monitoring and Alarm Receiving Centres (MARC) that monitor and/or receive and/or process signals that require an emergency response.

In all existing EN 50131 series accomplished under CLC/TC 79, Alarm systems, the abbreviation ARC is used. To avoid confusion and to achieve consistency in terminology the abbreviation ARC will be used throughout this European Standard, where MARC is equivalent for ARC.

The function of receiving, processing and initiating response actions by (human) intervention for information provided by alarm systems is not limited to only those signals as generated by Intruder and Hold-up Alarm Systems (I&HAS). The whole series of standards under CLC/TC 79, Alarm systems, encompasses CCTV surveillance systems (EN 50132), social alarm systems (EN 50134), access control systems (EN 50133) and audio and video door entry systems. All mentioned systems can send information, including alarms, to one or more remote locations for further processing, evaluation and (human) intervention.

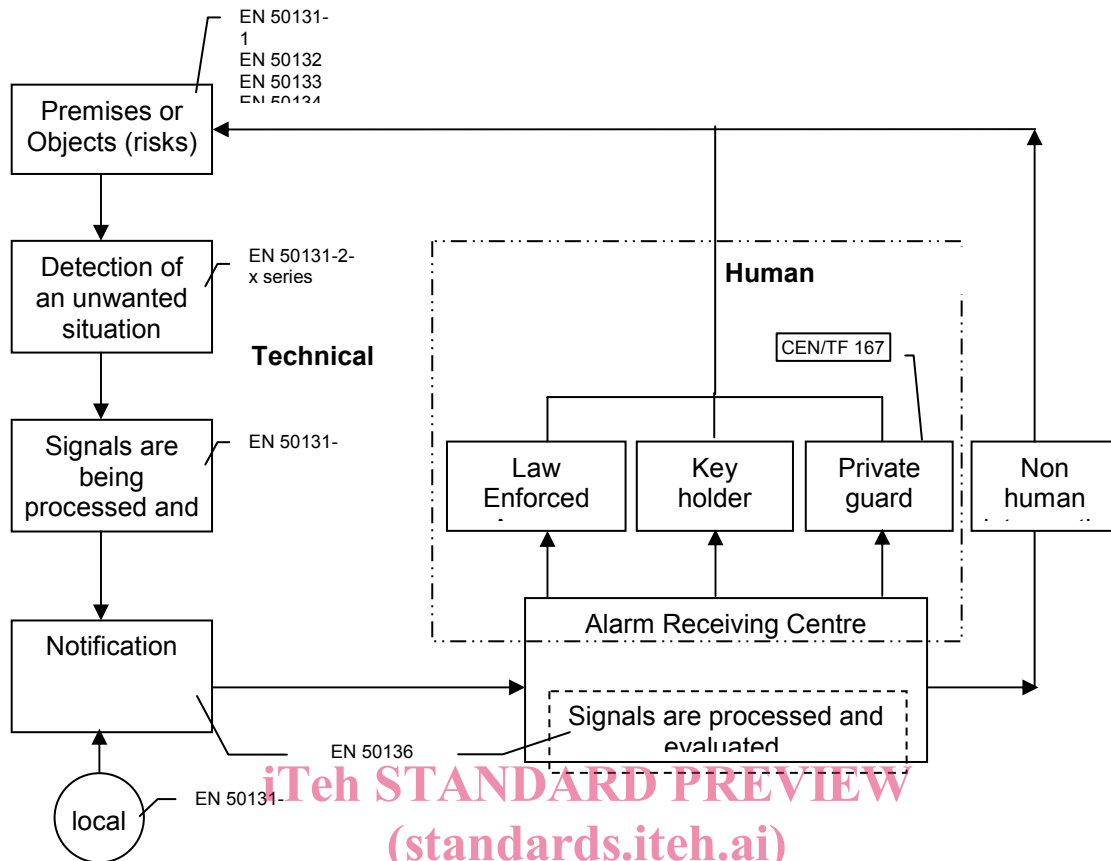
All alarm information generated by other systems e.g. fire detection and fire alarm systems, (vehicle) tracking and tracing systems, guarding or telecommunication network supervision is regularly transmitted to one or more remote locations for further processing, evaluation and (human) intervention.

In all above circumstances external and internal criminal action, emergency situations and/or calamities can jeopardize the safety and security of human beings and or properties. The central locations where the receiving, processing and initiation of (human) intervention take place should comply with the requirements of this European Standard.

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Figure 1 – Chain diagram of the total alarm process

It is noted that this European Standard cannot supersede any legislative requirements deemed necessary by a National Government to control the security sector on a national basis. This European Standard cannot interfere with items that are regulated by (inter)national regulations concerning external services (e.g. water, waste water, fuel supplies for gas and/or oil and mains power supplies).

1 Scope

This Part 1 of EN 50518 specifies the minimum requirements for the design, construction, and functioning equipment for premises where the monitoring, receiving and processing of (alarm) signals generated by alarm systems takes place as an integrated part of the total safety and security process. The requirements apply for applications in a remote configuration where multiple systems report to a single or multiple Alarm Receiving Centre(s) (ARC) as well as to a single site facility aimed for the monitoring and processing of alarms generated by one or more alarm systems installed within the perimeter of that particular site.

2 Normative references

The following referenced documents are indispensable for the application 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 54	series	Fire detection and fire alarm systems
EN 179	2008	Building hardware – Emergency exit devices operated by a lever handle or push pad, for use on escape routes – Requirements and test methods
EN 356	1999	Glass in building – Security glazing – Testing and classification of resistance against manual attack
EN 1063	1999	Glass in building – Security glazing – Testing and classification of resistance against bullet attack
EN 1303	2005	Building hardware – Cylinders for locks – Requirements and test methods
EN 1522	1998	Windows, doors, shutters and blinds – Bullet resistance – Requirements and classification
EN 1627	2)	Pedestrian doorsets, windows, curtain walling, grilles and shutters – Burglar resistance – Requirements and classification
EN 1906	2002	Building hardware – Lever handles and knob furniture – Requirements and test methods
EN 12209	2003	Building hardware – Locks and latches – Mechanically operated locks, latches and locking plates – Requirements and test methods
EN 13501-2	2007	Fire classification of construction products and building elements – Part 2: Classification using data from fire resistance tests, excluding ventilation services
EN 13779	2007	Ventilation for non-residential buildings – Performance requirements for ventilation and room-conditioning systems
EN 14846	2008	Building hardware – Locks and latches – Electromechanically operated locks and striking plates – Requirements and test methods
EN 50131-1	2006	Alarm systems – Intrusion and hold-up systems – Part 1: System requirements
EN 50131-4	2009	Alarm systems – Intrusion and hold-up systems – Part 4: Warning devices

2) At draft stage.

CLC/TS 50131-7	2008	Alarm systems – Intrusion and hold-up systems – Part 7: Application guidelines
EN 50132-7	1996	Alarm systems – CCTV surveillance systems for use in security applications – Part 7: Application guidelines
EN 50136-1	3)	Alarm systems – Alarm transmission systems – Part 1: General requirements for alarm transmission systems
EN 50272-2	2001	Safety requirements for secondary batteries and battery installations – Part 2: Stationary batteries
EN 62040-1	2008	Uninterruptible power systems (UPS) – Part 1: General and safety requirements for UPS (IEC 62040-1)
EN 62305	series	Protection against lightning (IEC 62305 series)

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

alarm company

organisation which provides services for AS

[EN 50131-1:2006, 3.1.7, mod.]

3.1.2

alarm condition

condition of an AS, or part thereof, which results from the response of the system to the presence of a hazard

[EN 50131-1:2006, 3.1.8, mod.]

3.1.3

alarm receiving centre (ARC)

continuously manned centre to which information concerning the status of one or more AS is reported

[EN 50136-1:200X, 4.1.2]

3.1.4

alarm transmission path

transmission link between an individual AS and its associated AE that carries the alarms

NOTE The ATP starts at the interface between AS and SPT and ends at the interface between RCT and AE. For notification and surveillance purposes the reverse direction may also be used.

[EN 50136-1:200X, 4.1.5]

3.1.5

client

individual or corporate body with whom the ARC has entered into a contract to provide alarm monitoring services

3) At draft stage.

3.1.6**detector**

device designed to generate an alarm signal or message in response to the sensing of an abnormal condition indicating the presence of a hazard

[CLC/TS 50131-7:2008, 3.1.12, mod.]

3.1.7**entrance lobby**

space between exterior and ARC that provides a controlled and secure entry/exit to the ARC

3.1.8**fire resistance**

ability of an element of building construction, component or structure to fulfil, for a stated period of time, the required stability, fire integrity and/or thermal insulation and/or other expected duty in a standard fire resistance test

3.1.9**hold up device**

device which, when manually operated, causes an alarm signal or message to be generated

[EN 50131-1:2006, 3.1.29]

3.1.10**intruder alarm system**

AS to detect and indicate the presence, entry or attempted entry of an intruder into supervised premises

[EN 50131-1:2006, 3.1.36]

3.1.11**mains supply**

public supply mains for the electrical power of the ARC

3.1.12**monitoring**

process of verifying that interconnections and equipment are functioning correctly

[EN 50131-1:2006, 3.1.45]

3.1.13**restore**

procedure of cancelling an alarm, tamper, fault or other condition and returning the alarm system to a previous condition

[EN 50131-1:2006, 3.1.56, mod.]

3.1.14**standby power supply**

energy source that is capable of supporting a ARC for extended periods

3.1.15**supervised premises**

that part of a building and/or area in which a hazard may be detected by a(n) (alarm) system

[EN 50131-1:2006, 3.1.66, mod.]

3.1.16**transfer hatch / chute**

facility to transfer keys, documents or other objects

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3.1.17

uninterruptible power system (UPS)

combination of convertors, switches and energy storage devices (such as batteries), constituting a power system for maintaining continuity of load power in case of input power failure

NOTE Continuity of load power occurs when voltage and frequency are within rated steady-state and transient tolerance bands and with distortion and interruptions within the limits specified for the load. Input power failure occurs when voltage and frequency are outside rated steady-state and transient tolerance bands or with distortion or interruptions outside the limits specified for the **UPS**.

[EN 62040-1:2008, 3.1.1]

3.2 Abbreviations

For the purpose of this document, the following abbreviations are used:

AE Annunciation Equipment

ARC Alarm Receiving Centre

AS Alarm System

ATS Alarm Transmission System

ATP Alarm Transmission Path

CCTV Closed Circuit Television

LEA Law Enforcement Agency

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4 Site selection

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The ARC shall be located on a site taking account of risks of fire, explosion, flooding, vandalism and exposure hazards from other sites. Where the ARC does not occupy all the building in which it is located, it shall be separated from the rest of the building by a physical boundary consisting of walls, floors, ceilings and essential openings.

4.1 Risk assessment

Risk assessment is a series of logical steps to enable the examination of relevant risks associated with the ARC. Risk assessment includes risk analysis and risk evaluation and should be a continuous process.

A record of risk assessments shall be maintained and available for third party auditing.

4.2 Site location

The risk assessment shall be executed as a first step for site selection for an ARC.

An ARC shall be located inside a building which complies with Clause 5.

4.3 Site accessibility

Access to the ARC and that part of the building in which the ARC is located shall be available solely to the company operating the ARC.