New Bulgarian University

Department of Mass Communications

PhD Candidate: Kalogiannidis Stavros

Resume of Dissertation

"THE ROLE OF MEDIA IN DISASTER AND CRISIS MANAGEMENT"

Dissertation resume for educational and scientific assignment doctoral degree in professional field: 3.5. Public communications and Information science

(Crisis Management – Electronic and Social Media)

Supervisor: Prof. Rusi Marinov

Sofia 2018

Contents

 Summary

This paper is referred to the role of SMEs in critical situations, in risk situations ("The role of SMEs in managing disastrous crises"). The ultimate goal, through the bibliographic review, is to see whether SMEs influence the knowledge of the public, how objective and true the information they are transmitting is.

For this purpose, this work was structured accordingly. Thus, initially and after the introduction, a comprehensive record of the catastrophic crisis is made as a concept, its characteristics, its species, its time phases and its types.

Subsequently, the second chapter is related with new trends in crisis management, disaster and risk management. Thus, the focus is on the concept of risk, its classification, crisis management, models and the current theories of crisis management.

The third chapter studies the role of SMEs in the disaster management system. In particular, this chapter includes bibliographic material on the role of SMEs in general, the influence of SMEs, the management of the critical situation by SMEs and the way SMEs are approaching it, the contribution of SMEs in general, the communication between staff of SMEs with crisis managers and the meeting between these two sides, the role of SMEs in critical situations more extensively.

The fourth chapter deals with European centers, programs, plans for crisis management, disasters and risks. In the fifth chapter the analysis of the experience in the field of communications and the media in Greece and the Balkan countries during the disasters, with the last chapter (chapter 6) being the conclusive chapter

Key words: crisis, risk, influence, media, information, objectivity

Introduction

Managing the catastrophic crisis by SMEs in general. The media intensively cover the major disasters and the statements that cause panic and collective anxiety. The crisis is generally about society, organizations, groups and individuals. This is an unpleasant event of high intensity, with difficulty to control and the main consequences of the disruptions of a society, material, social and environmental losses, while creating important problems that cannot be solved with the existing sources of assistance. It also appears that manipulating information in times of crisis and pursuing ambiguous goals is not a recent invention.

The purpose of investigating the matter. This dissertation, focusing on the key issue "SMEs and their role in disaster management", aims to contribute to an in-depth study of crisis management at the level of public administration. The aim of the thesis is through the existing knowledge of the Bulgarian, Greek and foreign literature in relation to the empirical knowledge to identify and evaluate the factors that influence jointly the crisis management process and the operation of crisis management teams in the government and the involved members as effectively as possible, to avoid crises and minimize the consequences for their proper treatment.

For the purposes of the study, it was taken into account that, according to the existing literature, the crisis management process consists of three general phases. The pre-crisis phase involving the detection of arrival signals a possible crisis prevention and preparation.

During the phase reaction (during the disaster), the crisis involves identifying the state as crisis and coping and after the crisis involving the recovery and the knowledge acquired by the management.

The research therefore focused on the three phases of crisis management, and whereas the three phases resulting from the tensions and disagreements between the research leader and the group's crisis management team are thought to affect the choice of conflict management methods as there is a more objective approach to the crisis. This is particularly important, since crises directly affecting demand indirectly in the public administration have a huge impact on a country and its citizens.

4

The basic research cases are as follows: The crises are an integral part of the modern political, economic, social and business environment, which today is more than ever confirmed by international developments. Diversity, the particular development and development conditions of others, and the results of their performance, create both individually and collectively the need to study and analyze management as situations are studied with the system approach.

Managing a crisis is the effort of members of a system, with the co-operation of unrelated or immediate interests in the system, to prevent or deal effectively with crises. It is vital to the public administration as it directly affects the long-term future of the social system. The study will not be one-dimensional and simply as a process, as in all critical situations it threatens the human or the resources used and thus influenced the decision-making process from time pressure and cognitive limitations.

Every society or organization must be prepared to face a crisis situation. A crisis is an unexpected major event that has the potential to end in a negative outcome for an organization and its employees, financial situation, and reputation (Koster & Politis-Norton, 2004). Communicating strategically and proactively to the global audience is vital to an organization's survival during a crisis situation. A crisis begins with a surprising trigger event that signals its onset, and the crisis state will continue unless there is some sort of resolution (Seeger, Sellnow, & Ulmer, 2003).

According to Coombs, a crisis affects the perceived reputation of an organization. The crisis violates stakeholder expectations for the organization. "When expectations are violated, the people perceive the organization less favorably: reputation is being harmed." In order to help alleviate the damage caused to an organization's reputation during a crisis, PR practitioners apply crisis management principles.

According to Fearn-Banks, crisis management is a process of strategic planning for a crisis or negative turning point, a process that removes part of the risk and uncertainty from the negative event and thus allows the organization to control more of its own destiny " . Coombs reported that crisis management has four interrelated factors: prevention, preparation, response and review.

Methodological toolbox. In order to achieve the objectives set and to solve the resulting tasks, the methodology of the dissertation study observes traditional methods of research. In interpreting the information gathered and making conclusions and recommendations, methods such as historical, induction and deduction, analysis and synthesis, comparative analysis. Collecting primary and secondary information is the result of quantitative and such as monitoring, topography and direct communication.

It should be noted that the examples that are the subject of the study have the character of unique processes unfolding for a certain period of time.

This allows the choice of the basic case study case study method of the so-called "case study study." In this main subject, the method of dissertation work, given the specificity of the subject of the study, is other research methods as elements of quality content, analysis and / or diachronic but their application justifies the development of specific examples and practices.

The importance of choosing the topic of Dissertation. Forming news could affect the public assessment of an organization during a crisis. Therefore, the understanding of the framework process is extremely beneficial to the PR practitioner. Entman said: "The framework is to choose some aspects of a perceived reality and make them more important in a communication text to promote a specific definition of the problem, causal interpretation, ethical evaluation and / or the provision of treatment for described item ".

Frames can set issues, diagnose causes, make ethical judgments, and offer solutions (Entman). Influencing the way a crisis is shaped is important because the context determines how people understand and remember a problem, and how they evaluate and choose to act on the issue.

Hallahan pointed out that framing is essential for PR practitioners, especially during the crisis, because professionals work as strategic directors: they try to determine how situations, qualities, choices, actions, issues, and customer responsibilities should be presented. According to Hallahan, there are many types of frames a professional could use to succeed in representing a client during a crisis. An important way of framing is to create news. "The crisis manager should deal with organizational information about

the organization's manifestation and response to media coverage, based on the knowledge of how media events and cultural reverberation are covered by such events issues that will gather the favorable opinion of the citizens ".

The interaction of the public relations profession with the media is vital to focusing on specific issues during a crisis. If a practitioner does not provide information to a journalist, the journalist will find the information elsewhere. A trustworthy employment relationship ensures the transfer of information between the professional and the journalist, which is vital for successful framing. Providing information to the media gives the trainee some partial control over the story of the news, which is important as a means of influencing public opinion. In general, a positive professional-journalist relationship may increase the likelihood of controlling the context of a crisis situation, but the relationship is ruined if moral rules are violated.

The review of the literature provided a summary of the theoretical and analytical research as it concerned effective crisis communication practices. The Horsley and Barker Public Sector Crisis Communication Guide has been revised as a model for effective communication of government crises. The synthesis model consists of six steps for public sector crises communication: ongoing public relations, identification and preparation for possible crises, internal training and rehearsals, crisis, evaluation and review of public relations efforts, and coordination between political and political analysis and Barker).

In the context of internal training and the preparatory phase, Marra's research on communication autonomy was completed. According to Marra, PRs should have the authority and responsibility to effectively communicate the message of an organization during a crisis.

Communication theorizing theories, information grants, and ethical preventative public relations provided additional guidance for investigating crisis communication practices. Research has explained why it is vital for PR practitioners to use the media as a point of sale for disseminating crisis communication messages. Depending on how the media's crisis message is publicized, the context will affect how people remember a problem

It is a take-and-go relationship that benefits both the professions and the crisis, relationships and previous subsidies are critical to how the message is framed. A public relations practitioner who has shown value is chosen by those who are either unfamiliar or have reduced their value by providing unnecessary information (Gandy).

1. The Types of Crises

There are some factors that can cause the crisis. Depending on these factors, there is a corresponding management plan for the catastrophic crisis. There are therefore, four categories of critical situations that are due to internal or external factors and may be technical / economic or human / organizational social factors.

The following table shows the categories of catastrophic crises.

	TECHNICAL AND ECONOMIC FACTORS	HUMAN ORGANIZATIONAL - SOCIAL FACTORS
INTERNAL POWERFULERS	- Incomplete information - Computer systems collapse - Accidents due to defective products - Industrial accidents	- Unable to adapt to change - Agency collapse / communication - Deliberate damage to a product - Sobotage from internal factors - Occupational diseases
EXTERNAL STRENGTH	- Environmental disaster - Natural disasters - Acquisitions - Social crises	- Sobotage from external factors - Terrorist actions - Frauds

2. Literature Review

The central point of the survey will be the three phases of crisis management and considering that the three phases resulting from the tensions and disagreements between the head of research, taking into account that the crisis management team from my agents and members of the team can affect the selecting conflict methods among members of the administration that there is a more objective approach to the crisis.

3. Research Questions

Specifically, the following research questions were applied in this study:

«The new tendencies of development of crisis, disaster and risk management"

"The role of media in the system of disaster management"

"European centers, programs, plans for crisis, disaster and risk management"

«Analysis of the experience in communications and the media in Greece and Balkan countries during the disasters".

4. Theoretical framework of the study

In today's world, international developments are succeeding each other. A major element of societies is that an incident occurring in one country is enough to affect the situation of the rest of the world. In this case, any kind of crisis in a country affects the country's conoic, economic and political environment or the country's natural environment, on the other, it affects other countries. It is worth noting that the same rates of growth or shrinkage are not present in all countries. Each country has its own distinct behavior and its own distinct role in the global system.

For this reason, the study of the crisis is not a simple process without obstacles and trouble. On the contrary, it takes time and careful study of the different elements of each country.

In view of the European construction, or more globally, crisis management is a collective responsibility and a priority for all members of the system, regardless of the interests and feasibility of each country.

Chapter 1.

New trends in crisis management, disaster and risk management

1. The concept and classification of danger

Risk is defined as the possibility of something evil occurring[1]. Risk is an element that accompanies human life from the time it is born. Of course, there is great wealth as a definition. However, in general, risk is synonymous with the words risk and risk. Also, the risk is considered to be the hazardous situation and the acceptance of the risk for potential profits. Finally, according to Mainelli[2], there is a risk that an adverse event, with serious consequences, may arise, so that an adverse event is mentioned.

Disastrous risks can be divided into two main categories. It's about

- natural disasters, which are geophysical, atmospheric and other disasters
- and man-made disasters, including terrorism, industrial pollution, technological damage and financial disruption[3].

2. Crisis management / catastrophic risks and theories

In the management of the crisis, there are some roles and responsibilities, as well as organizational requirements related to the process of a company. The reaction to catastrophic seizures involves action and specific reception crisis assessment, adequate crisis preparation, ensuring a rapid and adequate response to the crisis, keeping clear lines of reference and communication if crisis and agreement between the rules for eliminating the crisis occurs.

The techniques that could be used to manage the crisis relate to a variety of steps, namely understanding the fact that the crisis in the company influences, understanding prevention, alleviating and overcoming various types of the crisis[4].

Crisis Management generally addresses the following:

- implementation of methods to be used to respond to the reality of the crisis

---

[1] G. Babiniotis: Dictionary of the Modern Greek Language, Janus Publications 2005.

[2] Michael Mainelli: "Enterprise Risk/Reward Management", Balance Sheet, 10/ 3(2002), pp. 25-34.

[3] E. Banks: Catastrophic Risk. Analysis and Management, Chichester, John Wiley & Sons Ltd. 2005.

[4] M. Groh: Being Strategic: Strategy-specific Project Management in Times of Crisis, CreateSpace Independent Publishing Platform 2014a, p. 192.

- Establish crisis-related measures and scenarios to trigger the necessary crisis-response mechanisms

- Communicate during the response phase of the emergency management scenarios.

3. The theory of structural-functional systems theory and Diffusion of innovation

In order for an organization or business to properly manage a crisis, information should be provided to the organization or business when it is hit by the crisis. In the Theory of Structural Operational Systems, information networks and complex organizational communication are faced with this fact. This theory, therefore, defines the flow of information[5]. For the exchange of information, the method of diffusing innovation theory can be used as a means of managing the crisis. This method was developed by Rogers[6]. According to his theory, he describes how to spread and communicate innovation through the use of specific channels in a period of time. Innovation spreads when a person communicates a new idea through others. The process of communication is as follows:

- Innovation communication
- Communication through a person or unit who knows or has experience with the use of innovation
- communication through a person or unit who is not aware of innovation
- via a communication channel linking the two units.

The communication channel is the basic tool for transmitting messages from one person to another[7].

4. The theory of crisis leadership

According to James, there are five leadership capabilities that contribute to facilitating the organizational structure during the crisis or after the crisis. These skills are as follows:

---

[5] Dominic A. Infante, Rancer A.S., Womack D,F.: "Building Communication Theory", Waveland Press, 1997.

[6] E.M. Rogers: "Diffusion of innovations", Fifth edition, Free Press, New York 2003.

[7] Id.

- Creating an environment of trust
- changing the attitude of the organization
- learning to change through the experience of the crisis and its consequences

The issue of crisis leadership has been explored, suggesting that leadership action in crisis shows the organization's ability to act. As the organization is tested through the crisis, it can show how well the organization's goals are being served and how long the structure of the leadership of the institution has in the crisis. It is important to develop effective human resources to build organizational capabilities through the administration of the executive crisis[8].

5. Social tools and crisis management/ examples

The information on the crisis can be rapidly disseminated through the media. Social networks have a significant impact, such as Facebook, so people can get the news faster than they could through traditional media, where this process would be more difficult and more costly for stakeholders.

The moderation of this is done through proper policy education and through appropriate tools to monitor social media, by detecting breakpoints. Through social media it is also possible to access real-time information material from crisis-management groups and thus learn about how to influence the crisis, the emotional world of stakeholders and issues that concern them.

6. Emergency management plan and emergency communication plan

With slogan "Keeping people connected is keeping people safe", my study, along with previous surveys, shows that local radio can play a crucial role in a crisis. Researchers in crisis management and disaster management often point out that all disasters are local and that the first reaction to a crisis comes from the community itself.

My study dissertation, examines the ways in which the Civil Protection Agency in Emergency / Risk Communication cases is needed to be based on four theoretical

---

[8] L.P. Wooten, James EH.: "Linking crisis management and leadership competencies: the role of human resource development", Advances in Developing Human Resources, 10/3(2008), 352-379.

models that describe how a message or a risk information can affect population and how risk perceptions are shaped, and how risk decisions are made.

Introduction

The communication process begins when a transmitter or source has the desire to convey information, a thought, etc. The transmitter then encodes what he wants to convey, using a code of words, symbols, movements, forming a message. With the help of channels, it transmits the message to the receiver. The receiver receives the message, decodes it, interprets it and finally knows, understands, feels what the transmitter wanted to pass on. Communication usually produces results, that is, it affects knowledge, thought, ideology, feelings, behavior of the recipient.

With the Feedback mechanism, the transmitter is informed of the message's fate. According to the above, the basic elements of the communication process are:

- the source (transmitter)

- the transmitter code - encoding

- the message

- transmission channels or networks

- capture (receiver)

- receiver code (decoding)

- understanding the message or effect.

One of the first and most famous model of communication is the Aristotle Model

Aristotle Model of Communication

Speaker → Speech →(Occasion) Audience → Effect
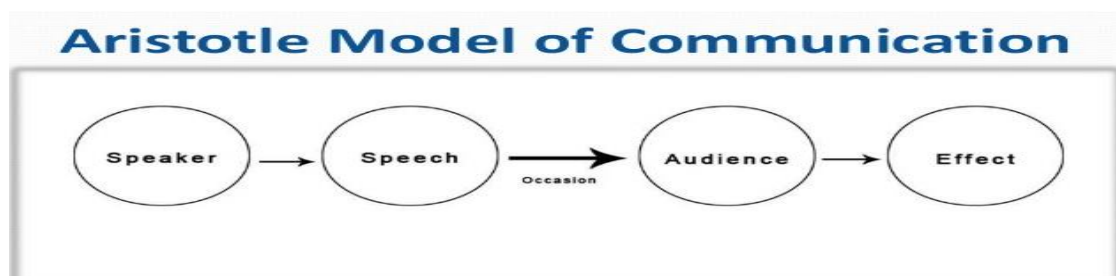
Chapter 2

The role of the media in the disaster management system

1. The role of SMEs in general

The media are linked to the democratic system of the country. Through these, political information is provided to voters, with the public supporting its choices in SME's information material. At the same time, the identification of social problems is achieved through these and is a key tool to address these. Also, the media is seen as preserving democracy, as various mistakes and injustices and injustices come from the existing power. Consequently, SMEs operate at specific levels and standards, as defined by democratic society[9].

The trends that SMEs have developed over recent decades are as follows:

- fusion of newspapers, radio, television, telephone and internet in technological and economic terms.
- There is a merger of SME businesses and their control is done by fewer owners. As a result of this vertical and horizontal concentration of media businesses, the news comes from shared sources.
- Media owners are multinational companies that may even have their headquarters abroad (globalization).
- No news and entertainment ads are distinguished, but they are unified (commercialization).
- More scenes of violence and sex are displayed, with an intense choice of commentary and criticism on the personal lives of individuals, avoiding controversial issues and serious discussions (superficially).

The fact that the SME market has been liberalized has led to the aforementioned trends of SMEs. Thus, they are chosen because they pay financially[10].

2. The communication between the media and the managers of the critical situation / event

There are some points that can improve the relationship between SMEs and crisis managers, which are listed below:

---

[9] J. Becker: "Contirbutions by the Media to Crime Prevention and Conflict Settlement", Conflict and Communication online, 3(2004), 1-2.
[10] id

- Control accessibility of SMEs to the critical situation.

- The interview of each person is oriented towards the media. Interviewers should refer to the key points of an issue. This is feasible by repeating the question in a different way.

- The answers of the interviewers are comprehensive, so in case of editing, not to alter the content of the interview.

- Regarding the body language and the emotional intelligence of the interviewees, they appear to be honest and honest when referring to really actual events rather than fantastic.

- Show the human profile. Those who promote a story should show a willingness to contribute with their efforts to an unpleasant event. They should not blame or collide with journalists, they should not express the "comment", as this statement reveals the mood that they want to conceal some truth.

- You should avoid speculation. Any answer can be the start of problems. When managers are called upon to speculate about alternative scenarios, they should be negative in speculation statements, as they will give a negative impression to the audience watching them.

- Avoid giving any responsibility, as this will show that there is no unity when trying to cope with the crisis, when there are conflicts or when litigation is taking place.

- Avoid conflicts with SMEs. In particular, those who come in contact with media representatives should be aware that members of the media exercise significant control over the information and the way they present them to the general public[11].

3. The theory of the effect of CNN

The fact that new technologies have developed and spread widely and globally has changed the perspective of SMEs. The media are now world-class media. Indeed, with their intervention, it can change the environment where foreign policy is engraved and exercised.The main features of global media are:

---

[11] Glaesser, 2006, id.

- Information is constantly transmitted when an event, that is, in real time, can occur
- Live events are covered so substantial restrictions are imposed
- Events can be transmitted from one place to another
- Telegraphic news titles dominate[12].

4. Media technology and crisis Coverage

Technological developments have made journalists play a mediating role now in complex and difficult-to-face international crisis situations. The journalists' directors are the ones who exert strong pressure to seek and bring fresh news and critical news to journalists. However, journalists may not be properly prepared. The question is, in these cases, journalists are involved in the transmission and presentation of a reportage, which is incomplete and inaccurate, so the news becomes easy to manipulate in this way[13]

5. The Role of Radio station in crisis Management

By now, passing through the radio stations, they are trying, when it comes to a crisis, to provide as much realistic and realistic information as possible, which will be useful for listeners.

The media have always been present at any time since the beginning of their creation. More specifically, the radio, whether in times of war or crisis, was the rock of human trust. Besides, the radio has the ability to provide timely information and psychological comfort.

It was commonplace that stations in smaller markets were better prepared to cope with a crisis, perceived a higher level of civil responsibility for crises and were more likely to say that citizens would respond to a pre-social emergency, in contrast with those in large markets, who may be less equipped or willing to serve in these possibilities.

---

[12] Center for International Politics of Thessaloniki: "The impact of global information networks on foreign policy and international relations, Reflections on new research directions 2010", available online at: http:// files.mgkworld.net/cipt/docs/ CIPTFragonikolopoulosMediaFP.pdf. (Last access on 17-4-2011)

[13] Becker, 2004,id.

6. The case for 2008

In the spring of 2008, an unprecedented bad weather struck a number of mostly Midwestern states in part. Demonstration prevents the accumulation of large quantities of water in certain areas, as well as the overflow of many rivers in the Mediterranean.

Problems were struck by the inhabitants as they flooded the houses and destroyed their crops. Besides, in many areas the pond water was contaminated. Beyond the flooded houses there were many injured but also dead with the outbreak of bad weather.

Although the media tend to focus on damage to larger population centers, many of the affected areas were rural communities that did not have the resources to cope with such a climate, even with the warning that the flow is upward.

7. Radio as a crisis mitigation tool

Under circumstances such as these, past research would suggest that radio should play a pivotal role in the management of the event and subsequent community responses. When a community is threatened, radio will typically help to galvanize citizens and motivate community leaders and social groups to work together to achieve common recovery goals[14].

These recovery efforts may involve the distribution of resources, such as food, clean water, fuel, sandbags and equipment. In addition to logistical needs, serious flooding is likely to produce a unique set of psychological needs among those affected, notably a need for uncertainty reduction[15].

Regarding these needs, local radio may act a means of community surveillance, allowing individuals seeking needed information to access it with simple, widely available and robust technology[16]. This utility and resiliency makes radio technology

---

[14] J. Waxman: 'Local Broadcast Gatekeeping during Natural Disasters', Journalism Quarterly, 50(1973), pp. 751– 758.

[15] J. Buckland, Rahman M.: 'Community-Based Disaster Management during the 1997 Red River Flood in Canada', Disasters,Volume 23(1999), pp. 174–191.

[16] P.L. Hirschburg, Dillman D.A., Ball-Rokeach S.J.: 'Media System Dependency Theory: Responses to the Eruption of Mount St. Helens', in Ball-Rokeach, S.J. and Cantor, M. (eds), Media, Audience, and Social Structure, Sage, Newbury Park, CA 1986, pp. 117–126.

better suited for emergency communication than other media. Radios are standard on vehicles, making them readily available and convenient for seeking information regarding road conditions in a rapidly changing environment.

8. Comparison between the traditional analog radio and the digital model

The evolution of the DAB technology, starting in 1981 and the German institute Institut für Rundfunktechnik (IRT) and the European research project Eureka 147 which consists of research institutes, service lanes and electronics companies and the World Dab Forum (www.worlddabforum.org), which all together contributed to the birthplace of technology and services that up to now is the Old Continent, without other regions such as Canada, Asia, South Africa, Australia, which are now on trial phase of the DAB +, falling short. Today there are worldwide more than 300 million people who can have access to more than 600 services DAB.

In the transition stage from analogue to digital radio, listeners of terrestrial are confronted with questions and dilemmas. The new possibilities offered by digital radio (better sound quality, more channel choices, greater access and flexibility of use) create uncertainty in Europe that seeks the best possible model for users. The media are gradually changing their character in the digital era compared to analog. The potential that the citizen has to choose by himself what he wants to see or hear (model "pull") - whenever he wants (on demand), effectively renders the older model, where a printed means or a broadcaster publishes in predetermined times the analog content, obsolete.

Since, at least theoretically, we conclude to a common technology platform, even if this causes some to move at two speeds.

European Centers, Programs, Crisis / Disaster / Risk Management Plan

1. The management of risks and crises / concepts analysis

Risk management and crisis management
It is important, prior to the risk and crisis management study, to make conceptual clarification on terms relevant to this issue. The reason is because it is very important to be careful about how the terms are used, and it is also important to include the English terms of each concept[17].

The concept of exposure
Exposure or otherwise exposure includes people, property, systems and every element that is inherent in each hazardous area and can be put in a state of loss. The basic measure for exposure is the numeric person and the types of goods within an area. Thus, it is feasible to have a vulnerability in combining the elements exposed to a specific risk so that there is quantitative exposure to the risk of the area concerned[18].

The concept of danger
Risk or otherwise hazard refers to a dangerous phenomenon or human activity or condition. Consequences of dangerous events or conditions may be loss of animals, injuries, destruction of property, social and economic disturbances and environmental consequences. These are geological, meteorological, hydrological, oceanographic, biological and technological phenomena with a risk, which have a significant impact when combined. The term gambling is scientifically considered to be a hazard[19].

The concept of destruction
Destruction receives the corresponding English term disaster. This is the situation in which social function is seriously disrupted, with serious human, material, economic and environmental losses and consequences. In the event of disasters, society can be put in a state of incapability to deal with the disaster with its own resources.

---

[17] A. Andreadakis: "Sewage Treatment and Sewage Treatment". NTUA Publications 2015.

[18] UN / ISDR: "UNISDR Terminology on Disaster Risk Reduction", International Strategy for Disaster Reduction 2009.

[19][19] id

The description of disasters is made as the main outcome of a combination of exposure to vulnerability, vulnerability and inadequacy of capacity with the measures taken in order to reduce or counteract the possible negative consequences. Destruction can lead to life losses, injuries, illnesses and other adverse consequences, burdening physical, mental and social well-being. At the same time, there may be property damage, destruction of goods, loss of service, disruption of society and the economy, and finally degradation of the environment[20].

The notion of "danger risk"

The term "risk / risk" takes the corresponding English term "risk". This is a possible occurrence of a natural phenomenon or a technological event or other disasters that are associated with negative consequences for citizens, goods, wealth resources and the infrastructure of an area. So, when these disasters are being put under management, then the risk refers to the combination of the likelihood of an event and possible negative consequences (UN / ISDR, 2009).

The concept of "vulnerability"

Vulnerability, or vulnerability, refers to the elements and conditions of a community, system, and infrastructure that receive certain attributes. Based on physical, social, economic, and environmental conditions and processes, they become vulnerable as it affects a dangerous phenomenon. These factors are of poor quality design and construction of buildings and infrastructure works, infrastructure maintenance, information and public awareness, risk assessment and appropriate measures as well as prudent use of environmental resources. In fact, there is a disparity within a community and time fluctuations[21].

The concept of natural disaster

Natural disaster or natural disaster concerns natural disasters. These natural disasters can be earthquakes, cyclones, floods, etc. These are basically the natural hazards. Natural disaster, as a term used interchangeably, can mislead anyone, as behind this word lies the concept of disasters that may derive from natural hazards and in fact be the result of human activities that drive the result of the disaster[22].

---

[20] id

[21] id

[22] Andreadakis, 2015, id.

The three existing definitions of the word 'natural disaster' are the following:

- The elements of the natural environment that harm humans and come from foreign or unknown sources for the human being.
- The possibility of a catastrophic event occurring at a time and place.
- The natural geological situation or the situation caused by humans or the phenomenon posing a potential threat to human life or human propertyid.

The concept of technological disaster

Technological disaster or technological disaster is a disaster, which derives from human activity and causes adverse effects on human health, life and property. These disasters can be the result of accidents, episodes and arise after industrial activity, transport or hazardous substances, such as fuel, chemicals, explosives and radioactive materials[23].

A chemical incident is an event where the chemical agent or industrial chemical makes use of a terrorist chemical "weapon". This is a biological or radiological incident with the terrorist weapon being the biological or radiological substance.

Chemical, biological, radiological and nuclear materials are the basic substances used as CBRN-E terrorist substances as explosives. Their use threatens public health and public security, national security, economic stability and political stability in every part of the earth. Therefore, it is important to have preventive measures for these incidents in order to counter terrorism by:

- Radiological and nuclear explosion
- Organic explosion
- Chemical terrorist attack.

The concept of physical-technical disaster (Na Tech)

Na Tech's natural-technical disaster combines physical and technical disasters. Natural disasters can push to technological disasters and be dangerous for any region that is not properly prepared to accept it[24].

---

[23] id

[24] Id

The concept of massive disaster

The mass destruction or massive disaster is an extraordinary and sudden situation, which is condensed in space-time and pushes to a large number of natural and social disasters and disasters. The main consequence of these is to induce psychological and physical reactions and outbursts that burden the mental health of the affected population.

2. Civil Protection in Europe

Civil Protection in Europe is aimed at activities aimed at protecting the lives and property of citizens from risks and natural, technological and environmental disasters in order to reduce their impact at European level. Although it was originally part of the Environment Directorate and was transferred from 2009 to the Directorate-General for Humanitarian Aid or General Directorate for Humanitarian Aid and Civil Protection, but it is not an autonomous policy.

The adoption of the Civil Protection Action Program was made by the Council in 1977 and concerned actions in 1998-1999 and 2000-2004 which were extended for 2006. The ultimate aim of the program was to support and complement the efforts of the Member States, at national, regional and local level, and facilitating exchanges between experts in dealing with disasters and crises.

Civil Protection Volunteerism System

According to the European Volunteer Centre, volunteerism is a means of social integration and fulfillment achievement that contributes to the social cohesion by creating bonds of trust and solidarity while investing in the social capital.

The Common Number of Emergency Calls 112

A common number of emergency calls is 112, which is valid throughout Europe. Thus, European citizens, whenever they are at risk, have the possibility to call 112, so they can talk to Emergency Responders, and this is the case for every Member State of the European Union. Anyone who moves outside Europe should have in mind only

a single number by calling on him to quickly and effectively manage an emergency disaster or crisis.

3. The European Civil Protection Mechanism

The Community Civil Protection Mechanism, or just a simple Mechanism, is the result of the 2001 Council decision. It is a proposal of the Committee to redesign and improve the Mechanism. The adoption of the new Council Decision was made on 18 November 2007. The Mechanism was set up to improve the coordination of assistance interventions and the provision of relief assistance. It was therefore established to ensure that people and the environment, property and heritage are protected when they are at risk of their destruction and fire, through the process of physical, technological, radiological and environmental destruction, or even in the marine pollution or after a terrorist attack threatening the European Union. Essentially, account is taken of the specific needs of isolated and outlying areas and island regions[25]

4. The Monitoring and Information Center (MIC)

For the Mechanism to work effectively, the Monitoring and Information Center, known as the MIC, has been set up. It therefore deals with civil protection issues within the European Commission and its headquarters are in Brussels. The Civil Protection Unit undertakes its 24-hour, 24-hour operation throughout the year, without interruption. Its staff consists of employees of the Unit. Thus, any country that has been hit by the disaster can submit a request for assistance to the EU. , with the latter responding directly and in a coordinated manner to its member state. The center can be based on a network of experts and contributes to the appropriate configuration and adaptation of the response group to any kind of disaster, and then essentially after the request begins its mission to the site of the disaster. The place, the

---

[25] 2007/779 / EC, Council Decision of 8 November 2007 establishing a Community Civil Protection Mechanism. Available online at: https://eur-lex.europa.eu/legal content/EL/ALL/?uri=CELEX%3A32007D0779 %2801% 29

end of the disaster can be any place on earth, as long as he is away, with his help within 12 hours of his request for help[26].

5. The Common Emergency Communication and Information System CECIS

This is an internet application that appears in many different languages and helps to facilitate MIC communication with the contact points of the States participating in the Mechanism. Its operation is based on 24-hour action and availability, so it can quickly and effective to deal with the disasters of the countries.

It aims to protect citizens as quickly and efficiently as possible from the natural and technological disasters they have suffered. Under this online system, it is possible to facilitate the exchange of information material and experience between the National Authorities and those responsible for civil protection and marine pollution. Besides, it aims at continuously improving their capabilities so they can effectively respond to emergencies, at preventive level and at the level of being always ready and responding accordingly[27].

6. The European Copernicus Program (GMES)

The information obtained and derived from the use of new technologies and relating to the environment is considered to be extremely important. Their importance lies in preventing and coping with natural and technological disasters. Given the changes in the planet and the climate, the role of human activities is important and decisive in these changes. So, through geo-information, actions can be taken to protect the environment and to deal with any kind of disaster and crisis.

The European Satellite Earth Observation Program GMES (Global Monitoring for Environment and Security) is also called the Copernicus program. This is a program that provides important information. It is also an EU initiative where the European Commission undertakes to coordinate and manage the program. In fact, the basic

---

[26] id
[27] https: //ec.europa. eu / echo / what / civil-protection_en

content of the program is a set of systems through which data is collected from various sources, with examples of such sources being the Earth observation satellites and the air and sea ground stations, where information is transmitted sensor material[28].

7. United Nations

ISDR - International Strategy for Disaster Reduction

ISDR aims at the creation of communities able to cope with disasters by promoting the importance of disaster reduction as a crucial element of sustainable development. The ultimate goal is the creation of a "preventive culture" through actions and programs.

ISDR is based on the cooperation of a broad spectrum of action takers, all of whom have an important role to play in the effort made by the communities and the member states for the achievement of the Disaster Risk Reduction (DDR). Among the participating action takers, there are governments, trans-national and non-governmental organizations, scientific and technical groups as well as the private sector.

---

[28] http://www.gmes.info/pages-principales/overview

8. NATO and European basic organizations

The Civil Emergency Planning Committee (CEPC) is operating within the context of the political pillar of NATO; all the countries of the alliance are represented in it. The Euro Atlantic Partnership Countries (EAPC) are also participating in CEPC.

In the context of CEPC are operating four sub-committees, which have been recently merged into each other and are the following:

• Civil Protection Group (CPG)
• Industrial Resources and Communications Services Group (IRCSG)
• Public Health and Food/ Water Group (PHFWG).

9 . Hellenic-French Joint Working Group

The term "**HE-FRA**" refers today to the widely known "Hellenic – France Joint Working Group for Civil Protection". For the time being, it aims, to start with, at enhancing the bilateral cooperation in forest firefighting. The two countries face every summer disastrous forest fires with common characteristics. The recognition of this common threat and the significant experience that has been accumulated in the past years through joint trainings but, mainly, through joint operations in the context of mutual assistance offered, has led the political leaders of the countries to the enhancement of this cooperation.

10. Bilateral Agreements and Cooperation Protocols in Force "FIRE 5"

Amsterdam Treat introduced in 1997 the term "enhanced cooperation", which is a tool that allows even to a restricted number of Member States to propose initiatives aiming at the seeking and development of actions in certain fields.

In February 2006, the national Civil Protection authorities of Italy, France, Portugal and Spain discussed on the meaning of the planning and implementation of joint actions to be taken in cases of natural disasters and emergencies emphasizing in the Mediterranean area.

11. Civil Protection Bulgaria

Bulgaria consists of 28 districts (oblasti, singular - oblast); Blagoevgrad, Burgas, Dobrich, Gabrovo, Khaskovo, Kurdzhali, Kyustendil, Lovech, Montana, Pazardzhik, Pernik, Pleven, Plovdiv, Razgrad, Ruse, Shumen, Silistra, Sliven, Smolyan, Sofia, Sofiya-Grad, Stara Zagora, Turgovishte, Varna, Veliko Turnovo, Vidin, Vratsa and Yambol. The heads (governors) of the administrative units (districts) are appointed by the national government.

According to the Act on Amendments and Supplements to the Ministry of the Interior Act, which has been in force since 24 November 2009, the Civil Protection Directorate-General (DG Fire Safety and Civil Protection) became part of the Ministry of the Interior (MoI) of the Republic of Bulgaria.

The DG Fire Safety and Civil Protection is a national specialised structure of the Ministry of the Interior responsible for performing tasks related to prevention and preparedness, management, reaction and recovery in case of natural and man-made disasters. At central administration level, the DG Fire Safety and Civil Protection – Ministry of the Interior is divided into three main departments:

- **The Operational Activities Department, which includes:**

The Situation Centre Sector

The Space Monitoring Centre Sector

The Rescue and Urgent Emergency Recovery Activities Sector

The Communication and Information Systems Sector

The Crisis Management and Defence and Mobilisation Preparedness Sector

The International Cooperation Sector.

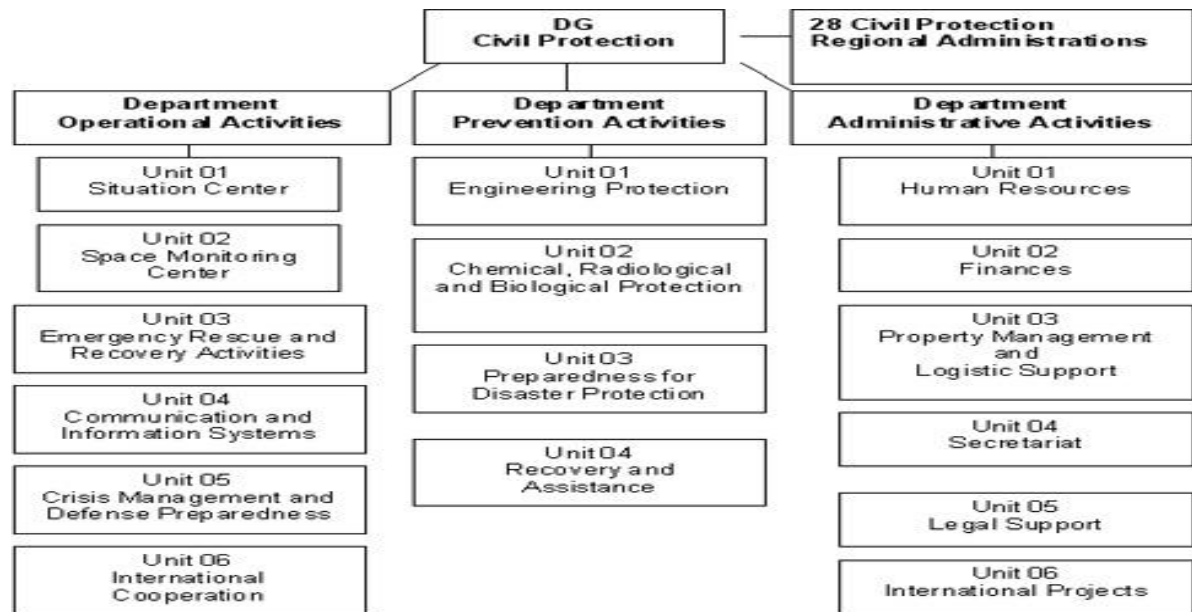**The Prevention Activities Department, which includes:**

The Engineering Protection Sector

The CBRN Protection Sector

The Preparedness for Disasters Protection Sector

The Recovery and Assistance Sector.

Organisational chart :

Regional agreements

Disaster Prevention and Preparedness Initiative for SEE (DPPI SEE)

Civil-Military Emergency Planning Council for SEE (CMEP SEE)

Black Sea Initiative and Black Sea Economic Cooperation.

Human and material resources

About 1,550 people are employed full-time the DG Fire Safety and Civil Protection - MoI.Medium urban search and rescue module registered to the MIC 2 EADRU registered to the EARDCC

Rescue and emergency equipment for urban and CBRN search and rescue, and equipment for alpine and water search and rescue.

Civil protection expenditures: Approx. 0.27% of the GDP.

Private sector The DG Fire Safety and Civil Protection carries out methodological assistance in organising the training of the executive authorities and population.

Volunteers The DG Civil Protection keeps and updates registers of volunteers, volunteers' modulus and their trainers.

Chapter 4

The experience of communication and the media in Greece and the Balkan countries during the disasters

1. The development, improvement and establishment of a platform, within frameworks and standards of knowledge management systems for disaster and crisis risk

According to the World Bank, data on risk assessment and assessment are developed by the international scientific community and are considered sophisticated and complex. It is difficult to disclose them by non-technical persons. Therefore, the World Bank has focused on developing a communication tool combining the results of the risk model with infrastructure assets and socio-economic data. Thus, this tool offers a significant number of data in an easily comprehensible form[29].

Information technology and technologies are the same objective. The overall objective of this project is to identify, design and implement and simultaneously validate the architecture of a general system for generating data exchange used to manage events related to risks[30].

2. Social media as useful information and communication tools in times of crisis

Social media is a term that applies to blogs, blogs, forums, photo sharing, wikis, social networking, networking and other digital tools and applications to facilitate interactive communication and exchange of content between people, audience, audience and organizations. On the one hand, the use of social media serves immediate information and communication. On the other hand, social media serve to monitor issues and the environment, in order to obtain a coherent picture of a situation.

3 . The availability of ICT technology and the communication of crises and disasters for vulnerable population groups

---

[29] Anil Sinha: "Disaster Management in India-towards enhanced crisis preparedness and quick response", Ministry of Home Affairs, National Institute of Disaster Management 2006.

[30] J. Rhyner: "ASSIST – Alpine Safety, Security & Informational Services and Technologies", in: International Disaster and Risk Conference IDRC Davos 2006, Proceedings, Davos, Switzerland 2006.

ICTs raise issues of accessibility, exclusion and participation[31]. The question of marginalization, of course, mainly concerns vulnerable social groups of the population. Thus, people with physical disorders, such as deafness and blindness, receive communication and information in a variety of ways. Of course, ICT in crisis and disaster issues at the information level should also be addressed to these groups of society.

Because there is no cultural and personal awareness of existing alert systems, these alert messages are not properly suited to the recipients and thus can not achieve optimal impact and compliance. Thus, the choice of the alert tool must be related to the age of the recipient, the area of his residence and his national confidence[32].

An example is coverage of the alert system, with remote regions having to benefit from technology. The increasing use of mobile telephony services is an important asset that should be used to alert citizens to a community[33].

4. European union emergency communication plan

Crisis and what it includes, are considered as the basic reason for social inequalities and social constructive destructions. The proper and meanwhile effective hazard administration in case of emergencies could be achieved through qualitative communications and dialogues.

The project from various sources including telecommunication satellites, radar, telemetry, meteorology and remote sensing allows for early warning. So, people are given the chance to take strict measures, such as the use of telecommunications as a way of transferring the piece of information about the imminent danger in order to reduce the negative consequences of these risks.

---

[31] Zemp, 2010, id.

[32] U. Meissen, Dressel K., Klafft M., Párraga Niebla C.: "The future of alerting the public – discussion of human behavior, information expectations and technology use in an inter-cultural context", in: International Disaster and Risk Conference IDRC Davos 2012, Proceedings, Davos, Switzerland 2012.

[33] Capistrano & Singh, 2012, id.

The way in which basic communications are shared is something that characterizes to a large extent all kinds of disasters. The failure of telecommunication infrastructure, irrespective of its size, leads to avoiding loss of life and property damage, causing delays in dealing with emergencies and disaster relief efforts.

However, although the reliability and resilience of modern telecommunications networks in personal injury is increasing, the risk associated with communications failures is constantly undermined by the increasing dependence on these tools in emergency operations. Lastly, this report does not only focus on official communication channels but deals with the whole universe of telecoms infrastructure that plays a critical role in crisis communications

5. Alert protocol of the European Union

Through the EU Civil Protection Mechanism, the European Commission has a major importance in coordinating reactions when various crises erupted in Europe and around the world. The Emergency Response Coordination Center closely monitors existing and potential crises throughout the day.

Policy and regulations are important elements of emergency communications planning and management. One of the main hindrances to effective establishment of telecommunications for disaster mitigation is the lack of a legal and regulatory regime. Before 2004, institutional frameworks and policies of regulatory commissions were far from incorporating contingency planning for disaster management.

The International Telecommunication Union (ITU) is looking at practical ways of helping countries ratify the Tampere Convention and is making an assessment on the implementation of this treaty . This will no doubt, help countries determine how best to smooth the rough edges of the implementation process so as to pave the way for a faster, unhindered, and effective deployment of telecommunications resources by all humanitarian actors before, during and after disasters strike.

6. Emergency Communications for Disaster Preparedness

The communication of warning message should inform what is happening, what it is relevant to that person, and what that person can do. It should be communicated in a clear, simple language and delivered with enough lead-time for the recipient to take any necessary action. Multiple communication channels are required by communities to ensure receipt of warning information from all levels of government structures.

There are two type of communication methods available for warning dissemination :

   (1) Mass notification methods and

   (2) Addressable notification methods.

Mass notification methods are not individually addressable and generally provide the same alert or message to everyone within a particular geographic area, regardless of level of individual risk. These include: outdoor systems – sirens, local sirens/ loud speakers, mobile electronic signs and mass broadcasting systems – conventional radio and television, cable television and **low power radio**.

Addressable notification methods are tailored and targets alerts and messages only to those at risk or to specific groups (such as emergency responders). Some latest addressable technologies are flexible enough to support many of the same functions of traditional mass notification systems. These include:

- Broadcasting systems – provincial radio broadcasting , amateur radio , VHF/HF radios , weather radio, micro phone, mosque, temple

- Telecommunication systems – telephone, fax, cellular mobile, Short Message Service, paging and tone-alert radio, internet, VoIP, and satellite .

- Inter personal communication – door-to-door, residential route-warning, etc.

Public networks, such as fixed line and mobile telephone system, are the basis of first responders. With involvement of partners from outside the immediate vicinity of an event, responsibilities and, thus, communication requirements shift to larger dimensions.

In disaster prevention, the avoidance of hazards, telecommunications have a key role in the distribution of knowledge and in raising awareness . They are vital tools for day-to-day prevention and early warning. Preparedness to respond to emergencies is a task of institutional responders, commonly known as emergency services. Due to the character of such services, their telecommunication equipment and network can be expected to be in a permanent state of readiness.

Many countries have developed this kind of system in coping with disasters and emergency situations. Japan for example, a country with constant disaster threats is a good example of a country that has developed a robust prevention and mitigation system for disaster and emergency situations, demonstrating that investing in a good communication system is integral to providing accurate information during disaster emergencies .

Conclusions

In conclusion, experience with both natural and man-made disasters highlights the simple truth that communications are useful only to the extent that they are accessible and usable by people in communities at risk. During disaster events, many vulnerable communities are often cut off from national response systems due to lack of appropriate communications that should have been in place before a disaster occurs.

We have to remember that the effectiveness is partly reflective of preparedness. In this respect, training plays a critical role, no matter how sophisticated or robust the system. An effective notification system requires continuous public education and awareness of the purpose and capabilities of the system. Whatever existing communication methods are chosen for disaster management, all groups that are part of the disaster cycles should be involved in the planning, implementation and operation of their systems.

These investigations indicate that local radio plays a particularly critical role in a community-based response to a crisis. Disaster researchers often point out that all disasters are local in their impact, and that the first response to a crisis comes from the community itself.

Local radio stations, given their resilience, flexibility, and accessibility, play a critical role in informing the public, coordinating response, and reconstituting community connections. Moreover, the finding that smaller-market stations are more fully aware of and embrace that role is troublesome. Regardless, a battery-powered or hand-crack radio is an essential part of an emergency preparedness kit.

In general, science needs to develop more and strengthen multidisciplinary and multidisciplinary, such as social science, and address the issue of civil protection at local, national and international level. There is, therefore, a significant gap in knowledge and data management at national and regional level, so this gap needs to be improved. Of course, the growing presence of technology is a major challenge for many stakeholders to use it effectively in support of an integrated and adaptive approach to risk management.

There is talk of the question of reliability in the use of social media and communication media, with the majority of information being usually inaccurate and sometimes misleading their content before it is even evaluated. Mobile devices can play an important role and work at the same time in improving personal readiness and security. However, they still accept technical challenges and research deficiencies, with new trends and developments being promising. Research should assess the dynamics of social media and, in particular, its potential as an additional technical tool that helps to improve communication between the authorities and the entire population of the population and among themselves. In addition, the impact of professional communication on the border of language and behavior from the use of social media is great, characterized by the resilience that occurs due to the multiculturalism of modern societies, so the use of social media must be assessed and identified. This may contribute in the context of opportunities, challenges, limits to an optimal use of social media advocating for enhanced resilience.

The needs of each local community have been highlighted, for example the need for wider use of mobile satellite telecommunications technology. A broad coverage of these technologies can enable local communities to be fully or better equipped, so if they respond better to disasters. Amateur radio is a useful tool for communication in crises and disasters, especially for distant regions. There is also a need to increase the use of home radio, which is facilitated by positive modifications by amateurs.

When covering the alert system, remote areas must benefit from the technology. The growing use of mobile telephony services is an important asset that should be used to alert citizens to a community. In general, the challenge of addressing demographic change and the corresponding patterns of using methods and media about the way teams are dealt with must be addressed. New technologies offer many opportunities, keeping it simple, and using a warning message that effectively informs

It seems, therefore, that communication is influenced by a variety of factors. Information and information technology and availability make it possible to manage crises and disasters. In addition, supply with relevant and timely data and information may be converted into knowledge if such knowledge and lessons have been learned from past events and can not be stored and communicated in a correct manner. The result of this is the loss of information.

Consequently, communication management is a key factor in risk and crisis management and risk and crisis communication. New communication technologies give the possibility of a practical reduction in the risk of disasters and the crisis. Their strength and flexibility make them suitable for the administration and operation of control, dealing with situations and emergencies, enabling the exchange and generation of information on the state of disaster and crisis, so that the vulnerabilities systematically.

Furthermore, through ICT, there is the possibility of planning and completing and increasing missions, roles and workflows. In the modern world with the huge distribution of information material, vital information can be identified and filtered without influences.

The International Telecommunications Union (ITU) is examining practical ways to help countries ratify the Tampere Convention and make an assessment of the implementation of this Treaty. This will undoubtedly help countries determine the best way to smooth out the rough edges of the implementation process in order to pave the way for a faster, seamless and efficient development of telecommunication resources by all humanitarian actors before, during and after the strikes .

With regard to Emergency Communications for Disaster Preparedness, communication of the warning message should inform what is happening, what is

relevant to this person and what this person can do. It should be communicated in clear and simple language and provided with sufficient time for the addressee to take the necessary measures. Many communication channels are required by communities to secure warning information from all levels of government structures.

Decision making in such unforeseen business conditions is a process involving many institutions, but private networks are needed.

Emergency Communications for Disaster Prevention is targeted at disaster prevention, avoiding disastrous risks, with telecommunications having a key and decisive role in knowledge sharing and awareness-raising. They are vital tools for daily prevention and early warning. Emergency preparedness is a task of institutional correspondents, commonly known as emergency services. Due to the nature of these services, the telecommunication equipment and their network are expected to be in a state of permanent readiness. One of the important aspects related to the prevention of disaster is a well-designed telecommunications network and an information system that is suited to dealing with chaotic situations during and after emergency disasters. Telecoms and computer facilities are the two most anticipated aspects to address disaster and emergency situations.

Finally, in Emerging Technologies and Trends, the two key areas of technology are the core network and the access network that includes interoperability.

Contributing moments of dissertation work

- Developing new models for local media/Television and Radio/ response during the emergency and crisis situations;
- Showing that communication management is a key factor in risk and crisis situations.New communication technologies give the possibility of a practical reduction in the risk of disasters and the crisis;
- Deep analysis of the level of media competency of government administration during the disaster situations in Greece and other Balkan countries;

- As a result of studies in dissertation work I was received an important role as a representative of the Prefecture of Western Macedonia of Greece to the European Civil Protection Mechanism.

List of publications related to the dissertation

1) International conference of Civil Protection, Title of Presentation: "The Role of Media in Crisis Management " and publication page on 159, Year 2016 Alexandroupoli Greece . ISBN : 978-960-89345-7-3
   https://safegreece.org/images/pdfs/2016/SafeEvros2016-proceedings.pdf

2) International conference of Civil Protection, Title of Presentation: "communication crises management: The Role of Media" Program on page 7, Year   2015   Crete   Greece   . http://www.safechania2015.tuc.gr/fileadmin/users_data/safechania/_uploads/Final_Program_10d.pdf

3) International conference of Civil Protection, Title of Presentation: "The Role of Media in Crisis Management   " and publication   page 31, Year 2017 Athens Greece .
   http://safeathens.gr/files/Safe%20Athens%20program-final.pdf

4) Publication 'Media and Journalism rules 'pages 171 -182 National Library of Greece ISBN 978-618-82289-0-0

5) Scientific Article «*The Role of Media in Disaster and Emergency Communication   Model*s» http://ebox.nbu.bg/mascom18/view_lesson.php?id=15

6) Scientific Article   «*The experience of communication and media in Greece and   the   Balkan   countries   during   the   disasters*» https://safegreece.org/index.php/blog-eng/181-the-experience-of-media-communication-in-greece-and-the-balkan-countries-during-the-disasters

7) Scientific Article "*The Role of media during a crisis Radio: The parameter of Analog broadcasting Vs Digital broadcasting*" ISSN 1310-8670
   http://ebox.nbu.bg/mascom16/articles.php

8) Presentation title: «*European prevention communication plan*» **Нов български университет** Департамент „Масови комуникации“ *XVIII ЛЯТНА ШКОЛА по Пъблик Рилейшънс* **Глад за съдържание** НБУ, 22,23 и 24 юни 2016 г. And Publication on : http://ebox.nbu.bg/ssc17/view_lesson.php?id=38

9) Publication «*The role of media in disaster and crisis management*» on department of mass communication annual collect papers http://ebox.nbu.bg/mascom17/view_lesson.php?id=19

10) Presentation and President of organize committee of the 5th International Conference of civil protection Safe Greece that will held in the City of Kozani on November 2018 https://safekozani.gr/index.php/en/