

English version

**Alarm systems -  
Intrusion and hold-up systems -  
Part 7: Application guidelines**

Systemes d'alarme -  
Systemes d'alarme  
contre l'intrusion et les hold-up -  
Partie 7: Guide d'application

Alarmanlagen -  
Einbruch- und  
Überfallmeldeanlagen -  
Teil 7: Anwendungsregeln

This Technical Specification was approved by CENELEC on 2008-06-20.

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**CENELEC**

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

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## Foreword

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

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The EN/TS 50131 series will consist of the following parts, under the general title *Alarm systems – Intrusion and hold-up systems*:

- Part 1 System requirements
- Part 2-2 Intrusion detectors – Passive infrared detectors
- Part 2-3 Requirements for microwave detectors
- Part 2-4 Requirements for combined passive infrared and microwave detectors
- Part 2-5 Requirements for combined passive infrared and ultrasonic detectors
- Part 2-6 Opening contacts (magnetic)
- Part 2-7 Intrusion detectors – Glass break detectors
- Part 2-8 Intrusion detectors – Vibration detectors
- Part 2-9 Intrusion detectors – Active infrared detectors
- Part 2-10 Intrusion detectors – Proximity detectors
- Part 3 Control and indicating equipment
- Part 4 Warning devices
- Part 5-1 Requirements for interconnections equipment using dedicated wired links
- Part 5-2 Requirements for interconnections equipment using non-dedicated wired links
- Part 5-3 Requirements for interconnections equipment using radio frequency techniques
- Part 6 Power supplies
- Part 7 Application guidelines
- Part 8 Security fog device/systems

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## Introduction

These application guidelines are intended to provide advice relating to the design, installation, operation and maintenance of Intruder and Hold-up Alarm Systems (I&HAS). The purpose of this document is to ensure, as far as is practical, that I&HAS provide the required performance with a minimum of unwanted alarms.

These application guidelines are set out in the logical order in which an I&HAS would normally be designed and installed. Each procedure is set out separately in the guideline but it is accepted that, in practice, some of the procedures may be carried out simultaneously. Annex K describes in the form of a flowchart the main processes and documentation included in this application guideline.

Those responsible for the design, installation planning, system installation, commissioning, operation and maintenance of I&HAS should be conversant with other European Standards relating to I&HAS, particularly those relating to system performance, control and indicating equipment, detectors, warning devices, power supplies and alarm transmission systems.

These application guidelines are set out in seven main clauses; a brief explanation of each section is shown below.

i) Clause 7 – System design

This clause is intended to assist those responsible for designing I&HAS to design I&HAS suitable for the premises to be supervised in relation to the perceived risk(s). The design of I&HAS will depend on many factors all of which will influence more or less the design of I&HAS. Consideration of these factors will result in a system design proposal for an I&HAS with the appropriate extent, security grade and environmental class.

ii) Clause 8 – Installation planning

This clause is intended to help those responsible for installing I&HAS by highlighting issues which should be considered prior to commencing the installation of the I&HAS.

iii) Clause 9 – System installation

In this clause, guidance is given with regard to issues arising during the installation of I&HAS. This clause is intended to ensure I&HAS is correctly installed as specified at the design stage.

iv) Clause 10 – Inspection, functional testing and commissioning

In this clause, guidance is given on issues arising after I&HAS has been installed. The clause is intended to ensure I&HAS has been installed as specified and also provides the level of performance intended at the design stage. Guidance is also provided with regard to the proper commissioning and handing over of the system to the user and to the documents, records and operating instructions which should be provided.

v) Clause 11 – Documentation and records

This clause describes the documentation which should be provided to the client on completion of I&HAS. The documents are intended to provide a history of modifications to I&HAS, based on the as-fitted document, prepared when I&HAS installation was completed.

The records are intended to chronicle any corrective action carried out following unwanted alarm conditions and details of any repairs or modifications to I&HAS. The record should also include details of temporary fault conditions.

vi) Clause 12 – Operation of I&HAS

This clause describes the responsibility of the client or user of I&HAS to properly maintain I&HAS and to ensure it is operated correctly.

vii) Clause 13 – Maintenance and repair of I&HAS

This clause describes how I&HAS should be maintained and repaired to ensure I&HAS continues to provide the level of performance intended at the design stage.

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## 1 Scope

These application guidelines include guidance on the design, planning, operation, installation, commissioning and maintenance of I&HAS installed in buildings. Requirements for I&HAS are specified in EN 50131-1:2006.

The recommendations of this Technical Specification (TS) also apply to IAS and HAS when these systems are installed independently.

When an I&HAS does not include functions relating to the detection of intruders, the requirements relating to intrusion detection do not apply.

When an I&HAS does not include functions relating to hold-up, the requirements relating to hold-up do not apply.

NOTE Unless otherwise stated the abbreviation I&HAS is intended to also mean IAS and HAS.

These application guidelines are intended to assist those responsible for establishing an I&HAS to ascertain the appropriate design of I&HAS both in terms of the extent of the supervision required and in determining the grade of system performance necessary to provide the degree of supervision considered appropriate.

These application guidelines are also intended to assist those responsible for selecting equipment appropriate to both the level of performance required and the environmental conditions in which the equipment will be required to operate.

These application guidelines are relevant to all classes and grades of I&HAS of any size and complexity. These application guidelines should be read in conjunction with EN 50131-1:2006.

NOTE It has been assumed in the drafting of these application guidelines that the execution of its provisions will be entrusted to appropriately qualified and experienced persons. However the guidance is also appropriate to other persons who may be required to purchase or use an I&HAS.

## 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 50131-1:2006, *Alarm systems – Intrusion and hold-up systems – Part 1: System requirements*

EN 61082-1:2006, *Preparation of documents used in electrotechnology – Part 1: Rules (IEC 61082-1:2006)*

## 3 Definitions and abbreviations

### 3.1 Definitions

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

#### 3.1.1

##### **alarm**

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