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SYSTEMIC CHANGES IN DISASTER MANAGEMENT IN THE CONTEXT OF PUBLIC SECTOR MODERNIZATION

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Abstract. Various types of calamities determine greater political attention to disaster management, but permanent efficient functionality of this sphere has to be the priority of the state as the guarantor of fundamental obligations to its citizens. Legal regulation sets foundations for functioning of certain system of institutions and processes, which intend to ensure proper disaster management. The article analyses theoretical aspects of disaster management in the context of public sector modernization with the distinction of traditional public administration, New Public Management, New Public Governance and Neo - Weberianism. The focus is on the acceptability of different models of public sector to disaster management. In the first part of the article, the attention is focused on the advantages and disadvantages of traditional public administration to disaster management. The second part of the article reviews the significance of the reform and the practical implications of the principles of New Public Management to disaster management. The third part of the article analyses the significance of New Public Governance discourse to disaster management and the fourth part defines the newest theoretical aspects of public administration Neo-Weberian model and its significance to increasing the efficiency of disaster management system is evaluated.

Keywords: disaster management, public administration, modernization, new public management, new public governance, neo-weberian state.

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1. Introduction

Paradoxically, scientific or political attention to disaster management usually intensifies after very significant and devastating events such as recent terrorist attacks in Paris, France, shootings at the Inland Regional Center in the USA or terrorist attacks in New York on 11 September in 2001, hurricane Katrina in 2005 in the USA, Fukushima accident in Japan in 2011 (which reminded about nuclear safety), tsunami in the Indian ocean a decade ago which took 300 000 lives (people did not understand the notifications about the coming disaster). Not all the threats which manifestations we face today arise in the state we live. The already occurred catastrophic situations promote reorganizations in the public administration institutions and development of roles and limits of responsibilities of managers who work in the public sector with catastrophic situations, and in scientific discourse the temporary increase of publications is observed seeking to study the dysfunctions of the existing system of disaster management and to avoid possible destructive effects in the future (Survila et al. 2015b; Comfort et al. 2012).

Similar tendencies of the need for modernization of disaster management institutions are noticed in Europe, too. Heat wave in Europe causing 35 000 deaths in 2003 (Survila et al. 2015b), cyber attacks carried out against public administration institutions communication and information systems in Estonia in 2007, hybrid war in Ukraine in 2014, the attack of the Islamic radicals executed against the editorial office of French satirical weekly in 2015 are only a few examples which encouraged many political leaders and intellectuals of European countries to question possibilities of national security, control methods, improvement of decision making, concept of crisis, aspects of jurisdiction, correspondence of the existing disaster management systems to the challenges of the contemporary period. Hence, disaster situations focused attention of politicians, scientists and public on whether public administration institutions are adequately prepared to carry out their functions, effectively coordinate their actions, and ensure territorial integrity and comprehensive security of their citizens.

G. A. Kreps defined disasters as non-routine events in societies or their larger subsystems (e.g., regions and communities) that involve conjunctions of physical conditions with social definitions of human harm and social disruption and are both physical events and public policy issues with distinctive qualities. The phrase "non-routine events" distinguishes disasters as unusual and dramatic happenings from everyday issues and concerns. The dual reference to "physical conditions" and social definitions means that each is individually necessary and both are collectively sufficient for disasters to occur in social time and space. The designation "societies or their larger subsystems" means that human harm and social disruption must have relevance for larger social systems (Kreps 2001). Quarantelli 1998 offered a comprehensive definition that bears on the shared defining component of disaster, that is, of the negative consequences of the disruption of the accustomed routines of daily functioning at the collective level. According to Quarantelli, disasters are those crisis occasions generated by the threat of or the actual impact of relatively sudden natural and technological agents (such as earthquakes, floods, hurricanes, volcanic eruptions, tornadoes, and tsunamis as well as toxic chemical spills, radiations fallouts, large-scale explosions and fires, structural failures, massive transportation wrecks and crashes, etc.) that have significant negative social consequences. Basically we include only those instances where everyday community life is disrupted and where local resources cannot handle the demands of the situation (Quarantelli 1998).

Public Administration as a science usually pays attention to implementation of public policy, management of public and non-profit organizations, actions of the government which uses partnerships, networking and contractual relations. Public administration institutions try to manage various risks in society - from threats to health and occupational safety to financial risks and risks to national security. Normally, in the disaster management system threat identification and risk management is carried out on several levels such as economic entities, municipalities (or communities) and the state (Survila et al. 2015a). Foundations on disaster management system are set by the legal regulation, which often is influenced by politicians more than managers, who are main addressees of it. Harmonisation of the legal and managerial aspects of disasters management is another issue, which is necessary to analyse. Disaster management is determined by the need to minimize the risk of potential threats, prepare to combat them and carry out response and recovery actions. It should be noted that in disaster management system the central role are playing public administration institutions, which effective actions are determined by coordination and cooperation.

Disaster management is a complicated field. This is confirmed by disaster management and public administration researcher Waugh who summarized the results of analysis of disaster management of many authors and differentiated factors such as: 1) especially large variety of disasters; 2) lack of support by political and administrative authorities for disaster management; 3) complexity of measures required for disaster management; 4) jurisdictional confusion; 5) inhospitable political and economic environment for the expanding state functions; 6) questionable competence of local and state level officials to plan, implement, finance and maintain effectively disaster management systems (Waugh 1994).

The changes of models of Public Administration were analyzed by Pollitt, Bouckaert 2011; Wong 2013; Stout 2010; Andrews et al. 2013; Wiesel et al. 2014. In the field of disaster management research the following authors as Coppola 2015; Schneider 2008; Saban 2014; Huder 2012; Busch et al. 2013 should be mentioned. While analyzing ratio of research of disaster management and public administration the article by Petak 1985

should be highlighted, where he tried to define disaster management as a challenge to public administration system. Academician Waugh went deep into the disaster management issues at national and local authorities levels (Waugh 1994). Comfort et al. analyzed the development of disaster management system in the context of public administration (Comfort et al. 2012). Basically, scientific publications mostly or exclusively focus on “case studies” of disaster management, or simply on the changes in public administration. In Lithuania, studies analyzing systemic importance of the different models of public administration to disaster management were not detected.

It should be noted that in changing global political, socioeconomic circumstances, implementing of the decisions of supranational institutions or seeking to integrate innovative cross-sectorial elements of good practice promoted by academic community, inevitably transforms political posture, practical aims of public sector institutions, methods of management, relations between the public administration sector and society. These changes are usually treated as permanent processes of public administration modernization. Traditionally, while analyzing public administration reforms it is agreed on four basic approaches: traditional (Weberian public administration); New Public Management; New Public Governance (which has a more theoretical nature, certain governance principles and its status as an independent paradigm is unclear) and emerging Neo-Weberian model. Theorists and practitioners of public administration constantly debate on the necessity of optimal management environment taking into account the fact that each of these models has strong and weak sides. The article raises the problem that is formulated as a question - how different models of modernization of public administration affect the disaster management system? The authors aim to find out exactly what paradigm of public governance and environment that it creates would best suit to the needs of disaster management systems in the context of modernization of public administration sector. Disaster management is the constant process of learning, the search of balance of management methods; therefore, literature review, comparison, and synthesis will be used to reveal the existing problem and achieve the objective.

2. Framework of existing disaster management system in Lithuania

If we see legal regulation as a reflection of public policy in certain field, it is necessary to review the main documents regulating the field of disaster management. Such analyses will encourage us to see the main areas, which policy makers treat as important. As well it will help to identify the peculiarities of Lithuanian system for managing disasters. The preamble of the Constitution of the Republic of Lithuania (1992) as law without gaps (Kūris, 2006, p. 11), among other things, declares the innate right of the human being and the nation to live and create freely in the land of their fathers and ancestors — in the independent State of Lithuania. One of the fourteen chapters of the Constitution – Chapter XIII “Foreign Policy” – determines the principles of foreign policy and national defense. National defense (protection) is the priority government’s and all citizens’ obligation binding to ensure protection of the priority constitutional values - the state’s independence, territorial integrity and constitutional order -, which guarantees the security of the state and require special constitutional measures and separate institutional system of military and paramilitary agencies (Birmontienė et al., 2012, p. 917-918). Systematically analysing the text of Constitution it is clear that the most important values, which are safeguarded by this fundamental document, mostly focus on ensuring the independence, territorial integrity and constitutional order in the state. It might be stated that there is no special focus on safeguarding the nation from the various types of disasters (extreme situations, if we use definition, which from Lithuanian legislation), which are not connected with infringement above-mentioned threats, but still are essentially important for sustainable development and wellbeing of the state. Still in Constitution of Republic of Lithuania (1992), there are several articles, which are related with a state of emergency. Such regulations include permission to limit certain fundamental rights (for example right of free movement on the ground of necessity to preserve health of society as it is stated in Article 32). Article 144 is dedicated for regulation of declaration of a state of emergency. According to the text of Constitution when a threat arises to the constitutional system or social peace in the State, the Seimas (Parliament) may declare a state of emergency (no longer than for six month period) throughout the territory of the State or in any part thereof. In cases of urgency, between sessions of the Seimas, the President of the Republic shall have the right to adopt a decision on the state of emergency and convene an extraordinary session of the Seimas for the consideration of this issue. The Seimas shall approve or overrule

the decision of the President of the Republic. This provision should be taken into considerations together with paragraph 1 of Article 94, there is stated that one of the most important function of Government of Republic of Lithuania is to manage national affairs, protect the territorial inviolability of the Republic of Lithuania, and guarantee state security and public order. The state of emergency is regulated in details by special law.

In general matters of civil safety in the Republic of Lithuania are governed by several legal acts. The main of them are briefly overviewed below. Having in mind that foundations of regulation of the state of emergency are provided in Constitution (1992), no doubly The Law on State of Emergency (2002) is one of the most important in this field. This Law presents a definition of extreme situation (equivalent in Lithuanian legislation for the concept of disaster), establishes the grounds for imposing such state, describes in detail the order of imposing it as well as discloses the peculiarities of state governing and institutional system for managing state of emergency.

Constitution and Law on State of Emergency divides functions of managing the state of emergency for several different institutions. Parliament (and President between sessions of the Parliament) is a body, who is authorized to impose such status. Government is an institution, which is in general responsible for guaranteeing state security and public order. Finally three institutions, which are authorized to secure the implementation of Law on State of Emergency: special institution, responsible for management of extreme situation; Public Order Protection Commandants and Municipal Administrations (two level managing system: state level and municipality level).

Another Law, which should be mentioned, is the Law on the Basics of National Security of the Republic of Lithuania (1996). This law also mostly is based on regulating protection and defense of the independence of the State of Lithuania, its territorial integrity and constitutional order. Still some articles focus on protection of such values as public health. In terms of the topic under discussion Chapter 21 "Institutions Of Civil Defense And Rescue" of Part III „The National Security Ensuring Institutions And Their Activities“ of the mentioned law is of particular importance. This section provides that the purpose of civil defense and rescue system is to protect the population from calamities in war and peace time, through their own active participation in these activities. This system ensures the readiness of all the rescue services and their preventive actions, and in the event of natural disasters, catastrophes and armed conflicts - ensure that the public be warned and kept informed, their lives and property protected, and the necessary immediate assistance and evacuation from dangerous regions carried out. Furthermore, the Chapter states, that the detailed structure, subordination, functions, responsibility of all the institutions and services of the unified system of civil defense and rescue, and their interaction with other state institutions and local governments shall be determined by law and other legal acts.

With respect to the law under discussion, the Law on Civil Protection (1998) shall be considered the special law. It 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. In this context, it should be emphasized that this law is particularly important for the definitions of an emergency event and emergency (partly it can be treated as equivalents of the disaster concept). Thus, an emergency event means an event of natural, technical, ecological or social character, which has reached or exceeded the established criteria and poses a hazard to the life or health of residents, the social conditions of their life, property and/or the environment. And an emergency shall mean a situation resulting from an emergency event and posing a sudden and grave hazard to the life or health of residents, their property, the environment or causing death and mutilation or likely to incur another damage. In the case of emergency, i. e., under the threat or event of it, reaction of specific institutions is necessary. Hence the need for the definition of civil protection occurs; it is described as follows: Civil protection means the activities comprising the preparedness of state and municipal institutions and agencies, other agencies, economic entities and residents for an emergency, actions in the event of an imminent threat or occurrence thereof and emergency response and mitigation of its consequences.

Additionally, another two legal acts should be mentioned: the Law on mobilization and support of the host country (1996) and Resolution No IX-907 of the Seimas of the Republic of Lithuania of 28 May 2002 on the Approval of the National Security Strategy (2002). The mentioned Law on mobilization and support of the host country, inter alia, regulates relevant civil infrastructure issues, defines the concept of civil mobilization institution, and

the like. Meanwhile, the National Security Strategy approved by the resolution of the Parliament in principle details the abovementioned Law on the Basics of National Security of the Republic of Lithuania (1996). It should be noted that one of the internal security policy priorities and objectives is maintenance and enhancement of public safety. This means that the Republic of Lithuania, in order to avoid state-level emergency or reduce their consequences, will focus on the education of the population, foundation of basics for secure society, and strengthening of the civil protection system operators' skills and capabilities. In conclusion, it should be stated that legal regulation of Republic of Lithuania establishes backgrounds for creation of disaster management system, envisages responsible institutions. Still the deeper analyses of legal foundations in this field is necessary in order to provide unified vocabulary of definitions, clarify the functions of each institution and systematically harmonize and legally validate the managerial processes, which should be ready to apply in cases of disasters.

3. Disaster management in the context of public administration

Traditional, Weberian public administration as the mechanism of implementation of public policy has certain specific features. This article does not seek to define all the features of the model but is oriented to those, which can be important to disaster management. Particularly important are the principles, which accent such features of the public sector institutions as impersonal, formal, hierarchical structure of management, centralization, transience, professionalism of bureaucrats, information asymmetry, and orientation to procedures. The only form of authority for public sector governance becomes law and regulations based on the law, public services are organized exclusively through state structures, public administration institutions operate effectively only if they are closed systems; therefore, citizen participation is limited (Stout 2010; Hughes 2003; Denhardt, Denhardt 2006; Wong 2013, Laužikas et al. 2015).

Many of the features of the traditional paradigm reflecting the ideal of legal management is highly relevant and adaptive organically to the area of disaster management, but in order to highlight these aspects, to disclose the compatibility and connectivity of the components it is very important to define the concept of disaster management (Survila et al. 2015a). In daily activities individual, community, society face with the seemingly endless hazards, but practically their number is very limited because manifestation of their effects depends on our genetics, movement in space, habitat, activities, geographical location and randomness. Hazard means an event or physical conditions that have the potential to cause fatalities, injuries, property damage to the environment, interruption of business, or other types of harm or loss (UN/ISDR, 2004). In the disaster management literature of disaster management hazards are usually classified into three types: natural, technological, and intentional. Existence of hazard itself does not pose any significant risk, but a significant risk is caused by their onset magnitude of the potential loss and the probability the specific loss will happen. Globalization, accessibility of international transport system, global climate change are those factors which facilitate the dissemination of hazard effects over a wide area. It is obvious that it is impossible to plan or to protect against any unforeseen situations; therefore, the biggest focus is put on hazards that cause the most unwanted consequences. Based on Saban the disaster management process is defined as the possible actions taken by an organization to reduce the impact of disasters on humans, the built environment, or both (Saban 2014). Although there is no agreed formula at the global level for how modern disaster management should be established and implemented, the following three aspects are mostly shared by distinctive disaster management programs:

- a) preparation for a disaster before it occurs by developing early warning devices;
- b) development of disaster response (e.g., emergency evacuation, and quarantine, mass decontamination);
- c) support and rebuilding plans after natural or human-made disasters have occurred.

Contemporary cycle of disaster management is characterized by four phases: mitigation, preparedness, response and recovery (Coppola 2015):

- a) mitigation - inseparable from potential harm reduction or elimination of the occurrence of the threat when it has not manifested yet. Mitigation phase aims to control the risks so that the frequency of the threat is minimized, and if it arises, it would have the least possible negative impact on society, environment, and property. Risk reduction practice includes risk source control, community protection actions, land use and building construction practices (Lindell et al. 2000). Prior to the formation of risk reduction policies, goals and objectives,

it is necessary to carry out the tasks of identification of threats, assess vulnerability and risk.

b) preparedness - includes sourcing the necessary measures, which assist or increase the chances of survival during disaster, reduce financial and other losses. During preparedness phase legislative acts and subordinate regulations on disaster management are prepared and approved; plans for disaster management are prepared, public warning system is developed, resources required for response and recovery operations are foreseen, mutual aid agreements with stakeholders are initiated and signed, training and practice for the staff and communities and public education are offered (McEntire et al. 2004).

c) response – focused on the implementation of concrete actions to reduce the risk of onset effects, to prevent further destructive consequences. During response phase people rescue and search are executed; first aid is provided; evacuation is carried out; the impact of disaster is evaluated; water, food and accommodation are supplied to victims; health protection of the victims and sanitation in the affected area are ensured; protection and security of the people of affected area is ensured; critical infrastructure is renewed; received charity for victims is managed (Coppola 2015).

d) recovery – in this phase is important to reintegrate the people and the affected area into the “normal” status according to the consequences of disaster. Recovery phase begins when response phase is still ongoing. Restoring of the affected area may last from several months to several years. Governmental authorities actions and support during recovery occurs by coordinating and assuring cooperation of the actions of the public administration institutions responsible for disaster management, damage assessment, emergency needs assessment, distribution of support, recovery program and project-level work plan preparation and implementation, funding and additional support (Coppola 2015).

Every disaster can require unique decisions but, on the other hand, there are common structures of models of disaster management. It should be noted that in countries with decentralized governance and where local disaster management managers have primary responsibility to react to disasters, the process of disaster management goes „step by step“. Local authorities of the affected communities try to manage the consequences until they are no longer able to cope on their own. When this level is reached the information about the current situation is transmitted to a higher officer, who then decides whether to go to the next level of Governmental support. If the official decides that the aid is necessary, he/she recognizes that there has been disaster and the necessary resources are given. If he/she thinks that the resources at his/her disposal are not enough to control the consequences of disaster, he/she refers to the leaders of national level for additional support. The official of national level, usually a Prime Minister (Lithuanian case) or President is obliged, on the basis of given information, evaluate the situation and decide whether the situation is characterized as national disaster. If a disaster is declared as national scale disaster, national Government resources of different institutions and ministries will be allocated for the implementation of National Disaster Management Plan. In addition, reserve fund for disasters management is used for response and recovery actions of emergency management (Survila et al. 2015b).

Based on the analysis of the thoughts of the above authors, we have to note that the key role in the field of disaster management is played by various human rescue, fire, environmental, social care, military and other services; although, in the optimal case, civil society should also be involved. By the way, in these structures of public sector institutions the elements of traditional public administration model are particularly relevant. Traditional public administration is characterized by hierarchical, centralized management and these features are particularly important to the context of disaster management (Denhardt, J. V., Denhardt, R. B. 2006). Democratic pluralism, long term debate about the suitability of decision making takes much time and this can cost human fatalities during disaster. Centralized, hierarchical form of governance (taking into account necessary advisory bodies for solution of each unique problem) enables subsystems (different organizations of disaster management) to communicate and interact in common. Besides, hierarchical management, prevailing rules and predominant law, as the only form of authority in disaster management, are important because they allow for every civil servant to identify oneself with the represented institution, in other words, every disaster manager or an official working in the disaster management system can act in the name of the institution he/she represents (authority) (Huhges 2003; Stout 2010). Strict assurance of rules and procedures is also important, closed nature of bureaucratic institutions is relevant to storage and restriction of usage of documents as sources of information, which is particularly relevant in disaster management, when working with secret or sensitive to society information.

Analyzing theoretical aspects of public administration we are obliged to mention the problem related to information asymmetry. In traditional public administration the aspect of bureaucratic professionalism dominates; therefore, it is necessary to pay attention to the fact that bureaucrats, operating in every separate institution, can dispose information available only to them. Inevitably there is a possibility that, in some cases, there will occur differences between the information that is known by bureaucrats working in a particular public administration institution, compared with the information available or provided to the politicians and civil society. This principle is relevant when analyzing the activity of bureaucratic institutions – they can also avoid sharing information with each other or start manipulating it in order, first, to ensure satisfying the interests of their institution, for example, to receive more funding than other institution operating in the area (Osborne 2002). This problem is particularly acute in the bureaucracy and can destructively affect disaster management. As an example can be given the situation of information asymmetry which occurred in the USA before the events of 11th of September in 2001, among such secret services as Federal Bureau of Investigation (FBI), Central Intelligence Agency (CIA), National Security Agency (NSA), when each of them had part of the information connected to the upcoming events, but did not share it; therefore, it can be assumed that maybe the scale of catastrophic events would have been different if the information had been shared among institutions.

Traditional continental European public administration system is particularly significant to disaster management for clearly defined and formalized functions and limits of liability that, as evidenced by the practice of many countries, is particularly relevant in disaster management. For example, in Lithuania disaster management is executed „from the top to the bottom“ while discussing the occurred situation in two separate levels – state level (if the situation is of the State level) or municipality level (if the situation occurs in the territory of a particular municipality), by appointing an operation leader on state or municipality level accordingly. For example, such situations as annual flooding in Šilutė in spring, the possibility of spread of dangerous and extremely dangerous infectious diseases – bird flu in 2007, African swine fever in 2013, pandemic influenza in 2009 also increase in forest fire in 2009 and not managed medical waste in Vilnius and other municipalities in 2011, were discussed at State level i. e. in the Government Emergency Commission meetings. Operation Leader appointed by the Government was responsible for managing the disaster and elimination of the consequences (PAGD 2015). Equally important feature of traditional paradigm is the prominence of procedural and legal aspects and lack of managerial flexibility, which could also have negative consequences for the decision-making sequence. Similar dysfunctions are revealed while analyzing management aspect. Although hierarchical, centralized management is an organic feature of the traditional public administration, it is necessary to draw attention to the fact that the specifics of disaster management is the need to coordinate and unify work of different institutions, act under extremely cardinal and challenging circumstances, implies leadership, not merely formal need for procedural management. Leader, acting in this field of management, must be flexible, take into account the fact that when making adequate decisions in disaster management it is necessary to work not only with the whole system of public administration, but also with other social partners: communities, business structures, NGOs (Survila et al. 2015a).

Scientists emphasize different aspects of leadership necessary for disaster management. One of the most important - having a vision. Vision indicates the direction, inspire followers, gives self-confidence, motivation to act and allow affected disaster individuals, communities or institutions to get out of the difficult situation and return to the normal state. The broad vision for disaster management should be linked with the needs of affected institutions or persons. In order to reach such aim disaster management leaders must not only ensure that their operations are legitimate but also to gain and maintain the trust of the people. F. Demiroz and Kapucu N. argues that the disasters are characterized by ambiguity, uncertainty, lack of access to predict the development of the situation. Thus, to act in such situations, according to a prearranged schemes often impossible. A. Farazmand argues that disaster manager must be characterized by the ability to “manage the surprise,” which is based on several principles: the need to learn to reject everything that follows from the routine and what can be expected and respond flexible and adaptive, and it means that the disaster manager’s flexibility, the ability to make decisions in time and learn lessons from previous disasters is essential. Leadership skills, enabling effective communication and to access and use information not only in a formal way, foreground, but the information available through informal channels are necessary for disaster managers. Thus, disaster manager must work effectively in formal and informal teams and networks, which include various stakeholders, communities and other groups

(politicians, civil servants). Here success can only be guaranteed the ability to cooperate (Survila et al. 2015b).

During the above mentioned hurricane Katrina, when all levels of public administration were characterized as incompetent, bureaucracy reaction took a lot of time, therefore communities (eg. religious or local) and various NGOs voluntarily expanded their activities and participation joining to the management of the disaster by providing effective assistance to the affected citizens where it was first needed (Haddow et al. 2007). Long lasting and process oriented activity of bureaucratic machine in the context of disaster management is basically becoming a challenge to the concept of traditional public administration as the most efficient and rational form of governance. Therefore, it is necessary to pay attention to static features of this paradigm, permanent dependence on legal framework, machinability and proceduralism, which minimizes bureaucracy options to respond to constantly changing external environment in the areas of public policy. However, in disaster management, taking into account the fact that disasters are usually characterized by vague nature, this procedural logic and coordinated, standardized training and partnership of all structures of governance become very practical and functional. In other words, even if traditional public administration is static, in this area its static nature determines procedures that ensure flexibility and adaptability of organizations involved in disaster management (Survila et al. 2015a).

In summary, it should be noted that traditional paradigm of public administration is relevant to the formation of the environment of disaster management because the essential role in the field is played by disaster management organizations which are based on hierarchy and centralization, and traditional public administration is characterized by these terms precisely. It is noteworthy that traditional public administration is significant to disaster management because of clearly regulated and formalized managerial or organizational functions and limits of liability which, as evidenced by the practice of many countries, are important for disaster management in order to avoid confusion arising from duplication of functions, unclear allocation of competencies and spheres of responsibility. Analyzing the obstacles of this model to the success of disaster management, it is necessary to draw attention to the need for leadership, management specifics, risk randomness, need to coordinate and unify work of different institutions to act under very critical and complex circumstances. According to the authors of the article, these aspects require a manager of disasters not only formal, procedural guidance, but also competencies, a certain amount of knowledge and personal qualities such as flexibility, creativity, ability to combine different interests, planning, ensuring information flow, time management, conflict resolution, change management and many others.

4. Disaster management in the context of the reforms of New Public Management

It must be recognized that disaster management is characterized by some uncertainty, i. e. there is always a possibility that the allocated funds can be justified, or fail, depending on the relatively rare nature of occurrence of some of the hazards. It is emphasized that necessary financial resources for disaster management may exceed the benefits they bring to society, so from the perspective of economic rationality this area often receives various types of resistance from political and administrative structures (Petak 1985). This is especially revealed when analyzing these processes from the perspective of neo-liberalism ideology characteristic to New Public Management. The reforms of New Public Management are an attempt to eliminate some dysfunctions of traditional public administration model moving to the principles of more liberal governance, emphasizing decentralization of institutions, integration of business principles, changing the perspective of short-term management to strategic planning, supplementing less control, governance based on strict rules with orientation to the mission of organization, highlighting economic efficiency and effectiveness, privatization, inter-institutional competition and partnerships of public sector with the structures of private sector. Integration of these business methods and values into the public sector is inseparable from the Chicago School of Economics, and especially by M. Friedman's ideas. The Nobel laureate Friedman's economic ideas significantly affected the New Public Management reforms in the genesis of modernization both in the UK and the USA. Since disaster management is an integral part of public administration sector, it is obvious that these reforms are undoubtedly significant to our area of study, so the above principles require more detailed analysis in order to better understand their impact on disaster management. (Andrews *et al.* 2013; Butler 2011; Huhges 2003; Osborne, Gaebler 1992; Survila *et al.* 2015a; Wong 2013).

In the institutions of public administration, in the context New Public Management, the focus on economic performance begins to dominate. Effective institutions in the context of New Public Management are those that are characterized by cost-effectiveness, i.e. act in accordance with market principles, are able to generate funds, distribute their finances taking into account the possibility to attain „tangible“ results (Andrews *et al.* 2013). Meanwhile, disaster management efficiency is characterized by many other types of elements, which are difficult to adapt to the criteria to New Public Management. Effective features of the structures of disaster management organization were presented by Public Entity Risk Institute, basing them with their studies: a) provides motivation for participation in the disaster management; b) suitable (local, national, international) funding; c) the opportunity to maximally warn the society; d) organizational structure of daily activities is similar to the organizational structure of extraordinary situation management; e) citizens' involvement in the disaster management f) constant monitoring of potential disasters (PERI 2001). It should be understood that nature of the field of disaster management requires permanent, rather than individual attention and funding, and on this basis the possible efficiency and effectiveness of the actions of disaster management authorities can be sought. We have to notice the fact that these economic tensions particularly manifest when raising questions about creating certain means of financial motivation for community involvement in disaster management. For many politicians, based on economic perspective of New Public Management model, this may seem like a mere waste of taxpayers' money, irrational use of financial resources (Survila *et al.* 2015a).

Privatization, as another instrument in New Public Management, is characterized by reduction of the role of the state in the context of disaster management, should be considered ambiguous. On the one hand, the role of private sector as a provider of public services can be justified by the objective of economic efficiency and more optimal use of human resources (when personnel, operating in disaster management, are hired only when a certain disaster happens), on the other hand, the context of privatization and contractation highlights ethical issues, whether it is ethical for the structures of private sector to profit from human misery, whether it is ethical that the taxpayers' money, allocated to ensure the fundamental functions of the state, get in the hands of private sector (Rademacher 2011). Another important feature of the New Public Management, which needs to be discussed, is connected with decentralization of public administration institutions, more liberal character of management, creation of partly autonomous structures. These trends may be harmful for decision-making in disaster management taking into account that decision-making must be characterized by subordination of lower institutions. Decentralization in this area distorts traditional links of organizations and causes the state of disability. Organization, which works efficiently in a specific sphere, in the context of disaster management can fail to properly implement the tasks because different hazards require complex solutions and every organization, participating in disaster management, is usually responsible for completely opposing area, differs in its existential purposes, for example, Fire, Rescue Departments and Police; therefore, centralized coordination and control is necessary (Survila *et al.* 2015a). It should also be noted that decentralized structure of the public sector institutions could actually become a threat in the specific context of disaster management as, for example, dissemination of contemporary terrorism, such as, Islamic State of Iraq and al-Sham or the Islamic State of Iraq and Syria (ISIS) in 2014 – 2015 in the Middle East or rise of Boko Haram (jihadist group based in northeastern Nigeria) in Africa, especially in Nigeria where for more efficient provision of public services the path of decentralization of public authorities has been chosen. Decentralization motives coincided with the transition from autocratic and militaristic regimes to democratization of governance (Okojie 2009).

Disaster researchers have identified two contrasting approaches to disaster response, commonly termed the “command-and-control” and the “emergent human resources,” or “problem-solving,” models. The command-and-control model equates activities with military exercises. It assumes that

- (1) government agencies and other responders must be prepared to take over management and control in disaster situations;
- (2) disaster response activities are best carried out through centralized direction, control, and decision making; and
- (3) for response activities to be effective, a single person is ideally in charge, and relations among responding entities are arranged hierarchically.

In contrast, the emergent human resources, or problem-solving, model is based on the assumption that communities and societies are resilient and resourceful and that even in areas that are very hard hit by disasters, considerable local response capacity is likely to remain. Another underlying assumption is that preparedness strategies should build on existing community institutions and support systems—for example by pre-identifying existing groups, organizations, and institutions that are capable of assuming leadership when a disaster strikes. The model also recognizes that when a disaster occurs, responding entities must be flexible if they are to be effective and that flexibility is best achieved through a decentralized response structure that seeks to solve problems as they arise, as opposed to top-down decision making (NRC 2006). On the other hand, despite the desire to move to decentralized institutions at the political level have been motivated by anti-expanding, stagnating bureaucracy, inefficient centralized public programs implementation and bureaucrats orientation not to citizens but to the personal interests of the administration (public choice theory), the decentralized institutions which employ large autonomy distinguished entrepreneur (Denhardt, Denhardt, 2006), can also cause major problems in the context of disaster management. Primarily due to a lack of resources when disaster occurs immediately necessary to mobilize and coordinate activities of many institutions, what for decentralized institutions would make it extremely difficult. As an example, may be mentioned the incident in Lithuania 2015 when more than 3,000 officers from various statutory authorities, including counter-terrorism special operations team „Aras“, were involved in to arrest of weapon stealed addict. The second no less important aspect is the weakening accountability of decentralized institutions. This problem particularly highlights in the background of growing terrorist threat. After the terrorist attacks in Paris in the society and at the political level have repeatedly raised questions and doubts regarding the efficiency of the activities of the secret services in order to prevent similar attacks.

Traditional public administration was dominated by the aspects of following various rules and regulations and in the context of New Public Management the mission of the institution begins to be emphasized. This change basically transforms rules-based state institutions in a manner, that rules are no longer the factor that hampers innovation and modernization of management. Turning to the organization's mission as a priority, planning of human resources and budgeting is accordingly improving, which must comply with the mission of the organization (Denhardt, Denhardt, 2006; Osborne, Gaebler 1992). We have to mention that in the course of New Public Management reforms, integration of the strategic perspective into the state governance, which first became popular in the private sector, was begun to discuss. Therefore, it was aimed to move from short-term administration, in which strategic perspective was very limited, to the implementation of long-term objectives. Traditional public administration can be understood based on the principles of M. Weber, but also on W. Wilson's idea about public-policy formation and implementation dichotomy. Bureaucrats do not interfere in political affairs, they only technically implement instructions, so planning, in principle, would oppose to the idea (Huhges 2003). New Public Management, as a phase of public administration modernization, using the best practices of the private sector, replaced those provisions and provided an opportunity to implement strategic planning in practice. Talking about the change of these management provisions it should be noted that disaster management is not a tactical process, which is usually characterized in the executive level of the organization, but a strategic process which aims to effectively coordinate, perform advisory functions to ensure that all levels of the organization or the entire emergency management system is guided by common objectives (Roebuck 2012).

The inter-institutional competition – the feature of New Public Management, which in many areas of public administration contributes to improving the quality of public services, is very ambiguous in disaster management. Disaster management is understood as a single mechanism characterized by institutions compatibility, rather than competition, to avoid any distortion of information which is essential to ensure optimal decision-making (Osborne 2002). The problem of information asymmetry is one of the counterarguments in favor of traditional public administration. Inter-institutional competition enhances or deepens information asymmetry.

In the context of disaster management competition is not possible because in disaster management institutional, complex interaction based on advance-formed relationships is essential, therefore it is necessary to in advance form the links based on partnership rather than competition, and it will depend on the productivity of the overall performance of public administration institutions (Survila *et al.* 2015a). Another relevant feature of the New Public Management, contrary to traditional, hierarchical public administration, creates greater opportunities to

include private sector to the system of disaster management establishing cross-sectoral partnership thus reducing the overall load to the state to combat threats (see Table 1). It is necessary to understand that when any community recovers from a disaster, the success of its efforts depends greatly on how quickly the predominantly private sector functions are restored (Haddow *et al.* 2007).

Table 1. Functions of private sector in the context of disaster management.

Food supply
Dissemination of disaster alerts
Temporary labor recruitment to solve a specific problem
Create jobs in such areas as health, child care at recovery stage
Aid for citizens at evacuation
Provide basic (transport, communication) services

Source: Prepared by the authors in accordance with Busch *et al.* 2013; Haddow *et al.* 2007.

In summary, it should be noted that the reforms of New Public Management are more significant to disaster management for their negative implications, primarily because of the loss of control responsibilities of central institutions in the context of decentralization, which is essential for efficient disaster management. Decentralized organizations have different purposes and specifics; they may be functional working in a particular area but not in disasters which require complex solutions. It should be also noted that the nature of disaster management determines that the results of this area become visible only when disaster occurs, therefore, economic ideology of New Public Management, seeking to “measure” the results of institutions, can become destructive due to continuous lack of funding for the development of disaster management resulting from lack of political will. Disaster management is oriented to the process and various factors of mitigation, preparedness, response and recovery. Only after they are accomplished in the face of a disaster the chances increase that the operational efficiency of institutions concerned will be ensured. This is the sphere that requires constant, not random attention and funding. New Public Management ideas of inter-institutional competition completely contradict the context of disaster management because it must be understood as a single mechanism, characterized by institutional coherence, partnership, establishment of advance contacts rather than competition. Among the positive aspects, we must pay attention to the fact that New Public Management, contrary to traditional, hierarchical public administration, creates greater opportunities to include private sector to the system of disaster management establishing cross-sectoral partnership, thus reducing the overall load to the state to combat threats.

5. The meaning of New Public Governance discourse to disaster management

The modernization stage of New Public Governance is important to disaster management because of the integration of new accents and innovative methods of governance. Although it must be recognized that it may be treated as a more theoretical discourse, adaptation of individual rather than systemic principles in public administration sector modernization practice. In New Public Governance hierarchic form of governance is changed to networking (inclusion of NGOs and communities into management process) the accents of economic efficiency and effectiveness of New Public Management institutions are supplemented by the elements of consensus, democratic pluralism, social justice and social responsibility, equality, ethics, accountability, citizen-orientation. Namely, the expanded role of the “third” sector in the formation and implementation of public policy becomes the key feature of the New Public Governance (Wiesel *et al.* 2014; Lindsay *et al.* 2014). New Public Governance is a new paradigm of public administration, emphasizing pluralism and providing not only a new research framework for theory research, but also a new mode of practice for the modern government of public affairs management (Xu *et al.* 2015).

New Public Governance embodies the changes in the provision of public services including such elements as:

- a) the fragmentation of needs in post modern societies;
- b) the evolution of plural (involving multiple organizations) and pluralist (involving multiple processes)

approaches to public services delivery;

c) a consequent need to focus upon not just inter-organizational relationships in understanding public services delivery but also the growth of public services systems comprising, inter alia, public service organizations, local communities, service users, and hard and soft technologies;

d) a shift in the balance of the key managerial skills required for delivering public services to privilege those of the governance and negotiation of needs, service delivery, and outcomes (Lindsay et al. 2014).

In New Public Governance co-operation is also emphasized. From the perspective of disaster management the involvement of different stakeholders into the management process is very important as preparation and interaction of communities, business structures and NGOs with the public authorities can improve preparedness and response to various likely to occur or already occurring threats, help to mitigate consequences of disasters, facilitate recovery process, reduce the control load of the state. Cooperation among institutions, accents of building confidence of private or third sector organizations are important because of establishing relations before disaster occurs. The lack of the relations can aggravate disaster management and the ability of institutions to act together. Networking also creates opportunities for the public and private sector institutions to simplify mutual cooperation, facilitate in obtaining information, optimize the use of resources, and help the achievement of objectives and division of functions in disaster management (Survila et al. 2015a; Vellotti et al. 2012). Trying to come back to the core values as democracy, ensuring of citizens and public interest, justice, create the possibility for disaster management, as opposed to the economization context of New Public Management, to become a priority area for politicians. This position is reinforced by the fact that, unlike traditional public administration, which focused only on process, procedures, New Public Management, which focused on measurable economic results, New Public Governance priority is both, process and results (Wiesel et al. 2014).

In summary, we note that in the context of New Public Governance the idea of hierarchy is changed to networking, the load change in disaster management occurs when public, private and third sector responsibilities are combined, orientation to procedures or result is supplemented with the orientation to process and result. New Public Governance emphasizes citizens' needs, not moving away from the fundamental functions of the state - ensuring the welfare of citizens, at the same time the area of disaster management, it means that in the context of this model, appropriate environment for political and financial attention for disaster management is formed.

Table 2. Change of workload in disaster management

Traditional public administration	New Public Management	New Public Governance
Responsibilities of state institutions	Coordination of Public and private sector responsibilities	Coordination of responsibilities of State, private and third sector (NGOs, community)

Source: prepared by the authors in accordance with Wiesel et al. 2014, Andrews et al. 2013.

6. Neo - Weberian state and the future of disaster management

While analyzing the changes of public administration it is necessary to understand that it is a permanent process. Until now neither traditional public management nor New Public Management or New Public Governance ensured the effective implementation of public policy and smooth functioning of the public administration system (Steurer 2004). Therefore, in this section we will try to look at the theoretical aspects of the fourth emerging Neo - Weberianism, as a normative approach to public administration, and try to discuss their role in disaster management.

Pollitt and Bouckaert give the principles based on which we can define Neo - Weberian model (Pollitt, Bouckaert 2011). Weberian elements:

a) Reaffirmation of the role of the state as the main facilitator of solutions to the new problems of globalization, technological change, shifting demographics, and environmental threat;

b) Reaffirmation of the role of representative democracy (central, regional, and local) as the legitimating element within the state apparatus;

- c) Reaffirmation of the role of administrative law—suitably modernized—in preserving the basic principles pertaining to the citizen–state relationship, including equality before the law, privacy, legal security, and the availability of specialized legal scrutiny of state actions;
- d) Preservation of the idea of a public service with a distinctive status, culture, and—to some extent, though perhaps not as much as in the past—terms and conditions

Neo - Weberian elements:

- a) shift from an internal orientation towards bureaucratic rule-following towards an external orientation towards meeting citizens' needs and wishes. The primary route to achieving this is not the employment of market mechanisms (although they may occasionally come in handy) but the creation of a professional culture of quality and service
- b) supplementation (not replacement) of the role of representative democracy by a range of devices for consultation with, and the direct representation of, citizens' views;
- c) in the management of resources within government, a modernization of the relevant laws to encourage a greater orientation on the achievement of results, rather than merely the correct following of procedure. This is expressed partly in a shift in the balance from ex-ante to ex-post controls, but not a complete abandonment of the former. It may also take the form of a degree of performance management;
- d) a professionalization of the public service, so that the 'bureaucrat' becomes not simply an expert in the law relevant to his or her sphere of activity, but also a Professional manager, oriented to meeting the needs of his/her citizen/users.

These aspects are relevant to disaster management because they emphasize the importance of management of both the state and other interested parties. On the one hand, planning, policy development, coordination, control and organization are assigned to public administration sector institutions and are conventional to public administration, which is particularly significant to disaster management because essential role is played by hierarchy and centralization based disaster management institutions, the importance of separation limits of clearly regulated and formalized managerial or organizational functions and responsibilities. On the other hand, the value of management of communities and other interested parties in disaster management is beyond doubt to managers, which is reflected in neo - Weberian model. It allows the realization of one of the existing and widely known approaches of managing extraordinary situations, the so-called community – based disaster management (CBDM). Community involvement means that people's contribution to the disaster management cycle can start from the basic steps in the process and end with the institutionalization in the community (Jahangiri et al. 2011).

Application of CBDM approach increases people's capacity to respond to disasters and enables the community and other stakeholders to participate in determining threats, which they face, directs interested groups of people to take different actions in the cycle and identify ways to increase capacity i. e. human potential to adapt to the consequences of disasters to respond and recover from them. Moreover, such an approach is likely to make communities stronger for future disasters and incorporate them into planning, policy formulation, coordination, control and organization process and its related application of necessary measures designed to reduce the consequences of the disaster (Falk 2005). Thus, all stakeholders could work together with government officials and experts, people could manage problems, consequences and challenges of disaster mitigation and preparedness. This process encourages people's sense of ownership, for this reason they constantly want to participate in these activities and assume long-term commitments.

Conclusions

1. After the research on legal background of disaster management system in Lithuania, it was concluded that despite of the existing legal regulation and appointed responsible institutions, there is no clearly defined system. It is obvious that the deeper analyses of legal foundations in this field is necessary in order to provide unified vocabulary of definitions, clarify the functions of each institution and systematically harmonize and legally validate the managerial processes, which should be ready to apply in cases of disasters.

2. Traditional public administration paradigm of disaster management implies management environment which is characterized by the following aspects: formal, impersonal, hierarchical management structure, information asymmetries, procedure orientation, law as the only form of authority, closed systematic nature of institutions becomes the criterion of their effective functioning.
3. New Public Management paradigm in the context of modernization of public administration sector is significant to disaster management due to the fact that it has integrated accents of neo-liberal ideology and economic efficiency criteria of public administration institutions to the dimensions of formation and implementation of public policy, which created political opposition to permanent financing of disaster management.
4. New Public Management paradigm in the field of disaster management has included these aspects as decentralization of management, strategic planning, management based on strict rules was supplemented with the orientation to the mission of organization, expansion of the role of the private sector, introduction of privatization instruments.
5. New Public Management reforms are significant because of their negative implications, primarily
6. resulting in the loss of control and liability of central institutions in the context of decentralization.
7. New Public Management ideas of inter-institutional competition, which completely oppose to the context of disaster management, which it must be understood as a unanimous mechanism, characterized by coordination of institutional activity, cooperation, establishment of contacts in advance, rather than competition, should also be emphasized.
8. New Public Management is significant to disaster management not as a systematic stage of public
9. administration sector modernization but more as individual principles, such as integration of networking, or expansion of a greater role of the third sector.
10. In the context of New Public Governance responsibilities of the state, private and third sector are combined, procedure or economic result orientation is supplemented with process and result orientation. Better involvement of communities and non-governmental organizations in management creates positive environment for ensuring fundamental functions of the state, along with disaster management.
11. Neo – Weberianism, as normative approach to public administration, combines two basic approaches to disaster management: traditional, which assigns planning, policy development, coordination of activity, control and organization to public administration organizations, and the other, which ensures participation of communities and other stakeholders in managing disasters.

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