COMMUNITY INVOLVEMENT INTO INCIDENT MANAGEMENT STRUCTURE: LITHUANIAN AND UKRAINIAN CASE STUDY

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Abstract: The experience of different countries demonstrates that community involvement in response phase of disaster management actions increase the resources of authorities and allow to eliminate consequences with lower costs as well as to earn public trust. The aim of this article is to assess the possibilities of involving communities in incident management system of disasters for effective disaster management from the point of view of management, public administration and law. The authors analyze incident management structure within a disaster and the Lithuanian and Ukrainian legal regulation whether regulations applicable in the aforementioned countries provide for community involvement in disaster management.

Key words: incident, disaster management, Neo-Weberian management, community involvement, legal regulation

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Introduction

Situations when different kinds of threats occur suddenly along with their aftermath are frequent and responsible institutions often have no time for discussions, planning or looking for the best solutions. Quick and resolute actions are required. To ensure smooth allocation of functions and know the actions to be performed by every institution involved in incident management structures (IMS) are developed to be applied during the response phase. To have proper implementation of the IMS, which would enable as quick elimination of an incident as possible, it is necessary to analyse and assess the importance of community involvement. Citizen participation strengthen trust in authorities and hierarchical (top to bottom) decisions of the public sector organisations among citizens, their groups and public authorities (De Mond Shondell Miller (2016), Kiuchi (2013), Dynes (2006), Szreter and Woolcock (2004), Kaasa (2016), Khalid et al., (2016), Szkudlarek and Biglieri (2016)). Synergy of coordination between citizens and strong centralised authority on disaster management is extremely...
important and yields perfect results. This article analyses community involvement in incident management (IM) from an interdisciplinary perspective. The authors have pulled their competences to reveal the admissibility of application of certain managerial structures in the light of the effective legal regulation. Law usually prevents the pursuit of managerial goals. There have been no legal research in Lithuania and Ukraine, which would be directly related to the subject matter. Therefore, it would be reasonable to carry out a systematic analysis of legislation regulating the involvement of the community in IM, revealing legal potentials for the community to actively participate in this process. To this end, the authors provide a brief definition of a disaster management cycle, present the IMS applied in the most advanced countries of the world, and analyse the potentials of community involvement in disaster management. The comparison of two case studies provides an overview of the Lithuanian and Ukrainian legal regulation in the field of emergency management.

Disaster Management Cycle and Incident Management Structure

In certain situations which determine the occurrence of threat an accident happens and it should be noted that Enrico Quarantelli classifies accidents in terms of their effect in the following “ascending” order: local incidents, emergencies, disasters and catastrophes. The extent of an emergency aftermath will result in the order of growing severity starting with an incident, then following to emergency, emergency increasing to a disaster, and the latter to a catastrophe (Hagen et al. 2013). Most emergencies are relatively minor events which can be managed in a usual manner or using the available resources. Quarantelli (1998) states that disasters are occurrences caused either by a manifestation of a threat or by a quite sudden effect of the consequences of natural or technological factors which might result in major negative physical and social effects, and the removal of which inevitably creates the necessity to use additional resources (human resources, equipment, managerial potential, etc.). Evidently, the definition of a disaster is much broader and less restrictive (Hagen et al. 2013). Even relatively minor incidents can grow into disasters or events exceeding the capacity of a community to respond to them (without the assistance of the central government) and to undesirable events, if not counter measures are taken (Dwyer and Owen, 2009).

A complex disaster management is based on the four-phase model as follows:

- mitigation (is inseparable from the reduction of possible damage or elimination of the potentials of threat manifestation even before its occurrence),
- preparedness (includes making sure that all necessary supplies are in place so as to help or increase the chances of survival in case of a disaster, to reduce financial as well as any other damages),
- response (oriented towards the performance of specific actions so as to reduce the impact of an on-going disaster and thus contain any further destructive effects),
recovery (this phase is an important reintegration of the affected people and territory to the state of “normal” life taking into account the disaster situation aftermath) (Coppola, 2015). Implementation of measures of the four-phase model can ensure community’s security. Without security, people cannot have a safe life and their facilities cannot be used reasonably. The absence of proper security damages the economic services and keeps it from the market, while instability and insecurity stop technology and industry activities, and cause deterioration of property and facilities. In a society, which is not secured enough, looters and illegal powerful groups break the law and violate the rights of the people (Rahimi, 2015; Loktieva, 2016; Włodarczyk, 2014). Response phase often uses the IMS developed by the Emergency Management Office of the California State Governor (Christen et al., 2001; Perry, 2003). The IMS is composed of the following three levels: strategic, tactical and operational (Crichton et al., 2005). The key purpose of the IMS is to make all planned resources potentially accessible in case of management of a disaster (Perry, 2003).

In carrying out response actions coordination is an important and necessary component because many different officers of public governmental and many of other organizations have to arrive to the point of incident as soon as possible. Successful coordination of all forces and cooperation is possible and often helps save lives and use resources effectively; however, an opposite process poses ineffective or overlapping use of resources and may even aggravate the impact of an incident (Survila and Smalskys, 2017).

In this context, the IMS is designed subject to the responsibilities of the incident management commander (IMC). As can be seen in Table 1, five sections are allocated for direct subordination to the management. The focus on roles rather than on persons or public governance institutions leads to one more aspect of the IMS, namely, to flexibility. Thus, any skilled worker of a response actions institution can play the role of IMC. I.e. in case of any individual incident, there shall be solely one IMC, and the first officers to have arrived to the point of an incident have the obligation to assume the management, except for extraordinary circumstances, when management can be transferred to a higher or specially trained officer. The main advantages of the IMS Neo-Weberian principles:

- it has to be fairly easily expandable so as to meet the needs of managing the challenges posed by the increasing effects of an incident;
- the aim of all IMS is to rationalize and organize the response phase actions which enable the use of pre-planned resources for response measures (Perry, 2003);
- management based on goals when all those working on the incident management perform their functions pursuing general goals and following the Incident Management Action Plan (IMAP) designed to attain these goals;
- functional management which includes the implementation of four specific functions (control, planning, execution of operations and logistics) of the Incident Management Team (IMT) (Dwyer and Owen, 2009), and
– the scope of control (incident management commander (IMC) should be appointed so as to assume responsibility for no more than five subordinate areas or teams. When the extent of an incident shrinks, the responsibilities of the IMT reduce accordingly) (Hayes and Obodei, 2011).

Table 1 shows hierarchical principles of organizing the IMS activities. Command is vested in the IMC, who may be assisted by a support officer and senior advisor. Deputy IMC and his/her team members shall make tactical decisions. Operational level decisions are made in situ: what shall be done next, who will be responsible for what, what the effects of previously adopted decisions were (Crichton et al., 2008). Sections operate in the command post at the strategy level. The size of these five sections depends on the extent of an incident and on the existing conditions and are usually as follows: administration, operations, logistics, planning and safety (Brunacini, 2002). Branches are established under sections and represent functional tactical areas relevant to each section. Usually branches are developed to perform the key functions. After the required branches are established, sectors are determined. Sectors are defined beneath branches and execute very specific tasks.

Table 1. Responsibilities of Units within the Incident Management Structure *(designed by the authors with reference to Perry, 2003 and Miehl, 2011)*

<table>
<thead>
<tr>
<th>Command</th>
<th>Sections</th>
<th>Branches</th>
<th>Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The IC first assumes command and establishes a command post.</td>
<td>Administration</td>
<td>Staging</td>
<td>Research</td>
</tr>
<tr>
<td>The support officer addresses tactical priorities, critical factors and safety, creating tactical plans for control.</td>
<td>Planning</td>
<td>Accountability</td>
<td>Monitoring</td>
</tr>
<tr>
<td>Logistics section</td>
<td>Rehabilitation</td>
<td>Decontamination</td>
<td>Decontamination</td>
</tr>
<tr>
<td>Fire</td>
<td>Resource</td>
<td>Entry team</td>
<td>Entry team</td>
</tr>
<tr>
<td>Rescue</td>
<td>Hazardous materials</td>
<td>Extrication</td>
<td>Extrication</td>
</tr>
<tr>
<td>Evacuation</td>
<td>Medical</td>
<td>Toxicity of the agent</td>
<td>Toxicity of the agent</td>
</tr>
<tr>
<td>Operations</td>
<td>Transportation</td>
<td>Triage</td>
<td>Triage</td>
</tr>
<tr>
<td>Safety</td>
<td>Safety</td>
<td>Ground transportation</td>
<td>Ground transportation</td>
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<td></td>
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<td>Water transportation</td>
<td>Water transportation</td>
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<td>Air transportation</td>
<td>Air transportation</td>
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<td>Public information</td>
<td>Public information</td>
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The establishment of a sector depends on the extent of an incident and its management needs. It can be intuitively perceived that the IMS principles can be characterized by complexity, allocation of responsibilities to ensure the implementation of IM tasks and development of a flexible structure for carrying out actions intended for resource management. One more advantage of the IMS is the possibility to adjust its structure to the IM of any size, extent and character, i.e. its structure suits both the management of minor and ordinary and the management of major and complex incidents (Perry, 2003).

Community Involvement in Disaster Management to Foster Trust in Institutional Activity

The application of the community involvement–based approach increases people’s capability to respond to disasters and provide them with a greater access and opportunities to control resources and the provision of the main social services. It is also beneficial since the community can identify threats it encounters and all interested groups of people are promoted to take actions in the disaster management cycle as well as to determine the ways to increase capabilities (Survila and Stasiukynas, 2015). Most of public governance institutions are either directly or indirectly responsible for the removal of incidents; besides, public sector reforms have been stressing the impact of advantages of citizen participation on the transparency of decisions made and on decision quality. A very important factor in engaging citizens in the work of disaster management is the demonstrated trust in public governance structures. Trust between public sector institutions and citizens creates ideal conditions for the management of various future risks. Absence of such trust deprives the system of the guarantee that the public authority will be provided with a full-scale assistance of citizens and their groups (Miller, 2016).

Trust is widely perceived as a proxy indicator of social capital. Trust describes the quality of people’s relations and interactions, on a greater scale the relationships and their strength or fragility within a given community or the whole society (Lazányi, 2017). Trust also means common networking of citizens, their groups, socially responsible business and public sector institutions and the resulting tendency to help each other. According to such authors as Dynes (2005, 2006) and Grottaert (Grottaert et al., 2004), the feeling of community and networking enhanced on the basis of social capital “unites” citizens and public governance to tackle difficulties. It is necessary to note that when writing about citizen involvement some authors emphasize different cultural, ethnical and religious differences, social and economic gap which affect the culture citizen participation (Putnam, 2000; Szreter and Woolcock, 2004). Researchers have described two contrasting approaches to the management of the disaster’s response phase which are often called the command- and-control and the problem-solving models. The command-and-control model is based on the following assumptions:
1) Public governance institutions and officers responsible for the response to disaster actions must be ready to take over both the command and the control once an accident occurs because they are trained to do this;

2) The response to disaster activities are carried out best by indicating the direction in a centralized manner, by managing and making decision, and

3) To make the response activities effective, the best solution is to attribute responsibility to one person, to establish hierarchical relationship among the entities performing response actions (Facing Hazards and Disasters: Understanding Human Dimensions, 2006).

Meanwhile, the problem-solving model is based on quite different assumptions:

1) Communities and the society are resistant and inventive, that they have sufficient resources;

2) Preparation and assistance strategies must be supported by the existing public governance institutions and NGOs (Facing Hazards and Disasters: Understanding Human Dimensions, 2006); moreover, they state that

3) Integrated readiness and response efforts are necessary.

The command-and-control and the problem-solving model approaches seem contrasting in terms of the response phase of disaster management at first sight only. The authors of the article claim that the combination of two public governance approaches, namely, the traditional hierarchical and the one which is based on citizen participation (the so-called “new public management”) could be given a try. The first approach (command-and-control) is oriented towards the traditional “vertically integrated” (top-to-bottom) response phase of disaster management principles. The second one – problem solving model – is oriented towards the assistance of citizens and communities in eliminating natural or technological threats. All the aforementioned shows that response to disasters, threat mitigation and prevention are addressed by creating a mixed threat removal model. The authors hold the view that incorporation of two diametrically opposite public management principles in the field of disaster problem solving can be integrated into the public management principles called the Neo-Weberian state by the prominent public management researchers Ch. Pollitt and G. Bouckaert (2004) back in 2004. The model of a Neo-Weberian state contains the principles which at first sight seem incompatible: accountability, the importance of public authority in solving technological, economic, defence and public security problems, transparency, hierarchical – vertically integrated management plus decision control, citizen involvement in public management, looking for compromise between public governance and citizen groups, etc. In other words, the development of an incident management structure of the response phase of disaster management will always be based on the principle of centralization. Analysis of the IMS claimed that the IMS itself is based on the principles of hierarchy and centralization. It cannot be otherwise in the field of disaster management. However, when reviewing the IMS branches and sectors provided in Figure 1, we can see that to ensure high-quality procedure of incident elimination the branches
of rescue, evacuation, medical services and extrication sector, the transport branch and its sectors will always employ residents and their communities (since, for instance, additional transport is required, local business helps by buying medicines and food, etc.). IM will not go smoothly without setting cooperation principles between the IMS departments and local communities. In this way, we again face the synergy of the command-and-control (centralized, hierarchical) and the problem-solving models which leads to the Neo-Weberian IMS principles. It is thought that the table which was drawn on the basis of Perry (2003) and Miehl’s (2011) ideas could reflect the principles of citizen and citizen group participation in the IMS activity. On the other hand, it should not be forgotten that reforms of public sector over the last three decades were based on the principles of the “new public management” and “new public governance”. For this reason, de-regulatory processes took place in the public sector. Decentralization and management de-concentration were aimed at restricting many functions of central authority by “downgrading” them to the local governance levels. The adjustment of the IMS of the response phase is practicable in the presence of de-concentrated and de-centralized management. As aforementioned, the Neo-Weberian model of public management reforms provides opportunities to combine the principles of centralization and citizen involvement in public governance.

Case Study: Legal Assumptions for Community Involvement in IMS in Lithuania and Ukraine

Assessing the legal base regulating emergency management, it can be noticed that the Law of the Republic of Lithuania on Civil Protection (1998):

− makes no reference towards community contribution to the management of emergencies;
− establishes the legal and organizational framework for the organization and functioning of the civil protection system, the competence of state and municipal institutions and agencies, the rights and duties of other agencies, economic entities and residents in the sphere of civil protection;
− stipulates the necessity “to prepare the public for practical actions in the event of an imminent or actual emergency, foster the initiative of the public and strengthen the confidence in the activity of the civil protection system”;  
− establishes the forces of the civil protection system which also contain the forces of appropriately trained volunteers and associations;
− establishes that in carrying out rescue, search operations and urgent works, responding to an incident, emergency event or emergency and mitigating their consequences, the freedom of a person’s movement may be restricted in the cases and in accordance with the procedure laid down by this Law and other laws;
− establishes resident’s rights and obligations. The rights: to obtain information about the incident and to receive assistance having regard to possibilities of entities of the civil protection system. It seems that if entities of the civil
Duties are related more with the performance of obligatory actions. Making sure that actions prevent any harm to other residents’ life or health, property, environment; reporting the imminent or existing emergency to the forces of the civil protection system; carrying out obligatory works; fulfilling the vested instructions by the rescue operations commander and operations commander, and in urgent cases, when a severe threat is posed to people’s life, health, property or environment, allowing the commanders to use material resources that are owned by residents.

- stipulates that in the event of a disaster, residents and entities shall, in accordance with the procedure laid down by the Government, perform obligatory operations required to ensure disaster response and mitigation of its consequences.
- stipulates that citizens, who deals with prevention and elimination of consequences of disaster as a part of the voluntary formation of civil protection, have to: 1) perform tasks and scope of work defined depending on the nature of emergency; 2) comply with safety measures during the tasks of prevention and emergency elimination, rules of conduct in the area of emergency; 3) study how to protect against emergencies, providing pre-medical aid, how to use the protective equipment.

- directly includes the participation of the citizens in the prevention and liquidation of the consequences of emergencies as part of voluntary civil protection formations;
- defines such types of rescue services: 1) state, regional, municipal, object and public organizations; 2) specialized and non-specialized; 3) professional and non-professional, where the services of public organizations are formed by a public organization in accordance with the law;
- among basic principles of civil protection there is the principle of openness, transparency, free receipt and dissemination of public information about the state of civil protection, except for restrictions imposed by law.

Law of Ukraine on Local Self-Government (1997) notices that voluntary formation of civil protection are formed during a threat or emergency situations for all works to prevent or eliminate the consequences of such situations, which include citizens on a voluntary basis in Ukraine at the regional level, direct management of the involvement of volunteers from the number of residents of territorial communities for the liquidation of emergencies and their consequences is carried out by local authorities in the framework of their powers. Law of Ukraine On the legal regime of the emergency state (2000) stipulates that in exceptional cases relating to the need for emergency rescue operations, it is allowed to transfer temporarily or involve on voluntary basis working people and vehicles of citizens to perform these works with the permission of the relevant head of rescue operations and providing mandatory safety work. The involvement of minors and pregnant women is
prohibited to work, which can adversely affect their health. It could be stated that both countries legal regulation do not provide any direct possibility of involving residents in the process of elimination of emergencies. In Ukraine it is mentioned the participation of residents in elimination of emergencies as part of voluntary civil protection formations. Here people voluntary can be involved in the process of rescue works and with the authorization of the rescue operations commander. Meanwhile, in Lithuania people are imposed with an obligation to allow using their material resources. Besides, persons are involved in the emergency elimination process under obligatory provision and imperative grounds (not by their free will). Residents in this activity are seen as the objects not participants of management. The statement formulated as an aim and tasks of the civil protection also confirms this position: “inform the residents; preserve residents’ lives, health and property; warn residents; help residents”. Instead of encouraging residents to contribute to the management of an incident, the opposite can be done, i.e. residents’ rights can be actually restricted. If we consider that associations are non-governmental organizations (as well as community groups), then, it could be stated that the legislator entitles these NGOs to get involved in rescue, search operations and urgent works. Although such rights are not granted to residents, the possibilities to conduct certain rescue works lead to the supposition that society members are partly involved in the process of emergency elimination. The analysis of residents’ duties established in the laws of Lithuania shows the pursuit to detach residents from elimination of the effects of emergencies.

Summary
This study recommends involving community into response phase of IM. Such engagement is necessary for increasing the trust between community and public management institutions. The application of this managerial principle is directly related with trends and recommendations of contemporary public administration theories. According to results of the study, it is clear that from managerial perspective engagement of public into IM is restricted by the legal regulation (Law on Civil defense of Republic of Lithuania, The Code of Civil Protection and Law of Local Self-Government of Ukraine). This study is limited in scope, because it covers only one aspect of engagement of public into IM. Following intention to foster greater public trust in public institutions during disaster management processes in response phase is recommended in future research analyze interinstitutional cooperation and IMC leadership aspects in relation to contemporary public administration theories and study legal regulation of above mentioned aspects.

References


Faced with Hazards and Disasters: Understanding Human Dimensions, 2006, Committee on Disaster, Research in the Social Sciences National Research Council, National Academies Press, Washington, DC, USA.


WSPÓLNOTOWE ZAANGAŻOWANIE W STRUKTURĘ ZARZĄDZANIA INCYDENTAMI: STUDIUM PRZYPADKÓW LITWY I UKRAINY

Streszczenie: Doświadczenia różnych krajów pokazują, że zaangażowanie społeczności w fazę reagowania w przypadku działań związanych z zarządzaniem katastrofami zwiększa zasoby władz i pozwala eliminować konsekwencje związane z niższymi kosztami, a także zdobyć zaufanie publiczne. Celem tego artykułu jest ocena możliwości zaangażowania społeczności w system zarządzania incydentami w celu skutecznego zarządzania katastrofami z punktu widzenia zarządzania, administracji publicznej i prawa. Autorzy analizują strukturę zarządzania incydentami w czasie katastrofy oraz litewskie i ukraińskie regulacje prawne zapewniające zaangażowanie społeczności w zarządzanie katastrofami.

Słowa kluczowe: incydent, zarządzanie katastrofami, neoweberowskie zarządzanie, zaangażowanie społeczności, regulacje prawne

立陶宛与乌克兰案例研究的社区参与事件管理结构

摘要：不同国家的经验表明，社区参与灾害管理行动的应对阶段，增加了当局的资源，并允许以较低的成本消除后果，并赢得公众的信任。本文的目的是从管理、公共行政和法律角度评估社区参与灾害事件管理系统进行有效灾害管理的可能性。作者分析了灾害事件管理结构以及立陶宛和乌克兰的法律规定，上述国家适用的法规是否规定社区参与灾害管理。

关键词：事件，灾害管理，新威伯管理，社区参与，法律规范