REPORT

ON

READINESS AND PERVENTION OF ALL KINDS OF DISASTERS IN BOSNIA AND HERZEGOVINA

I INTRODUCTION

The war in Bosnia and Herzegovina has left the deep traces to public administration capacities to protect adequately population from consequences of natural and manmade disasters and major accidents. The main reasons for this are found in consequences of damages to protection and rescue system, i.e. civil defence, lack of funds, equipment, and low education level in general of staff concerned with the protection of population from natural and modern technological disasters. At the Bosnia and Herzegovina level, the civil defence sector was formed within the Ministry of Security, while new civil defence structures have been set-up recently in both Entities - Federation of Bosnia and Herzegovina and Republika Srpska - and no such authority exists in the Brčko District.

Susceptibility to natural disasters, intensified industrialisation and all the more complex infrastructure characterise Bosnia and Herzegovina and its neighbouring countries. In the past, the civil protection in Bosnia and Herzegovina has been included into the army structure and has been very often mixed with war victims rescue. Nowadays, the civil defence has been organised as an independent system of protection for citizens and property from consequences of accidents, which include managing hazardous materials, taking action in case of technological disasters and evacuation during floods, in addition to supervision and compliance with ever complex (prevention) rules and regulations in the area of construction business, public security and environmental security. The civil defence sector in Bosnia and Herzegovina has already undertaken demining-related activities, as these are supported by the European Union. Further, the civil defence authorities have legal responsibility for coordination and preparation (planning, training and exercises) of the complete disaster management system.1

Taking regard of the disaster consequences that affect not only a narrow B-H territory, but rather reflect to a wider region, a need for a tighter and more strengthened cooperation between all institutions in country dealing with the issue, as well as for mutual cooperation of the counties in the region is evident.

In that respect, Bosnia and Herzegovina has defined three basic directions of activity:

- Prevention;
- Action in case of disasters.
- Repair of consequences.

¹ This is an estimation by Expert Group engaged by the European Commission Delegation in B-H on August 21 to October 10, 2002 for the preparation of the Study Report on Civil Defence Capacity for Protection of Civil Population in B-H in Case of Disaster.

Natural accidents and disasters that affect property and endanger human lives, as registered in the B-H territory thus far, refer to earthquakes, stormy weather with hail, severe winds with electricity discharge, snow storms, short heavy rains that cause raging floods, landslides, droughts, early and late frosts, and industrial and forest fire.

The consequences of mentioned disasters have the adverse impact to overall social and economic development because readiness to provide an adequate response to disaster is still unsatisfactory.

The awareness level on risks and readiness for protection from disasters in Bosnia and Herzegovina is also unsatisfactory.

An initiative was launched within the Stability Pact on prevention of all forms of disasters in countries of the region (DPPI countries), aimed at strengthening regional cooperation in this field.

Under the Law on Ministries of Bosnia and Herzegovina (February 2003), civil defence is situated within the Ministry of Security competences, more precisely its International Cooperation Department, with the key tasks in implementation of international obligations of civil defence cooperation, Emity civil defence services activities coordination, harmonisation of their plans for cases of natural and manmade disasters in the territory of B-H, and adoption of programmes and plans for protection and rescuing. In June 2004, The Council of Ministers of B-H accepted the proposal on establishment of civil defence department within the Ministry of Security of B-H.

As the Ministry of Security Civil Defence Department has started to function recently, the legal framework for protection and rescue in territory of B-H in cases of natural and man-made large scale accidents is not defined yet; therefore Entity regulations are usually applicable until state level regulations are adopted.

As Bosnia and Herzegovina is comprised of two Entities and the Brčko District (hereinafter: Brčko), and having on mind a fact that there are no unified data for the whole of Bosnia and Herzegovina, this report will rely mostly to data from the Entities.

II-POLITICAL COMMITTMENT AND INSTITUTIONAL ASPECTS

1.1. Are there national policy, strategy and legislation concerning the disaster risk reduction in place?

At Bosnia and Herzegovina level, no national policy, i.e. strategy for reduction of disaster risk, has been developed yet; neither has legislation governing the area. Projection is that by end 2004 an initiative should be launched for adoption of single piece of legislation to over all segments of protection and rescue.

In Entities, in Federation of Bosnia and Herzegovina and Republika Stpska, there are appropriate programmes for development of protection and rescue systems, i.e. civil defence, as well as appropriate by-laws and implementation laws to address the matter.

In that regard, the Law on Civil Protection has been adopted in Republika Srpska, based on which relevant by-laws were adopted to govern the area of protection and rescue. The Brčko District carried out its activities in this field under the mentioned law, and will be viewed in that respect.

The Federation of b-H adopted the Law on Protection and Rescue of Citizens and Property, along with by-laws on planning of protection from natural and man-made accidents, and other by-laws are in the process of development.

1.2. Is there a national authority for multi-sectoral cooperation in disaster risk reduction that includes Ministries competent for water utilities, use and planning a land, health, environment, education, development planning and financing?

As already noted in the introduction, there is no national authority on B-H level for multi-secontal cooperation in risk reduction (state-level civil defence HQ).

Other than Federal Directorate for Civil Defence and Republika Stpska Directorate for Civil Defence, civil defence posts were formed in the Entities, under the Entity laws and regulations, for protection in cases of natural and man-made large-scale accidents to manage actions of protection and rescue. Also, at the level of cantons and municipalities in Federation of B-H civilian defence stations were formed, while in Republika Stpska there is an additional, regional, organisation in the form of regional coordination and operation team.

In addition to professional staff, employed in the Civil Defence Directorate of Federation of B-H, cantons and municipal civil defence services, and in Republika Srpska Civil Protection Directorate and municipal services, there are also officers from Ministries and municipal services.

This organisation of the civil defence staff provides for a full cooperation between all disaster risk reduction competent authorities.

1.3. Are there sector plans or initiatives to include risk reduction concepts for some developing areas (such as water utilities, poverty reduction, adaptation to climate changes and development planning)?

A document titled Mid-term Development Strategy (PRSP 2004-2007) addresses, inter alia, all the priorities in certain areas, i.e. development areas. True, the document does not contain disaster risk reduction elements, even requested by the Federation of B-H Civil Defence Directorate, but the initiative was not considered.²

At B-H level, to adopt the Law on Protection and Rescue of Citiyens and Property.

Within the B-H EU integration, ensure the membership in the Europe Major Disasters Agreement with the Council of Europe:

² The initiative featured the following demands:

^{2.} Demining authorities (Demining Commission and H-H MAC) currently under the umbrella of the Ministry of Civil Affairs to be transferred to the competences of the Ministry of Security,

In Entities, up-dating is on-going along with adoption of relative defence and rescue plans, i.e. civil defence plans, which preventive measures are determined to be implemented in the course and after a natural disaster happens.

In addition, there are operative flood protection plans in place, developed based on water utilities and flood protection legal regulations,

1.4. Is disaster risk reduction incorporated into your national plans for implementation of the UN Millennium Development Goals (MDG), Poverty Reduction Strategy (PRSP), national adjustment action plans, national environment action plans, and Johannesburg Plans (World Summit for Sustainable Development)?

The Federation of B-H plans for protection and rescue of citizens and property, including those at the cantonal level, provide for implementation of these plans for reduction of major risks that can cause natural and man made large-scale disasters, such as serious earthquakes, floods, landslides, fire etc.

The planned documentation of the Republika Sipska civil defence does not address the issue specifically, except for the part dealing with the basic preventive measures of protection and rescue of citizens and property.

1.5. Has your country developed code of conduct on the ground and seismic risk-related standards?

Destructive earthquakes endanger some parts of Bosnia and Herzegovina at times. And they not only expose human lives and material goods to potential hazard, but also threaten the overall human activity and its normal development in these areas.

As it is still impossible to provide short-term earthquake cause prognosis, i.e. prognosticate its time, place and intensity, despite improvement of seismic location methods, yet it is possible with a certain degree of probability to ensure effective protection from earthquakes destructive effects. Within the relative framework, a seismic map represents only the last phase of seismic, seismic-tectonic and other relevant researches, but does not offer a definite answer on the seismic state of Bosnia and Herzegovina's territory. Therefore, the map needs to be up-dated and supplemented in regular intervals, based on scientific findings.

Bosnia and Herzegovina's territory represents one of the most active parts of the Balkan peninsula in terms of seismology, and it is a part of the Mediterranean – trans – Asian seismic belt.

4. Within sector priorities, underline the need for strengthening of B-H civil defence structures and their demining capacities, sampling, reconnaissance and monitoring of contaminated areas, aligned to the phasing out international donor funds;

5. If no specific segment in the PRSP B-H is not provided for the protection and rescue of people, we proposed the title of the sector priority "Demining" to be replaced with the title "Protection and Rescue of People and Assets", and that a part of this is dedicated to the demining, as it is a part of a overall protection and rescue system.

In the ex-Yugoslavia areas, most often and intensive quakes that affected Bosnia and Herzegovina and also made the strongest seismic effects were registered to have their centre in Bosnia and Herzegovina's surrounding.

Table 1 below shows chronologically earthquakes that happened and seismically

affected Bosnia and Herzegovina most:

| Time | Place | Magnitude (M) | Epicentre intensity (Io) on MCS scale |
|------------|------------------------|---------------|---------------------------------------|
| <u> </u> | 2 | . 3 | 4 |
| 06/01/1905 | Krupanj (Serbia) | M = 5.3 | lo = 7° |
| 06/10/1909 | Petrinja (Criatia) | M=6.3 | Io = 9° |
| 13/04/1964 | Slavon, Brod (Croatia) | M=5.7 | Io = 8° |
| 07/09/1970 | Knin (Croatia) | M=5.3 | Io = 8° |
| 14/03/1977 | Ulcinj (Monte Negro) | M=7.1 | Io = 9° |

According to data available in the area of Bosnia and Herzegovina, several destructive earthquakes happened from the local centres of M≥5.0, and epicentre intensity of the Io≥MCS scale.

Table 2 below shows destructive earthquakes in Bosnia and Herzegovina

chronologically:

| Time | Place | Magnitude (M) | Epicentre intensity (Io) on MCS scale |
|------------|------------|---------------|---------------------------------------|
| <u>l</u> | 2 | 3 | 4 |
| 07/04/105 | Petrovac | M=5.0 | Io = 7° |
| 01/08/1907 | Počitelj | M = 5.7 | Io = 7-8° |
| 25/12/1908 | Vlasenica | M=5.3 | lo= 6-7° |
| 12/03/1916 | Bihać | M = 5.0 | Io = 7° |
| 06/02/1923 | Jajce | M=5.0 | Io = 7° |
| 15/03/1923 | Imotski | M=6.2 | Jo=8-9° |
| 14/02/1927 | Ljubinje | M=6.0 | Io = 8° |
| 17/12/1940 | Derventa | M= 5.1 | Io=7° |
| 31/12/1950 | Dugovići | M = 5.7 | Io= 8° |
| 11/06/1962 | Treskavica | M=6.0 | 10 = 8° |
| 07/03/1967 | Srebrenica | M = 5.1 | |
| 27/10/1969 | Banja Luka | M = 6.6 | Io = 7° |
| 28/08/1970 | Gacko | M = 5.0 | Io = 9° |
| 29/10/1074 | Lukavac | M = 5.0 | Io = 7° Io = 7° |

An analysis of data on past earthquakes, from table 2, finds that several fierce earthquakes happened in the past in Bosnia and Herzegovina, the most intensive being those from centres in Imotski, Ljubinje, Treskavica, and Banjaluka.

Bosnia and Herzegovina's seismic map marks three zones with maximum intensities, and the largest part of the territory is noted to fill within the zone of 7, 8, and 9th degree of seismic intensity of MCS scale.

According to findings and monitoring of seismic trends in Bosnia and Herzegovina conducted to date, destructive quakes are realistic to occur in next one hundred years, particularly form centres in Banjaluka, Ljubinja, Imotski.

Banjaluka seismic area is one if the most active ones in B-H and beyond, with several destructive quakes in series in 1884, 1835, 1969 and 1981.

Earthquakes of October 26-27, 1969 had considerable seismic effects to the wider area of Bosanska Krajina. In the area of 9,000 km 2 in the territories of municipalities of Banjaluka, Čelinac, Laktaši, Prnjavor, Gradiška, Kotor Varoš, Kneževo, Srbac, Ključ, Jajce, Prijedor, Sanski Most, Novi Grad and Dubica, earthquakes were of the seismic intensity ranging between 7, 8 and 9 MCS degrees. The force has left impact on all aspects of social life equally as it destroyed or seriously damaged material goods in economy, housing, health, culture, social care, public services, infrastructure, and death toll was 15, and the injured numbered as much as 1,117 persons.

Out of total destroyed housing capacity of the region, 43% are rural and 56.8% are other communities. Considerable damages were made to buildings for economic and social activities, including either damaged or destroyed 266 school buildings, 133 health care institutions and 29 social care institutions, 152 buildings of public administration, as well as a considerable number of social standard buildings and economic agencies buildings.

The random nature of earthquakes imposes a need for a constant monitoring of the seismic activity of the whole seismic area and its surrounding, using seismic posts network. After Banjaluka's disastrous earthquake in 1969, a contemporary seismic post was built for researches on seismic features of the region.

During the war, wherever seismic posts were operational they were destroyed, while the instruments installed in the Banjahıka Seismic Centre are out-dated (30 years), non-maintained, and therefore cannot be used appropriately.

In view of the above and in addition to the high seismic risk of Bosnia and Herzegovina's territory, on one, and insufficient number of seismic posts and outdatedness of seismic instruments, on the other side, modernisation and up-dating of the seismic posts network appears to be urgently needed.

Seismic Monitoring in Bosnia and Herzegovina should be determined as follows:

- > seismic registering, collection, analysing and studying of seismic and seismictectoric trends (natural and induced quakes, explosions and mountain strokes);
 - > studying of seismic levels, activity and frequency of quakes;
 - defining of seismic effects of local and distanced quakes to focused area and prognosticating of their effects to soil, waters, water flows and buildings.

Seismic, seismic-tectonic and other mapping (quake epicentres, seismic hazards, maximum intensities) is needed for spatial planning and seismic designing and construction, all for the reason of prevention and protection of people and material goods from, this kind of natural disaster and accidents.

In order to estimate, based on certain parameters, the effects for citizens people and property of earthquakes in Bosnia and Herzegovina's territory, some data on structure of housing capacity and overall infrastructure are needed.

| No. | Decree (MCS) | OSCILLATIONS AND POSSIBLE DAMAGES | ACCELERATION (|
|----------|-----------------|--|--|
| 7 | (WICH) | | (m/s²) |
| ÷ | | 10.77 | <u> </u> |
| <u> </u> | <u> </u> | Oscillations are registered by instruments only. | < 0,0025 |
| 2 | <u> </u> | Oscillations are felt in state of calamity. | 0,0025-0,005 |
| 3 | ш | Oscillations are felt by some people and those knowing of the explosion. | 0,0025-0,010 |
| 4 | IV | Oscillations felt by many people, glass tinkles. | 0.010-0.025 |
| 5 | V | Parts of façade fall, cracks in façade appear. | 0,025-0,050 |
| 6 | VI | Small cracks in façade and damages to poor constructions | 0,10-0,25 |
| 7 | VII | Damage to satisfactorily built buildings, cracks in façade, falling of parts of façade, cracks to wall joints. | 0,10-0,25 |
| 8 | VIII | Considerable damages to buildings, cracks to support walls and large cracks to separations | 0,25-0,50 |
| 9 | IX | Buildings take apart, open cracks to wall: | 0,05-1,00 |

In Bosnia and Herzegovina, the disposition of residential buildings shows a high density of buildings in communities in some areas, such as Sarajevo, Banja Luka, Tuzla, Mostar, Zenica, Doboj and similar. The quality of residential building is very much improved, but the existing structure of the housing capacity and concentration of buildings still do not allow for an effective earthquake protective measures

In ex-Yugoslavia, most frequent and intensive earthquakes that affected Bosnia and Herzegovina occurred along the Adriatic coast, in the vicinity of Dubrovnik and Split and in the Sava River basin etc.

The mentioned data relate to the 1974 and 1981, because Bosnia and Herzegovina does not dispose of the new data, due to overall circumstances.

The sum-up of the above presented is that useful data and experiences exist at the level of Bosnia and Herzegovina, but a specific, normatively formed code of conduct in practice and the standards taking into consideration the seismic risks are yet to be developed.

1.6. Have you annual budget for risk reduction?

Bosnia and Herzegovina does not have budgeted resources for risk reduction, neither have them Entities or the Brčko District.

Financial resources at all levels of authority in Bosnia and Herzegovina for emergency cases and financing of aid programme are provided for in Bosnia and Herzegovina's State, Entity, cantonal and municipal budgets, although insufficiently to cover all eventual needs.

Entity governments finance the work of Civil Defence Directorates and Entity Civil Defence Staffs and their work programmes in full.

Cantonal and city governments finance their civil defence directorates and staffs in the same way it is done at the Entity level.

Municipal civil defence services and staffs are financed from nunicipal budgets.

Further, the International Community, through the Delegation of the European Commission for Bosnia and Herzegovius implements the Demining Programme by financing teams for demining (TUN teams) formed in the Federation of B-H and Republika Srpska.

1.7. Do private sector, civil society, NGOs, academies and media take part in disaster risks reduction efforts?

The Entity laws, which address the disaster risk reduction issue, are binding also for the private sector the legal entities within it that might provide for their disaster risk reduction contribution. In that sense, private sector can establish general and specialised civil defence units, pursuant to their specific needs and estimations and mobilise their own human and material resources for implementation of the preventive and operational measures of protection and rescuing, based on their own estimations and requests from competent civil defence authorities.

A number of NGOs and federations are active in both Entities in monitoring, securing of liaisons, undertaking preventive measures, prevention, reduction or removal of disaster consequences, education of population and similar in following ways:

Republika Srpska Red Cross and Federation of B-H Red Cross are the NGOs that adopted the International Red Cross principles, and they perform their tasks in accordance with the law, their statutes and other relevant regulations. They cooperate with both GOs and NGOs involved in disaster tisk reduction, and in that sense they develop their own structure of actions, management, cooperation and coordination;

 Radio Amateur Federation is a NGO which secures communications system for all structures involved in disaster prevention;

- Aviation Federation, through its aviation clubs, secures a lift and fast arrival of rescue staff and supplies to disaster sites;
- Fire Fighting Federation is an association of professional and voluntary fire fighting associations dealing with the prevention, training and removal of fire risks:
- ➤ Divers:
- > "Caritas";
- Mountain Rescue Service;
- Scouts
- Other environmental associations and associations of citizens, formed under the Law on Citizens' Association.

Cooperation between the civil society and NGOs:s good also in respect to designing of programmes aimed at improvement of conditions and quality of life in general, which more or less directly influence the disaster risks reduction.

II - DETERMINATION OF RISK

2.1. Has your county carried out a risk assessment/mapping?

Within the Stability Pact for South-East Europe (DPPI) an initiative has been launched on readiness for and prevention of all kinds of disasters in Bosnia and Herzegovina, and which can serve as a good basis for new exposure assessments for Bosnia and Herzegovina.

According to the current data, the Federation of B-H has not developed exposure assessment (risk assessment/mapping), but cantons and municipalities have developed exposure assessments on their own, and on the basis on which they prepared other planning documents for actions in cases of natural and man-made large-scale accidents. As the Federal Civil Defence Directorate developed, in accordance with the Law on Protection and Rescuing of Citizens and Property from Natural and Man-Made Disasters, the Methodology for Preparation of Exposure Assessments for Natural and Man-Made Disasters, we believe that the Federation, cantons and municipalities will develop their own assessments, which should be used as a basis for development of other planning documents provided for under the Act on Content and Way of Development of Protection and Rescue Plans in Federation of B-H.

The natural and man-made disaster exposure assessment was developed in Republika Srpska.

The Entities have developed their disaster maps for specific kinds of disasters, like the following:

- seismic map of Republika Srpska, created as a result of monitoring in this area, it contains a demarcation by seismic risk levels;
- hydrologic map of Republika Srpska contains a detailed review of status and development of water protection facilities in water ways;
- registered mine fields map prepared by the BH Mine Action Centre (MAC).

Mentioned maps are being regularly up-dated and are widely available.

2.2 Has Bosnia and Herzegovina conducted capacity and vulnerability assessment?

Bosnia and Herzegovina has not conducted assessment of capacities and vulnerability directly related to disaster prevention.

Normative-legal enactments at State, Entity, cantonal and municipal levels addressing this issue from various aspects might serve as a solid base for preparing concrete assessment, after appropriate regulations are developed at the State level.

2.3. Has your country mechanisms for risk monitoring and mapping?

Risk monitoring and mapping in Bosnia and Herzegovina have always been the competence of Entities.

Under the Law in Protection and Rescue of Citizens and Property and other legal regulations in Federation of B-H, sector ministries are responsible for risk monitoring and mapping and reporting regularly the Federation of B-H Civil Defence Staff, i.e. Federation of B-H Civil Defence Directorate on measures and activities undertaken to prevent or mitigate consequences of natural and man-made accidents.

In Republika Srpska, risk monitoring and mapping is being carried out within Republika Srpska Hydro-Meteorological Bureau and BH MAC.

2.4. Are any system socio-economic, ecologic and loss analyses in your country carried out after major disaster takes place?

During each action, particularly after a disaster takes place, consequences are analysed where a particular attention is paid to vulnerability of the poorest part of populace, unable to finance their buildings repair, and similar. In such situations, the authorised bodies and services of Bosnia and Herzegovina, Entities, cantons, cities and municipalities make analyses, primarily on socio-economic effects and losses. Environmental analyses are carried out to a much lesser extent. The competent authorities provide budget funds for care of the most vulnerable categories of populace.

2.5. Are there early warning systems in place?

The awareness among B-H population on potential dangers is rather developed by way of media, while a field work enables education on actions required in case of specific kinds of disasters. Also awareness is high concerning the needs for development and equipping of system elements for prevention and readiness in cases of disasters (among citizens, as among authorities), but this all is connected with insufficient material-technical resources.

Pursuant to the Entity laws on protection and rescue of citizens and property (civil defence), observation and alarming centres have been formed for cases of natural and man-made large-scale accidents. These centres collect data from hydrometeorological institutes, fire fighting brigades, water utility and other enterprises, Red Cross, veterinary services, NGOs, citizens etc., on likeliness of natural and man-made large-scale accidents, and based on these data, they inform citizens in timely manner on possible natural and man-made accidents or disasters. These centres are yet to be fully developed and they necessitate good equipment and means for work under mentioned conditions, for which the Entities are still not capable of providing for substantially.

III – KNOWLEDGE MANAGEMENT

3.1. Has your country risk information management system (either GO or NGO) in place?

Bosnia and Herzegovina still has no a risk information management system in place.

3.2. Are the academic and research communities linked to national or local institutions concerned with the disaster risk reduction?

N/A

3.3. Are there any education programmes in place in your public schooling system relative to disaster risk reduction?

Legislation on protection and rescue of citizens and properties (civil defence) provide for development of these programmes but, owing to the ongoing education reforms in Bosnia and Herzegovina, the incorporation of the same is being prolonged, so it is not studied within Bosnia and Herzegovina's education system at present.

3.4. Are there any training programmes in place?

Under the existing legislation on protection and rescue of citizens and property (civil defence), Entity civil defence administrations will develop training programmes for civil defence staffs, units and secretariats and protection and rescue services. However, such programmes and plans are not adopted yet because of lack of single regulation to govern civil defence units formation.

Thanks to the European Commission financial support, a training of cantonal civil defence staffs is underway within the Federal Civil Defence Directorate, carried out by the Federal Civil Defence Directorate and outside experts.

3.5. What kind of traditional knowledge and experience is used in disaster management or disaster risk reduction programmes in your country?

N/A

3.6. Have you any national plans of awareness building within disaster risk reduction campaigns?

In addition to Entity civil defence directorates preparing various awareness building programmes, such kind of programmes are being implemented by the Federation of B-H Red Cross, UNICEF, BHMAC and other domestic and international organisations.

IV - RISK MANAGEMENT APPLICATION AND TOOLS

4.1. Are there good examples of connecting ecological management and risk reduction practice in your country (key areas of ecological management may include coastal area, management of flood-exposed areas and water-channeling, forestation, agricultural practices etc.)?

In Bosnia and Herzegovina there are good examples on the ground of the linkage between environment management and disaster risk reduction related activities in various social activities such as following:

- forest farms, which undertake trees cutting control, forestation, implement fire
 prevention measures, thereby making more positive effects to overall
 environment, such as prevention of land erosion, landslides control, prevention
 of bare terrains creation and similar;
- health care institutes and veterinary services do every day researches, including drinking water quality control, together with control of hygienicepidemiological quality of water and food of animal origin, thereby monitoring and controlling emerging and spreading of various contagious diseases; they undertake needed precautious measures;

water utility enterprises and farms use the inflow and outflow channels system
to control water level when threatened by floods, thereby improving their
agricultural gains and reducing flood damage etc.

4.2. Are financial instruments used in your country as a disaster effects reduction tools (e.g. insurance/reinsurance, disaster damage funds, disaster damage bonds, micro-credit financing, community funds etc.)?

Bosnia and Herzegovina does not have such programmes yet, nor awareness is high in Bosnia and Herzegovina on need to establish insurance/reinsurance for cases of disaster.

The Federation of B-H Government, in cooperation with its Ministry for Agriculture, Forestry and Water Utilities and Federation of B-H Civil Defence Directorate has for several times now earmarked considerable funds to regulate water ways and embankments in order to prevent flood.

The Law on Protection and Rescue Article 180 provides for the allocation for equipping and repairs of damage caused by natural or man-made disasters from salaries of all employed persons in the Federation of B-H in amount of 0.5% net income.

Resources for cases of disaster are budgeted at municipal level.

4.3. Provide concrete examples of disaster risk reduction technical measures or programmes implemented in your country.

N/A

- V READINESS AND PLANNING FOR EMERGENC!! SITUATIONS
- 5.1. Are there any plans for cases of emergency situations in place?

Such a document does not exist at State level,

However, in accordance with Entity legislation on protection and rescue (civil defence) Entities should have in place plan document on this issue, and enterprises and other legal entities are obliged to adopt their own protection and rescue plans. These plan documents are up-dated on regular basis.

5.2. Has your Government established emergency funds as a response to disaster?

The Council of Ministers of Bosnia and Herzegovina has no established emergency funds as a response to disasters.

For cases of natural and man-made accidents (disasters) the Federation of B-H planned about KM 1,050,000 in its 2004 Budget. However, for such situations, the Federation of B-H Government may use reserve funds, as well.

Other than funds budgeted by cantons and municipalities, in case of large-scale disasters, financial resources are allocated for repair of consequences.

Republika Srpska has no emergency response fund.

5.3. Are there national or local warehouses for storing aid, mostly food, medicines, tents?

There are no such warehouses in Bosnia and Herzegovina.

The Federal Goods Reserves Directorate dispose of warehouses for storing humanitarian and other kinds of aids delivered in cases of accidents or disasters. Likewise, cantons developed their goods reserves, so they too have premises for storing humanitarian aid. All Red Cross warehouses can be used for these purposes in cantons and municipalities of the Federation of B-H.

5.4. What authority is in charge for preparation of responses to disasters and is the coordination authority manned and financed sufficiently to perform its tasks?

There is no single authority at State level for prevention of all kinds of disasters and coordination of actions in case of disasters (civil defence staff or similar authority to manage protection and rescue operations). This lack was particularly felt in the case of airplane crush (February 26/27, 2004), when the Macedonian state delegation plane crushed in the vicinity of Mostar, as well as during the OSCE-organised "2004 Aid to Disaster Victims" joint field exercise.

At Federation of B-H level, the Federal Civil Defence Directorate is responsible for the protection and rescue measures implementation, while the Federal Civil Defence Staff was established for management of protection and rescue operations in cases of disaster or danger, as well as for rescue of citizens and property during and after accident or disaster; the Staff gets activated as soon as accident or disaster happens.

VI – REFENERCE TO GOOD PRACTICE IN DISASTER RISK REDUCTION MANAGEMENT

It order to reduce risks of disasters and seek and provide aid timely to all needy in Bosnia and Herzegovina, the Republic of Croatia signed an inter-state agreement on mutual cooperation in natural and man-made disasters management, and similar agreement to be signed with the State Union of Serbia and Monte Negro is in the process of preparation.

Also, cooperation was established with all international GOs and NGOs, which should result in an improved quality, including by way of adoption of good practices of disaster risk reduction.

Over the past period successful realisation was for the following joint Projects: "From a Soldier to A Rescue Officer" - the success of the project is in soliders' retraining for fire fighters and their subsequent employment and equipping; "Joint Fire Fighting in Bosnia and Herzegovina, Republic of Croatia and Serbia and Monte Negro" - successful result of the Project is the formation of joint fire fighting unit, comprised of three states' elements (in May 2004 "Fire fighting Exercise - Budva 2004" in Serbia and Monte Negro was successfully completed); and "Readiness, Prevention and Means for Natural Disaster Cases - DPPR" - the Project aim is development of Entity projects and training materials and establishment contacts with both domestic and foreign counterparts.

Good practice was developed also through the demining processes.

Other than mentioned agreement, the Federal Civil Defence Directorate and the Republika Srpska Civil Defence Directorate signed an agreement on international cooperation in cases of natural and man-made accidents.

These agreements and memoranda should be also signed with a number of countries in the region so that, an immediate action can be taken without impediments at borders and in accordance with needs of the requesting country.

VII - PREFERRD PRIORITY ISSUES TO BE DISCUSSED AT THE DISASTER RISK REDUCTION WORLD CONFERENCE

The Disaster Risk Reduction World Conference should address the following.

- 1. improved regional cooperation in case of major disasters;
- harmonisation of planning documentation for crisis situations during disasters that might affect one or more countries or regions in the bordering areas;
- 3. provision of information and reporting by neighbouring countries that might be affected after a disaster.
- definition of procedures for emergency assistance (crossing of state borders and similar).