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Service model for social care alarms

National foreword

This Published Document is the UK implementation of [CEN/TS 17470:2020](#).

The UK participation in its preparation was entrusted to Technical Committee GW/1/12, Social alarms.

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

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English Version

Service model for social care alarms

Modèle de service de téléassistance

Servicemodell für Alarmsysteme
in der sozialen Versorgung

This Technical Specification (CEN/TS) was approved by CEN on 13 April 2020 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document ([CEN/TS 17470:2020](#)) has been prepared by Technical Committee CEN/TC 431 "Service Chain for Social Care Alarms", the secretariat of which is held by SIS.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Introduction

Social care alarm services enable individuals who choose to use these services to live safer, more secure and independent lives within their communities by providing support on demand, via the alarm system. Different service models have evolved across Europe to meet the social, health and care expectations of different countries and communities. These service models range from a telephone-only emergency service (which relies on the availability of friends, family and neighbours) through emergency support and regular telephone counselling, to providing on-the-ground response services that may include a formal home care service and undertake reactive home care visits at the request of the service user.

Social care alarm services have been successful in identifying individual, community and organizational needs and meeting these needs with affordable, effective solutions. As a result, the number of people being supported to live independent lives has grown over the past 30 years to a current day number of more than 5 million individuals across Europe. The size of the social care alarm services market is growing, and growth is likely to continue as a result of population demographics, resulting pressures on health and social care budgets, the adoption of social care alarm services by an increasing number of European countries and a general move within society to embracing person-centred technology within the health and social care environment. Social care alarm services are the first technology enabled care service and have proved to be the most successful to date.

Social care alarm services are generally used by older adults who could be vulnerable due to physical, mental or cognitive conditions. Given the potential vulnerability of their service users it is of utmost importance that social care alarm services offered are reliable, safe and secure. The safety and reliability of a social care alarm service is a consequence of correct choice, installation and maintenance of the social alarm equipment used within the service, coupled with the management and partnership framework embodied in the design and management of the service. The [EN 50134](#) (social alarms) series of standards covers the minimum technical standards for social alarm products, the overall social alarm system and the processes for deployment of social alarm equipment to create a social alarm system.

The size of the social care alarm market and the growth in demand for these services is stimulating a need for a common management framework, which will enable the sharing of good practice in the design of person-centred services and their management. This technical specification is the first step to delivering on this goal.

This technical specification is additional to the EN 50134 series of standards and describes the service chain involved in the provision of a social care alarm service. It sets out the roles within the chain of service and describes the processes associated with each role within the service chain. The document recognizes that these roles may be undertaken by different organisations, which will need to work closely to provide a safe, reliable and secure social care alarm service which protects and empowers its service users. The document establishes a framework for service design and management and the development of management standards and shared values within and between the organisations engaged in the social care alarm service chain. In doing so, it recognizes the importance of leadership, governance and communication in the development and provision of services that are service user focused, holistic and seek to respond to the changing needs of service users via a single point of dynamic needs assessment and frictionless referral between agencies.

The ISO High Level Structure is the basis for the social care alarm service management model. The Technology Enabled Care Operations Model ([Figure 1](#)) shows how operational processes are related in order to provide the service within the service chain and are supported by leadership, planning, support and evaluation.



Figure 1 — The Technology Enabled Care Operations Model (TECOM)

Each operational process in [Figure 1](#) consists of sub processes as defined in [Figure 2](#).

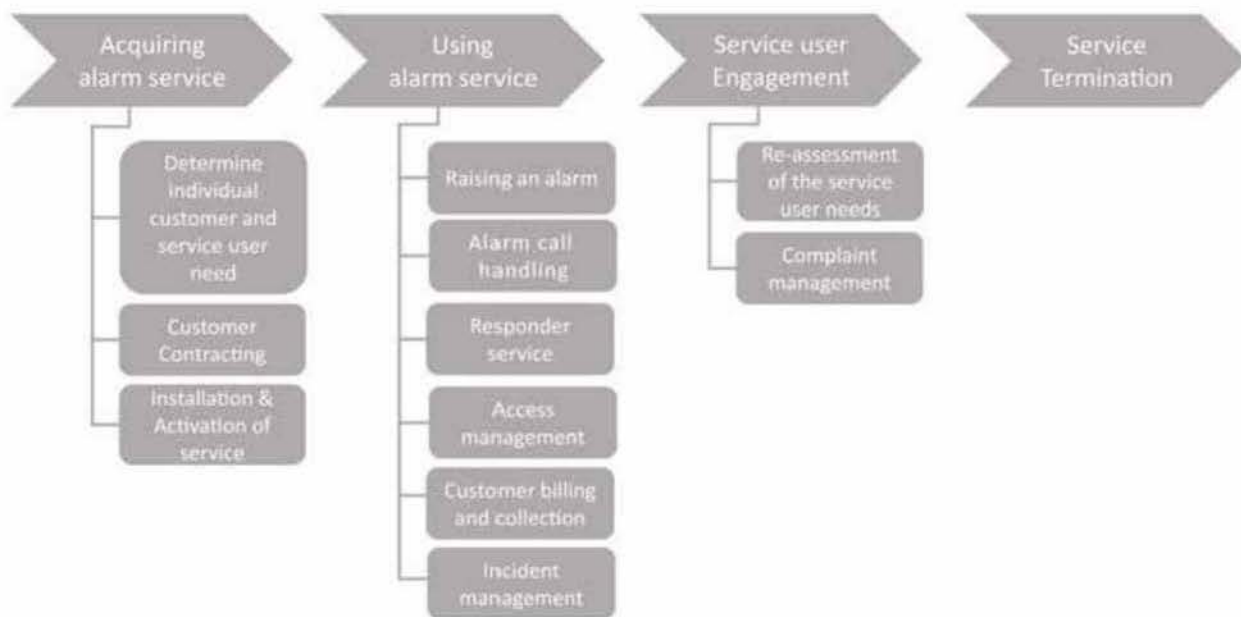


Figure 2 — Map of the TECOM processes and sub-processes

This document articulates the following key principles:

- Enhance the customer experience - The service user should be at the centre of service provision and their experience should define service design and quality.
- Consider the entire service chain regardless of technology and organisational structures - The customer / service user will experience the entire chain; quality of a service can only be managed and evaluated by holistic assessment of the full service chain and not just its elements in isolation.
- Clearly defined leadership, roles and responsibilities between actors is a key success factor for the overall quality of the service processes.

- Create a path for future service development – the needs of service users evolve and services evolves to meet changing needs and expectations.

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1 Scope

This document 'Service model for social care alarms', provides a framework and recommendations for the roles and responsibilities of the different actors in the social care alarm service chain.

The following topics are included in this document:

1. Service user perspective: objectives, roles, needs and processes
2. Process description for the service chain, including:
 - service user experience, installation and instruction, use, service accessibility, response arrangements, access management
 - marketing, sales, referral, review and termination
 - customer billing and income collection
3. Good practice of service provision: quality and risk management, including security, privacy and requirements for infrastructure.

Technology and organization structure independence are important features of this document, the service model for social care alarms.

This document contains “Requirements” and “Recommendations”. Requirements describe good practice that shall be achieved by all service providers modelling this document. Recommendations describe good practice that is not universally accepted across Europe and which service providers may wish to model.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1 alarm call

signal transmitted from an alarm system to an alarm receiving service to indicate the status or condition of that alarm system

3.2 alarm receiving centre

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

[SOURCE: EN 50136-1:2012, Clause 4.1.2]

3.3 alarm receiving service

service for the receipt and processing of alarm calls from an alarm system

[SOURCE: EN 50134-7:2017, Clause 3.9]

3.4

alarm recipient

person who receives and acts upon an alarm call

[SOURCE: EN 50134-1:2002, Clause 3.14]

3.5

complaint

expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected

[SOURCE: ISO 10002:2014, Clause 3.2]

3.6

connectivity

functioning end to end telecommunication connection

3.7

customer

person or organisation who pays for the technology enabled care service

3.8

digital key

means of gaining access without a physical key

3.9

distraction burglary

any crime where a falsehood, trick or distraction is used on an occupant of a dwelling to gain or to try to gain access to the premises to commit burglary

3.10

forced access

access through a secured door without a physical or digital key

3.11

formal responders

responders working in an organised responder service, whether paid or unpaid

3.12

informal responders

friends, family and neighbours of the service user nominated as responders by the service user

3.13

informed consent

informed consent is the process of providing information and explanation to an individual in respect of a proposed course of action so that the individual can consider their options

NOTE The outcome of an informed consent process is that the individual will agree, refuse or propose modifications to the proposed course of action

3.14

installer

person or provider who installs equipment in the service chain

3.15

key safe

secure container for storing keys

3.16

KPI

key performance indicator

3.17
problems

matter or situation regarded as unwelcome or harmful and needing to be dealt with and overcome

[SOURCE: Oxford English Dictionary]

3.18
regular contact

contact at a frequency appropriate to the contracted agreement and or the needs and objectives of the service, customer and service user

3.19
responder

person or persons who attend the service user when an alarm has been triaged and has been deemed to require a physical presence

3.20
safeguarding

measures designed to protect the health, wellbeing and human rights of individuals, which allow people, especially children, young people and vulnerable adults, to live free from abuse, harm and neglect

3.21
service provider

the organisation that provides the technology enabled care service and fulfils a contract with a service user or customer

3.22
service user

person who utilises the technology enabled care service

3.23
service user event

alarm call signalling a need on the part of the service user

NOTE Such needs may be in respect of the service user's welfare, safety, health or wellbeing and calls may be initiated by the service user operating a manual trigger device or via an automatic trigger device

3.24
TEC

technology enabled care, referring to the use of technologies to provide care for people that is convenient, accessible and cost-effective and includes, for example, telehealth, telecare, telemedicine, telecoaching and digital self-care resources

4 Leadership and governance

4.1 Leadership within the service chain

4.1.1 Introduction and expected outcome of the process

Good leadership and governance are key to the successful provision of person-centred services and the achievement of better outcomes for people. It is important that all partners in the service chain actively demonstrate a commitment to leadership and partnership working to achieve what shall be a collective objective. There are robust systems in place that clearly demonstrate leadership of the service provider and the lines of responsibility within the service chain.

4.1.2 Requirements

The service provider shall:

- a) demonstrate that there is a clear and accountable leadership and governance structure in place;
- b) ensure effective communication between management and operational team on corporate objectives, ambitions and service development;
- c) have methods for evaluating staff feedback;
- d) establish accountabilities and responsibilities within the service chain, which also demonstrate clear reporting lines;
- e) where there are multiple partners within the service chain, have an identified primary partner;
- f) make publicly available, details of the governance structure, including any annual reports that may be produced;
- g) demonstrate that TEC forms part of the organization's over-arching business strategies;
- h) ensure that service users consistently receive the same standard of care regardless of when, where, and from whom within the service provider organization they receive it.

4.2 Privacy protection and data security

4.2.1 Introduction and expected outcome of process

In matters of privacy protection and data security, service users (or their advocate or legal representatives) shall be involved. The service user has the right to access his/her data and to consent to data exchange. The privacy of service users shall be protected in a transparent and effective way. Depending on service provider's role in the service chain, this can also be achieved through the use of relevant standards in the ISO 27000 series.

4.2.2 Requirements

The service provider shall:

- a) have an information security policy;
- b) perform Data Privacy Impact Assessments (DPIA).

NOTE The General Data Protection Regulation (GDPR), establishes requirements for circumstances in which a DPIA should be undertaken or reviewed and national Supervisory Authorities can publish local regulatory guidance to support implementation or clarify or amplify the requirements in the GDPR.

In line with GDPR the service provider will be able to demonstrate:

- a) a clear process related to data security, retention and privacy protection;
- b) procedures to enable the service user to monitor data exchange on request;
- c) that the principle of informed consent is adhered to by all participants;
- d) data sharing agreements are in place with all partners, as necessary or required;
- e) a process to define the rights and obligations of employees;
- f) how it makes service users and/or advocates aware of how their information will be used and shared, and how their informed consent to this is captured;

- g) standardized systems for the inputting, checking and maintenance of accurate and up-to-date user information;
- h) that partner organisations involved in service provision are aware of their responsibilities to promote and actively use accurate information in decision-making processes;
- i) procedures to ensure service users and carers have access to their own personal information.

4.2.3 Recommendations

The service provider should ensure that all access to and change of data are logged.

4.3 Service accessibility

4.3.1 Introduction and expected outcome of the process

Technology enabled care services operate to different business models and service visions; some set out to provide a simple service to older people who enjoy high levels of independence and social integration, low levels of need and can organize their own response network while others may specialize to support user groups with high levels of need brought about by multiple or complex conditions and who require professional care and support. While the principles of 'design for all' apply to both exemplars of service, the range of human abilities and characteristics that would need to be considered will differ between these two exemplar services. The existence of different business and service models and the consequent segmentation of the market for technology enabled care services is a valid response to the expression of consumer choice. In such a market, the key issue is that services seek to identify and remove barriers to accessibility for those potential service users who would wish to choose the particular service.

Technology, societal expectations and user needs change over time and services need to reflect this through the adoption of a 'design for all' philosophy and the embedding of 'design for all' concepts within their quality management and continuous improvement processes.

The service is designed and delivered in a manner that promotes inclusivity and ensures accessibility for its intended user group. The service selects and uses technologies and equipment that do not create unreasonable barriers to accessibility to its service users and which support appropriate interconnectivity and interoperation with other consumer and assistive technologies that its service users may have.

4.3.2 Requirements

- a) The service provider shall undertake regular review of the accessibility of its service for people with a range of abilities and characteristics.
- b) The review shall generate an accessibility report which shall, as a minimum, contain consideration of the following:
 - the intended population of potential service users;
 - identification and determination of the diversity of human abilities and characteristics within the chosen service user group;
 - the ways in which humans are likely to interact with the service and the service provider;
 - the ways in which humans are likely to interact with the equipment used within the service;
 - determination of relevant accessibility aspects that should be addressed through the design of the overall service and individual aspects of the service;
 - determination of relevant accessibility aspects that should be addressed through the design of any equipment and technologies used within the service.

NOTE CEN-CENELEC Guide 6 on Accessibility provides useful information on the range of human abilities and characteristics for consideration as well as example questions and methodology that can be used to challenge thinking about the nature of barriers to accessibility for all.

- c) The service provider shall demonstrate how the accessibility review has influenced the design of the service and the choice and selection of equipment used within the service.

5 Operations

5.1 Acquiring alarm service

5.1.1 Determine individual customer and service user needs

5.1.1.1 Introduction and expected outcome of the process

Adequate information is obtained for the service provider and associated stakeholders to reach an informed understanding of the needs of the service user.

The identification of a need for TEC and social care alarm services in particular, can arise in many ways. Customers, service users, their family and carers, or a wide range of support organisations may create the initial request for supportive services. This leads to more detailed assessment of needs and eligibility, where service users are involved in needs identification and decision making. Information about services needs to be widely available and accessible to all, to support informed decision-making and recognition that services will vary according to the needs of users. Informed consent by users to care and support is essential, along with agreement as to how their information will be used. All of these activities need to take account of the wider health and care system(s) in which they operate, so that resulting services complement and coordinate with each other, while prevention and rehabilitation are emphasized.

5.1.1.2 Requirements

The service provider shall:

- a) facilitate different ways of initial contact to the service;
- b) ensure that service users are involved to be able to make an informed decision at every step of the process (where a service user does not have mental capacity or has appointed an advocate, an advocate should be involved to support a best interests decision);
- c) explain how the service links with and relates to the wider health and care system(s);
- d) ensure that service provision is informed by the use of individualized assessment of risks and needs and addresses any ethical issues;
- e) involve the service user in assessing their relevant needs, circumstances and choices;
- f) share the recommendations from the assessment with the service user;
- g) record when service users choose not to have subsequent re-assessments;
- h) ensure that any customer and/or service user preferences or locally agreed procedures relating to specific customer / service user requirements are recognized in the assessment and planning processes;
- i) provide evidence that safeguarding and protection is promoted;
- j) ensure that services are designed to achieve the best possible outcomes for service users and carers;
- k) ensure that service provision is person-centred rather than technology focused.

5.1.1.3 Recommendations

Service providers should:

- a) inform customers and service users about relevant additional services;
- b) coordinate all communication with service users and their carers;
- c) emphasize and prioritize prevention and rehabilitation;
- d) recognize or record any person who is authorized to update service user data or the contract.

5.1.2 Customer contracting

5.1.2.1 Introduction and expected outcome of the process

A contract stipulates the relationship between the service user and/or customer and service provider. The contracted party might not be the service user. The expected outcome is a valid contract signed by the customer, where all parties to the contract agree on obligations and responsibilities.

5.1.2.2 Requirements

The service provider shall:

- a) write contracts in clear, direct and unambiguous language, so that they are easy to read and understood by all parties concerned;
- b) provide a clear statement of the services to be provided to the customer and/or service user, and expected performance levels;
- c) define obligations and requirements of the service user, with regards to home access arrangements, connectivity of the equipment and regular testing, misuse and abuse of service;
- d) state prices and how price changes will be applied, payment conditions and procedures, duration of contract, terms of termination and ownership of equipment;
- e) gain consent from the service user, or from their advocate when the service user is unable to provide consent;
- f) upon request, explain all details of the contract to the service user.

5.1.3 Installation and activation of service

5.1.3.1 Introduction and expected outcome of the process

The installation of any TEC equipment should minimize and manage daily risks and, where possible, improve the quality of day to day living. As part of the installation process, service users and / or their carers, where appropriate, are provided with information and explanation of the equipment and its use. The installation of equipment is an integral part of the service user's acquisition of a TEC service and encompasses much more than simply the setting up of equipment. Service users and carers are actively involved at every stage of the installation process and will be supported to make choices related to the way in which the service is provided.

5.1.3.2 Requirements

Service providers shall:

- a) ensure that a risk assessment associated with the service user's environment is completed prior to installation;

- b) assess the telecommunications link at the service user's premises and select equipment appropriate to that link;
- c) have written procedures for responding to and reporting safeguarding concerns, and ensure that these procedures are adhered to;
- d) inform the person undertaking the equipment installation about all aspects of the individual's assessment that could influence the design and outcome of the installation;
- e) wherever practicable, offer service users choice both in the type of equipment installed and the way in which it is used;
- f) explain how the service works, when to trigger the alarm and what will happen when the alarm is raised;
- g) explain the limitation of equipment use to the service user and/or their carers;
- h) explain to the service user, and/or their carers, the importance of maintaining equipment connectivity and regular equipment testing;
- i) have adequate employer, contractual, public and professional liability insurance cover;
- j) have policies and procedures with regard to infection prevention and control;
- k) ensure that at the point of installation, equipment is demonstrated to the service user, or carer and tested for communication with the intended destination in accordance with manufacturer guidelines;
- l) have procedures for consent to and proper attachment of equipment to the structure of a building;
- m) provide all concerned parties with all relevant documentation;
- n) provide a customer / service user helpline.

5.2 Using the alarm service

5.2.1 Raising an alarm

5.2.1.1 Introduction and expected outcome of the process

It is important that the alarm supports the service user and helps them feel safe. Therefore, safety and reliability of the service are of utmost importance. All alarms raised are passed on to and received by the service provider.

5.2.1.2 Requirement

The service provider shall have a process to monitor that the equipment is capable of transmitting a signal to the alarm receiving service

5.2.2 Alarm call handling

5.2.2.1 Introduction and expected outcome of the process

It is important that appropriate alarm call handling and follow up when an alarm is triggered is ensured. Therefore, safety and reliability of the service are of utmost importance.

In many cases operational and coordinating processes are distributed among various actors. It is crucial these are clear for all involved. Assurance that all received alarm calls will be handled appropriately, as determined by the situation and service agreement.

5.2.2.2 Requirements

The service provider shall:

- a) have alarm call-handling procedures for the types of alarm calls generated;
- b) ensure that each received alarm call is handled correctly in accordance with procedures and contractually agreed performance levels;
- c) have a clear process definition of its operational and coordinating processes, related to alarm call-handling and follow up;
- d) document and implement a triage and priority determination procedure for incoming alarm calls;
- e) have accurate up to date information available regarding the service user, needed for triage and response;
- f) document and implement the procedures for different outcomes of the triage, including follow-up and escalation processes;
- g) where the alarm recipient has dispatched a responder, ensure that the responder accesses the service user's premises in accordance with the contract;
- h) ensure that all alarm calls and actions taken are logged, including time stamps;
- i) record all voice calls and other electronic communication related to the service and have defined retention periods;
- j) have processes in place to enable communication with all service users, in all situations, and for all abilities;
- k) treat the service user with dignity and respect at all times;
- l) involve partner organisations where appropriate and subject to service user agreement.

5.2.2.3 Recommendations

It is recommended that information provided by the service user in respect of any pre-existing medical conditions is available to the alarm recipient.

NOTE Both medical telecare and social telecare services exist within Europe. Where the telecare services operate to a social model it is not necessary for that service to hold information on medical conditions of the service user.

5.2.3 Responder Services

5.2.3.1 Introduction and expected outcome of the process

Responder services provide support to the service user as a result of the alarm triage process or as a concern for welfare. The responder services ensure the provision of routine and emergency responder services appropriate to the needs and wishes of the user.

NOTE Routine responder services cover actions of the social care alarm service where scheduled welfare visiting and reactive home care activities are part of the service model.

5.2.3.2 Requirements

5.2.3.2.1 General requirements for all responder arrangements

The service provider shall:

- a) have procedures in place, which define how the responder service will be utilized and under what conditions;
- b) have procedures in place for managing formal responders;
- c) have procedures for managing the non-availability of informal responders;
- d) make sure that the responder has access to relevant service user details, so that appropriate assistance can be provided;
- e) provide assistance to the service user, whilst taking into consideration the condition of the service user;
- f) keep the alarm receiving service informed of progress and advise when the incident can be closed;
- g) provide feedback on the outcomes of the response to the incident to the alarm receiving service;
- h) have procedures in place, which deal with the death of a service user.

5.2.3.2.2 Requirements for formal responder services

The formal responder service shall:

- a) ensure all staff are trained and competent in the use of First Aid, which shall be provided when necessary;
- b) ensure that all service equipment is maintained, tested and working in accordance with manufacturers' guidelines;
- c) ensure that the responder has all necessary equipment as appropriate to the needs of the service provided;
- d) have adequate staff resources to deal with service demands;
- e) provide personnel with appropriate Personal Protective Equipment (PPE), which shall be used when appropriate;
- f) proceed to the correct address of the service user as quickly as possible;
- g) gain access to the service user's home by the correct method as has been provided to responder;
- h) conduct a dynamic risk assessment on arrival at service user's home, which as a minimum, will include:
 - i. the safety and welfare of the service user;
 - ii. the responder's safety;
- i) have links and data sharing processes with emergency services in place;
- j) complete reports on all actions taken during the incident for the service user, carer or customer;
- k) where lone workers are utilized, conduct risk assessment and provide support mechanisms as appropriate.

5.2.3.3 Recommendations

It is recommended that the service provider ensures that all follow up actions are identified and referred to the appropriate support agency.

5.2.4 Access management

5.2.4.1 Introduction and expected outcome of the process

In order to provide the necessary assistance to the service user, the service provider may need to access the service user's home. Consideration for methods of access includes the service user's safety and security and protection from distraction burglary. This process describes how this should be achieved. The service provider gains access to the service user's home in a safe manner in line with the service agreement.

5.2.4.2 Requirements

The service provider shall:

- a) have an up to date access management policy that is made available to the service user and/or their carers;
- b) ensure that all formal responders can work with the access management methods the service provider supports;
- c) identify and advise the service user on different methods of access and agree to provide a suitable solution;
- d) provide advice to the service user on the need to check with their home insurer on the choice of access solution;
- e) where applicable, agree access arrangements with the owner of the building;
- f) ensure secure handling of keys and access codes;
- g) maintain records of who enters the home and when, related to the service, and the reason for entry;
- h) have a forced access policy.

5.2.5 Customer billing and income collection

5.2.5.1 Introduction and expected outcome of the process

The customer is billed for the correct amount agreed in the service agreement. The bill is paid by the customer according to the agreed payment method. The service provider receives the correct amount of money.

5.2.5.2 Requirements

The service provider shall:

- a) have a transparent and customer-orientated billing, payment and income collection process;
- b) inform the customer about all costs linked to the service;
- c) offer flexible invoicing and payment methods;
- d) offer the opportunity for multiple parties to pay parts of the invoice;
- e) have debt management policies and procedures;

- f) undertake analysis of the reasons for customer payment arrears.

5.2.5.3 Recommendations

It is recommended that there are no early termination fees in the case of the service user terminating the service because of death, hospitalization or entering residential care.

5.2.6 Incident management

5.2.6.1 Introduction and expected outcome of the process

Incident management covers unplanned operational events ranging from service user events and service user equipment failures all the way to total loss of alarm receiving or data processing facility. Incident management is intended to minimize or eliminate the impact of incidents on the service provided to the service user, through quick and effective resolution.

5.2.6.2 Requirements

The service provider shall:

- a) have procedures for managing and resolving all incidents;
- b) have escalation processes for incidents and their management;
- c) train appropriate staff in incident diagnosis and rectification;
- d) establish timescales for incident resolution;
- e) develop working practices with their partners to manage the impact of incidents on the entire service chain;
- f) establish procedures to learn from incidents and implement change;
- g) keep records on all incidents;
- h) implement corrective actions and improvements in response to incidents;
- i) encourage feedback as part of a continual improvement of the service chain;
- j) embed incident management capability to ensure continuity of priority functions and key services to service users during a disruptive event;
- k) have procedures in place to address and escalate incidents arising from the failure of the link between the service user's equipment and the telecommunications network.

5.3 Service user engagement

5.3.1 Re-assessment of the service user needs

5.3.1.1 Introduction and expected outcome of the process

The service user's needs and wishes will change over time. The individual service specifications remain appropriate to the service user as an individual throughout the time on service.

5.3.1.2 Requirements

The service provider shall:

- a) have regular contact with the service user at defined timescales to assess their changing needs and whether the service still meets those needs;

- b) make a re-assessment after a service user event or following receipt of information suggesting changes to the service user's circumstances;
- c) ensure that each re-assessment includes identification of any impact on the specification of service provided to the individual service user;
- d) demonstrate that the TEC package continues to contribute to the achievement of agreed outcomes.

5.3.2 Complaint management

5.3.2.1 Introduction and expected outcome of the process

All complaints are recorded and investigated and achieve a satisfactory resolution.

5.3.2.2 Requirements

The service provider shall:

- a) establish and maintain complaint handling processes, which cover complaints reporting, recording of complaints, investigation, resolution, typical timescales and appeals;
- b) provide information on how complaints can be made;
- c) acknowledge receipt of the complaint;
- d) take ownership and lead the complaint investigation;
- e) provide information to the service user and/or their carers about the independent organization to which they can appeal in the event that they are unhappy with the outcome of their complaint;
- f) agree on performance indicators with other chain partners and include these in contracts;
- g) evaluate complaints and the complaint process to help improve the service.

NOTE Guidelines for handling disputes are defined in [ISO 10003](#), *Quality management — Customer satisfaction — Guidelines for dispute resolution external to organizations*.

5.4 Service termination

5.4.1 Introduction and expected outcome of the process

The service can be terminated by the customer, service user, or service provider. It is recognized that, where the service user and the customer are not the same person, information about a request to terminate service will be provided to all parties. The expected outcome is that the service is terminated in accordance with the contract, while allowing the customer, or service user to put in place alternative arrangements.

5.4.2 Requirements

The service provider shall:

- a) have a termination process in place that is in line with the contract;
- b) inform the customer and/or the service user that the service is terminated;

NOTE When no other service is being provided, the service user may need to be informed of the risks in terminating their service, taking into account the circumstances of the service user.

- c) have procedures for de-installation of equipment;
- d) have procedures to facilitate the return any equipment the service user does not own;

- e) notify personal and professional contacts where appropriate.

6 Planning

6.1 Service chain continuity and risk management

6.1.1 Introduction and expected outcome of the process

In order to ensure continuity of service it is important to identify any risk of failure within the service chain and to militate against it. This includes all elements of service provision. Service providers ensure continuous service and develop robust business continuity plans.

6.1.2 Requirements

The service provider shall

- a) demonstrate that a robust framework for managing risk is in place;
- b) perform a risk assessment of the service chain on a regular basis;
- c) have strategies for handling all identified risks;
- d) have a business continuity plan, covering the entire service chain, that is reviewed regularly (at least annually and after any business continuity incident) and has a named accountable person;
- e) conduct regular tests of the business continuity plan, identifying any changes necessary;
- f) ensure that the service chain continuity plan is known to appropriate persons in the chain of the social care alarm service;
- g) have procedures in place to ensure planned staffing levels are maintained in all situations;
- h) demonstrate that its technical infrastructure is resilient, reducing the likelihood of significant disruption;
- i) have procedures in place to address and escalate incidents arising from the failure of the link between the alarm receiving service and the telecommunications network.

6.2 Service Development

6.2.1 Introduction and expected outcome of the process

The purpose of this process is to ensure that services continually evaluate what they do, with the ambition of continuous improvement.

Service providers will have conducted a review of their service and the wider TEC landscape, learned from their experiences and will have implemented changes to move them forward and improve their service offering.

6.2.2 Requirements

The service provider shall:

- a) create an evolving service structure and organisational culture;
- b) have a methodology for improvement and change management;
- c) establish mechanisms to obtain feedback on service use;
- d) at least annually, review all aspects of their service, including complaint logs;

- e) assess the customer and service user perception of the quality of service and implement change where appropriate;
- f) conduct evaluations on existing performance, carrying out analysis on any shortfall and take remedial actions;
- g) conduct ongoing research on user needs with a view to continuous improvement;
- h) through consultation with service users and wider stakeholders, establish what the future service requirements will be;
- i) involve users and carers in developing and evaluating technology enabled products and services;
- j) where new services are being considered, conduct an impact analysis.

6.2.3 Recommendations

Service providers should

- a) develop responsive and flexible service offerings to respond to opportunities within new and existing care pathways;
- b) test new equipment in non-production environments.

7 Support

7.1 Staff and competency management

7.1.1 Introduction and expected outcome of the process

It is important that all staff have received training applicable to their role, but it is also equally important that they have demonstrated their competency to undertake their duties. Service providers are able to demonstrate that all staff are suitably competent to undertake the tasks and duties allocated to them.

7.1.2 Requirements

The service provider shall:

- a) design a staff competency plan;
- b) determine the necessary skills and capabilities that their staff need to undertake their role;
- c) establish staff competency profiles for each job role;
- d) have job descriptions and person specifications for each job role;
- e) ensure that only personnel who have demonstrated competency, are allowed to perform specific roles;
- f) ensure that staff skills and competencies are re-assessed, and that refresher training is conducted and recorded;
- g) ensure adequate levels of supervision and counselling for staff guidance and support;
- h) provide an induction and training programme for all staff, specific for their role;
- i) ensure that all necessary staff background security checks have been performed, to protect the service user.

7.2 Asset Management

7.2.1 Introduction and expected outcome of the process

Asset management refers to all assets used within the service, from alarm receiving service hardware to service user equipment. It also refers to firmware and software. This process helps the service provider to reach its targets in terms of continuity of service with a good knowledge of its assets and a proactive maintenance programme. The service provider tries to minimize the environmental footprint by promotion of reuse through decontamination and refurbishing as appropriate.

7.2.2 Requirements

The service provider shall:

a) have a policy for:

- evaluation of new products;
- procurement of equipment;

NOTE The EN 50134 series of standards provides minimum performance and functionality requirements for social alarm equipment.

- inventory/stock management;
 - equipment maintenance;
 - decontamination and re-provisioning of equipment;
 - identification of equipment for refurbishment and recycling;
 - management of equipment recycling and disposal;
- b) have an operational programming and testing procedure, in accordance with manufacturer technical guidance, for every type of equipment deployed;
- c) have procedures in place for the decontamination, testing and refurbishment of returned equipment;
- d) store equipment in conditions specified by the manufacturer;
- e) encourage the service user to conduct regular test calls to ensure the equipment remains functional;
- f) perform scheduled preventative maintenance according to manufacturer recommendations;
- g) have adequate stock in order to maintain continuity of service and to meet service performance targets.

7.2.3 Recommendations

It is recommended that the service provider:

a) uses an inventory management system which includes:

- a software management system;
- a log for feedback comments on equipment and systems;

- b) is able to track all key events on any equipment, such as software update, complaint, equipment return and refurbishing;
- c) conducts systems failure analysis;
- d) has maintenance contracts where applicable.

7.3 Servicing hardware and software

7.3.1 Introduction and expected outcome of the process

The outcome of the process is that all equipment and infrastructure is maintained and operates as intended.

7.3.2 Requirements

The service provider shall:

- a) ensure and demonstrate that all equipment is maintained and tested in accordance with manufacturers' guidelines;
- b) identify the hardware and software that needs servicing, plan, implement and control the servicing processes for the identified hardware and software;
- c) test equipment whenever a maintenance intervention has taken place;
- d) have a planned maintenance/replacement programme for all equipment used in the service;
- e) have an effective maintenance system that will identify and report any missed maintenance activities or fault interventions;
- f) have processes in place to inform the service user of actions that will be taken in the event of equipment failure;
- g) demonstrate that there are robust asset management processes in place.

7.4 Alarm receiving centre and environment

7.4.1 Introduction

The design of the environment within which alarm call handling takes place is crucial to the security and effectiveness of the service.

NOTE EN 50518 and [ISO 11064](#) provide guidance on the design, construction and layout of facilities.

7.4.2 Recommendations

The alarm receiving centre should be designed and constructed in accordance with the requirements in EN 50518.

8 Performance evaluation and improvement

8.1 Performance management and evaluation

8.1.1 Introduction and expected outcome of the process

The services, underlying processes and customer /service user perceptions and expectations are to be reviewed on a regular basis, in conjunction with partners in the social care alarm service chain. The aim of this process is to improve the effectiveness and/or efficiency of the service and the social care alarm service chain.

NOTE ISO/TS 13131 contains descriptors for quality requirements, quality objectives and quality procedures.

The service provider monitors customer / service user perceptions of the degree to which their needs and expectations have been fulfilled.

Development of an open partnership working culture, which leads to improved effectiveness and/or efficiency of the service.

8.1.2 Requirements

The service provider shall:

- a) have a performance management process in place to regularly review the performance of the service against KPIs;
- b) establish KPIs to assess the quality, reliability and customer experience of their service, which as a minimum shall include:
 - alarm call acceptance time;
 - call triage time;
 - time from completion of triage to mobilization of response;
 - where a formal responder service is in place, time from dispatch to arrival;

NOTE [Annex A](#) contains informative exemplars of KPIs that a service provider might adopt.

- c) have procedures for collection, analysis and evaluation of feedback from service users and customers;
- d) undertake regular review of the performance of the service;
- e) share feedback and performance information with partners in the social care alarm service chain;
- f) have a process in place to identify, implement and maintain service improvement opportunities. Each organization within the social care alarm service chain shall evaluate the processes that link the organization to the other partners within the social care alarm service chain;
- g) make information on their KPIs publicly available.

Annex A (informative)

Key Performance Indicators (KPIs)

A.1 General

This annex contains a list of exemplar performance indicators for service providers to consider using within their services. The values given in the examples are indicative and subject to change by service providers to better reflect and challenge their service provision.

Service providers applying other European standards will need to adopt the performance indicators stated within those standards.

A.2 Acquiring alarm service

Time taken from receipt of initial referral to making an appointment with the service user for assessment and/or installation

Example value: 5 out of 10 urgent referrals in two working days and remaining referrals within five working days

A.3 Determine individual customer and user needs

Time taken from receipt of initial referral to completion of an assessment of needs with the service user

A.4 Installation and activation of service

1. Time taken from initial referral to completion of installation
2. Time taken from contract signing to completion of installation

Example values:

- 9 out of 10 URGENT installations completed within 2 working days – remaining installations completed within 5 working days
- 9 out of 10 NON-URGENT installations completed within 15 working days – remaining installations completed within 20 working days
- 9 out of 10 NON-STANDARD installations completed within 15 working days – remaining installations completed within 20 working days

A.5 Raising an alarm

KPIs for availability and transmission time of the alarm transmission system are set out in [EN 50134-5](#).

A.6 Alarm call handling

1. Time taken from receipt and acknowledgement of alarm within the call handling platform to acceptance and commencement of the triage

Example values:

- 80 % of calls answered within 90 s
- 100 % of calls answered within 180 s

NOTE [EN 50134-7:2017](#), Clause 9.1 e) contains applicable KPIs for alarm call handling activity.

2. The monthly % availability of the ARC as calculated in conformance with EN 50518:2019, Clause 9.1.12
3. Time taken for the operator to identify and activate an appropriate response

Example value: once the call has been accepted, triage should be completed within 60 s

4. Assuring appropriate request for intervention of the emergency services

Example value: maximum 2 % of total incoming calls result in a request for intervention to the emergency services

A.7 Responder services

Time taken for a responder service to arrive at service user's home from mobilization by the call handler

Example values:

- 9 out of 10 responder visits to arrive at the service user's premises within 45 min of the decision to deploy, remaining responder visits within 60 min of the decision to deploy
- the responder service has a first-time contact availability for mobilization of 99 %
- the responder service answers 75 % of mobilization calls within 90 s
- the responder service updates the alarm receiving service within 30 min of arrival
- the responder service completes and files the incident report within 24 h

A.8 Access management

The number of occasions when the agreed access arrangement fails to provide access

Example values:

- agreed access arrangements fail in less than 10 % of responder mobilizations
- number of forced entries after a response

A.9 Customer billing and income collection

Customer billing is timely and accurate

Example value: 100 % accuracy and timeliness

A.10 Incident management

Time to resolve an incident

Example values:

- 90 % of incidents should be investigated and resolved within 5 working days

- major incidents should be investigated and resolved within 1 working day
- no more than 5 % of incidents should lead to new functional requirements
- 90 % of customer equipment failures resolved within 5 working days

A.11 Service continuity

Alarm receiving service availability

Example value: no more than 15 min downtime in any individual alarm receiving service incident and no more than 120 min aggregate in 12 months

A.12 Complaint management

Time taken to acknowledge and resolve a complaint

Percentage of complaints satisfactorily resolved without recourse to external arbitration

Example value: 90 % of complaints satisfactorily resolved within 30 calendar days

A.13 Service user data accuracy

1. Time taken to update a service user's record from receipt of information about changed data. Performance to be calculated on a monthly basis

Example value: 100 % are updated within 24 h of receipt

2. Number of service user records identified as containing incorrect data as a percentage of all service user records. Performance to be calculated on a monthly basis

Example value: X% of service user records (service provider defined value)

3. Frequency at which service users are contacted to update or confirm their personal data

Example value: service users are contacted every two years and 95 % confirm or update their data

A.14 Asset management

1. Timely undertaking of planned maintenance

Example value: 90 % of planned maintenance activities performed within one month of the due date

2. End of contract recovery of equipment from service users

Example value: 90 % of equipment recovered within 7 days of termination of service

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389 Chiswick High Road London W4 4AL UK

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