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## Rescue and Protection of Inhabitants, Goods and Environment in Case of Emergencies

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**S U M M A R Y:** In paper described is what is emergency management. There are many hazards (natural and man made) which can endanger people, goods and environment. In the war about 14,000 people were killed and about 30,000 injured. Direct damages caused by the war in Croatia are estimated at about \$30 billion US\$. In addition to war damages, there are also usual peacetime damages caused by natural phenomena. These peacetime damages are estimated at more than \$300 million/year. Extraordinary experience (war) and everyday influence of nature and technology have shown to us that are necessary to have own very good emergency management. Terrorism is like subgroup of interior disturbances only one group of technological hazards. Other technological or man made hazards are hazard materials releases, fires and explosions, radioactivity, break of supply and dam failures.

Emergency management organization for natural and man made disasters, like one necessary human activity for decrease damages, is based on the factors: hazard analysis, authority, organization, communication, resources and emergency plans. Such organization has been built during the war in Croatia, according USA practices (FEMA, EMI, NATO) but on the beginning of 1994 all was stop. Now is the time, after 8 years pause, to proceed with this job again. It is known what is needed to be down in the field of organization, in the field of authority, collecting the data about resources, information & communication and in making plans. Only is necessary will of government to establish system of protection & rescue for inhabitants, goods and environment ? on most developed countries models and on experience from country war. Reasons for this establishment are deeply justified.

**KEY WORDS:** Emergency management, programming part of emergency organization, hazard analysis, authority, organization structure, communication, resources and emergency plans

In these mindless and deaf times, terrorism of all sorts besets us, from the physical, state-sponsored, anti-state, and that promulgated by small gods, to that of "information" terrorism. The struggle against this terrorism would be pointless except that the history of humanity demonstrates that there is always a will and a way to overcome crisis. It is most likely this will also happen in Croatia, sooner or later. The persecution of intellectuals and scientists is in full swing, especially if they were also previously defenders of Croatia – "generals" are not the only "problem." Important institutions are beyond state control. Many things are no longer ordinary and chaos is a possibility. This type of situation in Croatia may increase the need for civil safety and rescue services for the population in situations of crisis or emergency, as occurred in 1991. Politicians do not comprehend this and nothing is being done.

Many published articles have documented the key elements of the system of crisis management which we developed during the Homeland War, and which was destroyed by individuals with the Ministry of Internal Affairs in 1994. To date there has

been no permission forthcoming to rebuild anything new. This intentional and planned destruction of the civilian defenses system should be seen to be a crime against the civilian population (possibly there should have been no fatalities among the citizens of Zagreb during the missile attacks in 1995). It is similar to the crime of exporting crude oil and its derivatives to the enemy war machine. Perhaps these circumstances should be the subject of an investigation by The Hague Court or another court, as no one within Croatia has been interested in pursuing these matters. Surely someone should be held accountable for these attacks upon the Croatian people.

The aggression against Croatia resulted in the deaths of 14 000 people and a further 30 000 people were wounded or became invalids. Damage to property is estimated at \$US 30 billion. To date, no one has been found to be accountable for this nor has there been any compensation for any wartime property damage. In fact, the Croatian leadership has built homes for those involved in the destruction of Croatia. In Croatia, disasters or states of emergency in peacetime's cost the state an average of \$US 300 million annually. The greatest damage is caused by drought (42%), followed by hailstorms, rainstorms, snow and ice (26%), and earthquakes (17%). Fires (6%) and floods (5%), although earning greater media attention, are actually only a small proportion of the total damage costs. Losses due to technological, i.e. man-made damage (excluding traffic accidents), are significantly less than that due to natural disasters, even though they often excite greater media coverage. However, the poverty and dissatisfaction of the general population may lead to a drastic increase in the incidence of some types of emergency situations due to internal disruptions.

It is a primary security and economic concern for every country that it has an organized system for the defense and safety of its population, material assets and the environment. Therefore, each country must organize this activity so that it is maximally efficient, directed towards its priorities and with minimal costs involved.

## ESTABLISHMENT AND DESTRUCTION OF THE SYSTEM

During the Homeland War, especially in 1993, the Croatian Ministry of Defense built a modern and effective system of civil safety and rescue for its population, material assets and the environment in emergency situations (in war and peace). With good reason, it was organized upon the example of that which exists in the USA and which was promoted at that time by NATO. This was then destroyed by unscrupulous individuals, who were pursuing their own interests (from the beginning of 1994), with the supposed transfer of responsibility to the Ministry of Internal Affairs. In the general confusion and plunder of everything, the civil defense system was destroyed and it has not been restored to this day. Despite these events, some individual disparate segments still manage to obtain occasional positive outcomes. There would have certainly have been fewer problems, in post-war rebuilding and the return of refugees, if the entire system of civil safety and rescue which had already been established, had then not been destroyed, and a comprehensive methodology of recovery and rebuilding (already developed in other countries, especially the USA) had been applied. Also, damage due to the peacetime emergencies would have been less.

It is worth mentioning that even UNPROFOR demonstrated a high regard for our capabilities. It sought the protection of our civil defense system in the autumn of 1993 for its central offices in Zagreb (Illica) against the potential attacks of Greater Serbian aggression. Instead of using this fact to illustrate what was happening in Croatia to the rest of the world, politicians demonstrated a total disregard for the people. Missiles attacked Zagreb in May of 1995.

The system of civil defense was dismantled at a time when almost one third of Croatia was under occupation, particularly in areas which were considered most critical for its defense: the Osijek-Baranja region (1.2.1992), the Vukovar-Srijem region (Vinkovci) (4.2.1992), Sisak-Moslavina (Novska) region (11.2.1994) and the Dubrovnik- Neretva region (28.2.1994). The central organization of the civil defense system was destroyed and its most experienced personnel were scattered. Those remaining were allocated to other positions, which were completely unsuitable with regard to their training, experience, professional qualifications and knowledge. Approximately 200 explosives experts, who had been trained during the establishment of the defense system, were dispersed. Of course, all the equipment disappeared as well.

## THE SITUATION TODAY

From the time of the dismantling of the civil defense system until today, there has been no adequate analysis of risk undertaken at State or regional level within Croatia. This includes all types of natural and technological disasters, and the possibility of war. There is no adequate legal system in place which would define the roles and responsibilities of all those participating in the provision of civil safety and rescue services, and there is no organizational structure in place to manage such a system. There is no management structure for all the participants in the system and there is no single established system of communications. There is no resource base, which incorporates all the available resources in the civil safety and rescue system and the appropriate conditions for their use. For all the given reasons, there is a lack of planning for emergency responses in crisis situations. Despite the warnings of experts, nothing is being undertaken to change this situation. The issue of the security of the State and its population has become the private concern of various private enterprises, instead of being a clearly defined state activity.

Since the privatization of parts of the Ministry of Internal Affairs in 1994, when the civil safety and rescue system developed

during the war was destroyed, there has been a systematic sidelining of intellectuals (individual scientists with high levels of expertise), who were also Croatian defenders from the beginning of the war. This persecution of highly educated intellectuals, who defended the country during the war, has assumed an absurd terror similar to fascism. Persecution assumes a wide spectrum of forms, from home imprisonment, physical attacks, allocation to non-existent working positions in non-existent organizations, minimal rates of income, to the compulsory further schooling (compulsion which has no legal basis) of professionals, with Ph.D. and Masters qualifications, in semiprivate schools where there is no discrimination between kindergarten dance teachers, cooks or doctors of science.

We cannot hope to re-establish a system of crisis management in emergency situations while certain conditions persist. We must first establish the reasons why our system was dismantled and those responsible must be brought to account. We must cease indulging the bullying of our most qualified individuals (doctors and masters of science) by such persons. Also, our "political system is being created" by persons who sabotaged work on the establishment of civil defense during the war, most frequently by being under the influence of alcohol, by dealing in stolen art works and treasures. This has continued after the war by the wrongful use of loan monies from the World Bank (which had been intended for the clearing of land mines), the trade in mined land areas, and a whole range of other illegal activities. These same persons planned defenses for the possibility of NATO attacks, while now they must certainly be work along NATO guidelines. With the advent of Croatian independence, these persons became "great Croats" and as "suitable comrades" under the patronage of those at the top of the political heap, they continue to prevent the re-establishment of the civil defense system. With various changes in the ruling political structures, the politicians in power have been warned about these issues on numerous occasions. However, they have expressed no concerns.

## WHAT IS DISASTER MANAGEMENT OR THE MANAGEMENT OF EMERGENCY SITUATIONS

The management of disasters or emergency situations is one of the most complex of human undertakings. It is not a straightforward activity even in societies which are much better organized than that in Croatia. However, in our circumstances there are individuals who are cognoscenti of the difficulties involved, who have the expertise to develop a comprehensive crisis management system, if allowed to do so by the ruling politicians. The essence of crisis management is the ability to act appropriately between times of emergency. Emergencies are cyclical phenomena and their management is dependent on recognized phases: mitigation, preparedness, action, and recovery or rebuilding, when it becomes necessary to undertake a range of safety and rescue activities. Successful recovery from an emergency situation is possible, but numerous obstacles exist which prevent better organization of the civil safety and rescue of the population, our assets and the environment, and its response to all types of hazards, encompassing natural disasters, technological accidents and war. Many find the lack of organization in our society to be convenient for their purposes.

We know what needs to be undertaken in the area of organization, in risk analysis, in law-making, in resource management, in fostering information and communications, and in the development of plans of readiness and action for these situations. It is only political will that is further required to re-establish an organization of civil safety and rescue for our population, its material assets and the environment. It could be rebuilt along similar lines to those in most developed nations of the world, and based on our own experiences obtained during the homeland war. The arguments for this rebuilding are well established.

Numerous operational organizations should be given equally important obligations and rights to be able to operate within an efficient safety and rescue structure during emergency situations or disasters, both in war and peace times. These encompass health services, firefighting services, humanitarian organizations, the armed forces and police, water resource management, energy resource management, forestry management, and other public services and organizations. Also included are organizations of traffic control, industry, numerous government ministries and departments, hydrometeorological and seismological services, public information services, organizations of surveillance and reporting, ancillary public organizations, schools and many others.

Partial solutions to these concerns should be transformed into complete solutions, which are able to encompass and manage problems comprehensively. The essential issue regarding civil safety and rescue in our circumstances is the need to link all the numerous operational organizations into a comprehensive and efficient single network. This is the principal undertaking of expert committees for crisis management everywhere in the world. This still needs to be established in Croatia. The establishment of a professional entity under government supervision, for the management of the risk in disaster situations, is the pre-requisite for improved risk management by the civil safety and rescue system in any crisis. The annual costs for the provision of such a service (with 30 qualified employees) would be much lower than the damages likely to be sustained in any one day during any disaster situation. In this manner we would avoid the situation where several government agencies have no clear delineation of jurisdiction or responsibility, costs would be decreased and greater efficiency would be achieved.

Worldwide, government bodies manage disasters and emergency situations by providing the basic structure for all planned activities. So it should be here. Such a body provides the coordination of all operational committees which function in civil safety and rescue of the population, material assets and the environment in times of disaster and emergency, in war and

peace. To achieve this, it must carry very high authority, which is clearly defined by law. It must be able to clearly identify any threats. It must be able to establish an acceptable basis for the operation of the entire system. It must establish a strategy for the development of responses through all four phases of crisis management. It must be able to collect information about all available resources for crisis management and establish all five basic levels of response: notification/warning, civilian rescue, rescue of assets, care of the population and estimation of the degree of required rebuilding. It must react immediately in the event of an emergency or disaster, inform and notify the public, and implement its emergency response plan of action. It must also implement a fundamental plan of recovery suitable for the specific area.

Knowledge is the basis of efficient action in many activities and it is also vital here. An incomplete understanding of this area of expertise is a barrier to its functioning. Our experience is one of a lack of planning of systematic elements of civil safety and rescue. There are no bodies under state administration, which are responsible in the event of a disaster situation. There is an absence of higher education or any other training in this area. It is obvious that the education of professionals for this activity would facilitate vital integration of numerous scattered safety and rescue responses. By doing so, the outcomes in these disasters would certainly be improved. A comprehensive system of education for disaster responses has already been developed sometime ago, but it has not been allowed to be implemented and to function.

## WHAT NEEDS TO BE DONE TO DECREASE THE DAMAGE

Our profession proposes the following course of action:

The establishment of a state body for the management of emergency situations by the President of the Republic (responsible under the Constitution for the safety and security of the population), or by the Parliament.

This group would need to:

- Develop a proposal for a law which would regulate the organization of civil safety and rescue and its functioning.
- Define the organizational structure of all operational participants in civil safety and rescue, and determine how to monitor and manage available resources most efficiently.
- Prepare a range of guidelines for the activities of the organization at a local level, including crisis management, analysis of risk, public awareness, assessment of damage, mitigation strategy, planning for readiness and disaster response, the re-establishment of vital community structures after a disaster, etc.
- Assess costs and sources of revenue for an efficient working system, which would underscore its establishment, and monitor the funding of a comprehensive safety and rescue system.
- Develop a proposal for a comprehensive plan for the education and training of personnel for such a service (at levels of tertiary education and other levels).

Despite the fact that experts have proposed the re-establishment of a disaster management system for years, politicians have shown no interest. Whenever a disaster has occurred in Croatia, there has been an outcry but afterwards, there is little or no change. Effective work still continues in this field, but it is usually the result of the endeavors of a few enthusiasts, not an organized state activity. This is not nearly enough. The reasons for this state of affairs are many, but most are due to a lack of concern and knowledge by the decision-makers, their incompetence, and the consideration of private profits gained by those who are opposed to its existence. The consequences are obvious but they may potentially become much worse.

## NOTE

In his role as Director of Management of Emergency Situations in the Republic of Croatia (Headquarters Commander for Civil Defense, Republic of Croatia), one of the authors of this paper, was opposed to the dismantling of the Croatian system of civil safety and rescue in 1994. He informed then the Minister of Internal Affairs, the Prime Minister of the Republic, and the President of the Parliament of his concerns. The first two did not respond an indication of their level of concern for their own people. The third person expressed a willingness to stop this mindless action, but was soon replaced in his position as Parliamentary President. This man is now the President of the Republic of Croatia. It is high time that through his decision-making, he helps the civil safety and rescue system come back to life after eight years. Perhaps today, he feels that the Croatian people do not deserve such a system, or he is truly President Fikus, as he jokingly puts it.

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## Zaštita i spašavanje stanovnika, dobara i okoliša u slučaju izvanrednih stanja

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**SAŽETAK:** U članku je riječ o tome što je upravljanje u krizama. Mnoge su opasnosti (prirodne ili one koje izaziva čovjek) koje mogu ugroziti stanovnike, dobra i okoliš. U ratu je oko 14 tisuća ljudi ubijeno i oko 30 tisuća ranjeno. Izravne štete uzrokovane ratom procjenjuju se na oko 30 milijardi US\$. Osim ratnih šteta također su štete izazvane u doba mira, a pretežno uslijed djelovanja prirode. Te štete se procjenjuju na više od 300 milijuna US\$ na godinu. Nesvakidašnje iskustvo (rat) i svakodnevan utjecaj prirode i tehnologije pokazali su nužnost ponovne uspostave odgovarajućeg sustava upravljanja u izvanrednim situacijama. Terorizam kao vrsta unutarnjih smetnji je u grupi tehnoloških ili čovjekom uzrokovanih opasnosti. Druge tehnološke opasnosti su nekontrolirano oslobađanje opasnih tvari, požari i eksplozije, radioaktivnost, prekid opskrbe i lomovi brana, koje također mogu biti rezultat namjere.

Organizacija za upravljanje u krizama - izvanrednim stanjima izazvanih prirodom ili čovjekovim aktivnostima, za smanjivanje šteta zasniva se na činiteljima: analizi opasnosti, zakonodavstvu, organizaciji, komunikaciji, resursima i planovima pripravnosti i djelovanja. Takva organizacija izgrađena u Hrvatskoj za vrijeme Domovinskog rata u skladu s američkom praksom (FEMA, EMI, NATO) ali je početkom 1994 sve zaustavljeno. Vrijeme da se poslije osam godina ponovno nastavi s tim poslom. Poznato je znalcima što treba načiniti u području organiziranja, uspostave zakonodavstva, sakupljanja podataka o resursima, informiranju i komuniciranju i izradi planova. Samo je potrebno da vlast ima volju da uspostavi sustav zaštite i spašavanja stanovnika, dobara i okoliša na modelima najrazvijenijih zemalja i iskustvima iz Domovinskog rata. Razlozi za njegovu uspostavu duboko su opravdani.

**KLJUČNE RIJEČI:** Upravljanje u krizama, programatski segment organizacije, analiza opasnosti, zakonodavstvo, organizaciona struktura, komuniciranje, resursi, planovi za izvanredna stanja

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