

Alarm systems — Combined and integrated alarm systems — General requirements

ICS 13.320

National foreword

This Draft for Development is the official English language version of CLC/TS 50398:2002.

This publication is not to be regarded as a British Standard.

It is being issued in the Draft for Development series of publications and is of a provisional nature because its provisional nature in CEN. It should be applied on this provisional basis, so that information and experience of its practical application may be obtained.

Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion to a European standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its 3-year life. Notification of the start of the review period will be made in an announcement in the appropriate issue of *Update Standards*.

According to the replies received by the end of the review period, the responsible BSI Committee will decide whether to support the conversion into a European standard, to extend the life of the Technical Specification or to withdraw it. Comments should be sent in writing to the Secretary of BSI Subcommittee GW/1/2, Installed alarm systems, at British Standards House, 389 Chiswick High Road, London W4 4AL, giving the document reference and clause number and proposing, where possible, an appropriate revision of the text.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This Draft for Development was published under the authority of the Standards Policy and Strategy Committee on 8 May 2003

Summary of pages

This document comprises a front cover, an inside front cover, the CLC/TS title page, pages 2 to 19 and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 8 May 2003

ISBN 0 580 41805 7

English version

**Alarm systems -
Combined and integrated alarm systems -
General requirements**

This Technical Specification was approved by CENELEC on 2002-06-22.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

Foreword

This Technical Specification was prepared by the Technical Committee CENELEC TC 79, Alarm systems. The text of the draft was submitted to the questionnaire and vote procedure and was approved as CLC/TS 50398 on 2002-06-22.

The following date was fixed:

- latest date by which the existence of the CLC/TS has to be announced at national level

(doa) 2003-01-01

Contents

Introduction	4
1 Scope	4
2 Normative references	4
3 Definitions	4
4 General description and fundamental principles	7
4.1 General	7
4.2 Standards	8
4.3 Configuration types of integrated alarm systems	8
4.3.1 Type 1	8
4.3.2 Type 2	10
5 System requirements and compatibility assessment	12
5.1 Standards	12
5.2 General design	12
5.2.1 General	12
5.2.2 Access levels	12
5.2.3 Special design requirements for configuration types	13
5.3 Common facility for control	13
5.4 Common facility for indication	13
5.4.1 Reliability requirement	13
5.4.2 Indication of the information	13
5.4.3 Priorities	13
5.5 Processing in alarm standard required processing elements	14
5.5.1 General	14
5.5.2 Software for common processing elements	14
5.6 Connection to alarm transmission system	15
5.7 Interconnection rules	15
5.8 Power supplies	15
5.9 Timing requirements	15
5.10 Simultaneous occurrence of events	15
5.11 Verification of performance	16
5.12 Central control facilities	16
5.12.1 General	16
5.12.2 Classification	16
5.12.3 Requirements	16
Annex A (informative) Application and installation guidelines and responsibilities	18
A.1 Specification	18
A.2 Contractual responsibility	18
A.3 Installation and wiring	18
A.4 Certification	18
A.5 User Responsibilities	18
A.5.1 System supervision	18
A.5.2 System log book	18
A.6 Maintenance and Support	19
A.6.1 System upgrade and modification	19
A.6.2 System tests	19
A.6.3 System maintenance	19
A.7 Documentation and training	19

Introduction

This Technical Specification describes the general requirements and configuration types for combined and integrated alarm systems which shall apply when one or more of the applications being integrated is an alarm application.

The prime considerations of this Technical Specification are to ensure that the individual standards are applied when they form a part of an integrated system solution with each other or with other (specified or unspecified) applications.

This document provides additional information relating to initial system design, planning, installation, commissioning, operation and maintenance for such combined and integrated alarm systems.

1 Scope

This Technical Specification specifies the requirements for alarm systems combined and integrated with other systems which may or may not be alarm systems.

This Technical Specification defines requirements, related to the rules of integration, in order to complement the individual alarm application standards and to provide clarification where there is conflict.

Alarm transmission systems are excluded from the scope of this Technical Specification.

2 Normative references

EN 54 Series, Fire alarm systems

EN 5013x series, Alarm systems

EN 60073:2002, Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators

3 Definitions

For the purposes of this Technical Specification, the following definitions apply:

3.1

additional facility

facility which is not described in an application standard and not necessary to fulfil the functions required of that application standard

NOTE 1 An additional facility may be shared by two or more applications. In this case this facility may be an additional facility for one application but standard-required for another application.

NOTE 2 For an application where no standard exists, any facility of this application is considered as additional.

3.2

alarm

a warning of the presence of a hazard to life, property or the environment

3.3

alarm application

an application intended for the protection of life, property or the environment, such as:

- intrusion and hold-up alarm;
- social alarm;
- closed circuit television used for security and surveillance;
- access control;
- fire detection and fire alarm.

NOTE This list is to be extended, following the scope of CLC/TC 79 and CEN/TC 72.

3.4

alarm receiving centre

a continuously manned centre to which information concerning the status of one or more alarm systems is reported

3.5

alarm company

an organization which provides services for alarm systems

3.6

alarm condition

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

3.7

alarm system

an electrical installation which responds to the manual or automatic detection of the presence of a hazard

3.8

alarm transmission equipment

equipment which is used primarily for the transmission of alarms from the alarm system interface at the supervised premises to the annunciation equipment interface at the alarm receiving centre. It may also transmit information or commands from the alarm receiving centre to one or more alarm systems

NOTE This does not include equipment provided by a PTT or other general telecommunications equipment (for example modems) where these are used primarily for alarm transmission.

3.9

alarm transmission system

equipment and network used to transfer information concerned with the state of one or more alarm systems to one or more alarm receiving centres

3.10

application

all related facilities used for a specific purpose, such as the detection and warning in the event of fire, lighting control etc.

3.11

application standard

standard related to a specific application (such as referred in A.8)

3.12

central control facility – CCF

equipment used for control and/or indicating purposes in type 1 configuration, which is connected to one or more dedicated systems and which is normally manned by operating personnel, for example a computer at a supervised location. The CCF is an additional facility (and not the standard-required control and indicating equipment) for at least one of the applications