SELECTED ASPECTS OF ACTS OF LAW CONCERNING CRISIS MANAGEMENT AND CRITICAL INFRASTRUCTURE PROTECTION

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Abstract: The paper presents principle aspects of law acts concerning crisis management, currently in force in the Republic of Poland. Fundamental definitions and assumptions included in them, with a special focus on critical infrastructure and its protection, have been also shown. The paper presents also latest alterations of Polish legislation relating crisis management, inspired by respective changes of European Union directives. Article is also mentioning tasks of newly established public administration institutions, appointed on the basis of crisis management related legislation implementation, plus, concerned with them, new obligation of so called: sole and dependent owners of critical infrastructure systems.

Keywords: crisis management, critical infrastructure, european critical infrastructure

Streszczenie: Artykuł przedstawia zasadnicze założenia aktualnie obowiązujących w RP aktów prawnych w zakresie zarządzania kryzysowego. Przedstawiono podstawowe definicje i założenia w nich zawarte, ze szczególnym zwróceniem uwagi na problematykę infrastruktury krytycznej i jej ochrony. Omówiono także przebieg zmian w prawodawstwie RP dotyczącym zarządzania kryzysowego, inspirowanych zmianami w normach pranych Unii Europejskiej. Publikacja wymienia także zadania nowopowstałych organów administracji publicznej, powołanych w związku z wprowadzaniem ustawodawstwa związanego z zarządzaniem kryzysowym, a także związane z nimi nowe zobowiązania tzw. właściciele samoistnych i zależnych systemów infrastruktury krytycznej.

Słowa kluczowe: zarządzanie kryzysowe, infrastruktura krytyczna, europejska infrastruktura krytyczna
1. Introduction

Crisis management has become last years an important part of many aspects of our everyday life. This is coming out of both: increasing menace of terrorist attacks, and increasing number of different kinds of elemental disasters taking place in the near past.

The most significant facts, which have shown the need to initiate various activities, aiming to counteract crisis situations, were: terrorist attacks (New York 2001, Madrid 2004, London 2005), earthquakes resulting with tsunami waves, causing huge destructions of large areas, including sensitive objects placed inside them (Japan 2011), and floods caused by tropical cyclones (Katrina – New Orleans 2005, Sandy – New York 2012). Accidents having taken place in Poland, that should be pointed, are: devastating series of floods in 1997, which killed 55 humans and caused enormous damages, Katowice International Fair’s roof collapse in 2006, and train crash near Szczekociny in 2012.

Crisis management is covering members of society preparation to perform actions aiming to: lowering crisis situations appearance probability, proper reaction in case of crisis arise to restrict its negative results, and rapid infrastructure restoration to its conditions prior to crisis situation.

There are many law acts raised for crisis management needs, basic ones are:

- Polish Parliament act of 26 April 2007 on Crisis Management [2],
- Regulation of the Council of Ministers of 30 April 2010 concerning the Report on Threats to National Security [5],
- Regulation of the Council of Ministers of 30 April 2010 on National Critical Infrastructure Protection Programme [4],
- Regulation of the Council of Ministers of 30 April 2010 on Critical Infrastructure Protection Plans [3].

2. Basic notions used by acts of law concerning crisis management

Actual acts of law are determining state administration bodies responsible for crisis management, plus their tasks and principles. They are also indicating basic tasks and guidelines for people, institutions and companies, whose activities can be connected to: possibilities of crisis situations appearance, efforts concerned with reaction in case of crisis appearance, and restoring of infrastructure to its condition from before crisis situation.

Polish Parliament act of 26 April 2007 on Crisis Management, is defining, among others, following notions [2]: crisis management, crisis situation, critical infrastructure, critical infrastructure protection. Amendment to above dated 17 July 2009 is including obligation for Council of Ministers to adopt the National
Critical Infrastructure Protection Programme, and its regular updating (not less than every two years).


Crisis Management, within the meaning of above acts is: state administration bodies activities, being element of national security management system, consisting of: preventing crisis situations, preparing to take control over them by means of previously planned procedures, responding in case of crisis situation appearance, and removal of their negative effects, and the reconstruction of the resources and critical infrastructure.

Within the content of above mentioned definition, four phases of crisis management, that are used by most of publications concerning crisis management, have been marked:

- **Prevention** – analyzes of potentially possible crisis situations, and undertaking activities lowering probability of their appearance,
- **Preparation** – planning of actions (procedures), that should be performed in case of appearing of foreseen crisis situations.
- **Responding** – undertaking of previously planned, coordinated activities, leading to stop crisis situation expanding, support casualties, and restrict damages and losses.
- **Reconstruction (Recovery)** – restoration of conditions from before crisis situation.

Crisis situation is defined as a situation that impacts negatively on the safety of people, property in large sizes or the environment, producing significant restrictions on the operation of the competent authorities of public administration due to the inadequacy of the possessed capabilities and resources.

Above definition is specified by amendment to act of law on Crisis Management, dated 17 July 2009. Previously, act of 26 April 2007 on Crisis Management, specified crisis situation as one, for which: forces and means used, necessary for ensuring or restoring of safety, are not demanding introducing any of the extraordinary measures, mentioned in article 228 of the Constitution of the Republic of Poland. Phrase mentioned could have been understood as determination of limit, within which rules concerning crisis management apply – understood as until moment of introducing one of extraordinary measures (resulting different acts of laws begin being valid).

Actual wording is not mentioning this limit, so that can cause some problems about identification of potential resources capable of crisis situations neutralization.

Critical infrastructure is defined as systems and mutually bound functional objects contained therein, including constructions, facilities, installations and services of key importance for the security of the state and its citizens, as well as serving to
ensure efficient functioning of public administration authorities, institutions and enterprises.

Critical infrastructure is including following systems:
- energy, fuel and energy resources supply,
- communication,
- IT networks,
- financial,
- food supply,
- water supply,
- health protection,
- transportation,
- rescue,
- ensuring the continuity of public administration activities,
- production, storing and use of chemical and radioactive substances, including pipelines for dangerous substances.

Mentioned above systems, included in the critical infrastructure, have been pointed according to amendment to act of 26 April 2007 on Crisis Management, dated 29 October 2010. There are following slight changes, comparing to previous wording:
- energy resources supply systems have been added to energy and fuel supply ones,
- communication and IT networks have been specified as separate systems (previously grouped in one system),
- similarly to above, food supply and water supply systems have been separated,
- transportation has been pointed as separate system (previously linked with communication one).

Critical infrastructure protection is defined as all steps aimed at ensuring the functionality, continuity and integrity of critical infrastructures in order to prevent threats, risks or vulnerabilities and limitations as well as neutralizing their effects and quick reconstruction of the infrastructure in case of failures, attacks and other events disrupting its appropriate functioning.

Above definition has been quoted according to law on Crisis Management, dated 17 July 2009. Because its previous sounding had narrower meaning, this means importance of critical infrastructure and steps aiming at its protection, is increasing.

National Critical Infrastructure Protection Programme, according to amendment to act of law on Crisis Management, dated 17 July 2009, specifies [4]:
- national priorities, objectives, requirements and standards, to ensure the smooth functioning of critical infrastructure,
- the ministers in charge of government administration units and heads of central offices responsible for systems included in critical infrastructure,
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- detailed criteria which enable to identify objects, installations, facilities and services included in the critical infrastructure systems, taking account of their importance for the functioning of the state and satisfying the needs of the citizens.

According to act of law on crisis management, **confidential information protection regulations must apply** to above mentioned programme. Thus, information related to activities undertaken to its realization, are not widely available. The programme is covering a **list of objects, installations, facilities and services included in the critical infrastructure divided into systems**, but because of subordination to confidential information protection regulations – the list can be accessed only by selected, narrow group of persons.

It must be also assumed, that persons, institutions and scientific resorts, willing to take part in processes connected to creating and updating of National Critical Infrastructure Protection Programme, will have to fulfil regulations of act of 5 August 2010 on confidential information protection. Regulations, among others, are demanding obtaining of appropriate certificate of information security.

**European critical infrastructure** is defined as: systems and mutually bound functional objects contained therein, including constructions, facilities and installations of key importance for the security of the state and its citizens, as well as serving to ensure efficient functioning of public administration authorities, institutions and enterprises, designated in the systems within the scope of electricity, oil, gas, road, rail and air transport as well as inland waterways transport, ocean and short-sea shipping and ports, located in Member States of the European Union the disruption or destruction of which would have a significant impact on at least two Member States.

Implementation of **European critical infrastructure** notion into the act of law on crisis management in 2010, comes out of fact that some activities related to its protection, in some circumstances must be coordinated by two or more countries. The act is indicating: **electricity, oil and gas supply systems, and transportation systems**, proving that systems mentioned are specially important elements of critical infrastructure, demanding of special care.

It can be assumed, that coming years will bring significant intensification of activities concerned with research and identification of threats, and formulating of crisis management procedures for earlier mentioned systems. European Council Directive 2008/114/EC of 8 December 2008, specifies in details following subsectors of indicated systems, as especially important (demanding of special activities indicated in the directive) [1]:

- *Infrastructures and facilities for generation and transmission of electricity in respect of supply electricity,*
- *Oil production, refining, treatment, storage and transmission by pipelines,*
Gas production, refining, treatment, storage and transmission by pipelines, LNG terminals,
Road transport,
Rail transport,
Air transport,
Inland waterways transport,
Ocean and short-sea shipping and ports.

3. Bodies responsible for crisis management and their obligations

Crisis management on the territory of the Republic of Poland is conducted by the Council of Ministers. According to the law, hierarchical structures have been established: crisis management centres functioning on each level of public administration, and crisis management teams – created ad hoc.

Government Centre for Security has been established at the central level. The centre is responsible, among others, for: monitoring of potential threats, executing of crisis management procedures in the case of threats, ensuring the flow of information between national and international bodies and structures of crisis management, cooperation, as the national contact point, with the European Union, North Atlantic Organization Treaty, and other institutions responsible for crisis management and critical infrastructure protection, planning and programming critical infrastructure and European critical infrastructure protection tasks.

The centre, first of all, ensures services to the Government Crisis Management Team, that is body initiating and coordinating activities related to crisis management at the central level. Basic composition of the team consists of: Prime Minister and Ministers of: National Defense, Internal Affairs, Foreign Affairs, and Coordinating Special Services – if appointed. Other team members are designated according to needs (type of crisis situation appearing), the members can be: Ministers heading the government administration sections, chiefs of central offices, and heads of: Internal Security Agency, Intelligence Agency, National Civil Defense, Military Counter-Intelligence Service, Military Intelligence Service. The Centre is cooperating directly with other crisis management centers appointed by ministries and central offices of public administration, responsible for activities related to ensuring national security, including protection of citizens and economic base security.

There are: voivodeship, district and commune crisis management centres functioning on other levels of public administration. The centres are ensuring services to voivodeship, district and commune crisis management teams. The heads of mentioned crisis management teams are respectively: voivodes, starostes, voits (or mayors, or the presidents of the cities). Persons mentioned, according to the law, are also responsible for crisis management on respective public administration level. The Government Centre for Security, as previously mentioned, is responsible for planning and programming of critical infrastructure and European critical
infrastructure protection tasks. The tasks are first of all, preparing and updating of National Critical Infrastructure Protection Programme [5]. The programme is prepared by the Director of the Government Centre for Security in close collaboration with the ministers and heads of central offices responsible for the systems belonging to critical infrastructure, and competent for national security. The aim of the programme is improving the security of critical infrastructure, in particular: preventing the malfunctioning of critical infrastructure, preparing for crisis situations that could affect it, response in the event of its destruction or functioning disruption, and its reconstruction.

The base object of the programme is uniform register of objects, installations, facilities and services included in the critical infrastructure divided into systems. The register must also cover European critical infrastructure located on the territory of the Republic of Poland and the European critical infrastructure located on the territory of other Member States of the European Union which could have a significant impact on the Republic of Poland.

For the purpose of formulating of the above mentioned register, the Government Centre for Security is specifying criteria, allowing to identify objects, installations, facilities and services included in the critical infrastructure systems, in close collaboration with ministers in charge of government administration units and heads of central offices responsible for the systems. On the basis of specified criteria, appropriate ministers and heads of central offices, each according to his competence, are forwarding to the centre proposals of critical infrastructure systems to be included in the register. On the basis of the proposals received, the Government Centre for Security is compiling the register including following information [3]:

- name and location of critical infrastructure,
- organizational subordination to Ministers and Heads of central offices, if such subordination is in place,
- data of the critical infrastructure operator;
- data of the managing person on behalf of the critical infrastructure operator, if such is in place.

The Government Centre for Security formulates two kind of extracts from register of systems belonging to critical infrastructure:

- extracts divided into systems belonging to critical infrastructure – to be forwarded to Ministers and Heads of central offices – responsible for particular systems
- extracts divided into voivodeships, within which they are located – to be forwarded to particular voivodes.
The Government Centre for Security informs both sole and dependent owners and holders of objects, installations or critical infrastructure facilities, about fact of inclusion of them in the register. All above mentioned registers and extracts are classified.

Ministers and Heads of central offices, are in addition preparing and forwarding to director of Government Centre for Security following information concerning critical infrastructure [2]:

- the description of the field of their competence including the identification of its resources, subsystems, functions and dependencies on other critical infrastructure systems,
- proposals of the requirements and standards enabling the continuity of functioning of critical infrastructure,
- general risk assessment for the functioning of the above mentioned field of competence, taking into account the threats, susceptibility to threats and the consequences of the disruption of critical infrastructure functioning,
- proposals of the priorities in the scope of critical infrastructure reconstruction,
- possible methods of preventing the disruption of the functioning of the field of competence which are the consequence of the disruption of the functioning of the critical infrastructure,
- proposals of research and developmental programmes which shall contribute to increasing the critical infrastructure security.

Cooperation on implementation of the National Critical Infrastructure Protection Programme shall be based on maintaining contacts between the participants of the Programme by means of conferences, seminars, creating discussion forums, preparing and participation in exercises and trainings as well as exchange of information concerning:

- identification of the fields of action essential for raising the level of critical infrastructure protection,
- identified threats to critical infrastructure,
- expected or observed increase in demand for services and products provided by critical infrastructure operators,
- expected breaks or disruptions in providing services or products offered by critical infrastructure operators,
- support of the actions undertaken by critical infrastructure operators in case of destruction or disruption of functioning of critical infrastructure,
- critical infrastructure protection, functioning of the internal mechanisms of the protection and crisis management.
- preparing and updating of the Programme.
Following provision of law concerning critical infrastructure should be also quoted: *Both sole and dependent owners and holders of objects, installations or critical infrastructure facilities are required to protect them, particularly through the preparation and implementation, according to the anticipated threat, of critical infrastructure protection plans and holding their own reserve systems ensuring security and maintaining the functioning of the infrastructure until it is fully recovered.*

The sole and dependent owners and holders, mentioned above, are required to appoint within 30 days of receipt of the information about being included in the register of critical infrastructure systems, the person responsible for maintaining contacts with the entities competent within the scope of critical infrastructure protection. The meaning of mentioned note indicates to some entrepreneurs the necessity to implement appropriate crisis management procedures. Additionally, enterprises qualified as critical infrastructure elements, must be ready to cooperate with public administration authorities about crisis management activities. Entrepreneurs must also be ready to document possession of their security plans to controlling authorities.

### 4. Summary

Crisis management is a new object, concerning significant number of public institutions, public administration authorities and enterprises. A few examples given in section 1 of this article indicate however, that the object is very important, and its role is continues to grow.

One of basic crisis management issues is protection of critical infrastructure systems. All terrorist acts mentioned at the beginning of the article, took place within transportation systems – meaning systems belonging to critical infrastructure. Thus - critical infrastructure systems must be specially protected, because disruption of their functioning, caused by crisis situations, are potentially the biggest threats.

As the summary, following basic research directions can be indicated, that should be performed for the purpose of critical infrastructure protection:

- identification of threats to critical infrastructure systems,
- monitoring of reliability parameters of critical infrastructure systems,
- planning of responding procedures, to be executed in case of crisis situation appearance within critical infrastructure systems,
- formulating of recovery procedures allowing to restore critical infrastructure systems to their state from before crisis situation.
5. References


Prof. Miroslaw Siergiejczyk, PhD. Eng. - scientific fields of interest of the paper co-author concern among other issues of architecture and services provided by telecommunications networks and systems, especially from perspective of their applications in transport, reliability and operation of telecommunications networks and systems, modelling, designing and organising telecommunications systems for transport.

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