



TRAINING

OF EMERGENCY CALL TAKERS



The call taker's tasks are complex by nature. One of the key tools available to equip the emergency call takers for these challenges is education.

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UPDATED DOCUMENT



Version: 1.1

Revision date: 10/05/2019

Status of the document: APPROVED

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INTRODUCTION

Today, emergency response is facing a rich variety of social, technological, economic and even global challenges, requiring adaptation and evolution. The call taker fulfils a number of critical functions¹ revolving around the complex task of emergency call management and related processes. The roles may differ from one 112 model to other, yet the individual characteristics of emergency call takers are similar.

The call taker tasks, which are complex by nature, require analytical skills, multi-tasking, interpersonal and crisis management skills. Numerous factors and barriers can affect the realisation of these tasks; including decision-making under time constraints, quality of available support in the management of resources and decision-making, effective communication, coordination, cooperation and mutual awareness within a broader team of involved specialists. Psychological factors at individual level like personal skills, adaptive behaviour and coping strategies play an important role in shaping the performance of call takers as well.²

One of the key tools available to equip the emergency call takers for these challenges is education, which reflects and incorporates all the above-mentioned issues. Education also



Emergency call takers' education is continuous and is flexibly adapted to the changing environment and processes of the PSAPs. This document describes the main issues related to training, assembles the relevant information and outlines the general principles and objectives.

integrates the work of researchers as well as the experiences gathered in the course of service provision. It is continuous and flexibly adapted to the changing environment and processes in the PSAPs, and provides the call takers with the necessary knowledge, skills and support in their role.

The objective of this document is to describe the main issues related to the training of emergency call takers whilst assembling the relevant, currently available information about this issue, outlining some of the general principles and objectives.

1 | PROFILE OF CALL TAKERS

In general, the profile of the emergency call taker is defined based on the task and individual characteristics required for the call taker role. These should be incorporated into the process of evaluating individual applications for call taker training and enrollment. The specific attributes of emergency call taking require a closer analysis and integration of the psychological aspects of this job into profiling and educational strategies.

1.1 PSYCHOLOGICAL ASPECTS OF EMERGENCY CALL TAKING AND THEIR ROLE IN EDUCATION

It has been pointed out that the reality of emergency call taking is abusive callers, an exposure to traumatic events, conflict and obstructive callers, as well as hearing emotional, domestic and personal tragedy. This is combined with an expectation to be resilient and having little time to reflect, reset and collect your thoughts on some shifts.³

In addition to the internal processes and individual knowledge base, the performance and well-being of call takers is also determined by the dynamics of cooperation and communication under various environmental factors, as well as by the impact of work settings. Literature on occupational stress among emergency personnel emphasises the direct contact with distress, injury, violence and death as central causes of stress.⁴ The tension between competing needs of call takers (dispatchers) to act instantaneously while simultaneously not overstepping decision-making power, combined with inadequate resources contribute to escalating powerlessness and cumulative stress levels.⁵ The sense of responsibility is complicated by their role as intermediaries between the distressed, frequently panicked and incoherent public and paramedics.

In order to avoid an unwanted impact on human resources and institutional capacities, these identified stress factors require systematic attention at a personal level and comprehensive actions at the institutional level of PSAPs. They should also be reflected in the educational and in-service training context. In an ideal setting, they should translate to the development, implementation, evaluation and maintenance of stress management programmes in work settings (of the PSAPs). The programmes should have a clearly defined purpose, delineated individual and organisational goals and defined mechanisms of organisational support, which are to be integrated into existing occupational health and safety strategies.

Stress management might include management or supervisory frontline support, occupational health and easy access to it. You can also introduce quiet zones/safe places and workplace activities. Both yoga sessions and mindfulness sessions at work locations might be useful.⁶

2 | TRAINING CONTENT

Emergency call takers answer and process emergency calls that may relate to an acute illness or injury, traffic accidents, crimes, incidents that threaten law and order, fires, or social emergency situations. The call taker finds out what has happened and where, gives the assignment a risk classification and then alerts the help needed to the accident scene. The operator must also assess the health risk of the patient with the help of information given about the situation and incident. The demanding work of emergency call takers includes interaction with people in crisis, providing advice about first aid, fire extinguishing or other instructions services if needed, and supporting the alerted medical, police or fire & rescue units in their work on the scene.

Considering the fact that 112 models differ, thus the tasks of call takers and the needs for training program might vary, it is useful to follow the training cycle when preparing the training programme for call takers. First, you should identify the training needs. After all the following steps (see Figure 1 below), you must finally evaluate whether the goal was achieved and if needed you can start the cycle again. The same cycle can be used when planning and conducting individual training.

Given the individual and organisational costs related to the pre-job and on-job training of emergency call takers and their relation to performance and job satisfaction, there is a constant need to explore educational needs and upgrade programmes. This should be done from empirical and theoretical, as well as institutional and intervention related perspectives. The organisational structure of PSAPs and educational support can be a powerful conduit for change in reducing distress and improving employee morale and performance. Thus, they represent an important factor of institutional and economic sustainability of the 112 systems. It is highly advisable to actively participate in the development of educational programmes and in-house education strategies at the level of service providers.⁸



Figure 1 – Based on Training Cycle from Brookes & Kirk⁷

2.1 GENERAL PRINCIPLES

For basic and ongoing training, as well as for the quality control of such training, standards should be developed emphasising the scientific basis (where it exists) and generally accepted good practice. Training of a professional standard which is recognised and evaluated by peers should be established.

The main principles when developing the training programme to think about are given in the table below.

<p>Link between theory and practice</p>	<p>Training should not only be based on theoretical presentations and prescriptions but should also include extensive theory/practice links. It should also be based on learning from experience and further developing the resources of the participants. Training should be formed to encourage a gradual development of skills (based on gathering experience of responding to accidents, critical incidents and mass emergencies). Skills and ability to effectively respond should be increased by real-time exercises.</p>
<p>Improving personal skills</p>	<p>Training should improve personal skills, attitudes, experience, and group capability for providing emergency management support in a cooperative work situation. Training needs to be adapted according to the specific roles and tasks that staff will be expected to fulfill, and this should add to and complement the training of the general models of emergency management.</p>
<p>Common Language</p>	<p>Considering the multidisciplinary nature of the tasks, a basic knowledge and common language should be developed in relevant fields of expertise.</p>
<p>Values</p>	<p>Methods, procedures and protocols for the emergency response should be explained, discussed and included in training. Examples of this include communicating in an unobtrusive way with those affected by the emergency and providing adequate information in a sensitive manner. Discussion of values and general principles is essential for the development of appropriate attitudes towards people affected by emergencies. Training should also therefore include and recognise the human potential that takes account of the autonomy, survival skills and creativity of “victims” as its starting point. Attention to democratic rights and personal liberties and developing sensitivity towards cultural diversity, age and gender aspects is also very important.</p>

<p>Joint Training</p>	<p>Joint training with first responders encourages mutual understanding and support effective future cooperation.</p>
<p>The use of methods of active learning</p>	<p>Training with peers and the use of methods of active learning can help PSAP staff to recognise their own personal limits (self-awareness) and the limits of interventions in crisis situations (emergencies) in general, so as to reduce the risk of burn-out and traumatisation. Stress management methods should be included in the educational process and at an individual level can include methods like muscle relaxation, meditation, biofeedback and cognitive strategies, taught to employees as a means of reducing psycho-physiological and subjective distress. Thus, the individual is provided with the skills for recognising and coping with work related stress.</p>

Table 1 – Main principles of call taker training programmes

Call centers have a unique working environment characterised by working practices that can present hazards and systems of work that differ from those of other computer-based office jobs. Call centre ergonomics and the environment should be included in the training course, including the provision of necessary skills on working with all basic PSAP equipment. Call takers should also be trained on how to recognise such ergonomic risk factors (i.e. awkward postures, repetitive and sustained movements and forces associated generally with Occupational Overuse Syndrome).

Financial aspects and plans for continuous in-service educational support, as well as the evaluation of the effectiveness and outcome of training also need to be considered.



2.2 BASIC PREREQUISITES OF EFFECTIVE AND SUSTAINABLE TRAINING PROGRAMMES

The most basic precondition of the realisation of effective training programmes in general is the availability of enough administrative, technical and financial resources. Basic principles related to the quality of programmes include:

- an analysis of needs and content tailored to these needs and harmonised with educational and occupational profiles of the target group (emergency call takers),
- formal accreditation of educational programmes as a prerequisite for their replication, quality management and sustainability of the defined educational system from a long-term perspective,
- continual education using modern technologies, the use of a balanced combination of in-class and distance learning, theory and practice and active interaction between trainees and trainers,
- accessibility of education at national and regional level, ideally with an established network of experienced trainers/instructors,
- legislative and institutional motivation schemes, encouraging further education (life-long learning) for call takers, for example through a system of financial or other incentives related to achieving higher levels of relevant formal education.



2.3. POSSIBLE TRAINING-RELATED OBJECTIVES AT INSTITUTIONAL (PSAP) LEVEL

To make sure that training is done thoroughly, completely and in a standardised manner and to ensure further in-service support, every PSAP should ideally have a training manual for call takers. The manual can be issued to each new employee or easily accessed in online (e-book) form. It sets out in clear, printed form what tasks are to be performed, what behaviour is to be expected, and how each task can be successfully performed. The document then becomes a point of reference for every employee if a question arises about a particular policy, procedure or method.⁹

In Estonia there is a manual for call takers and dispatchers where all the relevant information about call handling is described in detail, from call taking to dispatching operational units. Previously, there had been many different documents with relevant information, making it difficult to manage them. One document which covers all the activities and is available on the intranet is much more practical. When changes are made in the working procedures or legislation, only one document should be updated. The document provides relevant information both for new and experienced call takers.

EXAMPLES OF SHORT-TERM OBJECTIVES

Objectives defined, based ideally on an annual analyses of staff educational needs, while reflecting upon the strategic goals of the institution (PSAP) and implemented based on a predefined schedule integrated into the organisation's human resources management (or development) planning scheme.

EXAMPLES OF MIDTERM OBJECTIVES

To standardise the quality of collected information/data (e.g. in a medical emergency context) and/or the quality of communication strategies in the call taking context.

To standardise the system, process and quality of educational support provided within the organisation (at PSAP level), by providing high quality and relevant input (e.g. through online educational platforms/programmes, co-shaped by call takers and their trainers/supervisors) and providing motivation towards continual learning, while encouraging stability in the working environment of call takers to avoid unwanted and costly turnover of staff.

EXAMPLES OF LONG-TERM OBJECTIVES

To standardise operational procedures (either at regional or national level), to harmonise procedures in different geographic and cultural settings and with relevant internationally accepted standards:

- building and strengthening the PSAPs corporate culture, trustworthiness and credibility,
- systematically utilising professional and personal skills of call takers, encouraging and actively supporting life-long learning, application of experience, exchange of best practices and implementation of research results into training and operation procedures,
- introducing call taking support mechanisms (like CAD), encouraging active caller support and effective coaching skills acquisition, introducing call takers to mass emergencies management strategies.



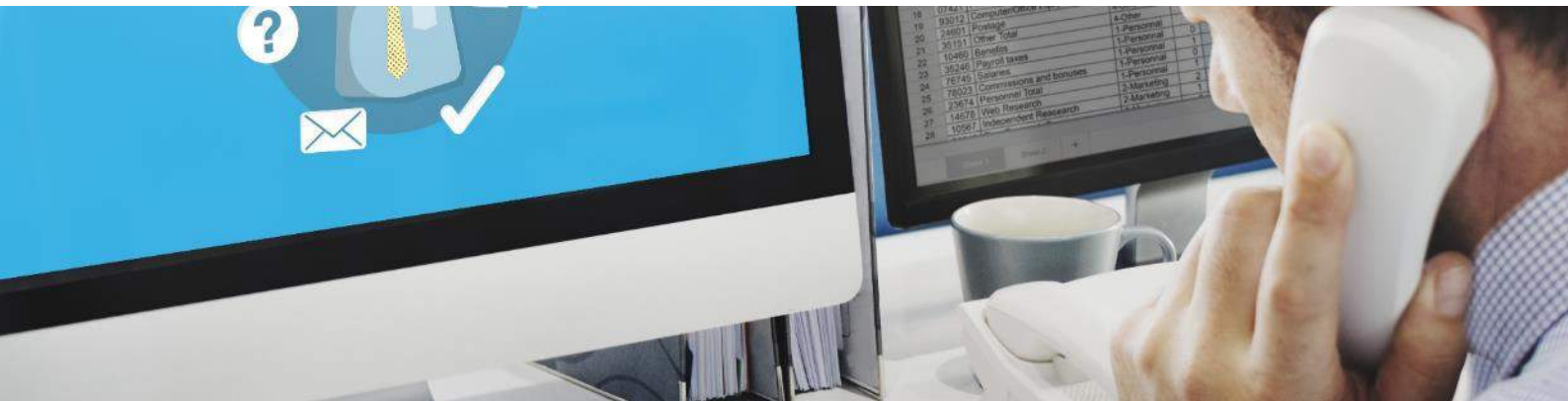
3 | GUIDELINES

3.1 BASIC FRAMEWORKS

The main goal of an educational strategy should be to ensure adequate information, instruction, training and supervision is provided for all emergency call takers. Basic frameworks for the educational requirements of emergency call takers are most commonly defined at national level and in some cases provided by the national legal frameworks (such as Occupational Health and Safety Acts, Acts on professional preparation, educational criteria and continual education of health workers and other rescue services staff etc.) setting out the legal requirements for employees involved in emergency call taking at PSAP level.

The PSAP employment strategies and human resources management standards of individual organisations also shape the professional (educational) profiles of emergency call takers, setting out institutional requirements for their required educational background and continuous in-service training.¹⁰





Examples of the regulations include the obligation of employers to:

- Provide training and information to employees about safe working practices, for example correct work methods and postures and the correct use of tools, machinery and other equipment.

In relation to employees:

- Adequate information, instruction, training and supervision to be provided for all PSAP workers
- An institutionalized process for consultation with employees
- Institutionalized process for identifying educational needs and support mechanisms meeting them put in place at PSAP level

3.2. Main areas to be addressed in call taker education

The role and competence profiles of the emergency call taker, combined with the institutional framework and ongoing reform/evolution of the PSAP's role and mandate and the wider context of legislative and other frameworks shaping the emergency services present a set of requirements that have to be transformed into the educational curriculum of call taker training programmes. The centre of focus, at all times, are and should be the needs of the citizen facing an emergency and in need of effective and timely assistance. The preparation of call takers to address these needs in a competent manner within their mandate.

Table 2 – Main areas to be addressed in call taker education

Address key components	Addressing aspects of all key components of the 112 service chain, including location of the caller, classification procedures, dispatch schemes, use of technical equipment, specific procedures in large-scale emergencies and others.
Complex preparation	Complex preparation for emergency call taking addressing, among others: effective communication with callers, legal and other frameworks for service provision, processing of emergency calls, risk analyses and integrated management of emergencies, telemedicine (including basic life support, advanced life support and other forms of assistance that can be provided via telephone in medical emergencies), ethical and psycho-social aspects of call taking, stress management methods and other relevant topics. This is aimed to equip call takers with the necessary knowledge and skills, preparing them for effective team work as well as coordination roles.
All relevant contexts	Emergency management in all relevant contexts, including coordination of rescue services interventions in emergencies at operational, tactical and strategic levels.
Language education	Language education (in the context of multilingual services, communication and interoperability with other national and international emergency management systems).
Communication & information technologies	Utilisation of communication and information technologies, including applications used for processing calls and data, as a precondition of effective realisation of call taking related tasks, as well as ensuring data flow throughout the system, ensuring coordinated management of emergencies.
Personal development	Personal development in the context of the call taker role and required competencies.
Supervision / leadership skills	Function related education and development of supervision/leadership skills of staff in management positions at all levels, in the context of coordination of emergency management, institutional development, human resources, process and project management.
Management specific emergencies	Preparation and training of key staff for their roles in the context of management of large-scale (national/international) emergencies, disaster risk reduction & management and national (public) security related events.



3.3. ETHICS IN CALL TAKING

For an emergency call taker, the issue of ethics can arise at almost every turn. And when it does arise, there is unlikely to be a unanimous opinion on the "right" path to take. But honesty, integrity and reliability are a cornerstone of the public safety profession and making the correct choice is a critical component. That is why ethics should be a part of a new call taker's training, and part of their continuing in-service education, as well as a basic component of a culture of "organisational accountability" at PSAP level.

4 | TRAINING PROCEDURES

The systemic approach of training for emergency call takers varies both at institutional and national levels. In Finland, it is a university level programme, while in some other countries a brief training course. Some PSAPs organise their own continual on-job training programmes, while others rely on education services of other institutions. What also varies significantly is the training methodology used: in some cases including a combination of theoretical and practical training, complemented by experienced peer support (on-job guidance), hi-tech simulation-based and online training through webinars and other tools and sometimes joint training with rescue services staff (often focused on integrated management of large-scale emergencies).

The level of educational support, supervision, testing and continual support made available to emergency call takers varies significantly. There is great potential for fostering closer cooperation of involved educational institutions, 112 PSAPs/service providers and other key stake-holders. All should be focused on the definition of educational standards, development of educational programmes and tools fostering the provision of necessary information to emergency call takers and sharing best practices in the relevant areas.



5 | CHALLENGES AND ISSUES FOR 112 SERVICES

5.1 EMBEDDING PROGRESS IN THE EDUCATIONAL SYSTEMS

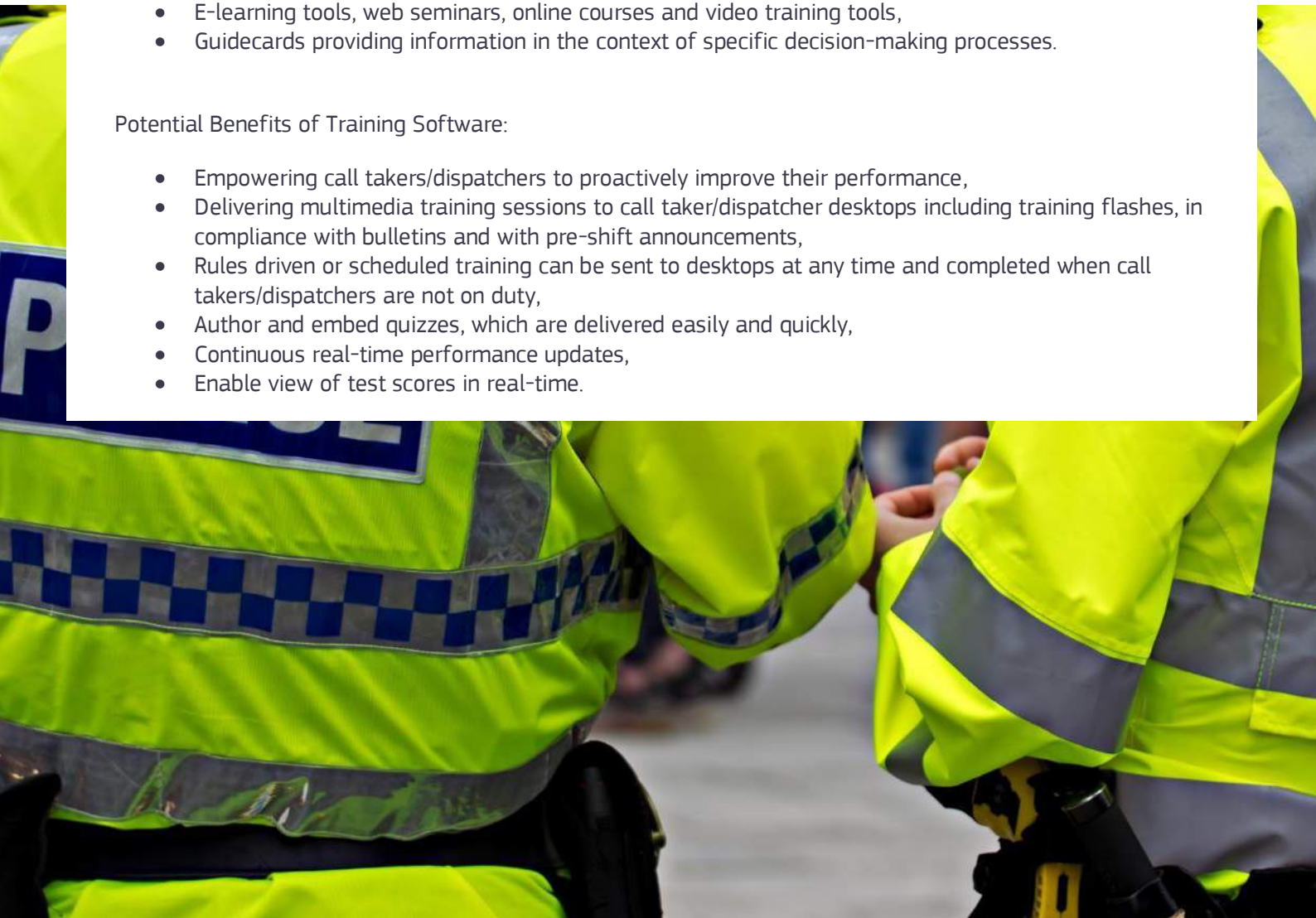
As support systems develop and are being introduced into the PSAP environment alongside new services and procedures, it is of crucial importance to ensure that the training systems adapt and develop alongside these changes. One of the aspects that should be considered in this context is the systematic inclusion of technological training tools in the training portfolio.

Potentially helpful technology that can be included in training process:

- Software, guiding through emergency calls and recording calls for future analyses of data and processes,
- Databases (on hazardous materials, institutional support networks etc.),
- Electronic guides for specific issues (SOPs, CPR, airway control, childbirth instructions etc.),
- Computer aided dispatch systems,
- PSAP training simulators,
- E-learning tools, web seminars, online courses and video training tools,
- Guidecards providing information in the context of specific decision-making processes.

Potential Benefits of Training Software:

- Empowering call takers/dispatchers to proactively improve their performance,
- Delivering multimedia training sessions to call taker/dispatcher desktops including training flashes, in compliance with bulletins and with pre-shift announcements,
- Rules driven or scheduled training can be sent to desktops at any time and completed when call takers/dispatchers are not on duty,
- Author and embed quizzes, which are delivered easily and quickly,
- Continuous real-time performance updates,
- Enable view of test scores in real-time.

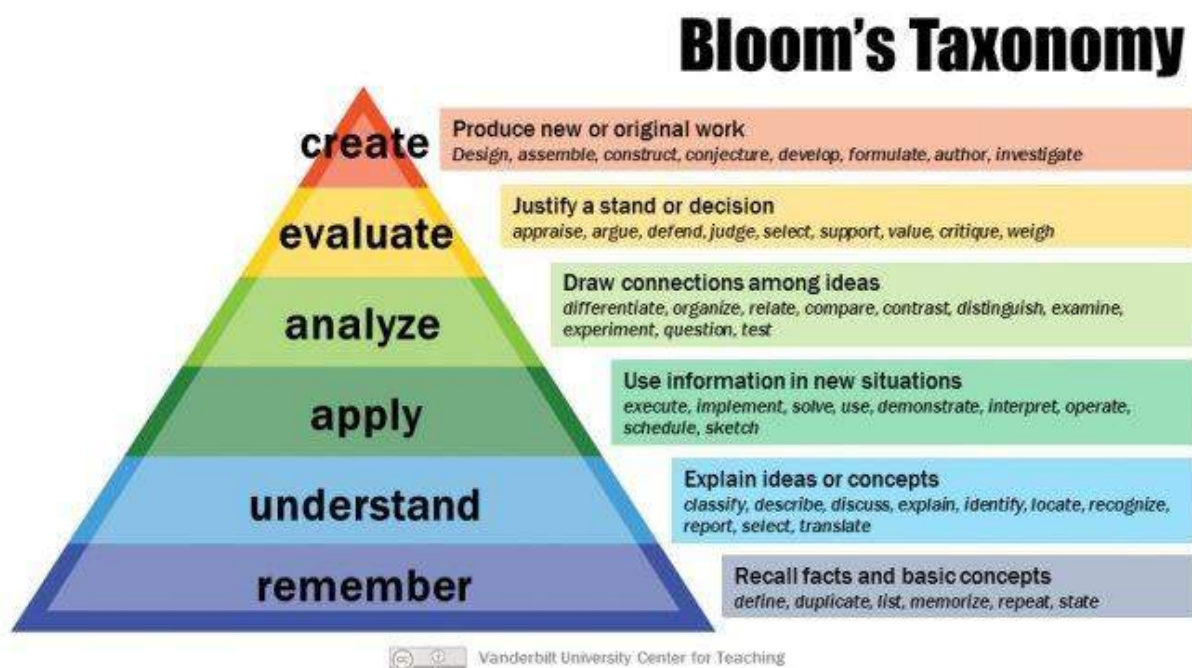


5.2 CONTINUOUS TRAINING

Emergency call takers must adjust to the developing standard operation procedures in the context of emergency management and new services integrated into the 112 service chain, based on technological developments (such as eCall, AML) and the addition of new services addressing the special needs of specific caller groups (such as eSMS). Continuous training is thus a necessary component of institutional sustainability of PSAPs and their services.

Continuous training can be conducted in different forms: internal training, job shadowing, e-learning, personal training, group training, key persons programme etc. In Estonia, all the before-mentioned are in use and the choice depends on the purpose and training need scale.

Figure 2 – Bloom's Taxonomy¹¹



6 | EENA RECOMMENDATIONS

A wider discussion is yet to form on the potential benefits of supra-national training programmes and the role of European Institutions in emergency call taker educational support, but we believe it could potentially lead to new initiatives in support of more systematic support and preparation of this key target group of service providers.

Table 3 – EENA recommendations for call taker training

Stakeholder	Recommended Action
<p>Competent authorities of emergency services</p>	<ul style="list-style-type: none"> • Provide/enable systematic educational support for emergency call takers • Support close cooperation of PSAPs with education and training providers • Enable participatory definition of training needs and performance targets for call takers • Establish risk management plans and critical incidents management support and their inclusion into training programmes • Create joint training opportunities that involve staff of rescue service providers
<p>Call takers</p>	<ul style="list-style-type: none"> • Actively participate in training • Participate in the definition of training needs and performance targets • Provide training-related feedback to management • Share best practices and experiences
<p>EENA</p>	<p>Present best practices in education of 112 call takers to the European public and encourage discussion about improvements in the provided educational support</p>
<p>European authorities</p>	<p>Support creation of public-private partnerships and centres of excellence addressing educational needs of emergency call takers</p>

7 | EENA REQUIREMENTS

Table 4 – EENA requirements for call taker training

Requirements		Status
Availability of training	Availability of a complex, continuous training programme	Compulsory
Training quality	Clear training evaluation procedure and defined standards of training programmes	Compulsory
EENA	Present best practices in education of 112 call takers to the European public and encourage discussion about improvements in the provided educational support	Compulsory
European authorities	Support creation of public-private partnerships and centres of excellence addressing educational needs of emergency call takers	Compulsory



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ANNEX – CASE STUDIES OF RELEVANT BEST PRACTICES



1 | SWEDEN

a) THE TRAINING AND EDUCATION OF 112 CALL TAKERS AT SOS ALARM

People who have passed through the needle's eye of being thoroughly screened and tested for the role as 112 call takers and emergency dispatchers are usually very highly motivated to learn the job. Their greatest fear is making mistakes that may cause a fatal outcome to others.

The greatest challenge then is not to train them initially – though that is certainly a complex task – but to keep that motivation for constant continuous learning and to never lose focus from that important task, year after year, and after hundreds of hours of crisis management.

Purpose of training

From day one of training, it must be integrated into the system that responsibility for competence lays not only with management but with every single individual and as a team at the call centre every day and every hour. Continuous learning and training must be easily available at all times, not only during job introduction.

Method

In an effort to achieve this, at SOS Alarm a mix of “blended learning” (i.e. classroom as well as e-learning), supervised on-the-job training, simulation and tests are used. Details in section c).

Challenges

The method involves challenges to traditional training (where teachers are information-givers more than facilitators and trainers) and subsequential supervising. This issue cannot be neglected but needs to be addressed in order for the method to fully function.

Time- and quality efficiency

Initial efficiency in training may or may not be improved – depending on the amount of technical training involved (Technical training is the major benefactor from simulation or simulated e-learning regarding time elapsed from start to self-sufficient work being done). The major performance gain lies in attitude and responsibilities taken by the individual in the long run, in the continuous training being achieved without planning or time being scheduled for training!

b) BEFORE HIRING: SCREENING OF CALL TAKERS

SOS Alarm practices an extensive scanning, training and trial before hiring on a permanent basis. Applicants are tested and interviewed on ability to make decisions as well as multi-tasking capacity in duress and under critical conditions. The extensive training is then followed by another 3-month period of probation, before management as well as training supervisors finally give the go-ahead based on performance as well as various test results after training.

c) DETAILS OF THE TRAINING

Basic layout of the training during the first seven weeks:

Management introduction, individual e-learning blended with co-worker job participation on a self-directed level

The student is given a set of e-learning modules to go through before the week is over in preparation for the following weeks. Areas involve technical as well as psychological aspects of the job. Emphasis is put on presence of veteran colleagues to recognise and experience real calls – to motivate and understand the skills needed.

Technical simulation and call taking training.

The students are learning and training in a classroom with special training software that simulates the technical system they will later use. Veteran operators with training skills are used as teachers. The exercises use simulated technical issues as well as preferred behavior in call taking situations, skills, knowledge and attitude.

Interviewing techniques and crisis psychology.

In a classroom setting, students discuss and are trained in a variation of interviewing techniques. The basis of crisis psychology, ethics, personal development, and key factors in defusing as a call taker were all part of the self conducted e-learning modules in the first week of preparation. Stress management and how personal attitudes and experience affects the calls, are now being discussed in depth with skilled professionals of these subjects.

Self studies and on-the-job training with peers.

Another week of reading up through e-learning, mixed with practising recently acquired skills in cooperation with veteran peers and supervisors at their designated work station. Preparation for the following weeks in classroom.

Telemedicine

Anatomy and symptoms of deficient vital parameters and consequences. Theoretical as well as practical training in giving instructions for BLS and ALS (Basic and Advanced life support). Further studies in medical aspects continue after this week as well, the extent partially depending on previous training in health care.

The 112-organisation and Rescue services

The services provided through several instances of service providers (municipal, regional and state resources), national emergency cooperation authorities, legal and media aspects of incidents and situations. Combined with practical training in fire fighting.

Security services

Optional for some stations and PSAP.

After this seven-week program of Blended learning the students are subject to another four to six weeks of on-the-job training, working side by side with skilled supervisors. At the end of that period they perform a series of certification tests to prove their acquired knowledge and skills.

A probation period of another three months supervised and evaluated finally by management, is then conducted and the student needs approval before final hiring.

The certification tests must be retaken every 12 months (or if away from work for any reason, on a time period lasting longer than 3 months). During training, there are exercises and minor tests available to the students for the individual to check his or her understanding and progress.

The certification tests are a requirement for staying on the job and can – if failed – lead to termination of the job at any time in their career. In order to not fail the tests, the operators need to read up on new e-learning material and/or attend training provided during the year.

Further follow-ups are also conducted by the use of individual screening of calls – in groups of with the PSAP manager.

d) TEACHERS AND SUPERVISORS

For this concept of blended learning to work, teachers, managers and supervisors need to be involved and understand the purpose and function of the training. Classroom methods differ from traditional training in the sense that the teachers' and trainers' main purpose is to secure the students understanding of the previously distributed e-learning, as well as teaching and discussing new material.

If the teachers are only used to traditional training, they may feel threatened and/or reject the e-learning parts. Students (depending on previous experience and sometimes generation issues) may feel abandoned when all training is not done under supervision of a teacher in a classroom.

Properly addressing this need not be an issue but a positive enhancement in their role as trainers: tedious repetitive tasks can be eliminated as they are handled differently and through the use of software, technical

monitoring and follow ups. The teachers are definitely needed as a resource of deeper understanding and for discussions.

e) 112 MODEL

Sweden uses a mix between:



2 | FINLAND

a) EMERGENCY RESPONSE CENTRE OPERATOR'S TRAINING PROGRAMME IN FINLAND

Introduction

In Finland, this education is an official vocational degree that can be completed in 1,5 years and contains 90 ECTS credits. The training is organised by Pelastusopisto (Emergency Services College) in cooperation with the Police University College and Emergency Response Centre Administration Finland. This degree gives graduates a formal competence (provided by the legislation) to work as an ERC operator in Finland. The training includes both theoretical and practical studies, but most of the studies are more or less practical. It focuses on the holistic handling of the emergency calls (handled by one person in the Finnish ERC system); using the ERC information system, task handling by using instructions from the different authorities

(healthcare, police, etc.), sending the assignment forward to the appropriate units (or deciding not to do it) and providing callers with advice.

The curriculum

ERC operators training must follow the reality of the profession. The curriculum is made by evaluating the requirements needed to fulfill the ERC operators' demanding work. Competence-based goal settings are used to describe the different study modules in the curriculum. The learning process contains many kinds of methods, but the basic goal is to give each student tools to build their professional understanding during the studies. The different learning environments play an important role in all studies. Pelastusopisto (ESC) has the most advanced ERC simulator in Finland and many more unique special units and simulators that are used in the training, not forgetting the specialised instructors on emergency response and all other sectors on emergency services. The curriculum's study modules are the following:

Basic studies:

- Orientation to ERC operator studies and profession (4 cr)
- Health and physical exercise education (4 cr)
- Swedish (5 cr)
- English (3 cr)

Vocational studies:

- Professional communication and interaction skills (6 cr)
- Professional basic readiness (13 cr)
- Emergency response centre operation: simulation learning (10,5 cr)
- Emergency response centre operation: on-the-job learning (10,5 cr)
- Rescue service tasks at the ERC (5 cr)
- Social services tasks at the ERC (2 cr)
- Healthcare tasks at the ERC (10 cr)
- Police tasks at the ERC (15 cr)
- Assessment of competence (2 cr)

Different modules are combined with each other and there are, for example, a lot of joint exercises. That is why the single module credits give you only an overall impression of how much there is about the subject matter on the training.

Entrance requirement and examinations

Courses start twice per year, in August and in January. The basic entrance requirements for the ERC operator course are:

- 18 years of age as the training starts
- By the end of the application period has completed:

- completion of upper secondary school syllabus or
- matriculation examination or
- vocational secondary qualification or a corresponding previous qualification or
- vocational qualification as referred to in the Act on Vocational Education (631/1998) or corresponding previous qualification
- Healthy and otherwise suitable for the ERC operator work. Capable of long-term sedentary work, uninterrupted shift work involving night work

The entrance examinations are held at Pelastusopisto (ESC). The number of invited applicants is three times more than there are starting places. The examination contains the following parts: written exams (English, Swedish and preliminary material), IT test, psychological test and an instructor's interview.

Some additional information can be found on Emergency Services Colleges webpages also in English: <https://www.pelastusopisto.fi/en/>

b) CONTINUING TRAINING: EMERGENCY RESPONSE CENTRE

Continuing training for operative staff at emergency response centers in Finland

Continuing training to support operational activities is organised at the agency and emergency center level. Each year, training plans are drawn up at agency level and in emergency response centres, which define the objectives, implementation, scope and timing of the training. The aim is to organise internal training at least the amount / person per year defined in the annual performance targets of the emergency centre and may be organised on separate training days or shorter periods.

In the planning of the agency level in-service training, the periodic work of the emergency response centre operators is taken into account, so that in the six-week work schedule there would be 1-3 training sessions per person. Operational-related training at the agency level is mainly training of trainers involving persons assigned by the emergency response center (i.e. shift supervisors, senior operators and specialists), whose task is to continue training in their own emergency center.

The aim is to identify common priorities (including recurring seasonal themes) on an annual basis, based on which joint training plans and materials are developed. In addition, emergency centres set their own educational goals.

Educational themes include:

- Processes and roles in the operations rooms
- call handling (including instruction training, positioning, interaction skills & customer service, risk assessment)
- seasonal themes (e.g., water rescue tasks, forest fires)
- information systems (e.g. ERICA, VIRVE, registers)
- co-operation between authorities (e.g. public warning)
- language training (e.g. vocabulary related to emergency center operations)

- instructor skills / instructor skills

In addition to class room teaching, there are other teaching methods available:

- the so-called rooming-in coaching, which means an individual way to teach and control areas of expertise related to one's own work, for example, by evaluating the operator's own call recordings and by analysing face-to-face possible development targets.
- self-study during a shift on the given material or in Moodle's online environment
- reviewing own call records

Shift supervisors and senior operators are key players in the development of operator skills. They observe the work during the shifts and the professional activity of the people in their group. If there is a need for professional development, they can guide their group during a shift or as a trainer according to a predetermined plan, either on their own or on another shift.

Individual learning support is provided to individuals (eg, part-time, older workers) as needed. Individual learning plans are prepared for individuals, describing goals and measures, and evaluating learning after training.

Vocational Senior Officer Training

The aim of the training is to create an overall picture of the managerial field of human resource management and to clarify the role of supervisor and supervisor development path in the emergency response center. The goal is to provide the ability to act as a close associate of your own group. This training does not go through the topics related to the duties of the shift supervisor, which are related to the operational activities of the emergency room, the work of management center work, and safety management or preparedness. The training is carried out in four sections for a total of 8 days.

Training content:

- The framework for supervisor work
- Acting as a group leader
- Functional interaction in managerial work
- Leadership of well-being

c) RE-TRAINING STAFF WITH NEW KNOWHOW: EMERGENCY RESPONSE CENTRE & ERICA

How was it ensured that the personnel in emergency response centers had the know-how to use the new emergency response center ICT system ERICA?

ERICA

ERC Agency Finland implemented a new ERC ICT system ERICA in 2018-2019. ERICA is a nationwide networked information system that provides the 112 services throughout the country. The networked information system enables optimal use of the resources of the emergency response centres and improved ability in different scenarios. The new ERICA system enables obtaining real-time situational picture of the internal security in the whole country in a centralised manner. The ERICA system will be used by the Emergency Response Centre Agency, police, fire and rescue, emergency medical services and emergency social services, as well as Border Guard that in charge of i.e. maritime rescue operations. This is a big technical, but also a cultural change that requires a lot of adoption of new procedures and responsibilities.

Training with new know-how

Emergency response center operators work as call takers and dispatchers. Each ERC operator (including shift supervisors) was trained for the use of a new information system by the system superuser situated in the centre. The knowledge of the ERC personnel was built piece by piece. The training was started with a few hours of online introduction and studies before the classroom teaching, where practice and repetition is everything. The duration of initial class room teaching and basic training was five days and the duration of complementary training to be held in the run-up phase has been three days.

In addition to the ICT system training in call-handling and dispatching, ERC operators are also trained for the use of risk analysis. The training of the risk analysis instructions of the various agencies (police, fire and rescue, emergency medical services, emergency social services and Border Guard) integrated into the emergency response centre information system is given for three days. In addition, a variety of refresher trainings have been organised for the staff and repetition training for those with special needs in special clinics.

All the time each ERC operator has had a possibility to study ERC ICT system ERICA independently in an electronic Moodle learning environment. During the implementation phase there has been on-site support available from superusers of the system and other specialists 24/7 for the first two weeks.

Supervisors and personnel in national command and control center have been provided separate training in the management of system failures and backup processes. There has also been special training for specialists and chiefs of ERCs to the reporting, statistics and analysis tool of the system.

The following training materials have been developed for ERICA: "Become familiar with ERICA" online course, ERICA Basics online course, Basic Training for End User package, risk analysis instructions by each authority, ERICA Deployment training package, and ERICA Emergency Response Center user manual.

More than 40,000 hours have been used for ERICA training in the Emergency Response Center during 2016–2018. This number includes the training of operator personnel and specialists in each center (approximately 500 persons). Police, fire and rescue, emergency medical services, emergency social services and Border

Guard have trained their own users. In the future Emergency Response College and Police Academy will teach the ERICA system as part of the educational curriculum of ERC operator basic training.

Police, fire and rescue, emergency medical services, emergency social services and Border Guard have trained their own users.

d) 112 MODEL



3 | CATALONIA, SPAIN

The 112 service model implanted in the Catalonia community, awards the management of the emergency number to the public company CAT112. Through a public bidding, this company designates the management of the PSAP to a BSC (Borrowing Service Company). Based on this agreement, the company takes on the accountability for call takers' education. On a monthly basis, the CAT112 supervises and validates the subject matter and the planning proposed by the BSC.

a) EDUCATION IN CATALONIA

Structure of call takers' education

Operational education: addressed to the call takers. Within this scope, the BSC delivers different education processes adapted to the needs of each call taker. Personalised tutoring to call takers with critical difficulties is also performed upon demand. This sort of education could be targeting several call takers work areas, such as: communication, empathy, territory knowledge, high stress work levels, etc.

The 112 training includes sessions related to theoretical knowledge on the issues related to emergency calls management: providing among others, territory-related knowledge and an awareness of the computer work programs and the necessary skills in working with them. The 112 also provides an education set addressing stress management and personal motivation.

In order to improve the 112 call takers performance, CAT112 intensively cooperates with the BSC in the creation of the training sessions.

The PSAP in Catalonia processes information to be transferred to police, medical services and fire departments. The call taker does not join in the operation crew's activation. For this reason, call takers' education is addressed to strengthen communication skills in order to optimise the quality of information that shall be forwarded later on to the operational emergency crews.

Education courses currently taught include:

Communication skills:

Three-hour long sessions are held for each basic call taker task. Linguistic and communicative resources are provided to improve the call takers' skills in order to maximise their performance.

Emotional management:

Training workshops are performed (groups of 5 to 10 call takers), triggered by the service coordinators. Over the long term, call takers learn to express and share concerns and difficulties that can make them feel powerless, and also to take control of their emotional and behavioural reactions.

Specific communication skills:

In the Catalonia PSAP, there is a telematic communication system transferring information to all individuals involved in the provision of service. This requires a specific set of skills related among others to timely and accurate synthesis, as they process emergency-related information in a written form for the system, and the allocation and dispatch of adequate resources depend on their efficiency.

Initial training:

The 112 PSAP in Catalonia has a training dossier designed by CAT112 for newly employed call takers, that is delivered by the Borrowing Service Company as an introduction to the complex training process. This

dossier includes all basic procedures, related to emergency call management, necessary to equip the call takers for the correct performance of their tasks.

This training and selection process includes several types of testing areas, also addressing various kinds of skills of the applicants. This training stage lasts 15 days and includes listening-based role-plays with real emergency calls.

The content of this education process is structured and divided into three different categories:

- Knowledge of the common service chain
- Education in operational management of every basic emergency type
- Role-play based practices and exercises

Quality Management in PSAP Catalonia:

Another key in call takers education is controlling the quality of calls management. The PSAP in Catalonia maintains a system of constant analysis of emergency calls, served by its call takers.

The coordination team has an interactive tool, called ECO. This tool is used to analyse and evaluate the quality of call management by each call taker. This evaluation is done in a random manner to ensure that the scores are a real reflection of the quality of provided service.

Every call taker has an assigned coordinator that is responsible for the monthly evaluation of 3 randomly picked emergency calls. This exercise is designed to motivate call takers to explore their tasks and progress in their call taking skills.

Later, 3 more calls from each call taker are evaluated. In this case, the coordinator chooses the calls based on different kinds of code calls (medical assistance, traffic accidents, forest fires, etc). This exercise helps to identify different areas of potential improvements in the call takers performance.

A 400 hours training programme is made available to emergency call takers in the Region of Madrid.

b) 112 MODEL

112 calls registered in Catalonia are received in two PSAPs. In case of call overload, or contingency, every PSAP can work as a backup of each other: therefore it works as a unique 112 model. The emergency call takers classify and dispatch the information to the emergency services organisations, which send the final resources.



4 | ESTONIA

a) Education in Estonia

Call takers are trained at the Estonian Academy of Security Sciences. Requirements to enter the call takers programme are: Estonian citizenship, secondary education, passed medical examination and passed background check.

Studies include the module of general subjects (organisational culture, cooperation in the organisation, psychology and principles of law), medical, rescue and police training (rescue service legislation, rescue work, police and border guard legislation, police work, medicine and internship), language skills (Russian, English), call handling skills and practical training at PSAP. The base for the 40 weeks curriculum (10 months training) is a pre-defined occupational standard for call-takers, followed by continuous training at the PSAP.

Entrance examination: language test and entrance discussion.

b) 112 MODEL





5 | CROATIA

a) Education in Croatia

Employment selection – the entrance testing:

The call taker must have minimum high school diploma. Selection process includes several types of testing areas, also addressing several kinds of skills of the applicants:

- Theoretical knowledge on the issues related to emergency calls management,
- Communication skills,
- Informatics skills,
- Knowledge of one foreign language,
- Psychophysical ability,
- Personal motivation.

Initial training – learning in the 112 center:

The education for newly recruited call takers takes place in the 112 centre under the supervision of the 112 centre leader. This includes all basic procedures related to emergency call management necessary to equip the call takers with the skills to perform in their tasks. This training stage lasts approximately 6 months.

Basic operational education - addressed to the call-takers:

The education course currently includes several basic call takers work areas:

- Normative regulation of the civil protection system and 112 system,
- Public alerting system and alerting procedures,
- Information and communication equipment and user programs,
- Communication skills,
- Stress management,
- Role-play based practices and exercises.

The 112 training includes sessions related to theoretical and practical knowledge on issues related to emergency calls management, an awareness of the computer work programmes and the necessary skills in working with them. It also provides an education set addressing stress management and personal motivation.

State exam – after one year:

The exam consists of a general and a specialised part. The general part of the exam is only verbal. It consists of a knowledge check of the following subjects:

- Constitutional arrangement
- State administration system
- Official relations
- Local and regional government system
- Administrative proceedings and administrative disputes
- Office work
- The Basics of the European Union

The special part of the exam consists of a written assignment in the context of the relevant jobs for which the candidate is trained, as well as verbal processing. After graduation, candidates get the right to employment in the state service.

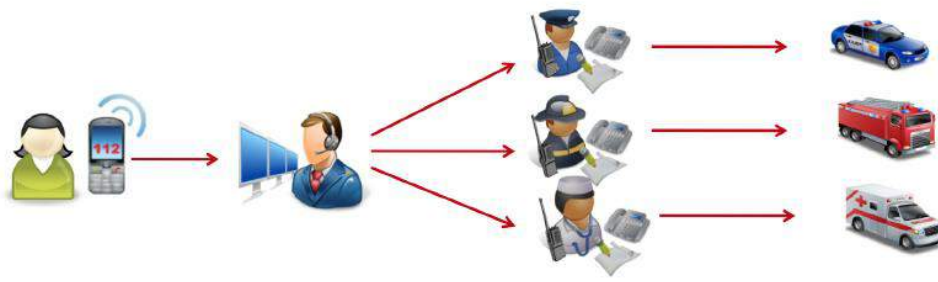
Special courses for call-takers:

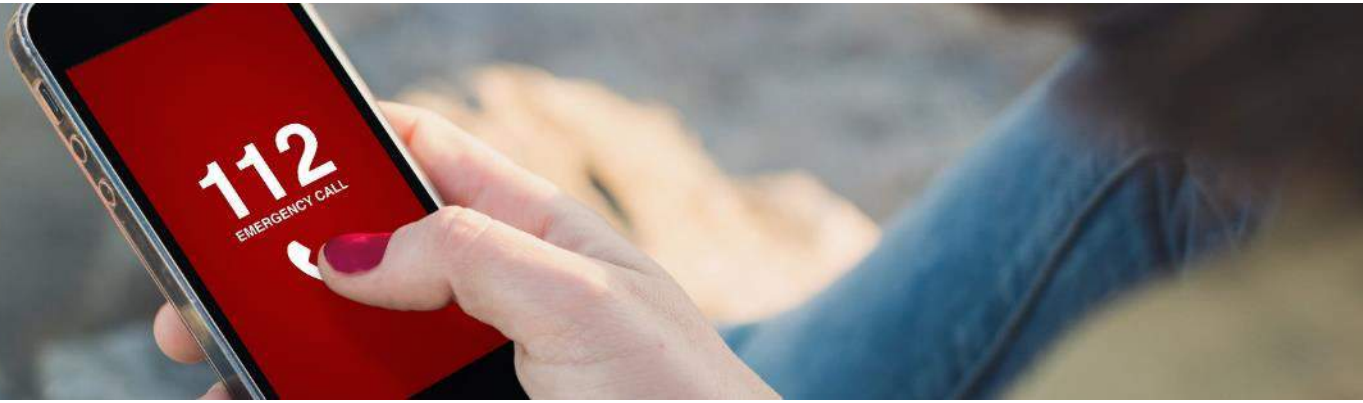
- Communication skills
- Stress management
- Aeronautical search and rescue
- Foreign language

Quality Management:

- Monthly evaluation of randomly picked emergency calls by the supervisor of each call taker.
- Secret calling exercise designed to explore call takers progress in their call taking skills in situations such as: silent or hang up calls, non-emergency calls, calls in foreign languages. Performed twice a year.
- Communication exercises designed for checking call takers skills in using communication equipment and user programs. Performed more than twice a year.

b) 112 model





6 | ADDITIONAL COUNTRY SPECIFIC INFORMATION

Germany

The school Landesrettungsschule Brandenburg provides a 2-year training programme for emergency call takers.

Lithuania

Call takers are being trained at special courses (3-month long theory followed by 2 month practical training)

Romania

Call takers have a 2-month theoretical course in a special training centre plus one-month training with supervisor at the PSAP. Training covers standard operating procedures and protocols.

Turkey

Emergency call takers follow a 2-year training programme, covering communication and language skills, computer skills, introduction into psychology and practical training at PSAPs.

Portugal

Emergency call takers are recruited from the National Police and National Guard, receive 4 weeks of theoretical training, 2 weeks of practical training followed by 2 month of supervised probation period at the PSAP.

USA

APCO emergency dispatch training: <http://www.apco911.org/institute/>