



IEC/TC OR SC: <b>79</b>	SECRETARIAT: <b>FRANCE</b>	DATE:
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Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

### A. STATE TITLE AND SCOPE OF TC

IEC TC 79 - Alarm and electronic security systems

#### Scope:

To prepare international standards for the protection of buildings, persons, areas and properties against fraudulent actions having the purpose to enter in a place or to take or to use something without permission and other threat related to persons. The scope includes, but is not limited to equipment and systems, either used by ordinary persons or by trained people in the following residential and non-residential applications:

- Access control systems
- Alarm transmission systems
- Video Surveillance Systems- VSS
- Building Intercom Systems
- Digital Door Locks
- Combined and/or integrated systems even including fire alarm systems\*
- Fire detection and fire alarm system\*
- Intruder and hold-up alarm systems
- Remote receiving and/or surveillance centres
- Social alarm systems
- Asset tracking
- People monitoring

These systems can be used for providing a local or remote alarm; they can be used for calling private guards, social assistance, fire brigade or police force. They can be used for recording and transmission of dated or undated information with accurate time references, sounds, pictures of places and people for surveillance purposes. The standards cover: terminology, technical characteristics regarding performance criteria, reliable operation installation, maintenance; testing for detection, monitoring, recording, triggering an alarm and transmission to a remote centre including procedures and protocols for communication. Electrical safety, environmental conditions and behavior of alarm systems regarding electromagnetic compatibility are also considered with reference to the appropriate standards (e.g. Guide ISO IEC 51).

\*ISO TC21 SC3 is in charge of the production of standards for "Fire detection and alarm systems".

## B. MANAGEMENT STRUCTURE OF THE TC

Alarm systems are widely known and used as anti-theft, hold-up, fire detection and evacuation alarm systems since decades. However, due to progresses in technologies they became popular in the field of access control, social alarm systems and video surveillance systems. They may be used for the surveillance of buildings or areas around buildings.

Access control and surveillance such as VSS is a consequence of an increasing need for more safety and security in places, either in buildings or around buildings, as accommodation buildings (for example: homes and dwellings, hotels, hospitals, elderly people homes, barracks etc...), or other buildings either residential or not residential (for example, offices, shopping centres, schools and universities, administrations and banks, entertainment and tourism, infrastructures, transports and industry etc...). Social alarm is a consequence of an ageing population asking for remote assistance in case of emergency while at home. It can be a great help for young, elderly or disabled people. Although alarm systems are based on sophisticated electronic design they are rather different from other electronic systems because they must be able to work reliably in case of an emergency situation.

In addition to that, intrusion and hold-up systems must be designed in order to trigger the alarm if someone decides to interfere with the system (tamper protection). Furthermore the respect of privacy in handling of sensitive information is taken in due consideration according to the prevailing standards or local legislation.

New aspects have been introduced like Alarm confirmation and False Alarm Prevention.

Working groups:

WG 11: Access Control  
WG 12: Video Surveillance Systems  
WG 13: Building Intercom Systems  
PT 62692: Digital Door Locks  
AHG 14: Interoperability platforms

Current situation: 41 available standards

Membership: See IEC website

Liaisons: the work of TC 79 shall be conducted so as to ensure that liaisons are maintained or activated with: IEC TC 9 WG 46, ISO TC 21 SC 3, ISO TC 22 SC 3 WG1, ISO IEC ITU-T SAG-S, ISO TC 223 WG 5, IEC TC 9 WG 46.

Note 1: A liaison with CLC TC 79 follows the IEC/CLC co-operation agreement.

Note 2: An informal liaison is established with the regional standardization body: CEN TC 33 WG 4 TC 4 (Doors, windows, shutters, building hardware and curtain walling – Structure)

## C. BUSINESS ENVIRONMENT

Increasing numbers of batteries and other components, which should be recycled, are used in alarm systems. Users are waiting for safe products and a clean environment, regulations and laws are increasing in severity with regard to pollution. It would be helpful if standards for alarm systems could anticipate this trend. The contribution of home automation to ecological environment implies at residential level that TC 79 systems (e.g. Intrusion systems) could contribute to an ecosystem (group of interacting components that collectively perform the function of a standard).

#### **D. MARKET DEMAND**

The recent growth of IT (information technology) has a strong influence on the development of alarm systems. It is easier, cheaper and faster than before to record and transmit alarm signals, information or data, including sounds, pictures and video through communication systems from the premises to an alarm receiving centre. Customers of such systems are not only waiting for a reliable system but they want an appropriate answer and/or service that immediately follow the alarm. This has several consequences for alarm and surveillance systems.

- First, a modern alarm and surveillance system must be able to transmit the alarm through a reliable communication system. The communication have been made through the PSTN during many years however nowadays other networks such as internet, cable television distribution systems or radio communication systems including cellular telephone or other available systems may be used. A consequence is that there is a need for standardized transmitting procedures and communicating protocols between the components (mainly the control panel) installed within the place under surveillance and the alarm receiving centre.

-Second, the alarm receiving and/or surveillance centre should not only receive the message or information but should also be able to verify and record the alarm, monitor the communication and control the local equipment. There is therefore a demand for remote modification of parameters within the alarm and/or surveillance systems which can only be done under certain conditions. For social alarms, a direct dialogue between the alarm receiving centre and the user is often necessary.

- Finally, the necessary equipment installed in the premises or places under surveillance should not only be easy to use but should provide an appropriate answer to the user. Greater computer analysis with high recording capacity and automatic verification is necessary to avoid unwanted alarms.

It is clear from the above statements that there is a demand for reliable detection systems and transmission systems. Government departments, public services, users, manufacturers, certification bodies and laboratories etc... should benefit from standards dealing with access control, VSS communication and protocols. Standard communication procedures between the local alarm system and the alarm receiving centre are also necessary.

The increasing number of combined systems in large residential and commercial buildings request strict installation rules to guaranty the performance, traceability and quality of co-existing means of communication e.g. audio, video, protection devices etc..

#### **E. TRENDS IN TECHNOLOGY AND IN THE MARKET**

EMC requirements in the field of alarm systems are extremely important from the point of view of reliability. Modern electronic designs are more and more sensitive to interference due to other equipment. For example, some components used in alarm systems may behave as antennas and could either influence their environment or be influenced by electromagnetic fields. This is a second area where standards should be helpful.

It is generally agreed that one of the fastest growing sectors of alarm systems are in the area of access control, video surveillance and social alarm. More recently interoperability of TC 79 systems with other systems (e.g. home automation) and interoperability within TC 79 systems based on IP techniques appear to be a new field of interest, for example, added functionality for the user of intruder alarm systems by enabling the use of remote access via new technologies / devices such as phones, tablets. These functionalities have to be considered with an ethic approach taking into account human rights. This could be considered as a basis for work within the IEC TC 79 at short and mid-term.

**F. SYSTEMS APPROACH ASPECTS (REFERENCE - AC/33/2013)**

The system approach is a key issue for TC 79 since alarm devices are useless without being connected and combined altogether within a complete system whose parts may be spread in several areas or premises. For example, outside premises under surveillance a pre-alarm detector can be combined with a video-camera from a video surveillance system and a key-pad from an access control system. The whole local systems are then parts of a broader system including the connection and transmission to one or several remote data centres having the responsibility to record the information, to check the local situation and to warn a guarding company.

This global system approach requires standardization on devices for each individual system (VSS, Access Control, Intrusion, Social Alarm...) but also between systems combined in a more global one including the remote centre and the intervention or surveillance force. It is an objective to make any effort to eliminate IEC/ISO dual work.

Since the global system may include surveillance against other risks e.g. fire, terrorism etc... it is necessary to coordinate the work with some other TCs such as:

- ISO/IEC SAG-S
- ISO TC 21/SC3
- ISO TC 22/SC3
- ISO TC 223
- IEC TC 9

**G. CONFORMITY ASSESSMENT**

The TC 79 publications are not used for IEC Conformity Assessment Systems.

The standards include test specifications, reproducible test requirements, and test methods.

**H. 3-5 YEAR PROJECTED STRATEGIC OBJECTIVES, ACTIONS, TARGET DATES**

STRATEGIC OBJECTIVES 3-5 YEARS	ACTIONS TO SUPPORT THE STRATEGIC OBJECTIVES	TARGET DATE(S) TO COMPLETE THE ACTIONS
<p>To focus on market requests for comprehensive standards and respond to the needs of all stakeholders with the most efficient and quick answer.</p>	<p>To continue the Chairman Advisory Group to review priorities and new subjects of interest for TC 79 and advise the chairman for major issues. To be flexible in the TC 79 structure and set-up and or disband appropriate groups when needed.</p> <p>To be open to initiatives that lead standardizing:</p> <ul style="list-style-type: none"> <li>• product comparison parameter and relevant test methods ;</li> <li>• access control to residential or commercial buildings for mono or multi services operators including health care ;</li> <li>• interconnection between security systems with other systems that could bring extra services to end users.</li> </ul>	
<p>To keep TC 79 standards up to date, to reflect new/changing technologies and user</p>	<p>To increase efficiency for the development times of deliverables to be achieved within the time</p>	

<p>requirements on the market place in an appropriate time scale.</p>	<p>scales set by the market by:</p> <ul style="list-style-type: none"> <li>– completing the IEC TC 79 standards portfolio according to the here above scope and subsequent target dates decided at TC 79 level ;</li> <li>– applying practical rules agreed by both IEC and CENELEC TC 79 within the frame of the Dresden agreement ;</li> <li>– evaluating current IEC TC 79 standards in view of revision or suppression when more recent equivalent documents are proposed or need to be developed</li> </ul>	
<p>To insure that IEC TC 79 standards are not conflicting and are harmonized with ISO IEC and or regional standards on subjects that could be at the edge of TC 79 scope.</p>	<p>To insure the work produced by TC 79 WGs/PT involving IP techniques; such as VSS, ACS, BIS, digital door lock systems and potentially intrusion, social alarm and alarm transmission, is consistent and leads to non-conflicting standard development.</p> <p>To create and or activate liaisons in order to be kept up to date about the work in other bodies including consortia</p>	
<p>To elaborate a strategy that leads, when associated, TC 79 security systems to be controlled and monitored to give the most reactive and appropriate answer to multi-risk situation.</p>	<p>To give room to innovation situation where open discussion could raise appropriate answer in term of project standards when more than one security system is involved.</p>	
<p>Note: The progress on the actions should be reported in the RSMB.</p>		