CTM	Monitorovacie a poplachové prijímacie centrá	STN EN 50518
STN		33 4580

Monitoring and Alarm Receiving Centre

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/19

Obsahuje: EN 50518:2019

Oznámením tejto normy sa od 06.02.2022 ruší STN EN 50518-1 (33 4580) z novembra 2014

STN EN 50518-2 (33 4580) z novembra 2014

STN EN 50518-3 (33 4580) z novembra 2014

STN EN 50518: 2019

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 50518

August 2019

ICS 13.320

Supersedes EN 50518-1:2013, EN 50518-2:2013, EN 50518-3:2013 and all of its amendments and corrigenda (if any)

#### **English Version**

# Monitoring and Alarm Receiving Centre

Centre de contrôle et de réception d'alarme

Alarmempfangsstelle

This European Standard was approved by CENELEC on 2019-02-06. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre 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, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels

Cor	ntents	Page
Euro	pean foreword	6
Intro	ductionduction	7
1	Scope	8
2	Normative references	9
3	Terms, definitions and abbreviations	10
3.1	Terms and definitions	
3.2	Abbreviations	
4	Planning	15
<del>-</del> 4.1	Categorization	
4.2	Site selection	
_	Construction – ARC structure	
<b>5</b> 5.1	General	
5.2	Walls, floor and ceiling – resistance against physical attack	
_	Category I	
	Category II	
5.3	Perimeter doorsets – resistance against physical attack and bullet attack	
5.4	Glazed areas	
5.4.1	Category I	16
5.4.2	Category II	
5.5	Resistance against fire and smoke	
5.6	Protection against the effect of lightning	
5.7	Openings	
	General	
	Entrance to the ARC	
	Emergency entry Emergency exit(s)	
	Ventilation	
	Service inlets and outlets	
	Transfer hatch / chute	
5.8	Location of data processing equipment	
5.8.1	Category I	
	Category II	
5.9	Communication cables	20
	Category I	
	Category II	
	Facilities	
	1 Category I	
5.10.	2 Category II	20
6	Alarm systems of the ARC	20
6.1	Category I	
	General	
	External attack	
	Glazed areas	
	Fire Entry / exit	
	Gas	
	Hold-up	
	Safety monitoring	

6.1.1	Messages from the ARC alarm systems  0 Video surveillance system  Category II	22
7	Electrical power supplies	22
	Mains supply	
	Standby power supplies	
	General	
	UPS	
7.2.3	Standby generators	23
8	Alarm Management System	23
8.1	General	
8.2	Time synchronization of equipment	
8.3	Recording and logging of events	
8.4	Storage of master data	25
9	Operation of the ARC	26
9.1	Procedures – General	
	General	
	Creation, modification and cancellation of services or customer accounts	
	Message handling	
	Communication with response services	
	Individual services provided by the ARC	
9.1.0	Unexpected increase in alarm signals	26
918	Alarm transmission path failures	26
	Controls to maintain quality of service	
	0 Installation, maintenance, protection, removal and reuse of assets under the cont	
	of the ARC	27
	1 Monitoring and testing of equipment	
	2 Fault procedures and reporting	
	3 Information management	
	4 Data back-up	
	5 Confidentiality and classification of information	
	6 Relationships with essential suppliers	
	8 Physical access	
	9 Remote access	
	0 Operational continuity and emergencies	
	1 Emergency evacuation and re-entry	
	2 Emergency entry	
	3 Key performance indicators	
9.2	Performance criteria – message handling	29
10	General Principles, Leadership, Governance, Management, and Staffing	30
	General	
	Governance and Strategy	
	Legal and operational set-up	
	Management System	
	Staffing	
	1 General	
	2 Security screening and vetting	
10.5.	3 Training	32
Anne	x A (informative) Typical ARC layout category I	33
Anne	x B (informative) Security and technical implications of remote access to ARC data	34
B.1	General	
<b></b>		54

B.2	Levels of access	34
B.3	Access to the system	34
B.4	Authorization for facilities	34
B.4.1	General	34
B.4.2	View only	34
B.4.3	Edit	35
B.4.4	Creation of a new record	35
B.4.5	Confirmation of changes made	35
B.5	Placing a system on test	35
B.6	Password management	35
Annex	C (informative) Alarm management system requirements	36
C.1	Structure of an AMS	36
C.1.1	General	36
C.1.2	Interface for interconnection with RCT (I <sub>RCT</sub> )	37
C.1.3	Interconnection with other AMS's (joining module)	37
C.1.4	Communication module	37
C.1.5	Information module	37
C.1.6	User Interface	37
C.2	Faults	37
C.2.1	General	37
C.2.2	Fault detection	37
C.2.3	Avoiding faults in manual data entries	37
C.2.4	Presentation of fault information	37
C.3	Message	38
C.3.1	Message acknowledgement	38
C.3.2	Alarm messages	38
C.3.3	Fault messages	38
C.3.4	Expected messages	38
C.3.5	Other received messages	38
C.3.6	Message queue	38
C.3.7	Input priorities	39
C.3.8	Alert indication	39
C.3.9	Message acceptance	39
C.4	Information to be presented	39
C.4.1	Information to be presented relating to messages	39
C.4.2	Information to be presented relating to fault information received from alarm system	s 40
C.4.3	Failure of the means of presentation of information	40
C.5	Logging	40
C.5.1	General	40

C.5.2	Time stamps for logging	40
C.5.3	Master data log (Log M1)	41
C.5.4	Event log's	41
C.5.5	Access levels	42
C.5.6	Access to database	42
C.5.7	Access to alarm management system	42
C.5.8	Access to alarm management system configuration data	42
C.5.9	Access to log data	42
C.6	Monitoring of interconnection with the receiving centre transceiver	43
Biblio	graphy	44

#### **European foreword**

This document (EN 50518:2019) has been prepared by CLC/TC 79, "Alarm systems".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with this document have to be withdrawn
   (dow) 2022-02-06

This documents supersedes EN 50518-1:2013, EN 50518-2:2013 and EN 50518-3:2013.

EN 50518:2017 includes the following significant technical changes with respect to EN 50518-1:2013, EN 50518-2:2013 and EN 50518-3:2013:

- referenced based standards were updated to the latest versions;
- definitions were updated;
- the scope was extended to include fire, access, CCTV, social alarms and other alarms;
- two categories ARC's are described, category I and category II. A category I ARC will be designed, constructed and operated to a higher standard with respect to construction, security and integrity than a category II ARC;
- a chapter was added which describes the management tools that shall be in place in the ARC;
- an informative annex was added which describes security and technical implications of remote access to ARC data;
- an informative annex was added which describes requirements for an alarm management system.

This revision was prepared to bring the procedures up-to-date with current technical developments, taking account of changes in the basic standards and the experience gained in the use of the standard.

#### Introduction

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

The abbreviation MARC describes the full functional scope of a Monitoring and Alarm Receiving centre. In all existing EN 50131 series 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 standard, where MARC is equivalent to ARC.

The function of receiving, processing and initiating response actions by (human or non-human) intervention is not limited to only those messages as generated by Intruder and Hold-up Alarm Systems (I&HAS). The whole series of standards under CLC/TC 79, "Alarm systems", encompasses video surveillance systems (EN 62676), social alarm systems (EN 50134), access control systems (EN 60839-11) and audio and video door entry systems. All of these systems can send information, including alarms, to one or more ARC's for further processing, evaluation and intervention.

Alarm information generated by other systems such as fire detection and fire alarm systems, (vehicle) tracking and tracing systems, man guarding or telecommunication network supervision is regularly transmitted to one or more ARC's for further processing, evaluation and intervention.

In all of these circumstances, criminal action and/or emergency situations can jeopardize the safety and security of people and/or properties. The central locations where the receiving, processing and initiation of intervention take place should comply with the requirements of this standard.

Figure 1 shows the chain of events of the total alarm process.

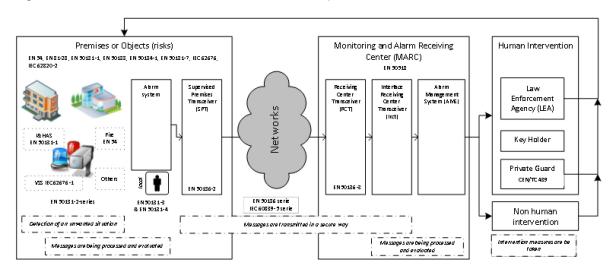


Figure 1 — Chain diagram of the total alarm process

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 standard cannot interfere with all those items that are regulated by (inter)national regulations concerning external services (for example water, waste water, fuel supplies for gas and/or oil and mains power supplies).

#### 1 Scope

This document specifies the minimum requirements for monitoring, receiving and processing of alarm messages generated by alarm systems taking place as a part of the total fire, safety and security solution.

For the purpose of this document, the term "alarm" is used in the broad sense to include fault, status and other messages received from one or more of a range of safety and security alarm systems such as but not limited to fire detection and fire alarm systems, fixed firefighting systems, intrusion and hold-up alarm systems, access control systems, video surveillance systems, social alarms systems and combinations of such systems.

This document gives requirements for two categories of ARC, category I and category II. A category I ARC will be designed, constructed and operated to a higher standard with respect to construction, security and integrity than a category II ARC.

The categorization is determined according to the type(s) of alarm messages handled.

Category I: ARCs handling messages from security applications:

- I&HAS's;
- access control systems;
- VSS in security applications that require an emergency response (for example loss prevention);
- people monitoring, lone workers and object tracking systems for security applications;
- alarm messages handled by category II ARCs;
- combinations of the above systems.

Category II: ARC's handling messages from non-security applications:

- fire alarm systems;
- fixed firefighting systems;
- social alarm systems;
- audio/video door entry systems;
- VSS in non-security applications (for example traffic flow);
- people monitoring, lone workers and object tracking systems for non-security applications;
- lifts emergency systems;
- combinations of the above systems.

The requirements apply to ARC's (whether established in single or multiple sites) monitoring and processing alarms generated by systems installed at other locations and also to ARC's monitoring solely alarms from systems within their own site.

The document includes functional and specific requirements supporting the services of an ARC.

The document does NOT apply to:

- alarm systems used for non-civil purposes;
- alarm systems for medical or health applications.

#### 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 54 (series), Fire detection and fire alarm systems

EN 179, Building hardware — Emergency exit devices operated by a lever handle or push pad, for use on escape routes — Requirements and test methods

EN 356, Glass in building — Security glazing — Testing and classification of resistance against manual attack

EN 1063, Glass in building — Security glazing — Testing and classification of resistance against bullet attack

EN 1125, Building hardware — Panic exit devices operated by a horizontal bar, for use on escape routes — Requirements and test methods

EN 1522, Windows, doors, shutters and blinds — Bullet resistance — Requirements and classification

EN 1627, Pedestrian doorsets, windows, curtain walling, grilles and shutters — Burglar resistance — Requirements and classification

EN 13501-2, Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services

EN 13637, Building hardware — Electrically controlled exit systems for use on escape routes — Requirements and test methods

EN 14846, Building hardware — Locks and latches — Electromechanically operated locks and striking plates - Requirements and test methods

EN 15713, Secure destruction of confidential material — Code of practice

EN 50131-1, Alarm systems — Intrusion and hold-up systems — Part 1: System requirements

EN 50134-7, Alarm systems — Social alarm systems — Part 7: Application guidelines

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

EN 50136-3, Alarm systems — Alarm transmission systems and equipment — Part 3: Requirements for Receiving Centre Transceiver (RCT)

EN 50272-2, Safety requirements for secondary batteries and battery installations — Part 2: Stationary batteries

EN 50600 (series), Information technology — Data centre facilities and infrastructures

EN 62040-1, Uninterruptible power systems (UPS) — Part 1: General and safety requirements for UPS (IEC 62040-1)

EN 62305-2, Protection against lightning — Part 2: Risk management

EN 62676-4, Video surveillance systems for use in security applications — Part 4: Application guidelines

koniec náhľadu – text ďalej pokračuje v platenej verzii STN