

PLEASE NOTE! THIS IS SELF-ARCHIVED VERSION OF THE ORIGINAL ARTICLE

To cite this Article: Bourdache, Kaci (2017) The Role and Importance of Citizens in Emergency Preparedness: Case Finland. Proceedings of the 10th International Conference Crisis Management Days, May 24-26, Terme Tuhelj, Croatia, 413-421.

URL: http://dku.hr/wp-content/uploads/2017/05/Zbornik Radova 2017.pdf

Kaci Bourdache

ULOGA I VAŽNOST GRAĐANA U PRIPRAVNOSTI NA HITNE SITUACIJE : CASE FINLAND

Stručni rad UDK 351.862(480)

Kaci Bourdache

Laurea University of Applied Sciences

Sažetak

U dobro organiziranom društvu, građani očekuju odgovor javnih službi u slučaju hitnih situacija, tako da su život i imovina primjereno zaštićeni. Međutim, u stvari, ograničenja čak i najučinkovitijih javnih službi nisu uvijek prepoznata među građanima, što bi moglo dovesti do podcjenjivanja osobne sigurnosti i svijesti o sigurnosti i vlastite pripravnosti. Primjeri su: pretpostavka da prevencija požara nije relevantna zbog postojanja službi spašavanja; Da je spremnost za dugotrajne prekide električne energije nepotrebna budući da je proizvodnja energije konstantna i neprekinuta; I da stjecanje vještina prve pomoći nije potrebno zbog postojanja hitnih medicinskih službi. Ovaj rad opisuje finski sustav pripravnosti za hitne situacije, ali naglašava ulogu i važnost građana i neposredne zajednice, istodobno promovirajući ideju da su oni daleko najvažniji element pripravnosti u hitnim situacijama. Shvativši to, možemo na kraju raspravljati o tome što bi društvo i javne vlasti trebale raditi kako bi se kod građana mogla razviti potrebnu razinu svijesti, znanja i vještina kako bi najvažniji element bio što učinkovitiji. Iako se koristi slučaj Finske, cilj je da se rad može primijeniti i na međunarodnoj razini.

Ključne riječi: pripravnost za hitne situacije, građani, zajednice

INTRODUCTION

In a well-organized society, citizens expect public service response in case of emergencies to be such as that life and property is sufficiently protected. However, in truth, the limitations of even the most efficient public services are not always recognized among citizens, and this might lead to undervaluing personal safety awareness and self-preparedness. Examples are: assuming that fire prevention is not relevant because of the existence of rescue services; that preparedness for long-lasting power outages is unnecessary since energy production is constant and uninterrupted; and that acquiring first-aid skills is not necessary because of the existence of emergency medical services. This paper describes the Finnish emergency preparedness system but highlights the role and importance of citizens and their immediate community while promoting the idea that they are by far the most important element of emergency preparedness. To conclude, this paper highlights measures that society and public authorities could do so that regular citizens can achieve the required level of awareness, knowledge and skills so that they - the most important element of emergency preparedness - is as efficient as it can be. Though Finland is used as a case, the aim of the paper is that it can also be applied internationally.

SELF-PREPAREDNESS AND EMERGENCY RESPONSE AS PART OF EMERGENCY PREPAREDNESS

Definitions

The two most important definitions are emergency preparedness and self-preparedness. Defining the former depends very much on the context. According to the United States of America's Federal Emergency Management Agency (FEMA), emergency preparedness is "a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response" (FEMA, 2016). It covers all disasters, natural and manmade. Meanwhile, in the EU, Emergency Preparedness falls under the Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO), a department directly under the EU Commission (ECHO, 2016). Humanitarian aid, though at times very strongly connected issue to emergency preparedness, is not strictly part of it. So discounting that, the primary role of ECHO is comparable to that of FEMA – to coordinate emergency assistance between nations/states. As such, the definition laid by FEMA is the most valid for the purposes of this paper. Outside the context of the previous organizations is the daily *emergency response* that forms the basic safety net of our lives. These include e.g. fire and rescue departments and emergency medical services. Emergency response actors come in a variety of forms, and while they do form the backbone of emergency preparedness as well, the great majority of their time passes in handling day-today services for the citizens they serve.

Defining self-preparedness is, for the purposes of this paper, simple. As Finland is used as a case, we refer directly to the Rescue Act (Ministry of Interior 2011), which states the following in section 14:

Self-preparedness

The owner and occupants of a building and the business and industrial operators shall for their part:

1) Prevent fires and other dangerous situations;

- 2) Prepare for the protection of persons, property and the environment in dangerous situations;
- 3) Prepare for extinguishing fires and taking other such rescue action which they are capable of performing independently;
- 4) Take measures to ensure safe exit during fires and in other dangerous situations and to facilitate rescue operations.

The provisions [above] also apply to activities carried out outside buildings and to public events.

It should be noted that "occupant" is meant in the legal sense and does not refer to individuals dwelling or sojourning in the building. Also, the extent of "dangerous situations" applies only to 1) accidents, 2) loss of vital functions that threaten people or property and 3) actual emergency conditions that threaten people or property, e.g. warfare or threat of it (Ministry of Justice 2011). The concept of "dangerous situations" therefore exclude the direct threat of e.g. violence or vandalism, but includes the possibility of them leading to the accident risk (e.g. arson leading to a fire). Keeping in mind the extent of the threats that self-preparedness covers, the following figure simplifies the Rescue Act in explaining what the building owner, occupant and the business and industrial operator needs to do about these threats:

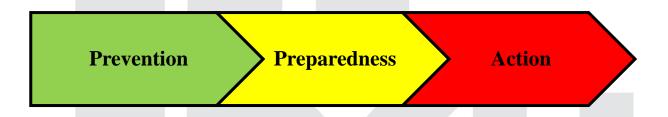


Figure 1. Extent of self-preparedness actions according to the Finnish Rescue Act (Ministry of Interior 2011)

First thing to note is that despite the wording of the concept "self-preparedness", it is more than that. First, it requires *prevention*. This in turn requires knowledge of risks and analyzing the root causes of threats so that they can be prevented. Obviously, only internal risks can be prevented and therefore outside threats such as nearby industrial accidents and disasters, not to mention actual emergency conditions, can only be prepared for from the perspective of a single building, or even local community. *Preparedness* refers to all actions that must be done in order to keep the damages of an accident that might occur as low as possible. *Action* means just that – correct actions when, not if, an accident occurs in order to minimize damages. Further, it should be noted that proper prevention, preparedness and action happens only if it includes structural, technical, administrative and operative methods, in a mix that that specific location and threat require.

Discussing Self-preparedness as part of Emergency Preparedness

Looking at the definitions above, two discussion points can be brought up. One is that the role of citizens is in emergency preparedness is minor. There are some instructions on preparedness (specifically: what to be aware of, obtain and do in anticipation of a disaster) and correct actions in case a disaster threatens or has occurred have been described, but they are all suggestions.

Basically, it is then the responsibility of the citizen to be aware, seek the necessary information and to be motivated enough to follow it. More on that later – the second talking point is the scope of events that fall under emergency preparedness; the most commonly used word to describe events that require it are "disasters". Disasters, however, are not the only issues that we need preparedness for. A more mundane type of negative event, which the Finnish Rescue Act (2011) – calls "accidents" also have a high impact on the society. The nature of accidents though is that they occur frequently. To apply a risk analysis perspective based on ISO 31000:2009 standard, accidents have milder consequences than disasters, but they occur more frequently. Therefore, when evaluating accident and disaster risks against each other, the overall impact of an accident type e.g. household accidents on the societal level, they might have an impact comparable to that of a disaster. The following table makes a comparison between a singular disaster event and accidents per annum.

Table 1. Comparison of an accident type and a single disaster (Il Sole, 2016; Ministry of Social Affairs and Health Finland, 2013; Rai News, 2016)

	Home and leisure accidents in Finland per annum	August 2016 Central Italy earthquake
Deaths	2300	299
Injured	770,000	388
Total costs	Est. 1,2 – 1,4 billion €	Est. 1 – 11 billion €
Other consequences		4500 homeless Cultural heritage losses

The purpose of this comparison is not belittle a significant disaster, especially since the earthquake mentioned is not the only one to occur that year in Italy, but to show that incremental incidents also have a very high and costly impact to the society. These incidents, not being disasters, are handled as daily emergency response events, calling little attention to them. The following table aims to highlight the differences and similarities of emergency preparedness and self-preparedness at a glance.

Table 2. Comparison between emergency preparedness and self-preparedness

	Emergency preparedness	Self-preparedness
Applies to	Major accidents, disasters, loss of vital functions, emergency conditions	Minor accidents, major accidents, disasters, loss of vital functions, emergency conditions
Responsibility to	Prepare, take action	Prevent, prepare, take action
Primary upkeep responsibility	The public authorities	Building owners and occupants, business and industrial operators

The most important note to take from this comparison is the overlap between the two. Basically, we can conclude that proper self-preparedness covers all emergency preparedness actions at the level of individual buildings or locations where people live, work and pass their free time. At times, they may of course need assistance from emergency response services, but that is not yet an emergency preparedness issue on a wider scale.

Discussing the role of citizens in Emergency Preparedness

Neither emergency preparedness nor self-preparedness strictly require individual citizens — unless they are also building owners in their own right — to actively do anything other than following basic duty of care amounting to little more than "not actually causing an accident or other negative event". It is up to each community, household and individual to participate in order to actually adhere to and develop their self-preparedness. Residents, members of staff or other persons who have knowledge, motivation and training are positive forces in all aspects of self-preparedness — they help to lower both the total amount of accidents and the consequences of any that might still occur. Conversely, ignorance or indifference of self-preparedness activities can lead to a situation where that person is a living, breathing risk factor. That much is obvious but a rather surprising factor that has an effect on motivation is that existing efficient emergency response that we are accustomed to in Finland and most parts of the western world might lead to dangerous assumptions.

Laurikainen (2017) of the Finnish National Rescue Association SPEK reports in his research concerning preparedness of Finnish households that 77% of Finns trust the authorities to handle the situation well in a nation-wide power outage, and in his conclusions mentions that the majority of households are confident in their self-efficacy. These do not clearly indicate that people are too trusting, but false notions do occur among the populace. Such notions would for example be assuming that fire prevention is not relevant because of the existence of rescue services; that preparedness for long-lasting power outages is unnecessary since energy production is constant and uninterrupted; and that acquiring first-aid skills is not necessary because of the existence of emergency medical services. Indeed, the notion of firemen rescuing people from fires can be dangerous. An often repeated example would be that of a household fire. Prevention, detection, correct action (such as notifying emergency response and evacuation) are all up to the occupant's preparedness and capacity to function. As a household fire is deadly in 3-4 minutes, but it takes over 10 minutes for emergency response to be able to begin operating at full capacity, it is clear that the most critical link in the chain lies with the self-preparedness of the people.

Allowing a bit of daydreaming, let's gather here what the ideal situation for national emergency preparedness would be, from the perspective of communities. Housing companies represents those responsible for self-preparedness, and is interchangeable with any other building or business and industrial operator. A household can be interchangeable with e.g. a small business.

- Housing companies:
 - o Identify and analyze risks, then treat them by preventing, preparing and planning for correct action
 - o Maintain the premises to be structurally and technically safe to live in
 - Regularly inform and motivate their residents of the risks, safety arrangements and proper procedures
- Households:

- Do their utmost to prevent accidents by regularly monitoring for risk factors and controlling them
- Have prepared for accidents so that they can detect and recognize an imminent threat (e.g. with smoke detectors)
- Have prepared for accidents so that they have the means for contacting emergency response, administer emergency first aid, extinguish a small fire and evacuate
- Have prepared for loss of vital functions and disasters and are able to function for at least 72 hours without external help

– Citizens:

- Take personally care that the possibility of an accident or harm (to them and others) is minimized in everything they do
- Are able to assist those that cannot take care of themselves (e.g. children, elderly or disabled)
- o Have acquired the necessary emergency first aid and extinguishing skills
- o Take care of their physical and mental health

Currently, there are very few ways to comprehensively measure on what level we are in the previous situation. For example, the European Commission (2009) Eurobarometer indicates that 46% of Finnish households have already taken actions such as "preparing a first aid kit, buying a torch, etc. to prepare [themselves] for disaster such as flooding, forest fires or earthquakes". In comparison to average result of 27 EU countries, which is 20%, that is of course comparatively but perhaps not objectively a good result. Also, the results are much too vague to be much use. Simply owning a torch might be enough for someone to answer "yes", and that is a minor detail in the whole picture. Further, as devastating floods and forest fires are very rare and earthquakes nonexistent in Finland, comparing different EU countries might not be the best policy.

Perhaps we can only say that we want the message of emergency- and self-preparedness to have the maximum - let's call it playfully market penetration — as possible. As a society can be assumed to help each other's members, we don't need a 100% coverage of that list above (a utopian goal), but to keep it as high as we reasonably can. The better we are in it, the less there are injuries, deaths and financial losses; and in high-impact disasters, the difference between 40% and 60% can be the difference between an uncontrollable situation followed by collapse of public order, and a situation under control. The gap in the latter scenario can be filled by the community and authorities assisting those in need.

CONCLUSIONS AND LOOKING TOWARDS THE FUTURE

Based on the discussions previously, we can make the following claims:

- Proper self-preparedness prevention of negative events lowers the possibility of emergency preparedness measures ever being needed in the first place. E.g. preventing all fires also lower the possibility of a major, industrial fire threatening local populace.
- Proper self-preparedness preparation and action lower the consequences of the accident and enhances the performance of emergency response.
- Proper self-preparedness lowers the amount of citizens and households in a community that "need rescuing", freeing resources to tackle the root cause of the threat

- Citizens should be exposed and have access to information about safety threats and their treatment in their daily lives
- Communities, housing companies, businesses etc. should be held responsible for risk management, and they must be given proper tools and assistance for doing so by the authorities

Overall, the role of citizens in emergency preparedness cannot be overstated. Done properly, we will have less accidents and even if they do happen, the correct actions and resilience of the population keeps the damages and other effects to a minimum and allows the emergency personnel to focus on the essentials. In the Finnish self-preparedness system, the responsibility of building owners and occupants is emphasized. Therefore, the role of citizens is dependent of the housing companies and other owners of residential buildings as an all-important link in the chain. The public authorities should provide them with the necessary support in order to do risk management and to keep the occupants skills and knowledge at an acceptable level. This support could take the form of training and reference materials readily available, easy-to-implement baseline of risk management processes and consultation. This conclusions apply internationally as well; though the prevailing situation and threats are different everywhere, the basic principle of enforcing the role of citizens to lower both the amount and severity of accidents and disasters works everywhere.

Further research is necessary though. Discovering best practices in legislation, tools and methods from different regions and countries in legislation, available tools and methods and applying them elsewhere would be very useful. Measuring the level of awareness of emergency preparedness among citizens would also be useful and allow evaluating the effectiveness of any procedures applied.

Literature

Directorate-General for European Civil Protection and Humanitarian Aid Operations (2016), About European Civil Protection and Humanitarian Aid Operations, 8.7.2016, http://ec.europa.eu/echo/who/about-echo en (2.3.2017)

European Commission (2009), Eurobarometer on Civil protection EB722, http://ec.europa.eu/public_opinion/archives/ebs/ebs_328_fact_fi_en.pdf (2.3.2017)

Federal Emergency Management Agency (2016), About the Agency, 11.5.2016, https://www.fema.gov/about-agency (2.3.2017)

International Organization for Standardization (2009), ISO 31000:2009 Risk management - Principles and guidelines

Il Sole (2016), Terremoto, Curcio: 4500 nelle tende, ma presto via da lì, 8.9.2016, http://www.ilsole24ore.com/art/notizie/2016-09-08/terremoto-curcio-4500-tende-ma-presto-via-li-le-casette-7-mesi-115052.shtml?uuid=ADnS26GB&refresh_ce=1 (3.3.2017)

Laurikainen, H. (2017), Kotitalouksien varautuminen Suomessa, http://www.spek.fi/loader.aspx?id=03718850-a8d7-4ced-90fc-48432a6683f3 (3.3.2017)

Ministry of the Interior (2011), Translation of Rescue Act, 29.4.2011, http://www.finlex.fi/fi/laki/kaannokset/2011/en20110379.pdf (2.3.2017)

Ministry of Justice (2011), Emergency Powers Act, 29.12.2011, http://www.finlex.fi/fi/laki/ajantasa/2011/20111552 (2.3.2017)

Ministry of Social Affairs and Health Finland (2013), Target Programme for the Prevention of Home and Leisure Accident Injuries 2014–2020, Tampere: Suomen Yliopistopaino Oy

Rai News (2016), Terremoto nell'Italia centrale. È morta una donna ricoverata: le vittime sono 299, 15.11.2016, http://www.rainews.it/dl/rainews/articoli/terremoto-299-vittime-morta-donna-ricoverata-6f42bd7f-3de1-42a8-9649-9d725fb509ff.html (3.3.2017)



THE ROLE AND IMPORTANCE OF CITIZENS IN EMERGENCY PREPAREDNESS: CASE FINLAND

Abstract

In a well-organized society, citizens expect public service response in case of emergencies so that life and property is sufficiently protected. However, in truth, the limitations of even the most efficient public services are not always recognized among citizens, and this might lead to undervaluing personal safety and security awareness and self-preparedness. Examples are: assuming that fire prevention is not relevant because of the existence of rescue services; that preparedness for long-lasting power outages is unnecessary since energy production is constant and uninterrupted; and that acquiring first-aid skills is not necessary because of the existence of emergency medical services. This paper describes the Finnish emergency preparedness system but highlights the role and importance of citizens and their immediate community while promoting the idea that they are by far the most important element of emergency preparedness. Realizing this, we can finally discuss on what the society and public authorities should do so that regular citizens can achieve the required level of awareness, knowledge and skills so that the most important element is as efficient as it can be. Though Finland is used as a case, the aim of the paper is that it can also be applied internationally.

Key words: emergency preparedness, citizens, communities

