Istvan Bukovics (Hungary)

THE SYSTEM OF THE HUNGARIAN DISASTER MANAGEMENT

The main goals of disaster management are:

- to protect life, property and safety, the property and safety of the State;
- by means of prevention, rapid response and the elimination of consequences in case of any disaster.

The system of the Hungarian disaster management was radically changed by the Act on Disaster Management of 1999, in force since 1 January 2000.

Basically, it is the first uniform and independent Act dealing with disaster management in the history of Hungarian legislation. It determines, in an epoch-making way, the directional system of disaster management and the activities of governmental organs of different level, participating in the direction of protection against natural and man-made disasters.

For the purpose of directing disaster management on the basis of responsibility the Act specifies the detailed tasks of

- each authority;
- the Government or elected functionaries;
- both in peace-time and classified periods; at the same time, it created a new system of direction and operation as well.

Based on this new system, the Government, the Governmental Coordination Committee, the Minister of the Interior and other ministers are responsible for the direction of disaster management at national level. In the counties and the capital, the chairpersons of the county and the Capital's Protection Committees, at local level, the mayors and the chairpersons of the Local Protection Committees are competent for making decisions.

The Act strictly and precisely defines the competences and tasks of the above authorities.

Furthermore, the Act, following the practice of several European countries, integrated the State Fire Service and the professional civil protection organization at national level and thus established a new professional disaster management organization.

Its central organ is the National Directorate General for Disaster Management (NDGDM), functioning in the subordination of the Ministry of the Interior and headed by the Director General. As for its legal status, it is a central public administration law-enforcement organization with national competence and an independent budget.

NDGDM directly commands and controls

- the Disaster Management Directorates of the counties and the Budapest International Airport;
- the Civil Protection Directorate of the Capital;
- and the Fire Station of the Parliament.

Furthermore, it supervises the professional fire-fighting units of settlements and the voluntary fire brigades. Its main tasks are described in the Act of Disaster Management.

Dear Collegues! As you know, fire & civil protection, and disaster management, becoming more and more a part of the general security policy, have to face several new challenges, not only in the near future but even nowadays.

Expectations and requirements originating in Hungary's NATO and especially EU membership, the rapid and continuous adaptation and the response constraints forced by globalization, the lack of social basis of safety culture and security conscience, central endeavors and the tensions between territorial inequalities mean new types of challenges.

Other new challenges are the disaster management issues of the global climate change, the protection of the critical infrastructure and the fight against terrorism. All these require a comprehensive international cooperation and assistance system, a new system and organization with suitable service-providing capability, being flexible, renewable and open to all stakeholders.

These challenges can no longer be met using traditional knowledge and with systems operating in a conventional way. Both the horizontal and vertical characteristics of security have to prevail. The horizontal approach, on the one hand, means that it uses an integrated security aspect and coordination and cooperation solutions, on the other, it expects the involvement and interest of all actors. One of its new and remarkable signs is that the safety of the individual is gaining more and more ground in the field of basic human rights.

The vertical approach means that this notion has been expanded beyond the armed and war approach, like illegal migration, terrorism and other hazard sources originating in the deficiencies of the functioning of the State.

The expansion of the notion of security in such a way places the missing institutionalization of satisfying new types of security demands in the fore. Thus, the challenge is to ensure the balance between freedom, welfare, democracy and security.

The Hungarian disaster management will have to face very serious challenges in the near future. In order to meet them it is important to organize scientific research programs. It is especially important to elaborate risk analysis methods and models for assessing the challenges. Some anomalies of the assessments made so far provide good examples. No adequate conclusions can be drawn from recent trends, since one of the most characteristic problems is the dissolution of trends. Another such anomaly is that disaster management uses the initial and extreme data, which have been forecast by climatologists and meteorologists. However, climatologists expect that disaster management should provide a point of orientation: which are the critical and extreme values from their standpoint.

The partial resolution of anomalies was implemented recently by carrying out probability-based researches. However, it has a great disadvantage: probability analysis may only be used in case of incidental mass phenomena, events repeatable under similar circumstances, theoretically unlimited times. Nevertheless, disasters are not incidental mass phenomena; therefore, their probability assessment is platitudinous in the better case and misguiding or damage causing in the worse. Recently, a trend has come to the fore, with the name deterministical or non-probability analysis, which, nowadays, can be found in the specialized literature under the name: logical risk analysis. Therefore, the event or state, being extreme enough, is a disaster, if it is a disaster, it is unique, and if it is unique, it has risks, and thus it demands logical risk analysis or, in other words, status management. Logical risk analysis tries to find, for the occurrence of an undesired event or status, the necessary and sufficient conditions,

which are in direct human competence.

The less we know about the phenomenon, the more significant, unexpected and undesired the event will be. The weakest point of any defense/protection issue is usually the unorganized state. In order to overcome this unorganized state and to restore the organized state the so-called self-organizing systems are most suitable. Artificial self-organizing systems in the form of self-reproducing automata (Janos Neumann, one of the most famous Hungarian mathematicians), nowadays are known as cell-automats and automatic networks. Cellular automata, on the present organized level of information technology, have been used in practice as well. One of its proofs is the appearance of NCW (Network Centric Warfare) in NATO. So, at the same time, this topic is both a risk analysis and an information theory issue.

Ladies and Gentlemen!

According to a famous saying by Benjamin Franklin (1706-1790): "Time is money". The fact that all events may and have to incur costs, I think, can be accepted by all of us as an axiom. Therefore, if we accept Franklin's principle, a consequence of it is that all events have both cost and time demands, that is, all actions whose outcome is an event. Naturally, it is also included in this principle that if we change one of the factors, the other one also changes, usually in the reverse way. We can obviously divide the tasks in risk management into three groups: prevention, protection or response and rehabilitation. Since all of these have a time and cost factor, we can distinguish six groups with the Franklin parameters. Therefore, the examination of the Franklin parameters must form an organic part of specific risk analysis.

From the aspect of our subject, the goal of disaster management is to prevent and reduce, in the most effective way, the social and human losses and damages caused by the climate change. However, in order that the decisions and the implementation activities under the ever-changing circumstances be more efficient and economic, there is a need for an action in similar strategic frameworks and according to similar strategic guidelines, ensured by the so-called strategic management.

Strategic management should not be a rigid bureaucratic activity based on routine and constrained by deadlines. Strategic expertise should be based on decisions searching for prospective answers to challenges and problems profoundly assumed for the future, being of great importance and mostly innovative. Furthermore, it should rely on everyday knowledge always at hand, based on information and knowledge, overreaching previous experience, in order to bring the professional and specific political decision-makers, by using the above mentioned factors, into an optimal decision status.