



CiProVoT
Civil Protection Volunteers Training

Intellectual output 2
DESIGN OF METHODOLOGY FOR FORMAL
AND INFORMAL CIVIL PROTECTION
VOLUNTEERS AND ASSESSMENT CRITERIA

Version 2.0

Elaborated by: ERGASIA SA Date: Febbraio, 2019

www.ciprovot-project.eu



Co-funded by the
Erasmus+ Programme
of the European Union



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**Erasmus+: KA2 - Cooperation for innovation and the exchange
of good practices Strategic Partnerships for Adult Education**
Agreement N° 2017-1-IT02-KA204-036650

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DESIGN OF METHODOLOGY FOR FORMAL AND INFORMAL CIVIL PROTECTION VOLUNTEERS AND ASSESSMENT CRITERIA

The outline – content, purpose, objectives and training material of a Civil Protection Volunteers training program.

Purpose

The purpose of the training module is to analyze the outline- content, the content , the targeting and training material of a non-formal training program.

Expected Results

After completing the implementation of the training module you will be able to:

- Identify the differences in training purpose and educational goals
- To understand the parameters associated with the design of a training module
- To design the content and outline of a training program
- To check the correctness of the targeting of a training module by utilizing the theoretical framework
- To adopt the target analysis on the level Knowledge - skills and attitude
- To follow specific standards in developing training material

Key concepts

- a. Knowledge
- b. Skills
- c. Attitudes
- d. Training Material
- e. Expected Results
- f. Purpose
- g. Training Objectives
- h. Expected Results
- i. Theoretical Part
- j. Practical Part
- k. Case Studies

This training module consists of **three sub-sections**:

1. The **first sub-section** presents the basic parameters associated with the design and organization of a training module.
2. The **second sub-section** analyzes the theoretical framework regarding training, targeting, the typology of educational objectives in adult education programs and the differentiation of purpose and training educational objectives.
3. In the **third sub-section** the analysis focuses on the structural features of a module and on the development specifications of the training material.

DESIGNING THE CONTENTS OF THE TRAINING PROGRAM

1. Parameters associated with content design

The design of the contents of the training program is stated on specific parameters relating to:

1. Analysis of important data on the area and the context
2. Analysis of the training needs of the target population and the actors involved
3. The infrastructure and budget available
4. The analysis of educational needs
5. The educational purpose and educational goals
6. The structure of the training modules
7. The extent and content of the training modules
8. The definition of the theoretical and practical part
9. The degree of coherence and coherence sought
10. The degree of interactivity sought by the modules
11. The analytical timetable and the training schedule
12. The desired level of interaction of the trainee with the trainer

The content of the curriculum is fully related to its educational objectives since participants, after completing the program, must have acquired specific knowledge, be able to perform a specific project (skills) and have a positive attitude towards behaviors topic or issues that have been developed. For this reason, the content should include the necessary theoretical knowledge, appropriate practical exercises, to develop the skills of the trainees, which are required to perform the foreseen as well as being inspired by the style, the attitudes and behaviors that are sought through the program.

2. Defining and organizing the content of a training module

Content definition and organization are at the core of the design of a training module. This step includes:

1. determining the content of the training module,
2. dividing the content of the training module into sub-sections and
3. The time allocation of the sub-modules of the training module.

3. Identifying the Purpose and Educational Goals

3.1 Educational Purpose vs Educational Goals

The purpose of a training program is a general statement of intent that may not refer to the expected results with clear and detailed, Instead, the goal of a unit of study refers to what is sought.

Gli obiettivi del programma di formazione definiscono i confini e rappresentano il livello più astratto di intenzioni educative rispetto agli obiettivi didattici con i quali stabiliamo precisamente ciò che cerchiamo di raggiungere e i partecipanti durante e dopo la fine del processo educativo.

The objectives, of a Training Program set their boundaries and represent the most abstract level of educational intentions as opposed to teaching objectives with which we state precisely what we seek to achieve trainees during and after the end of the educational process.

The educational purpose of a training program is based on the analysis of the important data concerning the subject, the socio-economic-cultural context of the program, as well as the analysis of the educational needs of the target population. Educational goals relate to the expected learning outcomes and it is recommended that before the start of each course or program be communicated to the participants who may even supplement or modify them, without of course destroying the purpose. Thus the trainee he / she becomes co-responsible for the educational process, and can organize the time and the way he / she will work. So the learner becomes the co-responsible of the educational process, and he can organize the time and the way he will work. In conclusion, the objectives also function as self-assessment criteria for learners. However, the role of the educational objectives is multidimensional, because the better the teaching objectives are, the easier it is to select the appropriate materials, the teaching methods and the content.

The description of the learners (demographic characteristics, interests, prior knowledge, monitoring conditions of the specific program, etc.) plays an important role in the formulation of the objectives. Along with defining objectives, we should also design ways of assessing both the process and the acquisition of new knowledge by learners.

3.2 The theoretical framework of educational targeting

Regarding the classification of Bloom and depending on the level of knowledge we want the learners to conquer; the following verbs can be used:

1. **Knowledge:** define, name, put in order, recall, repeat, arrange, memorize, correspond, reproduce, list, convert, generalize, compute, identify, match, and understand.
2. **Understanding:** categorize, describe, explain, express, locate, translate, choose, summarize, distinguish, repeat, apply, convert
3. **Application:** edit, compare, critique, distinguish, distinguish, examine, experiment, ask, try
4. **Composition:** gather, compose, create, design, develop, organize, prepare, propose, write, revise, generalize
5. **Assessment:** I argue, judge, support, appreciate, evaluate, defend, interpret, justify, conclude
6. **Composition:** improve, compose, write

For the Emotional field, the energetic verbs we can use, depending on the level, are the following:

1. **Phenomenon perception:** ask, follow, show, answer, hold;
2. **React to phenomena:** help, report, write, discuss, present; Value recognition: I differentiate, explain, suggest, share, participate, invite, complete
3. **Organization:** arrange, explain, modify, generalize, defend, integrate, synthesize
4. **Value internalization:** influence, revise, suggest, modify, demonstrate

3.3 The typology of learning objectives in adult education programs

The objectives of a training module are classified according to the prevailing trends of international literature and practice in three levels:

1. **Level of knowledge:** What knowledge will the learners acquire and / or what skills they will develop - which are related to the acquisition and the use of knowledge (understanding, analysis, synthesis, assessment).
2. **Level of Skills / Skills:** What will the learners be able to do after the end of the module?
3. **Level of Attitudes:** What values and general predispositions will develop or acquire learners, which will affect their preferences and behavior for certain persons, things or situations.

4. Basic structural components of a training module.

4.1 The training material

4.1.1. Development specifications for training material

The creation of training material consists of collecting and adapting it to serve the educational objectives and to reinforce the participants. After leaving, it can be used as reference material, or as a guide for further study and education. Training material should support and serve the objectives and facilitate the learning of learners, including supervisory material, which has been extensively referenced in a previous section. The written material provided to trainees in face-to-face training is either used by the participants during the training programs or is distributed after completion. Types of material vary and may consist of either whole books or parts thereof (chapters), articles from newspapers and magazines, instructions, circulars, and so on. It is noted that the written material can be given to the participants in a program and before it is started in order to prepare them, or to prepare them, or even through it, to elaborate a task that they will need during the implementation of the teacher program.

For the writing of educational material requires the observance of specific standards in order to be reliable and to help the trainees in their essence.

In particular:

1. The objective of the material should be the codification of the experience experienced by the trainee during the training and not the deepening of the subject. It must be a means of producing “memories” and reproducing the educational experience.
2. The amount of information embedded in the material is so as not to prevent participants from looking at it. In the case that trainees want, it is possible to recommend a specific bibliography or to give a book to give more insight into the subject.
3. Before starting the production of the training material, the sections, the capital and paragraph numbering system, the way of writing the titles and the texts, the way of highlighting the important points should be defined.
4. The enrichment of the educational material with shapes, sketches, pictures, graphs, etc. makes the material attractive and interesting therefore easier to study and understand.
5. The educational material should include a table of contents, summaries and bibliographical references.

6. Finally, an attractive and original cover with a specific title accompanied by a drawing, a figure or a sketch referring to the content of the educational material.

4.1.2 Distance Learning Specifications and Learning eLearning

Training material to be used in distance learning or eLearning-based training should be compatible with distance learning methodology to be an important success factor in the curriculum. In order for the educational material to meet these requirements, it should include a 'Teacher' on hand, willing and available constantly to guide the learner in his study, to promote.

Interacting with the learning material, explaining difficult points and concepts, evaluating and informing the student about its progress and animating - encourages the student constantly. Educational material should be designed and feature features that enable trainees to determine the place, time and pace of their study and learning by themselves, thus serving the educational goals that have been set. Distance learning training materials may consist of specially written books for distance learning, specially designed study guides, interactive audio visual interactive materials and software, and multiple means of information and technology representation in the form of a "training package".

Training material for distance learning should be on the Internet and in particular on the e-class and will address the main points of theory, practical applications in a more "live" way than presented in printed material, assessment exercises, case studies and useful internet addresses to be used within the educational process to ensure interactivity and interaction.

4.2 The building blocks and the structure of the content of a training module

Each teaching module has a specific structure and way of development. Thus, the teaching material of each unit of study consists of the following basic building blocks:

1. Contents
2. Purpose
3. Expected Results
4. Key Concepts
5. Introductory Remarks
6. Summary
7. Bibliography

Below we will analyze each of these components skeleton of a tutorial Contents.

Each module is divided into a number of sub-segments, depending on how the author chooses to be divided. The contents of the module provide the titles and subtitles of each subsection or subsection. Each subsection may be subdivided into subsections and subsections. The subdivisions of the modules can reach the three.

1. Purpose

The purpose of the module should be to provide a general description of the module. In the context of the purpose of the module, we should not be expanding particularly. The purpose should mostly consist of a paragraph where the lesson is discussed in a few words.

2. Expected Results

The Expected Results should give the trainee a clear picture of what he / she will achieve by studying the particular teaching module. The expected results are essentially the goals at the level of knowledge-skills-attitudes. They specify to the trainee what exactly he / she should understand and keep from the study of unity and at what points he / she should pay special attention. The expected results are specific. Particular attention should be paid to the way they are presented, since the verbs with which we usually introduce the expected results are specific. The verbs used to list the expected results are those that could also ask a question about understanding the content of the unit, such as verbs analyze, describe, quote, submit my opinion, compute, appreciate , I give examples, find, present, apply, report, present, demonstrate, distinguish, compare, evaluate, separate, demonstrate, justify, choose, construct, design, etc. The expected results of the module are placed in bullets. Since they aim to demonstrate to the student the knowledge they will derive from the teaching module, they usually start with a sentence that states that upon completing the study of the module, the student will be able to analyze its basic concepts.

3. Key Concepts

In Key Concepts you should indicate the basic concepts that the trainee will encounter in the study of the module. They are the main concepts set forth in the context of unity and which are decisive for its understanding. Key concepts are still the basic conceptual parameters on which unity is based and are those which are adequately explained in the context of the development of unity. They are also presented with dots and for each teaching module they should not exceed the number of 15.

4. Introductory remarks

Introductory remarks are a very important part of the content of a module. It is essentially the framework of the structure of the unit of study where the subdivisions are presented in more detail and explanation. In the Introductory Remarks a brief summary should be provided for each subsection. We describe everything that will be developed in the core of our teaching module, but we do not extend it very much. We are based on those points where the student needs to focus more in order to understand as fully as possible the content of the unit he is studying. Introductory remarks should not exceed one page. Typically, they consist of three or four paragraphs.

5. Synopsis

After completing the development of the module of the module, in the end the content is summarized. The synopsis is a brief summary of the unity, having as main role to list the key points that have been developed. The summary is also given in dots and not as a single text. It should not go beyond that one page.

6. Bibliography

The bibliography of the module is the last part of the contents. It is presented after the summary and is given the bibliographic reference on which the writing and development of the module was based. Usually, it is the responsibility of the author of the unit's material to deliver and bibliography. In the case of the addition of material from specific sources it should be mentioned in the bibliography. For each book or piece of work that was used in the section, we should mention in turn the author, the date of issue, the title of the book, the publishing house and the place of issue.

7. Links (Hyperlinks)

A link may be a word or phrase or more generally a point within the text that you think you should analyze more. With the help of electronic links, you are given the opportunity to explain, analyze or add things to the main text. Links to electronic material are not appearing in the main text, but they work like our well-known Internet links, so they appear in another window. Of course, in the context of the development of the web, links can be grouped into a separate word file. You should remember that we never open another Link within another Link.

8. Examples

In the context of developing distance learning materials, examples should be given to represent and support theory. Examples, depending on the content of each module, may vary. Other examples may be numerically the solved exercises, while others may explain and further analyze the theory that is being developed in our material.

9. Case Studies

Case studies are real examples, usually perceived through reality, by which we give the trainee the opportunity to study in practice what he has learned from the theory. This technique is a complex form of practice that allows knowledge to be applied on practical issues through realistic situations and is an important means of acquiring the required attitudes. The main factor in the educational process is the learners, who have the opportunity to penetrate an issue through practice rather than through monitoring. The students' active participation, critical thinking and the ability to solve problems develop. The disadvantages are mainly that it is difficult to find cases where all trainees have experiences and performances. It is also difficult to reduce the individual to the whole.

10. Articles – Government Gazette – Parallel Texts

- i. In the framework of the Articles-FEK, there are texts from newspapers, magazines or books that are related to the subject of study of the didactic unit. Articles usually selected as additional material in the classroom do not need to be rewritten in word format. It is possible to show them after they are given for their proper conversion. This means that if you select an article related to the module, you must first give it to the scanner and that in turn pass it as the corresponding file in the electronic library. The many pages should be avoided because they are tiring for the trainee, who tends to quit in the middle of what he reads if he finds that he is missing out on the subject.

11. E-Directories

Another important parameter in the development of web-based tissue is the listing of useful web-sites. Typically, at the end of the section, some e-mail addresses are provided which we deem necessary to better and more fully exploit the issues discussed by the module. This, of course, also requires the corresponding verification that this address is valid. This is confirmed by reference to the last date when the e-mail address was checked. Also, when the e-mail addresses are quoted, the reason why the learner should go to that particular page will also be mentioned. Self-Assessment Exercises Assessment exercises enable the trainee to evaluate his / her performance in the lessons and in each teaching module separately, after having completed their completion, they can see the correct answers and their overall rating. We should be very careful about the way we write an exercise. Every exercise usually has a weight and value, which we should not ignore. The exercises must fully correspond to the content of the module. It is also very important to be able to combine the contents of previous modules so that we can create exercises covering a wide range of learners' knowledge. In the assessment exercises, it will be possible to provide a comment for each learner's answer, sometimes correct and sometimes wrong.

Types of Self-Assessment Exercises

1. List matching assign choices with the right answers In this list of exercises, the trainee should match the choices given to him as suggested solutions with the corresponding correct answers. Each possible option corresponds to a specific answer.
2. Pick-one In this Pick-one class, the trainee has the option of choosing a single answer from the set of answers given to him / her.
3. Boolean (True / False) In this particular Boolean class, the trainee has the option of choosing whether the exercise is true or false.
4. Upload In this category of exercises (upload), the trainee will have to submit the correct answer to the question asked, in the format of the requested file (for example word or excel file).

WHAT ARE THE 3 MOST IMPORTANT SKILLS FOR CIVIL PROTECTION VOLUNTARY?

According to the majority of respondents, the three most important skills for a PC volunteer are personal, social and learning skills; awareness and cultural expression; civic skills.

WHICH SUBJECTS WOULD YOU LIKE TO LEARN?

Those who have expressed their support for a European-level course have identified the most interesting elements of study:

- Use of communication systems and equipment for TLC;
- Natural risks and disaster risk reduction;
- Emergency planning.

TRAINING MODULE OUTLINE

According to the majority of respondents, the results and the analysis of Field Research, the three most important topics to be training a Civil Protection volunteer are:

- Emergency planning.
- Use of communication and IT equipment
- Natural hazard and Disaster Risk Reduction

TRAINING MODULE OUTLINE

«Emergency planning»

1. GENERAL

Lesson title

«Emergency planning»

When emergencies arise, people are often asked to take on responsibilities outside of their regular day-to-day duties. To do this effectively requires training. The County of Simcoe offers a range of courses designed to prepare individuals for the role they play within their organization's emergency management program. In providing these courses, our goal is to enhance the ability of organizations to prepare for, respond to, and recover from emergencies that occur in our region.

2. LEARNING RESULTS

Knowledge and skills of volunteers regarding civil protection is enhanced. Training activities will enable volunteers regarding civil protection to participate in virtual prevention and preparedness missions. Experts will share a common experience, agreed with the E.U. and U.N. standards. Enhanced knowledge among volunteers in civil protection of internationally recognized standards and methodologies in specific areas (e.g. logistics, environmental emergencies etc.) to allow for better coordination with other international stakeholders. New training opportunities on specific topics (e.g. logistics, environmental emergencies etc.) will be offered to participating volunteers.

3. GENERAL SKILLS

- Search, analyze and synthesize data and information, using the necessary technologies.
- Adapting to new situations, making decisions.
- Work in an international environment.
- Working in an interdisciplinary environment Producing new research ideas.
- Respect for the natural environment.
- Capacity for autonomous work and teamwork.
- Project design and management
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4. LESSON CONTENT

A training course effectively linking all relevant stakeholders. Strategy for training and implementation of best practice in specific fields, e.g. industrial or natural and technological disasters is developed . The voluntary pool of disaster response capacities is operational in an initial start-up configuration. Quality requirements are specified for identified capacities. Enhance all phases of disaster management training (prevention, preparedness, response and recovery) through a targeted civil protection/disaster management training.

The expected results are:

- Identify challenges to working in the context of civil protection and their practical solutions.
- Explain the concept of integrated emergency management (IEM).
- Explain the main features of the legislation and regulations that support IEM, and the structures designed for its delivery.
- Apply the European civil protection model of risk assessment.
- Evaluate their community risk register and identify ways of developing it, as a planning and prioritisation tool and as an instrument of public communication.
- Design and apply a template for the design and creation of generic major incident plans and specific plans.
- Design a strategy to validate plans.
- Enable organisations to prepare, plan for and activate the recovery phase of an emergency.

5. THEMATIC SUBUNITS

A. Basic Emergency Management

- Emergency Management in Europe
- Roles and Responsibilities
- Hazard Identification and Risk Assessment
- Prevention, mitigation, preparedness, response and recovery
- Critical infrastructure
- Emergency Response Plans

B. Introduction to Incident Management System

- Incident Management System (IMS) in Europe
- Key concepts and principles of IMS
- Simple vs. complex incidents
- IMS roles and responsibilities
- Operational cycle meetings
- Incident Action Plans

C. Introduction to CP Operation Planning

- Creating CP of Operation Planning
- Key elements of CP of Operation plans
- Conducting a Hazard Identification and Risk Assessment
- Identify critical business functions and resources required Developing mitigation, contingency and recovery plans.

6. DIDACTIC AND LEARNING METHODS - EVALUATION

Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Bibliography, Tutorial, Practice, Interactive Teaching, Educational Visits, Project Work, Training exercises, Simulation games etc .

EVALUATION

Multiple Choice Test, Quick Response Questions, Test Development Questions, Problem Solving, Written Work, Report / Report, Oral Examination, Public Presentation, Laboratory Work etc.

7. TIME TABLE

- A. Basic Emergency Management : 1 day , 6 didactic hours
- B. Introduction to Incident Management System : 2 days, 12 didactic hours
- C. Introduction to CP Operation Planning : 2 days, 12 didactic hours

8. SUGGESTED BIBLIOGRAPHY

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TRAINING MODULE OUTLINE

«Natural hazard and Disaster Risk Reduction»

1. GENERAL

Lesson title:

«Natural hazard and Disaster Risk Reduction»

Disaster preparedness is highly beneficial for communities located in disaster-prone areas. Preparedness to hazards, such as extreme weather, volcanic activity and flooding, can help reduce the impact of such catastrophes on lives, livelihoods and communities. Better know-how, practice and response mechanisms, such as early warning systems and other disaster preparedness activities can save lives and speed up the recovery of communities.

In addition, disaster risk reduction programmes are cost-effective and save aid money. On average, every euro spent for reduction and preparedness activities saves between four and seven euros which would be spent to respond in the aftermath of disasters.

2. LEARNING RESULTS

At the end of the training course it is expected the participants will be able to:

- Identify global and regional typology of hazards including their spatial and temporal distribution.
- Identify and understand the causes and impacts of various hazards in Europe.
- Understand disaster risk reduction concepts and DRR conceptual frameworks and institutional mechanisms.
- Identify disaster risk reduction strategies and opportunities in programming
- Expected outcome The training package is expected to achieve the following goal: Taking the objectives into account, the package is expected to enhance knowledge of national and local level disaster risk reduction government, NGOs, civil society, media personnel and other actors so as to achieve substantive results on reduction of disaster losses, in lives and in the social, economic and environmental assets of communities.

3. GENERAL SKILLS

- Search, analyze and synthesize data and information, using the necessary technologies.
- Evaluate Community resilience
- Adapting to new situations, making decisions.
- Work in an international environment.
- Working in an interdisciplinary environment Producing new research ideas.
- Respect for the natural environment.
- Capacity for autonomous work and teamwork.
- Project design and management
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4. LESSON CONTENT

The lesson would start with an introductory session, which would establish the importance of the course for the participants and the skills, technique and knowledge they would acquire at the end of the course. The rationale would be established through citing the impacts of natural hazards on development projects as well as how improper planning and implementation of these projects could lead to increase in risk from natural hazards. Introduction to key concepts and principles used in disaster management such as hazard, disaster, vulnerability, disaster risk and coping will follow. The module will also explore hazard and disaster management at global and regional perspectives including introduction to global trends, disaster risk reduction frameworks, hazards and disaster risk in Europe.

5. THEMATIC SUBUNITS

A. INTRODUCTION TO NATURAL HAZARD AND DISASTER RISK REDUCTION

- Climate setting
- Learning objectives
- Knowing each other and the resource persons better
- Listing out the expectations from this training course
- Understanding the importance of this course and how it would help in their professional work
- Introduction to disaster risk reduction will include the following disaster management terminologies and key concepts:
 - Hazards, disaster, disaster risk, vulnerability coping and vulnerability
 - Classification of hazards and disasters
 - Disaster elements and disaster cycle
 - Overview of hazards/disasters (global and regional perspectives),
 - Disaster risk reduction legal frameworks and institutional mechanism

B. RISK INFORMATION FOR RISK REDUCTION PLANNING

- Risk evaluation
- Visualization of risk information
- Risk information and spatial planning

C. NATURAL HAZARDS AND DISASTER RISK REDUCTION PLANNING

This unit will highlight typology of hazards, temporal and spatial hazard distribution, disaster management legal and institutional arrangements including European disaster policy, legal frameworks and role of relevant DRR institutions.

D. DROUGHT HAZARD

This unit will highlight the typology of droughts in Southern Europe, temporal and spatial distribution and causes of drought. The module will also focus on drought mitigation, prevention and risk reduction measures.

E. FLOOD HAZARD

This unit will cover the following: definition of flood, occurrence of flood in Europe, mitigation measures and risk reduction strategies. It will also focus on Integrated Flood Management (IFM) in the context of legal, social, economic and environmental aspects.

F. EARTH/LAND MOVEMENT HAZARDS (EARTHQUAKE, VOLCANO AND LAND SLIDE)

This unit will highlight the occurrence, causes, impacts and disaster risk reduction strategies for the following hazards: earthquake, volcano and landslide.

G. FOREST FIRES

This unit will focus on the following : Types of forest fires, occurrence in Europe and causes, mitigation strategies and risk reduction measures. The module will also explore the causes and occurrence of fire in Europe, methods of controlling fire, predicting likely fire impacts etc.

6. DIDACTIC AND LEARNING METHODS - EVALUATION

<p>The following training methods are planned for use during workshops:</p> <ul style="list-style-type: none">• Power point presentations• Group discussions• Group exercises Supplementary handouts• Review sessions	<p>Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Bibliography, Tutorial, Practice, Interactive Teaching, Educational Visits, Project Work, etc.</p>
<p>EVALUATION</p>	<p>Multiple Choice Test, Quick Response Questions, Test Development Questions, Problem Solving, Written Work, Report / Report, Oral Examination, Public Presentation, Laboratory Work etc.</p>

7. TIME TABLE

- A. Introduction to Natural hazard and Disaster Risk Reduction : ½ day, 3 didactic hours
- B. Natural hazards and disaster risk reduction Planning : 1 and ½ day, 9 didactic hours
- C. Drought hazard : ½ day, 3 didactic hours
- D. Flood hazard : 1 day, 6 didactic hours
- E. Earth/land movement hazards (earthquake, volcano and land slide) : ½ day, 3 didactic hours
- F. Forest fires : 1 day, 6 didactic hours

8. SUGGESTED BIBLIOGRAPHY

TRAINING MODULE OUTLINE

«Use of communication and IT equipment»

1. GENERAL

Lesson title:

«Use of communication and IT equipment»

Telecommunications and information communication technologies, services and applications have long been demonstrated as critical tools for coordinating response and relief efforts and allowing citizens to communicate often lifesaving information. Telecommunications technologies and services are being deployed for disaster relief and response purposes, including information on how those technologies and services were used in specific disaster events.

The wide availability of ICT systems and their possible interconnection and potential may greatly enhance natural disaster prevention and crisis management. High effectiveness are IC Technologies with a strong geographical basis (GIT-geographical information technology), mainly the Internet, blogs, mobile telephony, and texting, satellite, GIS. The availability of all of these technologies and their convergence may enhance natural disaster management performance in its various dimensions: mitigation, preparedness, response and recovery.

2. LEARNING RESULTS

Disaster management is standing on three major phases like preparedness, prevention and mitigation. Disaster preparedness highlights on warnings and forecasts of impending disasters and often entails processes which are quite dynamic and results in a “rapid onset” disaster. Disaster prevention is a long term activity where satellite monitoring of relevant factors such as changing of land use, population growth is the main criteria. Communication of information about a disaster to a population at risk and appropriate actions to mitigate that hazard is an important part of information technology. The hazard or disaster sometimes cannot be avoided but the negative impacts on the people’s property can be mitigated through public warning which is primary goal of the information technology and to ensure to the greatest extend so that hazard may not be a disaster. The success of information technology in case of disaster management is hidden in the seed of communication technology such as evacuation of the people from the hazardous site, to reduce damage to the property and thus minimizing human suffering.

3. GENERAL SKILLS

- Search, analyze and synthesize data and information, using the necessary technologies.
- Adapting to new situations, making decisions.
- Work in an international environment.
- Working in an interdisciplinary environment Producing new research ideas.
- Respect for the natural environment.
- Capacity for autonomous work and teamwork.
- Project design and management
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4. LESSON CONTENT

The ability to provide accurate information in a timely manner to the appropriate stakeholders is of utmost importance during disaster response interventions in order to facilitate the delivery of assistance. The overarching aim of lesson is to facilitate assessment, coordination and decision-making during expert interventions through strengthened information management processes. Specifically, the course objectives are to improve the participants' understanding of how sound information management practices can facilitate the mission, increase and broaden their understanding and ability to apply standard information tools used in emergencies and identify best practices and share experiences in terms of information management. The course is formed around the information management cycle and is composed of theory, group work sessions and practical exercises based on realistic disaster scenarios.

The expected results are:

- Identify mechanisms for coordination, management and organisation of the civil protection system
- Apply the use of new information and communication technologies
- Using methods, techniques and instruments for how to monitor and map risks
- Using methods and tools for efficient information and preparation of the citizens

5. THEMATIC SUBUNITS

a. Core/basic information

- Basic concepts and terminologies of disaster management
- Basic concepts of geographical information systems (GIS) and remote sensing, Mobile telephone and other communication equipments.
- Introduction to spatial information

b. Risk information for risk reduction planning

- Risk evaluation
- Visualization of risk information
- Risk information and spatial planning
- Social Media data Collection

c. Post-disaster impact and damage analysis

- The use of satellite imagery for disaster relief and recovery
- The use of satellite imagery for disaster relief and recovery
- Building damage assessment

d. Pre-disaster risk assessment

- Hazard assessment
- Elements at risk and vulnerability assessment
- Types and methods of risk assessment, risk evaluation, cost and benefit analysis

e. Equipment Knowledge

- Testing
- Diagnosis
- Analysis

6. DIDACTIC AND LEARNING METHODS - EVALUATION

Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Bibliography, Tutorial, Practice, Interactive Teaching, Educational Visits, Project Work, etc.

EVALUATION

Multiple Choice Test, Quick Response Questions, Test Development Questions, Problem Solving, Written Work, Report / Report, Oral Examination, Public Presentation, Laboratory Work etc.

7. **TIME TABLE**

- A. Core/basic information : 1 day, 6 didactic hours
- B. Risk information for risk reduction planning : ½ day , 3 didactic hours
- C. Post-disaster impact and damage analysis : 1 and ½ day, 9 didactic hours
- D. Pre-disaster risk assessment : 1 day, 6 didactic hours
- E. Risk information for risk reduction planning : 1 day, 6 didactic hours

8. **SUGGESTED BIBLIOGRAPHY**

Project's Consortium



Coordinator
Centro Studi Città di Foligno/Italy
www.cstudifoligno.it



ERGASIA EKPEDEFTIKI S.A./Greece
www.ergasiakek.gr



London South Bank University/United Kingdom
www.lsbu.ac.uk



Public Safety Communication Europe/Belgium
www.psc-europe.eu



Associação Portuguesa de StartUps/Portugal
www.apsu.pt



CESIE/Italy
www.cesie.org



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Erasmus+: Key Action 2, Strategic Partnership in the field of Adult education



Co-funded by the Erasmus+ Programme of the European Union

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