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INTERNATIONAL ORGANISATIONS AND MAJOR HAZARD MANAGEMENT

Open partial agreement on the prevention of, protection against and organisation of relief in major natural and technological disasters

Strasbourg, February 2004

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PREFACE

The aim of this report is to present the major programmes and activities being implemented by the different international organisations dealing with one or more aspects of major hazards. Particular attention has been paid to activities and programmes covering Europe and/or the Mediterranean Basin. However, many organisations conduct activities at an international level throughout the world, without reference to a particular region, and their activities have been described in this report.

In view of the variety of major disasters of natural or man-made origin, their frequency, scale and geographical distribution, many international intergovernmental and non-governmental organisations have established strategies aimed at limiting the damage caused to the populations concerned as well as to the environment. Some of these organisations have been granted special terms of reference entrusting particular responsibilities to them, which enables them to concentrate on well-defined areas.

Given the specific nature of the activities and programmes run by all those involved, it emerges that, taken as a whole, they cover all phases and fields of action. It is therefore felt both necessary and useful to situate the different stages requiring action on behalf of these organisations:

- the prevention of major hazards and disaster preparedness;
- the organisation of relief operations for a rapid response to an emergency once a disaster has occurred and;
- rehabilitation with a view to restoring the initial living conditions of a community hit by a disaster and preparing for further disasters.

Determining when the rehabilitation phase begins is not always a straightforward matter. When, in other words, does the work being done cease to be a mere palliative and concentrate on longer-term objectives? Experience has shown that there is no real break between the rehabilitation phase as such and the preceding phases. The same thing can be said of the recovery phase, the aim of which is to guard against future disasters, and which includes aspects of prevention and preparedness.

The activities and programmes of international organisations are undergoing constant change. Some departments are also being re-organised. These changes reflect a growing awareness of better risk management. They illustrate the need for international organisations to adapt to increased risks and changing mitigation techniques.

I would like to take this opportunity to thank all organizations for their cooperative attitude encountered and which bears out the interest shown in this report.

Jean-Pierre Massué
Executive Secretary
EUR-OPA Major Hazards Agreement, Council of Europe

GOVERNMENTAL ORGANISATIONS

1. UNITED NATIONS ORGANISATION AND SPECIALISED AGENCIES

OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS (OCHA)

http://www.reliefweb.int/ocha

GENERAL DESCRIPTION

Since 1971, the United Nations General Assembly has adopted 18 resolutions defining the principles of emergency humanitarian aid in the event of a disaster, as well as the rights and obligations incumbent on the international community in mitigating the consequences of emergencies.

General Assembly Resolution 46/182, adopted in 1991, on the strengthening of the co-ordination of humanitarian assistance in the United Nations Organisation seeks to ensure a prompt and co-ordinated response in emergency situations that require the strengthening of local or national resources. It makes specific provision for an enhanced reserve capability as a result, in particular, of financial mechanisms to cover unforeseen expenditure and central files on resources and responsibility for emergency relief, permanent arrangements with governments and organisations to ensure rapid access to these resources as well as rules and procedures governing their use in emergency situations.

The aim is to save lives and contribute to rehabilitation and development for the affected populations.

Consequently, the Secretary-General set up a new Office for the Coordination of Humanitarian Affairs (OCHA) in April 1992, appointing an Under-Secretary-General for humanitarian affairs and co-ordination of emergency relief work.

STRUCTURE

The OCHA operates in the " grey" area where political, humanitarian and security concerns converge. Policy co-ordination, planning and early warning functions are performed in New York, where the OCHA works closely with the deliberating organs of the United Nations and with the political, financial and economic departments of the Secretariat.

The Geneva office, on the other hand, acts as the focal point for emergency operational support and relief co-ordination, as well as for disaster mitigation. The Geneva office (OCHA-Geneva) continues to handle the UN system's response to all natural disasters. It also monitors the follow-up and prepares situation reports with all the partners, in particular on programmes for which consolidated appeals are issued.

The OCHA is therefore recognised as the central organ for co-ordinating disaster relief within the United Nations system.

OBJECTIVES

One of the major objectives is to ensure that relief is distributed in a manner that does not compromise future development efforts. In addition, and especially in situations where, for political reasons, relief operations on the ground are either hampered or rendered impossible, exercising

humanitarian diplomacy may enable required humanitarian objectives to be met. Activities involve not only the distribution of food, medical supplies and other forms of relief required, and in organisational matters and logistics, but also in ensuring the safe distribution of relief and the protection of those responsible for its delivery.

The role of the Department clearly goes beyond mere co-ordination. In response to humanitarian emergencies the OCHA provides not only emergency assistance but combines immediate humanitarian action with longer term efforts aimed at tackling the underlying causes of a given crisis.

In order to ensure that all aspects of humanitarian assistance are comprehensively addressed and properly co-ordinated, the Office for the Coordination of Humanitarian Affairs works closely with all the relevant organisations of the United Nations system as well as with non-governmental organisations, and relies on their operational capacity to deliver the necessary assistance.

The OCHA therefore strives to:

- organise technical assistance for prior planning and the prevention of complex emergencies;
- further the study, prevention, control and forecasting of disasters;
- help assess damage and emergency relief requirements;
- mobilise the international community to raise funds and encourage support for the country affected;
- co-ordinate donations;
- act as intermediary between victims, governments and donors;
- provide logistics back-up.

The OCHA's key functions are:

- coordination of emergency response
- policy development and coordination
- advocacy of humanitarian affairs
- information management

ACTIVITIES AND PROGRAMMES RELATING TO NATURAL AND TECHNOLOGICAL HAZARDS

INFORMATION MANAGEMENT BRANCH ACTIVITIES

OCHA provides the world with updates and analyses of humanitarian situations to ensure better understanding of humanitarian issues and concerns.

ReliefWeb is an Internet Web site, managed by OCHA. It provides up-to-date information on complex emergencies and natural disasters collected from over 170 sources. Users from 150 countries access an average of 200.000 documents each month. ReliefWeb expanded several features to serve the information needs of the international community. These include a map center, a humanitarian employment bulletin board, an on-line discussion forum, an advanced search engine and a humanitarian donation database.

With regard to technological disasters, and in the context of operational co-operation, the Office for the Coordination of Humanitarian Affairs and the United Nations Environment Programme started work in 1992 on the development of a joint information management system providing common access to information on technical knowledge and expertise available internationally. The

Department's " situation reports " and " information reports " are a constant source of information on ecological disasters.

The Office for the Coordination of Humanitarian Affairs has a computerised inventory of relief goods and commodities available in depots and which can be rapidly mobilised in the event of a disaster.

The Department's depot is situated in Brindisi, Italy.

CO-ORDINATION OF EMERGENCY HUMANITARIAN ASSISTANCE

The adoption of General Assembly Resolution 46/182 in December 1991 and the establishment of the UN Office for the Coordination of Humanitarian Affairs (OCHA) has strengthened the co-ordination of humanitarian assistance under the UN system.

The OCHA plays an important role in co-ordinating international emergency assistance following a major disaster on the request of an affected country.

Resolution 46/182 provides the United Nations with several instruments for co-ordination:

- the Office of the Emergency Relief Co-ordinator
- the Central Emergency Revolving Fund
- the Inter-Agency Standing Committee
- the Consolidated Appeals Process

These instruments enable the United Nations to respond to emergency situations with a division of labour between the executing agencies.

The Office for the Coordination of Humanitarian Affairs, with the support of the inter-agency committees of the UN system, in conjunction with the international assistance system through a series of permanent agreements, and as a result of various projects on, inter alia, search and rescue, operational co-ordination, inventories of relief stockpiles and the training of on-site disaster management teams , can draw on wide-ranging experience when it comes to providing operational support for disaster assistance.
The Office for the Coordination of Humanitarian Affairs maintains constant links with the United Nations Centre for Urgent Environmental Assistance (UNCUEA) of the United Nations Environment Programme to ensure the co-ordination of relief in the event of technological disasters.

RESPONDING TO SUDDEN ONSET DISASTERS, ASSISTANCE MECANISM OF THE OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS

1st phase 0-24 hours

Affected country:
Triggers national contingency plan.

International community:
The Office for the Coordination of Humanitarian Affairs alerts the international community (information and situation reports).
Information-sharing with the International Search and Rescue Advisory Group and the UN team responsible for disaster operations in the capital of the affected country.

Affected country:
Organises search and relief activities of local teams.
Rescue and first-aid operations.
Organises damage and needs-assessments and informs the international community (where appropriate).

International community:
The UN Office for the Coordination of Humanitarian Affairs, with the consent of the affected country, sends in a United Nations Disaster Assessment and Co-ordination Stand-by Team (UNDAC).
Countries and assistance organisations/donors, drawing on available information, examine and make preparations for the provision of assistance (mobilisation of relief, supplies of relief items).

2nd phase 24-48 hours

Affected country:
Decides to request international assistance.

International community:
The Office for the Coordination of Humanitarian Affairs, on the request of the affected country, launches an international appeal or offers international assistance to the affected country.
The United Nations Disaster Assessment and Co-ordination Stand-by Team (UNDAC), establishes a mechanism for co-ordination at the site of the disaster.

Affected country:
Continuation of search and relief operations.

International community:
Countries organising and providing assistance send in search and relief teams (at the latest 12 hours after receipt of the request) and technical staff to assist in the organisation of damage limitation measures or certain aspects of emergency response (restoring communications for example).

Affected country:
Continuation of first aid and rescue operations.

International community:

Countries providing assistance send in medical teams to support first aid and rescue operations.

RELIEF CO-ORDINATION BRANCH

The Relief Co-ordination Branch responds swiftly immediately after a disaster, making use of its 24 hour duty service. A network for contacts and exchange with specialised agencies serves as a source of information and further details of the incident.
Experts listed on a central file may be alerted and sent to the site of a disaster or of an imminent disaster, depending on the situation.
The Relief Co-ordination Branch also organises air-lifts of relief items to disaster-affected areas and keeps an inventory of emergency relief supplies available in the affected country or in neighbouring countries.

UNITED NATIONS DISASTER ASSESSMENT AND CO-ORDINATION STAND-BY TEAM

The UNDAC team was established by the Office for the Coordination of Humanitarian Affairs together with eight European countries and became operational on 1 September 1993.
This team can be mobilised very rapidly following a major disaster. It visits the site of a disaster in order to assist local and national authorities of the affected country in identifying international assistance needs and, if necessary, coordinating the activities of international relief teams arriving at the site of the disaster.
The team assists the government concerned in formulating its request and works in close co-operation with the Resident Coordinator.

INTERNATIONAL SEARCH AND RESCUE ADVISORY GROUP-INSARAG: COORDINATION OF INTERNATIONAL RELIEF OPERATIONS

The International Search and Rescue Advisory Group (INSARAG) was inaugurated during the meeting organised in Beuggen, Germany, from11-13 December 1991.

The Group's main aims are the following:

- to organise effective international relations in order to save lives and provide humanitarian services during disasters;

- to make emergency relief planning and response more effective and thereby save more lives, alleviate suffering and reduce environmental consequences to a minimum;

- to ensure more effective co-operation between international Search and Rescue teams (SAR) operating on the site of a disaster;

- to encourage activities aimed at enhancing the preparedness of search and rescue operations in natural disaster-prone countries, with priority going to the developing countries;

- to draw up internationally accepted procedures and systems for lasting co-operation between national SAR teams operating at international level;

- to provide guidelines and technical support, primarily through the Office for the Coordination of Humanitarian Affairs, for the co-ordination of operations;

- to examine SAR procedures formulated in other international fora and strengthen co-operation between organisations active in the field of search and rescue during the emergency relief phase;

- to suggest a model for the transmission of information on damage assessment, requests for relief and relief operations in order to facilitate rapid decision-making and to respond effectively to disasters on an international scale.

Regional groups have been established for Africa/Europe, the Americas, Asia/Pacific as well as working groups and inter-regional groups who monitor the quality and the composition of teams, co-ordinate operations and suggest emergency relief exercises.
The Office for the Coordination of Humanitarian Affairs keeps an inventory of international search and rescue teams.

On-site Operations Co-ordination Centre (OSOCC):

The main aims and functions of the Centre are the following:

- Administrative functions: administrative back-up and management, identifying and liaising with local authorities, policy implementation, formulation of strategies, co-ordination of local activities, responsibility for safety of installations and services....

- Operational planning functions: identifying and liaising with operational bodies, analysis and distribution of needs-assessment information, monitoring of the situation and investigation of resource sources, including food...

- Logistics function: logistics support for the Centre's team, planning and use of communication facilities.

PROJECT FOR THE USE OF FOREIGN MILITARY AND CIVIL DEFENCE ASSETS IN DISASTER RELIEF OPERATIONS

The Military and Civil Defense Unit was established by a decision of the Inter Agency Standing Committee in order to ensure the most efficient use of military and civil defence assets in support of humanitarian operations. The MCDU serves as the UN focal point for governments, international organizations and military and civil defence establishments for the employment of these assets in humanitarian situations and coordinates their mobilization when needed.
MCDU conducts the UN's Civil-Military Coordination (UN-CMCoord) courses, and coordinates UN agency participation in major exercises with humanitarian scenarios.
The unit also maintains the UN's Central Register—a database of non-commercial governmental and other resources which may be available for humanitarian use.
These resources include a wide range of equipment and supplies (food/shelter/water capabilities, transportation assets, medical care), expert teams and disaster response
contacts.

CENTRAL EMERGENCY REVOLVING FUND

A Central Emergency Revolving Fund has been established to respond to disaster emergencies. The Fund, a financial reserve for use in the initial phase of an emergency, has been in operation since May 1992. The Fund is designed as a self-financing mechanism enabling organisations within the system to respond rapidly and in a co-ordinated manner. It's initial endowment was of 50 million US dollars and it is funded through voluntary contributions.

Operational organisations within the system receive an advance from the Fund which is reimbursed by being automatically debited against donations received in response to consolidated appeals.

INTER-AGENCY STANDING COMMITTEE

The Inter-Agency Standing Committee (IASC), was set up following UN Resolution 46/182 , and is chaired by the Under-Secretary General for Humanitarian Affairs.
The Committee is intended to enable the UN system to respond rapidly and in a coherent manner to appeals for emergency relief in the wake of a disaster. In an emergency, the Committee will meet as soon as possible.

The International Federation of Red Cross and Red Crescent Societies has a standing invitation, and other non-governmental organisations concerned may also be invited to participate in the work of the Committee.

COMMON APPEALS PROCEDURE

Should an emergency require a coordinated response, the Secretary General ensures that an initial common appeal is launched as quickly as possible and anyway within a week , involving all the relevant Organisations within the UN system and prepared in consultation with the disaster-stricken country.

In the event of a prolonged emergency, this initial appeal is updated and given a sharper focus in the four following weeks, in the light of the additional information received.
Potential donors take the necessary steps to increase their contributions and ensure more rapid payment and make provision, inter alia, for a reserve for financial and other resources, for use by the UN system in response to common appeals made by the Secretary General.

POST-DISASTER ACTIVITIES AND PROGRAMMES

CONTINUITY BETWEEN THE RELIEF PHASE AND THE RECOVERY AND DEVELOPMENT PHASE

UN General Assembly Resolution 46/182 stipulates that emergency aid must be provided in conditions that support long-term recovery and development. Development aid organisations forming part of the UN system respond as soon as possible and, within the limits of their respective terms of reference, work in close co-operation with emergency relief and recovery authorities.

The international community's co-operation and support in recovery and reconstruction activities continues beyond the initial relief phase. The recovery phase seeks to rebuild and enhance installations and services destroyed in a disaster so that they can better withstand future emergencies.

UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

JOINT UNEP/OCHA ENVIRONMENT UNIT

http://www.unep.org/

GENERAL DESCRIPTION

The Joint UNEP/OCHA Environment Unit was set up following the experimental phase of the United Nations Centre for Urgent Environmental Assistance (UNCUEA), launched in the light of growing concern on the part of the international community about the man-made dangers to which the environment is exposed - a concern which found spectacular illustration in accidents such as those of Seveso, Schweizerhalle, the Exxon Valdez , Bhopal, Chernobyl and the oil wells in Koweit, but which is equally fueled by the likely increase in smaller-scale incidents which often go unnoticed although they may cause irreversible damage to many sensitive ecosystems.

The idea of endowing the UN with an intervention mechanism in the case of emergencies likely to have serious consequences for the environment was announced officially for the first time in December 1988.

In General Assembly Resolutions 44/224 of 12 December 1989 and46/217 of 20 December 1991, Governments underlined the need to strengthen international co-operation and the capacity to monitor environmental threats and to render assistance in cases of environmental emergencies. Since 1988 the United Nations Environment Programme (UNEP) has been exploring ways of improving the capacity of the United Nations system to respond to such emergencies.

In recognition of the overriding need to increase the resources presently available under the United Nations system in order to respond to environmental emergencies, the governments of developed and developing countries endorsed UNEP's activities. The London Economic Summit in 1991 recognised the need for greater international capacity to prevent and respond to environmental disasters and welcomed the 16/9 decision of the Governing Council. The Helsinki Summit of the Conference on Security and Co-operation in Europe (CSCE) and the Brasilia Conference of the Inter-Parliamentary Union in 1992 also highlighted the need to respond to environmental emergencies. Agenda 21, adopted by the United Nations Conference on Environment and Development (UNCED) in 1992 defined priority areas and encouraged the development of assessment and assistance during environmental emergencies. Principle 18 of the Rio Declaration on Environment and Development stated that the international community should spare no efforts in coming to the assistance of countries afflicted by ecological disasters.

The Governmental Advisory Meeting, convened by UNEP in November 1993 drew up and adopted a set of proposals concerning the enhancement of the international response capacity, with recommendations on the development of a mechanism that would augment the existing international capacity for responding to environmental emergencies. Such a mechanism should provide countries with greater security and facilitate rapid and direct links between the country requesting assistance and the providers of expertise and specialised equipment. It was underlined that the administrative and institutional arrangements chosen should foster close links between UNEP and the Office for the Coordination of Humanitarian Affairs (OCHA) of the United Nations, ensuring access to the technical expertise available in UNEP and better use of the services of the OCHA.

Taking into account the results of the experimental stage, UNEP responsibilities under Agenda 21, the brief conferred upon the OCHA for emergency response co-ordination within the United Nations, the recommendations of the Governmental Advisory Meeting and the views of various countries, an agreement has been concluded between the OCHA and UNEP to establish a Joint UNEP/OCHA Environment Unit to provide the environmental services as defined by the Governmental Advisory Meeting.

ACTIVITIES AND PROGRAMMES RELATING TO TECHNOLOGICAL HAZARDS

The role of the Section is to rapidly mobilise and coordinate emergency assistance and response resources to countries facing environmental emergencies and natural disasters with significant environmental impacts. In particular, the Section is available to mobilise assistance for developing countries, when domestic capacity is exceeded or additional response resources and specialised expertise are required.

The Section is able to provide assistance for emergencies such as chemical and oil spills, industrial accidents, forest fires, and other sudden crises with the potential for significant damage to the environment and human health and welfare including natural disasters such as earthquakes and floods.

The UNEP/OCHA Environmental Emergencies Section has a number of key functions that it undertakes to ensure timely and coordinated response to emergencies.

- Monitoring - Continuous monitoring and ongoing communication with an international network of contacts and permanent monitoring of news services and web sites, for early notification of environmental occurrences.
- Notification - when disaster strikes, the Section promptly alerts the international community and issues Information and Situation Reports to a comprehensive list of worldwide contacts.
- Brokerage - the Section can quickly bring the affected country in direct contact with donor governments around the world who are ready and willing to assist and provide needed response resources.
- Information Clearinghouse - the Section serves as an effective focal point to available information on chemicals, maps and satellite images from donor sources and institutions are channeled directly to the relevant authority in the affected country.
- Mobilisation of Assistance - the Section is able to mobilise multilateral assistance from the international donor community when requested by countries affected by environmental emergencies or natural disasters with significant environmental implications.
- Assessment - the Section can arrange for the urgent dispatch of international experts to assess the impacts of an emergency and to make impartial and independent recommendations about response, clean up, remediation and rehabilitation.
- Financial assistance - the Section can, in certain circumstances, release OCHA Emergency Cash Grants to meet immediate emergency response needs.

The Section may only mobilise assistance when specifically requested to do so by an affected country. To facilitate this process, the Section has developed the 'Environmental Emergency Notification/Request for International Assistance' form. This form is available in English, French, Spanish, Russian, Chinese and Arabic, through the Environmental Emergencies Section, and on the Section's web site at http://www.reliefweb.int/ochaunep.

OCHA and UNEP launched at the World Summit on Sustainable Development in Johannesburg in August 2002, a new global Partnership on Environmental Emergencies. This Partnership brings together Governments, UN agencies, non-governmental organizations, and industrial associations with the aim of improving prevention, preparedness for and response to environmental emergencies at different levels.

AWARENESS AND PREPAREDNESS FOR EMERGENCIES AT LOCAL LEVEL - APELL

At the end of 1986, and following several chemical accidents, the Executive Director of the United Nations Environment Programme (UNEP) suggested a series of measures to help governments, especially in developing countries, to reduce the number and the impact of technological accidents and emergencies.

This procedure was developed to assist decision-makers and technical staff in their efforts to improve local information on hazardous installations and to prepare contingency plans should events endanger life, property and the environment.

There are two fundamental aspects to the APELL procedure:

- Amassing information at local level on the potential dangers involved in the manufacture, handling and use of hazardous substances and on protection measures taken locally by public authorities and industry.

- The development, on the basis of this information and in conjunction with the local authorities, of response machinery drawing on broad public participation.
Accordingly, APELL is composed of two parts:

- Supply of information to local authorities concerned

- Development of plans to protect the public.

APELL's field of application is essentially that of the hazards relating to an installation and those associated with the transport of dangerous substances within the zone.

APELL's broader aims include preventing loss of life and assaults upon health and social well-being, minimising damage to property and ensuring the protection of the environment at local level.

More specific objectives include:

- providing information at local level on the dangers associated with industrial activities in the vicinity, and on measures taken to reduce the risks involved;
- revising or laying down contingency plans in the region;
- increasing the involvement of local industry in efforts to inform the public and organise relief;
- combining the contingency plans of industry and local authorities in one single plan in order to be able to tackle any emergency within a given zone;
- ensuring local involvement in the development, testing and implementation of the combined emergency response capability.

UNEP CHEMICALS

UNEP Chemicals is the focus for all activities undertaken by UNEP to ensure the global sound management of hazardous chemicals. UNEP Chemicals is located in Geneva, Switzerland, and is built upon the solid technical foundation of the former International Register of Potentially Toxic Chemicals (IRPTC). Its staff of professionals catalyses actions to promote chemical safety by providing countries with access to information on toxic chemicals, by assisting countries in building their capacities to produce, use and dispose of chemicals safely, and by facilitating global actions that may be needed to reduce or eliminate chemical risks.

UNEP's Chemicals programme promotes sustainable development by catalysing vital global actions and building national capacities. These components are implemented through catalysing global action and building national capacities.

The most important UNEP actions during 1998 to catalyse global action for the sound management of chemicals, as mandated by UNEP's Governing Council in its 19th session, are:

- facilitating development of a legally binding instrument for the application of the Prior Informed Consent (PIC) procedure and implementing the new convention. Negotiations were convened jointly by UNEP and FAO beginning in 1996, and concluding in March 1998. At a Diplomatic Conference held in Rotterdam in September 1998, 100 countries adopted and 62 countries signed the treaty, which will be open for signature at UN headquarters for one year. During the interim period until the convention enters into force, countries have agreed to implement the convention on a voluntary basis, with UNEP and FAO serving as the secretariat;

- convening an intergovernmental negotiating committee for the development of a legally binding instrument to implement international action on persistent organic pollutants (POPs). Negotiations began in June/July 1998 with the first session held in Montreal and are expected to successfully conclude in the year 2000. In addition to supporting governments by convening and otherwise facilitating the development of a global POPs convention, UNEP is undertaking a number of measures to help countries reduce or eliminate environmental release of POPs. These measures include promoting the exchange of information and expertise among governments on POPs; providing guidance on alternatives to POPs; assisting countries in the identification of polychlorinated biphenyls (PCBs) – in use, in stockpiles, and in waste – as well as helping to identify where PCB's can be destroyed safely; assisting countries in identifying sources of dioxin and furan releases; and continuing to better characterise the full extent of the global POPs problem.

UNEP Chemicals' capacity building work is implemented in two key areas:

- promoting information access through the delivery of information and information tools for countries to use in assessing and managing the risks of chemicals. Delivery in this area includes: IRPTC's databank, which is available in a personal computer version and contains extensive safety data on over 8,000 chemicals; Internet and hard-copy information clearinghouses on chemical hazards, pollutant release and transfer registers (PRTRs), POPs, and PIC; published inventories of information sources covering international data sources on chemicals, critical reviews of chemicals, new chemical assessments (in progress), and national data on existing chemicals (in progress); and extensive publications in the field of chemical safety;

- direct work with countries in building capacities, including awareness raising, training, capacity building exercises, and "Hotline" support for governments. UNEP actively sponsors or participates in over 20 capacity building workshops on chemicals management each year. These take place on the regional, sub-regional, and national level, and cover such diverse topics as risk assessment, development of national ifnormation systems, chemicals legislation, operation of the PIC procedure, and reduction and elimination of releases of POPs into the environment.

INTERNATIONAL PROGRAMME ON CHEMICAL SAFETY (IPCS)

The International Programme on Chemical Safety (IPCS) was formally launched in April 1980. It defines chemical safety as the prevention and management of the adverse effects, both short- and long-term, to humans and the environment from the production, storage, transportation, use and disposal of chemicals.

The Programme was set up by three organizations, World Health Organization (WHO), International Labour Office (ILO) and United Nations Environment Programme (UNEP), to produce assessments of the risk to human health and the environment of chemicals, whatever their origin or where ever they are found, thus providing the internationally evaluated scientific basis on which Member States may develop their own chemical safety measures.

It also aims to provide advice on the use of these assessments, to strengthen national capabilities to prevent and treat the harmful effects of chemicals, and to assist in the management of emergencies involving chemicals. However, its objectives do not include monitoring chemicals nor aspects of chemical control that are dealt with at other levels by the three organizations.

WHO is the executive agency for the Programme and the Central Unit of the IPCS, responsible for the day-to-day management of the Programme, is represented by the Programme for the Promotion of Chemical Safety, located within WHO. UNEP is involved in the collection and dissemination of information on chemicals. ILO participates, via its chemical safety programme, in preparing codes of practice, guides and manuals in providing technical consultative services and in carrying out technical co-operation projects.

UNITED NATIONS INTERNATIONAL STRATEGY FOR DISASTER REDUCTION (ISDR)

Web Site: www.unisdr.org

ISDR Mission
The ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters.

The United Nations adopted the International Strategy for Disaster Reduction (ISDR) to build on the vital work of the International Decade for Natural Disaster Reduction 1990-99.

What is the ISDR?
Recognising that natural hazards can threaten any one of us, the ISDR builds on partnerships and takes a global approach to disaster reduction, seeking to involve every individual and every community towards the goals of reducing the loss of lives, the socio-economic setbacks and the environmental damages caused by natural hazards. In order to achieve these goals, the ISDR promotes four objectives as tools towards reaching disaster reduction for all:

Increase public awareness to understand risk, vulnerability and disaster reduction globally
The more people, regional organizations, governments, non-governmental organizations, United Nations entities, representatives of civil society and others know about risk, vulnerability and how to manage the impacts of natural hazards, the more disaster reduction measures will be implemented in all sectors of society. Prevention begins with information.

Obtain commitment from public authorities to implement disaster reduction policies and actions
The more decision-makers at all levels commit themselves to disaster reduction policies and actions, the sooner communities vulnerable to natural disasters will benefit from applied disaster reduction policies and actions. This requires, in part, a grassroots approach whereby communities at risk are fully informed and participate in risk management initiatives.

Stimulate interdisciplinary and intersectoral partnerships, including the expansion of risk reduction networks
The more entities active in disaster reduction share information on their research and practices, the more useful the global body of knowledge and experience will progress. By sharing a common purpose and through collaborative efforts we can ensure a world that is more resilient to the impact of natural hazards.

Improve scientific knowledge about disaster reduction
The more we know about the causes and consequences of natural hazards and related technological and environmental disasters on societies, the more we are able to be better prepared to reduce risks. Bringing the scientific community and policy makers together allows them to contribute to and complement each other's work.

How does the ISDR work?
The ISDR combines the strengths of many key players through the **Inter-Agency Task Force on Disaster Reduction (IATF/DR)** and the **Inter-Agency Secretariat for the ISDR (UN/ISDR)**.

The **IATF/DR**[1] is the principal body for the development of disaster reduction policy. It is headed by the UN Under-Secretary General for Humanitarian Affairs and consists of 25 UN, international, regional and civil society organizations. It meets twice a year in Geneva, Switzerland. Working Groups reporting to the IATF/DR bring together specialists and organisations to discuss issues of common and global relevance to disaster reduction such as climate variability, early warning, vulnerability and risk analysis, wildland fires and drought.

The **UN/ISDR** is the focal point in the UN System to promote links and synergies between, and the coordination of, disaster reduction activities in the socio-economic, humanitarian and development fields, as well as to support policy integration. It serves as an international information clearinghouse on disaster reduction, developing awareness campaigns and producing articles, journals, and other publications and promotional materials related to disaster reduction. The UN/ISDR headquarters is based at the Palais des Nations in Geneva. It conducts outreach programmes through its regional units in Costa Rica and Kenya.

National participation is one of the primary elements for sub-regional, regional and international cooperation within the ISDR. Within any given country there are numerous groups that have a role to play in reducing the impacts of hazards, such as the humanitarian, meteorological, developmental, environmental and agricultural sectors. By harmonising efforts towards reducing risk and vulnerability, communities are in a better position to become resilient to disasters. The purpose of ISDR National Platforms[2] is to contribute to the implementation of the ISDR, acting as a focal point for disaster reduction within a country and serving as an interface between the national and international levels within the Strategy.

The ISDR today
The ISDR continues to grow as a more visible, recognized and flexible instrument for reducing risk and vulnerability to natural hazards and related environmental and technological disasters. Throughout its relatively short existence, the ISDR has made major contributions to raising awareness of the issues and developing added-value accessible information and tools. It has

[1] The Inter-Agency Task Force on Disaster Reduction was established to: (a) serve as the main forum within the United Nations system for formulating strategies and policies for disaster reduction; (b) identify gaps in disaster reduction policies and programmes and recommend remedial action; (c) provide policy guidance to UN/ISDR; and (d) convene *ad hoc* meetings of experts on issues related to disaster reduction.

Current members include: African Union; Asian Disaster Preparedness Centre; Asian Disaster Reduction Centre; Centre for Research on the Epidemiology of Disasters; Council of Europe; Drought Monitoring Centre; FAO; Global Fire Monitoring Centre; Iberoamerican Association of Civil Defense and Civil Protection; Organization of American States; International Council of Science; International CIS Council; International Federation of Red Cross and Red Crescent Societies; International Telecommunication Union; Munich Reinsurance; South Pacific Geosciences Commission; UNDP; UNESCO; UNEP; UN-HABITAT; UN University, World Bank; WFP; WHO and WMO.

[2] To date the following countries hold National Platforms and/or 'focal points' for the ISDR: Argentina, Austria, Bahrain, Brunei, Bulgaria, Czech Republic, Central Europe, China, Djibouti, Finland, France, Germany, India, Holy See, Japan, Korea, Malta, Nicaragua, Mauritania, Peru, Philippines, Portugal, Singapore, Spain, Sweden, Switzerland, Turkey, United Kingdom, Zambia.

attracted increasing attention and support from Governments and key expert institutions. The World Summit on Sustainable Development (WSSD) in Johannesburg in August-September 2002 provided the ISDR with a concrete set of objectives within the sustainable development agenda to which both the IATF/DR and the UN/ISDR, along with partners, will increasingly turn their attention and capacities to integrating and mainstreaming risk reduction into development policies and processes. The ultimate aim is to reduce disasters, while securing development that lowers rather than increases disaster risk. Such a task is ambitious but highly needed – with much still needing to be done to raise awareness and commitment among governments, business leaders, communities and financial institutions of the specific social and economic advantages of investing in reducing risk and vulnerability.

The two main institutional mechanisms of ISDR – the IATF/DR and the UN/ISDR – continue to consolidate their roles, facilitating the interaction between relevant international, regional and civil society organizations towards the development of a common understanding and an integrated approach, to work on shared activities and projects, to guide and monitor progress and to periodically report on achievements and gaps to be addressed. Substantive advice and support to Governments and other institutions concerned with disasters is being provided. Specific ISDR technical documents, awareness and educational materials have been developed and are reaching further into communities living in disaster–prone areas. Although the ISDR is still in its early stages, it has demonstrated the very great potential for progress, and the opportunity provided for Governments and institutions to use ISDR as a platform to increase investment in this area.

Review of the Yokohama Strategy and Plan of Action and Preparation for the Second World Conference on Disaster Reduction.
On the occasion of the 1994 mid-term review of the IDNDR (International Decade for Natural Disaster Reduction), the first World Conference on Natural Disaster Reduction was held in Yokohama. Since then, the "Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation" and its Plan of Action, has served as the international blueprint for disaster reduction.

In 2002 the UN General Assembly resolution 57/256 "Requests the Secretary-General, with the assistance of the Inter-Agency Secretariat for the Strategy, to plan and coordinate, in consultation with Governments and relevant organizations of the United Nations system, including the financial institutions, the 2004 review of the Yokohama Strategy and report to the General Assembly at its fifty-eighth session in this regard".

In his report of 2002 on the ISDR (57/190) the UN Secretary-General specifies that: "This review process will help identify gaps and means of implementation in a way that will chart the course of action for the forthcoming decade, while taking into account the outcome of the World Summit on Sustainable Development".

Currently in progress is the review of the *Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and Plan of Action*, examining the achievements in the implementation of disaster reduction worldwide, identifying gaps and preparing recommendations for future priorities to guide action in longer-term development plans by UN Member States. The ten-year review takes into account several relevant processes, such as the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, and will culminate in the Second World Conference on Disaster Reduction (WCDR-2) to be held in Kobe, Japan in January 2005.

It is anticipated that the WCDR-2 will establish a programme of action 2005-2015 based upon an

agreed set of principles and framework for disaster risk reduction, including benchmarks and criteria for indicators, to serve as a tool for guiding and monitoring progress at all levels. It will draw upon various regional and thematic meetings including regional consultations in Africa, Asia, Latin America and the Caribbean, the South Pacific, Europe, the Second International Conference on Early Warning, Review of Small Island Developing States and Barbados Plan of Action, as well as the International Conference of the Red Cross and Red Crescent Societies.

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UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION (UNESCO)

http://portal.unesco.org/

GENERAL DESCRIPTION

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has a broad role covering education, social and natural sciences, culture and communication.

STRUCTURE

The General Conference brings together representatives of the Member States every two years to determine the Organisation's policy, approve the programme and budget and appoint the Director-Gereral on the Board's recommendation. The two-year budget is funded by the Member States.

The Executive Board, which meets twice a year, is responsible for implementing the programme.

The Secretariat comprises the *Director- General* and the staff appointed by him. The Director General draws up the draft programme and budget, prepares proposals for action to be taken and supervises the Secretariat in its execution of the programme. Programmes are biennial (approved every two years); there is also a six-year medium-term strategy.

OBJECTIVES

UNESCO plays an active role in the International Strategy on Disaster Reduction (ISDR). The purposes of UNESCO in the field of natural disasters are to promote a better scientific understanding of the distribution in time and space of natural hazards and of their intensity, to help set up reliable observatory and early warning networks and systems, to encourage the establishment of rational land use plans, to promote the adoption of suitable building design, to contribute to the protection of educational buildings and cultural monuments, to strengthen environmental protection for the prevention of natural disasters, to enhance preparedness and public awareness through information and education, and to foster post-disaster investigation. UNESCO takes a multidisciplinary approach to disaster reduction.

The programmes are oriented towards fundamental scientific studies and an interdisciplinary approach to the issue of natural hazards.
Work is devoted to both the reduction of natural hazards and their socio-economic aspects. The Organisation responds to requests for assistance made by Member States and implements projects under its general programme, together with projects funded from extrabudgetary resources.

The main activities concern projects implemented at national, regional and international level. Other activities have been run in the fields of research, the promotion of study groups and technology transfer.

The Natural Sciences Sector has the primary role in disaster reduction. The scientific and technical work of UNESCO in disaster reduction is essentially promoted by its natural hazards programme in the

Earth Sciences, by its intergovernmental scientific programmes such as the International Geological Correlation Programme (IGCP), the International Hydrological Programme (IHP), the Man and Biosphere (MAB) Programme, the programmes of UNESCO's Intergovernmental Oceanographic

Commission (IOC) and the activities on the applications of remote sensing. Through these undertakings, UNESCO also contributes to the three global observing systems, the Global Ocean Observing System (GOOS), the global Climate Observing System (GCOS) and the Global Terrestrial Observing System (GTOS). These are joint initiatives of UNESCO, IOC, Food and Agriculture Organization (FAO), World Meteorological Organization (WMO), United Nations Environment Programme (UNEP) and the International Council of Scientific Unions (ICSU).

Other sectors of UNESCO are also engaged in the area of natural hazards. In the Culture sector, the Natural heritage division has launched a programme aimed at ensuring the protection of cultural monuments against the effects of earthquakes and other natural hazards and the restoration of monuments damaged by these phenomena.

In the Education sector, a special effort has been made in designing school buildings capable of resisting earthquakes or violent winds.

In the aftermath of natural disasters, and at the request of Member States affected, UNESCO's intervention is aimed at investigating and introducing transitional actions to draw lessons from the event, to propose and, sometimes, execute measures for reducing the impacts of the disaster as well as losses from any future event, and for developing human resources as a catalyst for recovery and national self-reliance. The purpose is also to fill the gap between emergency relief operations and the long-term recovery and rehabilitation action.

Essential activities include the following:

- setting up observation or early warning networks,
- training,
- founding international institutes to make a substantial contribution to the development of research and the dissemination of knowledge,
- providing co-ordination between international governmental and non-governmental organisations.

ACTIVITIES AND PROGRAMMES RELATING TO NATURAL HAZARDS

RESEARCH AND TRAINING ACTIVITIES

The UNESCO Programme focuses on improved understanding of risks, hazard mapping, monitoring of earthquakes and volcanoes, floods and tsunamis as well as on technical, educational and information measures aimed at risk mitigation. In addition, activities are also carried out in relation to other societal aspects of disaster reduction and to the integration of disaster reduction into environmental and developmental concerns. In many ways, the problem of natural hazards finds itself embedded in several UNESCO's ongoing projects including special projects on environment and development in cities, in coastal regions and in small islands, in population education and information

Through its various scientific programmes, UNESCO promotes research and training in fields related to disaster reduction. The Organization has been behind the establishment of international, regional and national centres, systems and networks for the exchange and analysis of hazards data and training; the identification of risk zones and the quantitative assessment of the risk in those zones; field studies

of the effects of large earthquakes; and the exchange of experience among scientists and engineers, and the training of qualified personnel. Training is fostered in the above-mentioned areas. Training modules are prepared which cover in single texts different sectors involved in disaster reduction including the sectors of environment (science and technology), human settlements, human behaviour, health and management (public administration). Testing of such modules is operated in selected countries.

Ensuring that disaster-related issues be addressed in an integrated and balanced manner requires forging close cooperation across disciplines and sectors, and between sectoral organizations and departments within organizations. In conducting research on disaster-related issues in a development context, different disciplines from the natural and social sciences need to join forces through interdisciplinary work to bring solutions to complex problems. UNESCO has been a leader in promoting interdisciplinary scientific work through and among its intergovernmental scientific programmes, and in promoting transdisciplinary activities between its programmes in the sciences, education, culture and communication.

Among the achievements are:

- the establishment of the International Institute of Seismology and Earthquake Engineering, Japan,
- the Institute of Earthquake Engineering and Engineering Seismology, Skopje,
- the International Seismological Centre, Newbury, United Kingdom.
- the Regional Seismological Centre for South America (CERESIS), Lima.

Earthquake hazards

Regarding earthquake risk, UNESCO encourages the establishment of international, regional and national centres, systems and networks for the exchange and analysis of earthquake data and training; the identification of seismically active zones and the quantitative assessment of earthquake hazard in those zones; field studies of the effects of large earthquakes; exchange of experience among scientists and engineers, and the training of qualified personnel. Among the achievements are the establishment of the international Institute of Seismology and Earthquake Engineering, Japan, the Institute of Earthquake Engineering and Engineering Seismology, Skopje, the International Seismological Centre, Newbury, United Kingdom. the Regional Seismological Centre for South America (CERES1S), Lima. Regional initiatives include the regional seismological networks in Southeast Asia, the Balkan Region, the Programme for Assessment and Mitigation of Earthquake Risk in the Arab Region (PAMERAR)and the recent UNESCO/USGS programme on Reducing Earthquake losses in the Eastern Mediterranean Region (RELEMR). These projects help bringing together seismologists, geologists and engineers from neighbouring countries to define seismic risk on a regional basis and in terms directly applicable to earthquake-resistant design and construction, and to implement actions towards the reduction of this risk. in this context, specific study groups and projects relate to topics such as induced seismicity, strong ground motion, earthquake prediction, experimental sites for earthquake prediction, global seismic data bank, earthquake engineering, etc.

Volcanic hazards

Facing volcanic hazards, particular attention is given to techniques for detecting and monitoring the phenomena preceding violent eruptions, and to problems of communication between scientists, civil defence services, and the general public. General guidelines are issued on volcanic-hazards zonation, and on volcanic emergency management. UNESCO has promoted a study on an International Mobile Early-Warning System for Volcanic Eruptions (1MEWS), on the basic

premise that an improved international system of rapid response and mutual assistance is needed to better cope with volcanic crises. The study has permitted the revision of existing volcano-monitoring facilities and the identification of 100 high risk volcanoes in the world.

Tsunamis

UNESCO became, in 1965, the organization through which international co-operation in tsunami warning was formally initiated. In that year, the ICC of UNESCO set up an International Tsunami Information Center (ITIC), now located in Honolulu, which works closely with the Tsunami Warning System in the Pacific operated by the United States. Connected to this field is the International Co-ordination Group for the Tsunami Warning System in the Pacific (ITSU) which today numbers two dozen member countries. ITSU meetings provide an opportunity for the Member States to examine together means for tsunami preparedness and risk mitigation.

Hydrometeorological and other hazards

Under the International Hydrological Program (IHP) which develops in several phases, considerable attention is given to hydrological hazards. The hydrological processes of these phenomena, including river floods, and flood risk assessment, are studied as well as the management and prevention aspects regarding the design of engineering works for flood control. Basis are laid down for the development of a decision-support system for urban water disaster mitigation

Various studies have been conducted by UNESCO on the cause and prevention of landslides, in particular the publication of guidelines on landslides hazards zonation. Projects in this area resulted in significant multi-national landslide research and mitigation.

Studies on droughts and desertification are undertaken in the framework of IHP and the Man and Biosphere (MAB) Program which started in 1971. The arid land studies including drought and desertification problems are given an important place in MAB activities, with significant input to the Convention to Combat Desertification. These studies are undertaken in the framework of integrated pilot projects aimed at better understanding the functioning of arid and semi-arid ecosystems and at devising optimal land-use systems in drought-prone areas thus contributing to the combat against desertification in these areas. Such projects were developed in particular in Africa (Sahelian countries, Kenya, Lesotho and Tunisia). A large number of scientific publications and guidelines tailored to decision-makers and the general public have emanated from these projects, including poster and audio-visual series.

Educational buildings and cultural monuments

UNESCO helps Member States to deal with the problems that sudden natural hazards present for school buildings. Emphasis is laid on practical advise on how to build schools that will be relatively safe if a natural disaster occurs. This is mainly done through the holding of national/sub-regional training seminars and the publication and dissemination of guidelines on the construction of disaster-resistant educational buildings. In addition, all school construction projects benefiting from UNESCO technical collaboration are examined from the point of view of their vulnerability to natural hazards and the necessary changes are made in the projects. The program has also fielded a significant number of reconnaissance missions to countries that have experienced disasters, assessing the damage to educational buildings and recommending rehabilitation measures. Immediate actions are also proposed to minimize discontinuity in educational programs. The emphasis of the program is now on the development of schools that can be used as a place of

community refuge during, and as a relief center after, a disaster. Recently some pilot studies have also included the introduction of disaster-preparedness in the curricula covering social and behavioral aspects. In addition, prototype schools (pilot projects) with emphasis on disaster

resistance have been developed in certain countries to serve as models for large scale projects.

Sites, monuments and other works of art are liable to be affected by natural disasters. UNESCO participates in the operations undertaken to safeguard such property against disasters and issues guidelines for the protection of cultural monuments. Within the framework of risk preparedness and emergency response for the safeguard of cultural properties and museums in relation to disasters, a computer assisted multimedia system for reporting, recording, and communicating information and data is being produced together with a set of plans criteria and policies.

Education and information

Activities on education and information in the field of disaster preparedness and prevention are carried out in the Education Sector and within the UNESCO project "Environment and Population, Education and Information for Development (EPD)". Basis are laid down for developing guidelines on crisis and risk management for the use by special target groups, in particular policy-makers and community leaders. Studies are elaborated on the role of mass communication media in disaster situation.

POST-DISASTER ACTIVITIES AND PROGRAMMES

In the aftermath of natural disasters, and at the request of Member States affected, UNESCO's intervention is aimed at investigating and introducing transitional actions to draw lessons from the event, to propose and, sometimes, execute measures for reducing the impacts of the disaster as well as losses from any future event, and for developing human resources as a catalyst for recovery and national self-reliance. The purpose is also to fill the gap between emergency relief operations and the long-term recovery and rehabilitation action.

It was on the initiative of UNESCO that first post-natural disaster reconnaissance missions started to operate from 1962 onwards in areas stricken by earthquakes, volcanic eruptions, landslides, floods and cyclones. In instances, these missions have resulted in the implementation by UNESCO of international meetings, of projects related to hazard-zonation prior to reconstruction, to future risk mitigation, and to rehabilitation or reconstruction of educational and cultural buildings.

WORLD METEOROLOGICAL ORGANIZATION (WMO)

web site: http://www.wmo.ch

GENERAL DESCRIPTION

The World Meteorological Organization (WMO) is the United Nations specialised agency dealing with weather, climate and water. Together with National Meteorological and Hydrological Services (NMHSs) throughout the world it organises and co-ordinates the provision of global meteorological and climatological services and similar services relating to the environment.

The aim of the WMO is to co-ordinate and encourage international co-operation when conducting meteorological, hydrological or related geophysical observations.
WMO also supports the analysis, interpretation and understanding of information used for the purposes of forecasting, and application of the knowledge gained for the benefit of human activities and the protection of the natural environment.

The programmes of the WMO are designed to meet two categories of needs: the immediate and the long-term. With regard to the first category, the supply of meteorological including climatological, and hydrological information is required for a variety of different purposes: be it to save lives and property or to mitigate the effects of weather-related disasters; be it for the needs of food and fibre production and processing; energy supplies, air, sea and land transport; civil engineering and the construction industry or tourism and leisure; or yet other activities that require the collection and prompt exchange of information based on hourly and daily observations. In order to meet long-term requirements, such as the harvesting and conservation of resources and environmental protection etc., access is required, amongst other things, to elements of meteorological and hydrological information and other information relating to the environment gathered on a systematic basis over longer periods of time and having undergone a quality control.

STRUCTURE

The structure of the World Meteorological Organization includes:

World Meteorological Congress, the supreme body, which brings together representatives of Member States every four years to decide upon the policy orientations of the Organization. It defines WMO's plans, decides on levels of expenditure, lays down international meteorological codes of practice, elects the President and Vice-Presidents of the Organization and appoints the Secretary-General.

Executive Council is composed of 37 Directors of National Meteorological or Hydrological services. It meets at least once a year to review the activities of the organization, implement the decisions taken by Members, study issues that have a bearing on international meteorology and the related activities of the Organization and draw up recommendations in these areas.

S*ix regional associations* (Africa, Asia, South America, North and Central America, South-West Pacific and Europe) are made up of Members of the Organization. They are responsible for co-ordinating meteorological and related activities in their respective Regions and examining all matters referred to them from a regional perspective.

Eight *technical commissions* are composed of experts appointed by Members. They are responsible for the examination of all issues relating to the Organization's terms of reference, and for forwarding recommendations thereon.

Secretariat, which is located in Geneva, comprises the Secretary General and technical and clerical staff required to expedite the WMO's activities. It serves as the Organization's administrative, documentation and information centre, carrying out the technical studies entrusted to it and lending assistance to all the WMO's statutory bodies including Regional and Sub-regional Offices.

OBJECTIVES

The aims of the World Meteorological Organisation are the following:

To facilitate international co-operation in the establishment of a network of stations carrying out meteorological and hydrological observations, or geophysical observations relating to meteorology, and to promote the establishment and maintenance of centres responsible for providing meteorological services;

To promote the establishment and maintenance of systems for the rapid exchange of meteorological and related information;

To encourage the standardization of meteorological and related observations and to ensure the uniform publication of observations and statistics ;

To further the application of meteorology to aviation, navigation, water problems, agriculture and other human activities;

To encourage activities in operational hydrology and foster close co-operation between Meteorological and Hydrological Services;

To give support to research and training in meteorology, and in related areas, as necessary, and to assist in coordinating the international aspects of such activities.

Among the principal aims governing the period 2000-2010, a reduction in natural hazards is an important aspect, in particular in the context of the WMO's contribution to the United Nations International Strategy for Disaster Reduction.

ACTIVITIES AND PROGRAMMES RELATING TO NATURAL AND TECHNOLOGICAL HAZARDS

<u>WORLD WEATHER WATCH PROGRAMME OF THE WORLD METEOROLOGICAL ORGANISATION</u>

The broad aims of the World Weather Watch Programme (WWW) of the World Meteorological Organisation (WMO) are the following:

To maintain an effective world-wide integrated system for the collection, processing and rapid exchange of meteorological and related environmental data, analyses and forecasts;

To make available, in real time and non-real time , as appropriate, observational data, analyses,

forecasts and other products to meet the needs of all Members, of other WMO programmes and of relevant programmes of other international organisations;

To arrange for the introduction of standard methods and technology which enable Members to derive the greatest possible benefit from the WWW system and ensure an adequate level of services and also the compatibility between systems in order to co-operate with other bodies.

Among the systems forming part of this programme, a certain number are more particularly relevant to information on major hazards likely to affect Europe.

These systems can provide useful information, particularly in the case of natural hazards of meteorological or hydrological origin, but also in the case of industrial hazards such as accidents giving rise to the formation of toxic clouds for example.

The WWW system operates on three levels: global, regional and national. The programme includes the design, implementation and development of three closely inter-related elements, namely:

- the Global Data-processing System
- the Global Observing System
- the Global Telecommunications System.

Global Data Processing System (GDPS)

The GDPS links global, regional and national meteorological centres responsible for supplying processed information, analyses and forecast products. The aim of the system is to provide Members with the analyses they require to enable them to provide, in the most cost-effective way, high-quality forecasting, warning and information services to weather-sensitive national activities , including the forecasting of violent weather conditions and very short-term forecasts of imminent dangers, such as tropical cyclones etc.

Global ObservingSystem (GOS)

The GOS includes the resources, installations and facilities required for making observations at stations on land and at sea, from aircraft , meteorological satellites and other platforms. The system aims to provide high-quality observational data from all parts of the globe for use in the preparation of weather analyses, forecasts and warnings, and to provide support for the relevant programmes of other international organisations.

Global Telecommunications System (GTS)

The GTS covers the resources, infrastructure and organization needed for the rapid and reliable collection and distribution of observational data and processed information. Its task is to ensure the rapid and reliable collection, exchange and distribution of observational data, meteorological analyses, forecasts and warnings.

The World Weather Watch is of paramount importance for the notification of early warnings in the event of natural or ecological disasters and for mitigating their consequences. The programme provides for enhanced forecasting and warning systems, improved measures to prevent disasters of meteorological origin and better prior-planning as a result, in particular, of the rapid exchange of meteorological information.

ACTIVITIES AND PROGRAMMES RELATING TO NATURAL HAZARDS

The World Meteorological Organisation (WMO) implements a number of programmes, the main purpose of which is to co-ordinate and facilitate world-wide co-operation in the making of

meteorological and hydrological observations, in particular through data exchange, analysis, interpretation and understanding and through the application of the information gained for the benefit of human activities and the natural environment.
Some of the WMO's major scientific and technical programmes such as the World Weather Watch (WWW), Public Weather Services (PWS), Tropical Cyclone (TCP), World Climate (WCP), World Weather Research (WWRP) and Hydrology and Water Resources (HWRP), are more concerned with mitigation of, and preparedness for, natural disasters of meteorological or hydrological origin They are particularly important in contributing to global capacities in the detection, forecasting and early warning of hazards, as well as in providing effective means and procedures to minimize their adverse consequences through their activities.

WWW promotes the upgrading of infrastructures to exchange real-time data, forecasts and warnings for the public and the international community. Through its system of Regional Specialized Meteorological Centres, WWW provides weather forecasts, early warnings and advisories on tropical cyclones and other severe events. As a part of WWW, the TCP coordinates activities at the international, regional and national levels, to provide upgraded and more effective warnings of tropical cyclones and associated floods and storm surges, and to strengthen related community preparedness through appropriate guidance.

PWS, as part of the AMP Programme provides assistance to National Meteorological and Hydrological Services to develop their capability to communicate adequate warning messages to both the public and the emergency management community. That assistance is provided through training activities and the publication of guidelines on media issues, the use of Internet and the use of new technologies and research.

WCP provides assistance to countries through Climate Information and Prediction Services (CLIPS) for the application of climate information and knowledge in the prediction and early warning of climate-related natural disasters. As a part of the Atmospheric Research and Environment Programme, the WWRP contributes to promote research on cost-effective and improved techniques for the forecast of high-impact weather phenomena such as tropical cyclones, sand and dust storms, and heavy rainfall that could provoke severe flooding.

HWRP promotes, through the provision of technical guidance and the establishment of technical cooperation projects, flood risk assessment and forecasting water-related hazards with focus on major floods and droughts. To that effect, HWRP and the Global Water Partnership launched a joint project, the Associated Programme on Flood Management (APFM), in the context of integrated water resources management, which considered both negative and positive aspects of floods.

To support the activities of natural disaster prevention and mitigation, as a new major initiative, the Fourteenth World Meteorological Congress decided to create a new crosscutting major programme. The purpose of this new WMO Programme is to ensure integration of relevant activities being carried out under the various WMO Programmes in the area of disaster prevention and mitigation, and to provide for effective co-ordination of the pertinent WMO activities with related activities of international, regional and national organizations involved. One of the main objectives of the

programme is to ensure that WMO's progamme activities and results are fully used in the process of WMO's participation in International Strategy for Disaster Reduction.

SPECIFIC CONTRIBUTION TO THE INTERNATIONAL STRATEGY FOR DISASTER REDUCTION

WMO is a permanent member of ISDR Inter-Agency Task Force and is participating actively in the initiatives established under ISDR framework including in the IATF working groups. This contribution is provided to ISDR through the activities and results of its major scientific and technical programmes that concerned natural disaster prevention and mitigation.

In effectively fulfilling its role, the World Meteorological Organization seeks to:

- Foster the further strengthening of co-ordinated programmes and action to provide effective and timely warnings of damaging and destructive tropical storms;

- Promote and co-ordinate activities that lead to the improvement of forecasting of severe and damaging weather events, including resulting flooding;

- Assist other organisations responsible for providing regional and global warnings of natural disasters by making the facilities of WMO programmes available, when appropriate;

- Co-operate with national, regional and global organisations planning or implementing programmes designed to mitigate the adverse effects of natural disasters.

WORLD HEALTH ORGANISATION (WHO)

web sites : http://www.who.int
http://www.who.dk

GENERAL DESCRIPTION

The World Health Organization (WHO) is a specialized agency within the United Nations system. The Organization, whose headquarters are in Geneva, is served by six regional offices. The Regional Office for Europe is located in Copenhagen, Denmark.

The Organization operates through its three major bodies:

The World Health Assembly
The Executive Board
The Secretariat

In addition, each regional office has its own Regional Committee.

In 1974, WHO set up a unit dealing with emergencies in order to coordinate the technical aspects of other programmes in the area of disaster preparedness at local level. Following the latest restructuring of WHO in 1998, coordination of emergency-related activities is ensured by the Department of Emergency and Humanitarian Action (EHA) within the cluster for Sustainable Development and Healthy Environment.

The mandate of WHO arises from Article 1 and 2 of the Constitution of WHO and the guidance by the World Health Assembly Resolution WHA48.2 adopted in May 1995. The mandate comprises actions at global, regional and country levels concerning Emergency Preparedness and Disaster Reduction, Emergency Response and Humanitarian Action as well as Humanitarian Advocacy.

EHA's mission is, through a concerted effort across WHO, to increase the capacity and self-reliance of countries in the prevention of disasters, preparation for emergencies, mitigation of their health consequences, and the creation of a synergy between emergency action and sustainable development.

SCOPE OF RESPONSIBILITIES

EHA works in concertation with other departments and through WHO Regional and Country Offices to fulfil developmental as well as relief-focused tasks.

In a developmental perspective, EHA assists member countries in creating, maintaining or recovering conditions for development by building capacities for emergency preparedness and by mitigating the effects of disasters with response activities ensuring survival, the stabilisation and the recovery of health and health-related systems. EHA builds on WHO's presence in countries and guarantees implementation and coordination of health activities in crisis situations.

Long-term presence in most member countries gives WHO a comparative advantage in understanding the context where disasters take place and their real impact on the people’s health.

When an emergency occurs, EHA fulfill its role in humanitarian operations within the United Nations Coordination System.

In human-induced and natural emergencies, acting as a gatekeeper for WHO Headquarters in Geneva and Regional Offices and as a facilitator between WHO Country offices and a vast network of technical partners and donors, EHA mobilises expertise and resources for rapid assessment, public health coordination and management. This is backed-up by technical and logistical presence at field level.

In a global context, EHA gathers, analyses and disseminates health information on at-risk and emergency affected populations, for advance planning and better targeted, and thus more effective humanitarian interventions. In line with WHO's normative function, EHA promotes best practices, sets and upholds standards and research in public health during emergencies, and spearheads efforts to put health at the core of the global debate on development and humanitarian assistance and the UN Reform Process.

EHA has focal points in each WHO region and represents WHO in the disaster-related fora and programmes of the United Nations System, such as the Inter-agency Standing Committee (IASC) and its sub-working groups and Task Forces and the International Decade for Natural Disaster Reduction (IDNDR). The network of EHA partners includes the Red Cross/Red Crescent Movement, 15 Collaborating Centres, various universities and other academic institutions, NGOs, senior public health experts all around the World, plus various inter-governmental initiatives and institutions such as the Organisation of African Unity, the Council of Europe, the International Organisation of Migration, and the International Organisation of Civil Protection.

ACTIVITIES AND PROGRAMMES IN THE FIELD OF DISASTER PREVENTION, PROTECTION AND PREPAREDNESS

Emergency Health Intelligence

a) Rapid health assessments (RHA)

In the initial phase of a major emergency collecting subjective and objective information in order to recognise and quantify the emergency, identify basic needs of the affected population, readjust strategies and plans accordingly is essential. In a wider perspective, it will also produce information for financial and political advocacy, public information, press release and case studies as well. This makes Rapid health assessments a complex task and one that carries heavy responsibilities. EHA insures the availability of teams of well-qualified and experienced specialists, their deployment in the earliest possible time and the application of a standardised RHA protocol for assessment.

b) Risk assessment, vulnerability mapping and early warning systems:

It is possible to foresee the likelihood of major health consequences of emergencies specific to a country. To prepare against these Health hazards and to co-ordinate effectively with its many partners for the Health aspects of any emergencies, WHO takes a comprehensive view of the dynamics of hazards, vulnerabilities and capacities in the member countries. To this effect, risk assessments and vulnerably mapping that is a systematic analysis of hazards, vulnerabilities and capacities, is essential and EHA has the expertise and the responsibility to enable member countries to have this capacity and to link it with their national preparedness planning. In the same line EHA in collaboration with other departments and other partners, has the responsibility to provide guidance and technical assistance for member states, to establish early warning systems.

c) Emergency epidemiological surveillance:
To respond to the challenges that disaster and their consequences pose to public health, everyone involved in relief efforts - Policy makers, disaster mangers, resource co-ordinators, field-workers and the victims themselves - require timely and accurate information. Public health surveillance can identify healthy problems, establish priorities for decision-makers and evaluate the effectiveness of relief activities. Hence EHA insures Emergency epidemiological surveillance systems are established and/or operational when disasters strike.

Emergency Health Capacity Building

One of the basic principles of WHO is to nurture and strengthen the health capacities of member countries at international, national and sub-national levels. In relation to this WHO's normative function include a) setting evidence-based standards, b) building capacities through training and c) ensuring best public health practice in emergencies and crisis situations. EHA's activities and projects for Emergency Health Capacity Building include:

a) Norms, standards and reference database/materials:
In collaboration with other WHO departments and external partners, EHA develops, consolidates, publishes and disseminates best practices, strategies, and guiding principles for emergency health management *(*through *guidelines, manuals, training materials, newsletters and Web pages).* Furthermore, EHA has produced a standard *WHO Emergency Library Kit*, ready to be shipped to national and/or international health workers involved in emergency operations.

b) Training for emergency health management:
EHA promotes, and collaborates to training in Emergency Health Management. EHA develops and disseminates training materials, participates in UN-interagency training activities, collaborates with WHO offices, universities, training institutes, the Red Cross/Red Crescent Movement and other partners to deliver training at inter-country and country levels.

c) WHO/EHA Collaborating Centres and Academic Institutions:
EHA liaises with fifteen WHO Collaborating Centres and two Universities for their own institutional development and in order to enhance support to Member Countries, in the areas of emergencies and humanitarian assistance, national capacity building for emergency health management, information sharing and research. Subject to availability of funds, at least two specific projects are envisaged

d) Research:
EHA promotes and co-ordinates operational research on issues related to health and emergencies, and has established a specific advisory group. Research initiatives include Health Priorities in Complex Emergencies, Health Approaches to Rehabilitation and Reconstruction, Health Preparedness for Civil Disturbances, Health as a Bridge for Peace.

e) Building In-house Competencies:
The awareness, knowledge, skills and attitudes of its staff are the first components of WHO performance in emergencies. Then, these human capacities must be consolidated in a corporate culture of readiness, strategic focus, and effectiveness, predictability and accountability vis-à-vis the various partners, throughout WHO. EHA assists growth of competencies and professionalism for emergency management within WHO. A *WHO Field Emergency Handbook* has been published.

EMERGENCY RELIEF

Emergency Health Partnership

WHO's coordination and cooperation with the United Nations and other specialised agencies and with governmental and non-governmental organisations is imperative for appropriate and prompt support to countries, in order to strengthen their emergency preparedness and response. Through direct interaction, as well as participation in various consultative structures, WHO collaborates and consults with a number of operational partners, as well as with other decision-making and planning agencies. The added value of WHO's partnerships stems from its structure, the regional and country offices that puts it in a position to bring together relief and development oriented agencies.

a) Interagency relations

Within the United Nations system, WHO is the focal point of competence for all health matters related to emergency preparedness and response. In epidemics and other disasters whose main or only manifestation is to affect people's health, WHO may assume a leading role among the United Nations and specialised agencies.

WHO's emergency preparedness and response activities are also coordinated through a Memorandum of Understanding with UNHCR, the Norwegian Refugee Council and IOM. Further agreements with UNDP/Emergency Response Division, ICRC, UNICEF, and WFP are under discussion.

b) Field support

In partnership with countries EHA provides technical reference and programme support to enhance country capacities for emergency health management in stable and crisis situations. EHA's services include general technical advice and/or direct collaboration in risk-assessment, need-assessment, advocacy, training, project design, resource mobilisation, programme management support and reporting and evaluation. WHO emphasises building national capacity and avoiding the establishment of parallel health care structures during emergencies. In the provision relief Health services during emergencies, EHA concentrates on information management, epidemiological surveillance, coordination, and meeting unmet health needs e.g. the elderly, chronic illnesses, tuberculosis, mental health….

c) Consolidated appeal process and resource mobilisation

The UN system has a multitude of resources and mechanisms to draw on in support for strategic coordination functions and to fit WHO's health sector activities into an overall humanitarian strategy uniting operational and technical agencies, donors and national governments, EHA participates in the Consolidated appeal process.

EHA is essentially funded through voluntary contribution with minimal core staffing. EHA mobilises resources based on specific project and or country/sub-region needs. To this end EHA maintains an active relationship with the Humanitarian Liaison Working Group, the Permanent Missions of Donor Governments in Geneva, and cooperation and development agencies. Some governments have and are contributing through the provision of staff as well.

"Special Emergency Health Programmes"

Special Emergency Health Programme with the Palestine Self Rule Area
Special Emergency Health Programme with Iraq
Special Emergency Health Programme with the Russian Federation

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE (UNECE)

web site: http://www.unece.org/

CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS

ACTIVITIES AND AIMS OF THE CONVENTION

Activities:

- The exchange of information between countries on:

-policies and strategies as contact points for notification of industrial accidents and mutual assistance;

- the centres, authorities and national programmes dealing with industrial accidents;

- national co-ordination machinery and bilateral and multi-lateral agreements concluded in this area.

- The notification of industrial accidents, mutual assistance and the development of the accident notification system.

- Simulation exercises.

- The co-ordination of training and exercises in fighting industrial accidents in Poland and industrial accident prevention in Hungary.

- The exchange and analysis of information relating to earlier industrial accidents.

- The classification of dangerous substances and the determination of dangerous activities.

Aims:

- The protection of man and the environment against the harmful efffects of industrial accidents.

- The active strengthening of international co-operation in industrial accident preparedness, prevention and management, including the development and implementation of policies and strategies aimed at establishing a similar legislative framework throughout the region of the Economic Commission for Europe.

CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS

The Convention on the Transboundary Effects of Industrial Accidents of the United Nations Economic Commission for Europe was adopted on 17 March 1992. It serves the promotion, at regional level, of international co-operation between countries before, during and after an industrial accident.

Scope of the Convention

The Convention applies to the prevention of preparedness for and response to industrial accidents capable of causing transboundary effects, including the effects of such accidents caused by natural disasters, and to international co-operation concerning mutual assistance, research and development,

and the exchange of information and technology. By "effects" is meant any direct or indirect, immediate or delayed adverse consequences caused by an industrial accident on human beings, flora, fauna, soil, water, air, the landscape, and the interaction between these elements, material assets and cultural heritage, including historical monuments.

The Convention does not apply:

- to nuclear accidents or radiological emergencies;
- to accidents occurring at military installations;
- to dam failures, with the exception of the effects of industrial accidents caused by such failures;
- to land-based transport accidents, with the exception of emergency response to such accidents, and transport on the site of a hazardous activity;
- to the accidental release of genetically modified organisms;
- to accidents caused by activities in the marine environment, including the exploration and exploitation of the sea bed;
- to oil-spills or spills of other harmful substances at sea.

Twenty six countries together with the European Union have signed the Convention on the Transboundary Effects of Industrial Accidents.

MAIN ELEMENTS OF THE CONVENTION

Prevention

The Convention lays particular stress on industrial accident prevention through a reduction in their frequency and severity and the mitigation of their effects.
The Parties (" Party " denotes a Contracting Party to the Convention) take appropriate measures to prevent industrial accidents, including measures to encourage operators to reduce the risk of such accidents.

With regard to any hazardous activity, the Party of origin may demand that the owner furnish information attesting to its safety.

Decision-making on siting

Within the framework of its legal system, the Party of origin attempts to introduce policies on the siting of new hazardous activities and on significant modifications to existing ones with the aim of minimising the risk to the population and the environment of all the Parties affected.

Emergency preparedness

The Parties take appropriate measures to establish and maintain adequate emergency preparedness to respond to industrial accidents. They ensure that preparedness measures are taken to mitigate transboundary effects of such accidents, on-site measures remaining the responsibility of the operator.

The Parties ensure that with regard to hazardous activities, on-site contingency plans are drawn up and implemented, including appropriate response and other measures to prevent or minimise transboundary effects.The Party of origin provides the other Parties affected with the information in its possession to enable contingency plans to be drawn up.

Information and public participation

The Parties ensure that adequate information be given to the public in areas capable of being affected by an industrial accident arising out of a hazardous activity.

Industrial accident notification systems

The Parties provide for the establishment and operation of compatible and efficient industrial accident notification systems at the appropriate levels, in order to receive and communicate notifications of industrial accidents containing the information required to counteract transboundary effects.

Response

The Parties ensure that in the event of an industrial accident, or imminent threat thereof, adequate response measures be taken as soon as possible using the most efficient means of containing and minimising the effects.

In the event of an industrial accident, or imminent threat thereof, causing or capable of causing transboundary effects, the Parties concerned ensure that the effects are assessed - if need be together - in order that appropriate response measures be taken. The Parties concerned attempt to co-ordinate their response measures.

Mutual assistance

Should a Party require assistance in the event of an accident, it may request it from other Parties, stating the scope and type of assistance required. The Party that receives a request for assistance takes a rapid decision and promptly informs the requesting Party if it is in a position to provide the required assistance, indicating the scope and terms of the assistance that might be rendered.

PROGRAMME TO STRENGTHEN THE ABILITY OF COUNTRIES IN TRANSITION TO PREVENT, PREPARE FOR AND RESPOND TO INDUSTRIAL ACCIDENTS

There are three major sections to the programme:

- development of the institutional framework (legislative and administrative)

- safety management and technology

- training and exercises.

Activities under the programme are being run at the Regional Co-ordination Centre for Training and Exercises to Combat Industrial Accidents in Poland and at the Regional Co-ordination Centre for Industrial Accident Prevention in Hungary.

The projects put forward have been designed in such a way as to bring tangible improvements that make a significant and visible impact. They concentrate on measures required for the development

and use of political and legal instruments by public authorities, including local authorities.

Training programmes include a section on “ teacher training ”. The projects put forward make provision for and encourage mutual assistance and co-operation between transition countries. The programme builds on existing assistance activities and seeks, in particular, to provide transition countries with readily usable training material and guidance literature, and to assist them in drawing benefit from it.

INTERNATIONAL MARITIME ORGANIZATION (IMO)

web site: http://www.imo.org

GENERAL DESCRIPTION AND AIMS

The aims of the International Maritime Organization (IMO) are :

- to provide inter-governmental co-operation structures in the area of rules and practices relating to the technical aspects of all manner of international maritime navigation,

- to promote and encourage widespread adoption of the most advanced standards in the field of maritime safety, efficiency of navigation, and the prevention and control of marine pollution from ships,

- to deal with administrative and legal matters relating to such areas.

The international standards that have been introduced cover many aspects of the prevention and control of marine pollution from ships, rescue operations and intervention on the high seas, compensation and liability, the prevention of the dumping of waste at sea and contingency planning for accidental marine pollution emergencies.

The prevention of accidents linked to the maritime transport of hazardous substances and action to mitigate the consequences of such accidents for human health and the marine environment is one of the most important aspects of the work of the Organisation, alongside the development of international standards and regulations. Such international instruments aim to ensure that ships are built, equipped and operated safely, and to limit any possible damage to the marine environment when ships collide or run aground or during any other incident likely to cause damage.

These various aspects are dealt with in IMO conventions, in particular:

- The International Convention for the Safety of Life at Sea, SOLAS, 1974,
- The International Convention for the Prevention of Pollution from Ships, 1973 and its Protocol of 1978 thereto (MARPOL 73/78).

In accordance with the provisions of the 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (which entered into force on 13 May 1995), the IMO is responsible for ensuring the following functions and activities:

reception, collation and dissemination of information received from the Parties to the Convention and of relevant information received from other sources (notification in the case of pollution, etc.);
assistance in identifying provisional sources of financing to cope with an oil pollution accident;
promote training in the field of the preparation and fight against oil pollution. To this end the Organization has developed a series of training courses intended to assist countries in their efforts for setting up emergency measures;
facilitate co-operation in the field of research-development; advise States; analyse the information received from the Parties to the Convention;
facilitate the provision of technical assistance and of advice to States.

In conjunction with the United Nations Environment Programme (UNEP) and other international organisations, the IMO has actively engaged in the development of regional Protocols and Agreements to cover emergencies where pollution affects neighbouring countries. These agreements constitute the regulatory framework in matters of mutual assistance during accidents involving hazardous substances.

ACTIVITIES AND PROGRAMMES RELATING TO TECHNOLOGICAL HAZARDS

TRAINING ACTIVITIES OF IMO

The Marine Environment Division (MED) of the International Maritime Organisation (IMO), together with the Organisation's Marine Environment Protection Committee (MEPC), has developed a series of training courses designed to assist countries in their efforts to introduce contingency measures.

EMERGENCY ASSISTANCE PROVIDED IN THE EVENT OF TECHNOLOGICAL DISASTERS

EMERGENCY ASSISTANCE

The International Maritime Organisation can mobilise assistance in the event of marine oil pollution by facilitating the communication of information. If emergency assistance is required, IMO identifies contact points, information, expertise, equipment and resources that can be mobilised in response to an emergency involving oil spills at sea. If asked to do so the IMO can sift through and select, among offers of assistance, that which corresponds best to the awaited response. It may also provide technical advice and the assistance of experts on the request of the government of the affected country.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION (UNIDO)

web site: http://www.unido.org/

The activities of the United Nations Industrial Development Organisation relate to both the prevention aspects of natural and technological disasters likely to affect industrial establishments and to rehabilitation aspects in the wake of a disaster.

ACTIVITIES RELATING TO INDUSTRIAL ESTABLISHMENTS

Within its mandate for the promotion and co-ordination of industrial development, the United Nations Industrial Development Organisation (UNIDO) plays an active role in natural disaster mitigation and post-disaster recovery.
UNIDO is also active in the area of technological disaster prevention in industries dealing with hazardous substances. Emphasis is placed on links with other key sectors of the economy, in particular the building materials sector, and the important role of industry in the post-disaster reconstruction phase.

UNIDO has taken part in early damage assessment and reconstruction planning following major recent earthquakes including those of Mexico City, Spitak and Manjil. The building of disaster resistant buildings involves a choice of materials and structural design based on technical know-how, appropriate codes and standards and institutional support mechanisms which UNIDO is endeavouring to create by building up local resources.

One of the elements of UNIDO's assistance to Armenia following the1988 Spitak earthquake was advice on the upgrading of the physical facilities of the Armenian Institute for Construction and Architecture (ARMINSA) through the establishment of a dynamic testing laboratory.

UNIDO co-operation with six Balkan countries in the 1980s resulted in a compendium of guidelines and codes related to anti-seismic construction techniques, damage assessment and the repair of engineered structures. To serve the needs of the many populations living in non-engineered structures, UNIDO is planning to assemble a similar compendium of proven building practices to enable local populations to build homes which are more resistant to cyclones, floods and earthquakes by pooling and disseminating available information from experienced sources worldwide.

UNIDO is also involved in post-disaster activities, providing emergency shelter to displaced persons as a result of armed conflict in Croatia. An international conference was organised on the subject of the effects of war on the environment. The conference resulted in a number of recommendations to assist regions dealing with war-inflicted chemical pollution and strategies to monitor risks and hazards due to that pollution.

The safety of industrial plants is an integral part of UNIDO's programmes. Planning of new, and the rehabilitation of existing, industrial units pays close attention to their safety under normal operating conditions as well as under conditions brought about by natural disasters. This involves the banning of hazardous chemical and other industries from high risk areas during the industrial planning stage as well as the promotion of cleaner technologies, occupational safety and environmental protection.

One aspect of disaster preparedness is the inclusion of strategies for the recovery of the industrial sector in post-disaster rehabilitation phases.

UNITED NATIONS FOOD AND AGRICULTURE ORGANISATION (FAO)

web site: http://www.fao.org/

Many of the activities conducted by the United Nations Food and Agriculture Organisation (FAO), concern the rational use of natural resources and relate to natural disaster prevention, preparedness, early warning, mitigation, impacts and needs assessment, relief and rehabilitation.

Measures to reduce vulnerability to natural disasters such as drought, floods, pests and diseases, tropical storms and cyclones, earthquakes and volcanic eruptions, and forest fires, include improved water control; improved management of soils, rangelands, forested areas and watersheds; crop diversification; introduction of drought, pest and disease-resistant crop varieties and livestock breeds; better coastal fishing practices; and home gardents and nutrition education.

The Organisation's activities in the area of disaster preparedness include monitoring and early warning systems (covering nutritional surveillance, remote-senses data on crop production, insect and pest swarms, and environmental conditions, market information, soil classifications, data on water resources and general agricultural statistics) and support for improved on-farm storage, cereal banks and food and seed security reserves.

FAO has prepared technical handbooks on actions to take and procedures to use at each phase of the disaster cycle.

The United Nations Food and Agriculture Organisation (FAO) gives technical advice on issues related to food and agriculture and on ways of reducing vulnerability. It promotes the recovery of agriculture, animal husbandry and fishing through the emphasis placed on local food production. It also monitors food production, food exports and infestations that devastate crops and defines procedures relating to food aid.

GLOBAL INFORMATION AND EARLY WARNING SYSTEM (GIEWS) ON FOOD AND AGRICULTURE

The Global Information and Early Warning System on Food and Agriculture was established in 1975 in order to provide accurate, timely and independent information on imminent serious food shortages in a country or region so that appropriate and timely actions can be taken to prevent loss of life or minimize the impact on the affected populations. To do this, FAO has established a network of partners for the collection, assessment, analysis and dissemination of up to date information on crop prospects and overall food supply and demand situation and outlook at global, regional, national and sub-national level for early warning purposes. Through crop and food supply assessment missions to affected countries, GIEWS, often jointly with the World Food Programme (WFP), assesses the impact of natural and/or man-made disasters in order to determine the country's food import requirements and food aid needs until the next harvest. A number of other international organisations, particularly those within the United Nations System, and non-governmental organisations (NGOs) participate in GIEWS missions.

GIEWS also participates in inter-agency needs assessment and consolidated appeals co- ordinated by the Office for the Coordination of Humanitarian Affairs (OCHA). The System also makes extensive use of agrometeorological and satellite-based data and imagery for monitoring crop

conditions and drought detection.

EMERGENCY OPERATIONS AND REHABILITATION DIVISION

FAO's Emergency Operations and Rehabilitation Division (TCE) responds to needs for emergency assistance in the agricultural, livestock and fisheries sectors in developing countries affected by exceptional natural or human-induced calamities. FAO's emergency assistance covers a wide number of activities related to the urgent rehabilitation of agricultural, livestock and fisheries production in disaster-stricken areas. FAO also assists developing countries in the establishment of agricultural preparedness and post-emergency measures, formulating and implementing relief and short rehabilitation programmes that will speed the return back to agricultural development.

In detail, FAO's Emergency Operations and Rehabilitation Division's activities comprise:
the assessment and monitoring of emergency requirements in the agro-economic and livestock sectors;
the mobilization and coordination of donor support;
the implementation of urgent relief operations through the provision of agricultural inputs (seeds, fertilizer, pesticides), agricultural equipment (small tools, farm mechanization, irrigation and fishery equipment), veterinary and feed supplies, including breeding animals, and logistic facilities (workshops, training courses, etc.);
the coordination of emergency agricultural activities.

INTERNATIONAL LABOUR OFFICE (ILO)

web site: www.ilo.org

PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS

The International Labour Office (ILO) seeks to implement a certain number of recommendations, conventions, codes etc, in order to support efforts made at international, regional and local levels in the area of industrial accident prevention.
Major activities in industrial accident prevention are organised around the following main elements:

- the Convention concerning the Prevention of Major Industrial Accidents (No. 174), 1993;

- Recommendation concerning the Prevention of Major Industrial Accidents (No. 181), 1993;

- the Code of practice on the Prevention of major industrial accidents, 1991;

- Major hazard control. A practical manual. 1988;

- International Programme for the Improvement of Working Conditions (PIACT);

- the technical co-operation programme on the establishment of infrastructure for the prevention of major industrial accidents.

Systems and sources of information include:

- the International Occupational Safety and Health Hazard Alert System;

- the International Occupational Safety and Health Information Centre (CIS);

- the CIS network of national centres;

- the bibliographical database CISDOC;

- the ILO-CIS Bulletin " Safety and Health at Work ".

Chemical safety is one of the chief aspects of the occupational safety and health programme.Convention No.170 and its accompanying Recommendation No.177 were adopted in 1990 and concern safety in the use of chemicals at work.

The International Labour Office has undertaken a series of activities relating to the prevention of major industrial accidents. To complement the control system established in certain countries the ILO has published a practical manual on major hazard control and a code on the prevention of major industrial accidents.

THE OFFICE'S INTERNATIONAL OCCUPATIONAL SAFETY AND HEALTH INFORMATION CENTRE

The International Occupational Safety and Health Information Centre of the International Labour

Office provides an abundance of information on occupational safety and health. Legislative aspects, industrial hazards and their control are also covered. The aim of the Centre is to facilitate the exchange of information on legislation and various activities relating to health and safety. One area of priority interest is chemical safety.

The International Labour Office works in close co-operation with agencies of the United Nations and more particularly with the World Health Organisation.

CONVENTION CONCERNING THE PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS, 1993 (NO.174) AND RECOMMENDATION (NO.181)

This Convention states that Members having ratified the Convention must, in consultation with the most representative organisations of employers and workers and with other interested parties who may be affected, formulate a coherent national policy concerning the protection of workers, the public and the environment against the risk of major accidents. This policy is to be implemented through preventive and protective measures for major hazard installations and , where practicable, should promote the use of the best available safety technologies.

Employers must identify any major hazard installation within their control, notify the competent authority and maintain a hazard prevention and protection system which includes provision for the identification of hazards and risk assessment, technical measures, including design and safety systems, organisational measures including the training of personnel, emergency plans and procedures and measures to limit the consequences of a major accident. Taking into account the information provided by employers, competent authorities have to ensure that emergency plans and procedures are drawn up, which contain provisions for the protection of the public and the environment. They must also ensure the establishment of information and warning systems.

The Convention further defines the rights and duties of workers and their representatives, and in particular, the right to interrupt an activity where there is reasonable justification for believing there is an imminent danger of a major accident.

The Convention does not apply to nuclear installations and plants processing radioactive substances, except for facilities handling non-radioactive substances at such installations, to military installations and to transport outside the site of an installation other than by pipeline.

The provisions of the Recommendation concern the international exchange of information on major accidents, and safety and organisational requirements. National policies should be guided by the Code of practice on the Prevention of major industrial accidents, published in 1991. Recognizing that a major accident could have serious consequences in terms of its impact on human life and the environment, the Recommendation invites countries to encourage the establishment of systems to compensate workers as quickly as possible after the event and adequately address the effects on the public and the environment.

CODE OF PRACTICE CONCERNING THE PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS

A Code of practice concerning the Prevention of major industrial accidents was published in 1991. This code was drawn up to provide guidance to Member States in framing national legislation on the prevention of major industrial accidents. Its main objectives are the protection of workers, the public and the environment against major accidents through specific measures (emergency planning, arranging for separation between major hazard installations and housing, schools, hospitals etc..).

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

web site: www.iaea.org

ACTIVITIES AND PROGRAMMES RELATING TO TECHNOLOGICAL HAZARDS

NUCLEAR, RADIATION, TRANSPORT AND WASTE SAFETY

The IAEA maintains a set of safety standards for the protection of health and the minimization of danger to life and property from the effects of ionising radiation. The IAEA safety standards cover safety in four areas: the safety of nuclear facilities; radiation protection and the safety of radiation sources; the safe transport of radioactive material; and the safe management of radioactive waste. In addition, some standards cut across these areas, and these are grouped into a general safety area: legal and governmental infrastructure, emergency preparedness & response, and quality assurance. The IAEA safety standards are not binding on the IAEA Member States but may be applied by them to achieve an acceptably high level of safety. The standards reflect an up-to-date reference level to evaluate the safety on nuclear facilities and activities. At the request of its Member States the IAEA will provide for the application of the safety standards through – inter alia – safety review missions.
To support the IAEA safety standards a number of supporting documents have been developed that describe good practices and give examples and detailed methods that can be used to meet the requirement in the standards.

The Agency standards have served as a basis for two international conventions that have been developed and are now in force:
Convention on Nuclear Safety;
Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

Both conventions contain a number of obligations and the contracting parties have to take measures to meet these obligations. Each party must submit a report on these measures for a review that takes place every three years. The contracting parties meet for the purpose to peer review these reports and substantiate if each contracting party has taken the appropriate measures. The conventions have an incentive character and aim at achieving any reasonably practicable improvements. The substantial obligations have been formulated using statements from the principles in the IAEA safety standards. The Convention on Nuclear Safety entered into force in October 1996, and since then Review meeting took place in 1998 and 2002.

The Joint Convention entered into force in 2001 and the first review meeting will be held in November 2003.

EMERGENCY ASSISTANCE PROVIDED IN THE EVENT OF TECHNOLOGICAL DISASTERS

Responsibilities and authorities
The International Atomic Energy Agency has statutory obligations to "establish… standards of safety for…protection of health and minimization of danger to life and property…and to provide for their application upon request". Moreover, under the Conventions on Early Notification of a Nuclear Accident and on Assistance in the Event of a Nuclear Accident or Radiological

Emergency of which the IAEA is depositary, the IAEA is also assigned specific functions in case of a nuclear accident or radiological emergency.

The IAEA has a Memorandum of Understanding with OCHA[3], which encompasses the specific responsibilities of OCHA and IAEA in a nuclear accident or radiological emergency; disaster related activities in respect of which OCHA and IAEA will co-operate; requests for disaster relief assistance; joint action in the field and missions to disaster areas; exchange of information; confidential information; and financial arrangements. In particular, it recognizes that OCHA's role is that of an overall co-ordinator of all aspects of disaster relief assistance, and that the IAEA has operational responsibilities for co-ordinating relevant technical and scientific assistance following a radiation accident. On request, the IAEA will advice OCHA about any special precautions or preparations, which should be taken or made by relief personnel. In a disaster situation following a radiation accident, the IAEA will arrange for members of its staff to join any UNDAC team, and to be responsible for the assessment of relevant technical and scientific requirements. OCHA will, at its discretion, send representatives to the disaster area for on the spot assessment of emergency relief requirements other than those of a technical or scientific nature.

Capabilities

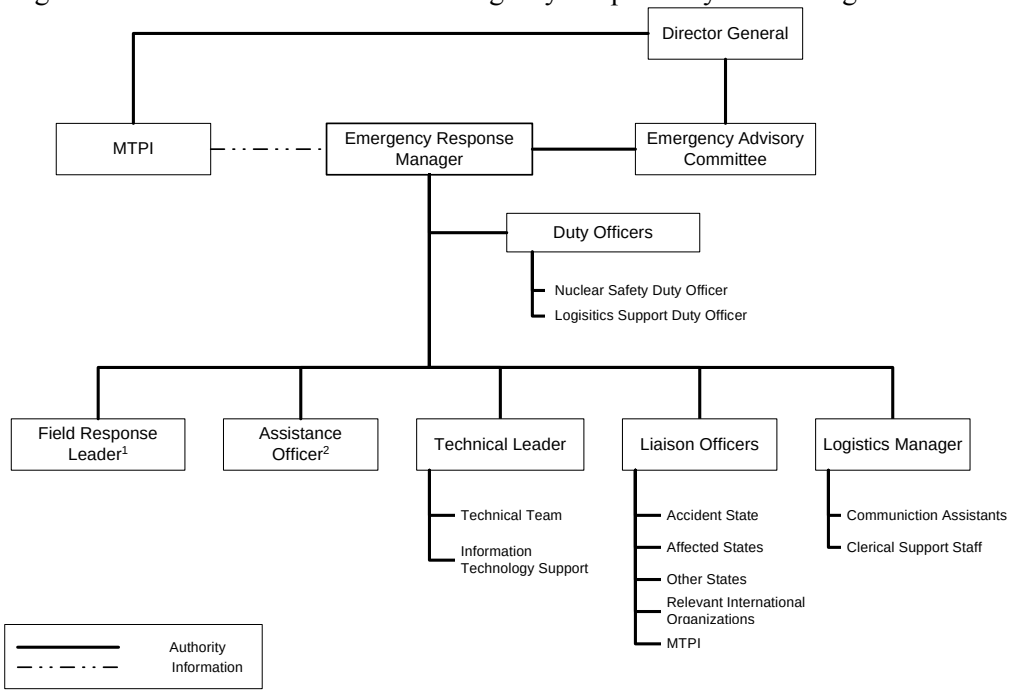
The IAEA maintains an equipped emergency response system and trained personnel to meet its responsibilities, in particular:

- a 24-hour on-call system of duty officers with technical expertise and a duty Emergency Response Manager to respond to a notification and activate the system;
- teams of technical experts — with expertise in nuclear, radiation and waste safety — for round the clock operation if needed 1) to ensure that the initial and any additional information received from the notifying State is verified and together with any other relevant information made available to the IAEA is consistent and coherent before providing to contact points; 2) to review the trend assessment made by the notifying State and, based on the information available, to evaluate the adequacy of that assessment; 3) to review the response by the notifying State and by affected States and based on information available, identify areas where safety related gaps in the response may exist; 4) to compile and disseminate relevant available information and, as appropriate, IAEA guidance on generic and operational intervention levels, action levels and assessment methodologies, techniques and tools; 5) to facilitate requesting States to assess their needs;
- logistics support for round the clock operation, if needed;
- teams for direct liaison with competent authorities of the Notifying State and Member States, emergency contact points of other International Organizations, and Permanent Representatives to the IAEA;
- telecommunications system (round the clock) with a high degree of redundancy and reliability for receipt of notification and incoming communications, including dedicated telephone lines for notification purposes and assistance requests, and after activation, solely for the notifying State; and for receiving and sending fax messages, if needed, to over 300 nationally designated emergency contact points;
- full and secure Internet capabilities; an Early Notification and Assistance Convention (ENAC) web based system with active pages for exchanging relevant emergency related information;
- video conference facilities for emergency liaison activities;
- an on-line subscription to electronic news network, satellite TV and radio connections for monitoring public information and responding to rumours;

[3] Memorandum of Understanding between the Director General of the International Atomic Energy Agency and the United Nations Disaster Relief Co-ordinator, 1977.

- databases of: contact points; potential resources (health physicists, medical doctors, medical physicists (qualified experts), equipped emergency response teams, equipment and materials, specialized facilities and services); power and research reactors around the world; missing and found sources;
- standing arrangements for dosimetry services and assessment activities;
- public and media information personnel; International Nuclear Event Scale and NEWS system; and
- trained personnel and emergency arrangements for rapid field deployment to nuclear or radiological emergencies with appropriate monitoring equipment.

Organizational structure of IAEA's Emergency Response System during its activation.



1 only activated on deployment of field mission
2 only activated on receipt of request for assistance during full activation

The organizational structure of the IAEA when activated is as shown in the diagram. With regard to the interaction with other relevant international organizations during activation, several positions are relevant:

- An international organization Liaison Officer is the primary focal point and maintains lines of communications between the IAEA and other relevant organizations for the purposes of exchange of information and for sending and receiving offers of assistance from other organizations.
- The Emergency Response Manager is the focal point for the operational and tactical management of the response;
- The Director, Public Information (MTPI) is the focal point for co-ordination of any joint media releases.
- The Head, Emergency Advisory Committee is the focal point for co-ordination of any strategic decision-making.
- The office of the Director General is the focal point for policy co-ordination in this area.

UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR)

web site : www.unhcr.org/

EMERGENCY RESPONSE CAPACITY

The United Nations High Commissioner for Refugees (UNHCR) concept of emergency response is based on the rapid deployment of standby emergency resources to cover a wide range of critical needs and establish operations during the emergency phase. During this critical phase there is a need to assure programme protection and delivery at the same time as the establishment of operational systems and administrative structures.

INTERNAL UNHCR EMERGENCY STAFF

Emergency Preparedness and Response Officers (EPRO)

These Emergency Preparedness and Response Officers are on stand-by for responding to emergencies. In the event of an emergency, where the UNHCR Branch Office lacks adequate resources to respond, or where UNHCR has no prior presence, the EPROs can be deployed, at very short notice, to lead an emergency team or existing staff in establishing a UHHCR presence and launching operations. An EPRO can also be deployed to lead a needs-assessment mission prior to the deployment of other emergency resources.

Their deployment is limited to the critical emergency phase when basic structures and operation management have to be put in place.
Alongside operational deployment, EPROs are also responsible for emergency preparedness activities.

Emergency Response Teams (ERT)

A central pool of UNHCR emergency staff has been established, composed of people drawn from various duty stations in the field and sections in Headquarters, who are on stand-by for emergency deployment. These staff members constitute the experienced human resources reservoir of the UNHCR and can be mobilised as part of the Emergency Respone Teams led by EPROs.

Like EPROs, Emergency Response Teams can only be deployed to meet the critical needs of an emergency operation, when no resources are available locally or when they are unable to cope.

Emergeny Administrators

An important staffing requirement which is crucial in all emergency operations when proper structures have to be put in place is that of administrative capacity. Like EPROs, Emergency Administrators are on stand-by at all times for deployment. This group includes Emergency Finance and Administrative Assistants.

EXTERNAL STAFF SECONDED TO THE UNHCR IN EMERGENCIES

Nordic stand-by arrangements

To complement the internal UNHCR staff available for emergencies, a stand-by arrangement has been signed for the secondment of staff from the Danish and Norwegian Refugee Councils. Staff may be deployed within 72 hours to UNHCR operations. In principle, all the profiles normally required in UNHCR operations can be provided under these arrangements.

Stand-by arrangements with United Nations Volunteers (UNV)

Similar arrangements to those concluded with the Nordic Refugee Councils, but on a more modest scale, have also been established with UNV.
Under this emergency arrangement, UNVs can be deployed on a short-term basis. They may also be called upon to bridge the need for staff in the transition from an emergency team presence to the assignment of long-term staff for an operation.

Stand-by arrangements with various non-governmental organisations

Stand-by arrangements have been worked out with several non-governmental organisations, in particular with *Redda Barnen* (Sweden), *Red-R* (United Kingdom), and with the *Centres for Disease Control* (United States), for the secondment of technical staff in the area of community health services to join emergency relief teams. They are involved in needs-assessment missions, and also co-ordinate UNHCR assistance in their respective sectors as full members of UNHCR teams.
The UNHCR is tending to extend this kind of arrangement in other sectors, working together with other agencies.

EMERGENCY FUND

Each year, the UNHCR has available to it a special reserve fund of 25 million S dollars for immediate emergency response.
This fund is normally reconstituted following a special appeal to donors for each emergency operation in order to be able to respond to emergencies in the future.

EMERGENCY LOGISTICAL SUPPORT AND MOBILISATION

The UNHCR has established logistical support and mobilistion machinery to enable staff to operate more effectively under different geographical conditions and varying degrees of hardship. It includes the following:

- vehicle stockpile;
- stockpile of telecommunications equipment;
- computers and printers;
- emergency field kits;
- base-camp managers;
- a stand-by arrangement with the Swedish Rescue Services Board: where an operation has to be carried out in an environment where almost all the infrastructure required has to brought in from outside, the Swedish Rescue Services Board (SRB) is on stand-by to provide a comprehensive range of support staff. At 72 hours' notice, the SRB can send equipment and a team of staff acting on behalf of the UNHCR to establish office and housing facilities, sanitation, water, electricity, telecommunications, transport and nursing services.

STOCKPILE OF EMERGENCY RELIEF SUPPLIES

Through funds made available under a stockpile project administered by the Emergency Preparedness and Response Section, a Central Emergency Stockpile has been established to ensure the availability of relief supplies for 100,000 beneficiaries. It is intended to increase the stockpile to meet the needs of 200,000 beneficiaries. Basic relief items include tents, plastic sheeting, water equipment, kitchen utensils, blankets and pre-fabricated warehouses.

In addition to these arrangements for the Central Emergency Stockpile, UNHCR has negociated access to established stockpiles of agencies such as the SRB, the Norwegian Emergency Preparedness systems and the stockpile of the Office for the Coordination of Humanitarian Affairs in Pisa.

TRAINING

Emergency management training has been introduced to develop the management skills of UNHCR officers in emergency operations.

Various training courses are dispensed each year on the subject of crisis management.
The Emergency Management Training Programme (EMTP) , which is held three times a year and involves some forty participants is open to representatives from governments, non-governmental organisations and United Nations agencies. Each training session lasts two weeks with courses held in different regions each time drawing participants from four to nine nations.

UNITED NATIONS CHILDREN'S FUND (UNICEF)

web site: www.unicef.org/

The United Nations Children's Fund (UNICEF) is concerned with the survival, development and protection of children and mothers, with the fulfillment of their basic rights as enshrined in the Convention on the Rights of the Child, and more specifically with child health and nutrition. Its primary activities include basic health and education programmes, child supplementary feeding (together with the World Food Programme), water systems development and distribution, sanitation and provision of sanitary facilities (together with the World Health Organisation). It also provides administrative and logistical support.

The UNICEF Supply Division based in Copenhagen (Denmark) has special authorisation to respond to emergencies using its stockpile of essential medical supplies, available for immediate use.

WORLD FOOD PROGRAMME (WFP)

Web site: www.wfp.org

The United Nations World Food Programme (WFP) provides food aid in humanitarian crisis situations arising from both man-made and natural hazards, while also supporting relief and rehabilitation efforts as well as livelihood protection. Given the growing number of crisis situations around the world, one of WFP's priority areas of competence is emergency preparedness and response, particularly global early warning, information preparedness, contingency planning, and relief management. Related fields of expertise are risk reduction, vulnerability analysis and mapping, as well as emergency needs assessment. WFP works to ensure that its plans and humanitarian activities are closely coordinated with host Governments, local authorities and actors, UN and non-UN partners. In addition to the direct provision of relief, during emergencies WFP also manages inter-agency logistics and air services for the broader humanitarian community.

For further information, please contact

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UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

Web site: www.undp.org

The main emphasis of the United Nations Development Programme (UNDP), is on dealing with a disaster's potential impact on development, and on the need to provide technical assistance in the establishment of institutions, in all areas of disaster management. Mention should also be made of the inclusion, in development planning programmes, of the following elements:

- long-term risk reduction and disaster protection measures;

- support for specific risk reduction measures, as required;

- assistance in the planning and implementation of recovery and reconstruction measures in the affected area, including the formulation of new development strategies involving risk reduction measures applicable to such areas;

- consideration of the influence of numerous centres for refugees and displaced persons on development strategies;

- provision of technical assistance to authorities supervising major emergency relief operations for the benefit of disaster victims over a long period, in particular with a view to arriving at a lasting solution for displaced persons.

Administrative and operational assistance is also provided to the UNDP resident co-ordinator in the affected country and at UNDP headquarters.

UN-HABITAT (The United Nations Human Settlements Programme)

Web site ://www.unhabitat.org/

Risk and Disaster Management Programme

On the 1st January 2002, UN-HABITAT was elevated in status to become the United Nations Human Settlements Programme. Previously known as the United Nations Centre for Human Settlements (Habitat) this transformation was formalised in General Assembly resolution 56/206. The resolution reinforced the role and function of UN-HABITAT, and also strengthened the mandate and status of its governing body, now known as the Governing Council of the United Nations Human Settlements Programme.
The adoption of the resolution means that UN-HABITAT is in a better position to help governments and other partners to meet the Millennium Declaration's goal of improving the lives of at least 100 million slum dwellers by the year 2020. UN-HABITAT will be called upon not only to do its statutory work, but also to help in the reconstruction and rehabilitation of cities, towns, and villages in post-conflict situations.
The mission of UN-HABITAT is to promote socially and environmentally sustainable human settlements, development and adequate shelter for all.

Risk and Hazards

The Disaster Management Programme (DMP) from the Disaster, Post Conflict and Safety Section (DPCSS) is one of UN-HABITAT's Global Programmes functioning under our Urban Development Branch. Supported by both Global Campaigns on Shelter and Urban Governance, the DPCSS functions as an early response operational programme, as well as a contributor to the normative work produced by Habitat through these campaigns.

Risk and Disaster and the "Habitat Agenda"

DMP's mission is to support national governments, local authorities and communities in strengthening their capacity in managing human-made and natural disasters. This applies to the prevention and mitigation of disasters as well as the rehabilitation of human settlements. DMP also aims at creating awareness among decision-makers and communities on mitigation and adequate rehabilitation in human settlements. Finally DMP works to bridge the gap between relief and development by combining technical expertise and human resources in the field.
Dealing at the earliest stages with the rehabilitation of social and economic conditions in post-conflict or post-disaster situations offers a unique opportunity to re-think past development practices, improve the sustainability of human settlements development and prepare communities to prevent against future threats and risks.
UN-HABITAT's Disaster Management Programme is not contrived as a humanitarian initiative, though from time to time we implement humanitarian activities; rather we have offered our expertise at the shoulder of those whose responsibilities are to effectively deliver humanitarian and emergency assistance to those affected by disaster…either natural or man-made.
The strategy is to provide humanitarian agencies with advice and support in planning and deploying emergency aid with a strategic view that looks at the impact of all activities on the longer-term human settlements development trajectory. This applies particularly whenever a disaster weakens, or disintegrates local decision-making structures.

Disaster, Post-conflict and Safety

UN-HABITAT is working in areas where human settlements are affected by natural disasters such as flooding situations and post-conflict areas where both institutional and physical infrastructures are damaged or destroyed.

In post-conflict situations the security situation can be compromised further when inadequate attention to livelihoods of demobilising military or para-militaries is applied.

UN-HABITAT Focus on Disaster and Risk

Land and property: security tenure, and access to land is a central issue in disaster response. It is also crucial when developing strategies and programmes to minimise vulnerability of populations to future risk. DMPs focus on land and property is a rights based approach and seeks mechanisms to ensure land and property rights are protected.

Gender and Human rights: Gender issues impact in all areas of disaster management from relief, through rehabilitation, reconstruction and development. Promotion of gender mainstreaming in all the above phases of a disaster. DMP has developed specific and generic tools to assist communities and local governments to achieve this.

Displaced populations: re-establishment of livelihoods, planning and management of human settlements, and restoration and management of basic services form the basis DMP's "Immediate Measures" planning for return of IDPs (Internally Displaced Populations) to their place of origin.

Shelter: The right to adequate shelter is central to UN-HABITAT's mandate, and is again, a central theme through the DMP approach of ensuring that investments made in the short term integrate well into a longer-term development plan.

Vulnerability Reduction: Disaster response capacity is intrinsically linked to the state of preparedness and resources available. DMP is working with its partners developing tools for communities and local authorities to link national or regional disaster reduction plans to vulnerability reduction programmes implemented at local level.

Governance: Managing disasters in human settlements is an issue that cuts across all elements of both preparedness and response. Creating inclusive institutions that facilitate greater participation of communities and local government is the core theme of UN-HABITAT's "Urban Governance Campaign", which underpins DMP's activities.

Where DMP works

Post Conflict:

Europe: FYROM (Former Yugoslavian Republic of Montenegro), Kosovo, Serbia
Africa : Angola, Burundi, Rwanda, Sierra Leone, Somalia, Sudan, Uganda
Asia: Afghanistan, East Timor

Natural Disaster / Preparation:

Africa: Kenya, Malawi, Mozambique
Asia: Bangladesh, Central Asian Republics, China, India, Nepal, Sri Lanka, Vietnam
Latin America / Caribbean: Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama

Safer Cities: Papua New Guinea, Cameroon, Kenya, Madagascar, South Africa, Mali, Côte d'Ivoire and Tanzania

Lessons learnt

From the work with the International Strategy for Disaster Reduction (ISDR), and most recently, in the Central America vulnerability assessment programmes, it is clear that prevention and mitigation are integrally linked. Rolling out this programme outside of CA, practical elements of both

prevention / preparedness and mitigation of the effect of potential disasters are being applied, most recently in Mozambique and Southern Africa Region.

The drive to meet the immediate needs of families in crisis following disaster need to be tempered with an understanding of the longer-term impacts of emergency response. It is our position that early discussion on emergency deployment of resources can be as effective in the short term, while considering foundation building for the longer term.

As often as not, individuals at the national and regional levels are quite capable and discerning when disaster strikes; however without the operational capacity clearly built both within local government and at a community / civic level, the efficacy of disaster response is minimised. Therefore it is critical that efforts to ensure this capacity is in hand must be prioritised.

UN-HABITAT has but one perspective and a limited sphere of expertise, and disaster mitigation and risk reduction require a broad range of intervention from environmental, health, education, and infrastructure protection strategic planning, policy development and research. Clearly there is a need to bring together and schedule or organise the timely input of the vast expertise available to assist in these initiatives both at local and international levels.

Finally, the earliest possible introduction of a longer-term perspective in the application of relief and emergency aid, and the development of strategies to mitigate risk and disaster, will assist in building a stronger foundation for development in circumstances where it is needed most.

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2. THE WORLD BANK

Web site: http://worldbank.org

WORLD BANK ASSISTANCE IN DISASTER PREVENTION AND MITIGATION MEASURES

World Bank Operational Policy 8.50, last revised in August 1995, outlines provisions for support to post-disaster recovery. Although the policy focuses on post-disaster lending, it also highlights tools for disaster risk reduction as viable opportunities for investment. Options include developing national strategies for disaster risk management, carrying out vulnerability and risk assessments, and implementing hazard-reduction technologies.

EMERGENCY RECOVERY ASSISTANCE AND SUPPORT FOR RISK REDUCTION

Since 1980, the World Bank has approved more than 500 operations related to disaster management, amounting to more than US$40 billion. This figure includes post-disaster recovery projects, as well as projects that contain components aimed at preventing and mitigating disaster impacts.

The World Bank systematically encourages co-operation with other organizations in the field of disaster management, including United Nations agencies, multilateral development banks, bilateral agencies, non-governmental organizations, the private sector, and other groups involved in recovery activities.

In 1998, the World Bank established the Disaster Management Facility (DMF) to assist the World Bank in providing a more strategic and rapid response to disaster emergencies and to mainstream disaster prevention and mitigation initiatives into all of its activities. The DMF provides technical support to Bank operations, corporate strategy and policy analysis and development; knowledge generation through work with Bank Group and external partners; and, learning and training activities for Bank staff and clients. The unit' s goal is to reduce human suffering and economic losses caused by natural and technological disasters. Specific objectives of the DMF are to:

- improve the management of disaster risk in member countries and reduce vulnerability of investments in the World Bank's portfolio;

- promote sustainable projects and initiatives that incorporate effective prevention and mitigation measures;

- promote the inclusion of risk analysis and disaster prevention mechanisms in World Bank operations, analysis and country assistance strategies;

- promote training in the areas of disaster prevention, mitigation and response; and,

- identify policy, institutional and physical interventions aimed at reducing catastrophic losses from natural disasters through structural and non-structural measures, community involvement and partnerships with the private sector.

3. EUROPEAN UNION:

Web site : http://europa.eu.int/

EUROPEAN COMMISSION
Web site http://europa.eu.int/comm/index_en.htm

The European Commission is an institution of the European Union. Its particular roles include producing policy initiatives, monitoring the application of the Treaties underlying the European Union, and generally acting as the executive body of the European Union.

DIRECTORATE GENERAL ENVIRONMENT – CIVIL PROTECTION UNIT

Website : http://europa.eu.int/comm/environment/civil/

Since May 1998, the Directorate General Environment and in particular its **Civil Protection Unit** ENV.D.3, is the European Commission's Permanent Correspondent to the Council of Europe's EUR-OPA Major Hazards Agreement .

The Civil Protection Unit is responsible for coordinating the inter-service activities of the European Commission in the field of civil protection. Since 2002, it is the EU Commission's focal point for the coordination of accident and disaster interventions.

GENERAL DESCRIPTION

The Unit is engaged in risk management activities in the field of civil protection, including the EU Mechanism on civil protection intervention assistance, marine pollution and industrial accident prevention and preparedness. Since 2002 it has a response centre for coordinating civil protection assistance interventions in case of emergencies inside and outside of the EU. The aim is not to attempt to set up an additional civil protection corps alongside those already existing at national level in the Member States. Rather, the work of the Commission is to encourage and support efforts made at national level

Details may be found under "Texts and legislation" of the civil protection homepage http://europa.eu.int/comm/environment/civil/

The EC Programme in Civil Protection

Civil Protection at the European Level

Throughout the years, Europe has continued to suffer from major natural and technological disasters. Thus, the foundations for Community cooperation in the field of Civil Protection was laid down at a first ministerial meeting held in Rome in May 1985. This event was followed by the adoption of six resolutions between 1985 and 1994, which led to the establishment of operational

instruments dealing with the preparedness of those involved in civil protection and the response in the event of a disaster, based on the subsidiarity principle laid down in the Maastricht Treaty.

Objectives

The purpose of Community cooperation in the field of Civil Protection is to ensure better protection for people, the environment and property in the event of natural and technological disasters. More specifically, it has the following objectives:

- to support and supplement efforts at national, regional and local level with regard to disaster prevention;
- to contribute to the information of the public in view of increasing the level of self-protection of the European citizens;
- to establish a framework for effective and rapid cooperation between national civil protection services when mutual assistance is needed.

Community actions in the field of civil protection

Since the end of 1997, acting on the Commission's proposal, the Council improved the foundations for co-operation by establishing a Community action programme in the field of civil protection. A first two-year Action Programme (1998-1999) was followed by a five-year Action Programme for the period 2000-2004. An evaluation of past ongoing and future activities in this field has also been completed in May 1999.

Important projects of general interest have been launched or continued, each with objectives and an overall long term vision. These deal with prevention, information to the public, new technologies, communication during crisis, disaster medicine and exchange of experts. Moreover, workshops and exercises have been organised to improve emergency preparedness and response. The “Committee for the Action Program and for the Mechanism in the field of Civil Protection” assists the Commission in matters regarding community actions.

On 23 October 2001, the Council adopted a decision [2001/792/EC, Euratom] establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions. The mechanism covers interventions in the event of natural, technological and environmental disasters. The participants in the mechanism are the 15 EU Member States, the three EEA countries, and eleven accessing or candidate countries that have signed a Memorandum of Understanding. Thus, the mechanism is intended to care for 480 million inhabitants in 29 countries, but is also able to support civil protection response outside of this circle.

The mechanism consists of a series of elements that refer to the preparatory phase as well as to the response phase:

- the establishment and management of a Civil Protection Response Centre (MIC),
- the establishment and management of a **C**ommon **E**mergency **C**ommunication and **I**nformation **S**ystem (CECIS),
- the identification of intervention teams and other intervention support available in Member States,
- the establishment and, as needed, dispatch of assessment or coordination teams,
- other support action, such as measures to facilitate transport of resources for interventions,
- the setting-up and implementation of a training programme for intervention teams, for experts, and for the assessment or coordination teams,

- workshops, seminars and pilot projects on major aspects of interventions.

The intervention teams are the core component of the mechanism. Participants and third countries also may request other support, involving specialised personnel and specific equipment needed to deal with the particular emergency. Civil Protection authorities in the Member States, non-governmental organisations and other relevant entities could provide these resources.

The overall responsibility for the emergency response measures remains entirely with the country requesting assistance. The Community mechanism can also contribute to the Union's overall non-military response to crises in third countries under the common Foreign and Security Policy.

Following the events of the 11 September 2001, and at the request of the Ghent European Council, the Commission issued a Communication to the Council and the European Parliament clearly stating its priorities in this field.

The overall aim of the "Integrated EU strategy on prevention, preparedness and response to natural, man-made and other risks" is *to better protect citizens and environment by*:

- Identifying risks,
- Raising public awareness,
- Adopting preventive measures.

The mechanism was formally implemented by the Council Decision and entered into force 1. January 2002. But before this date, the Civil Protection Unit of DG ENV had already handled emergencies and coordinated assistance in the framework of the Community action program. On the average, one or two events are dealt with per week. Some of them just continue a short time like the coordination of assistance after the earthquake in Algeria while others go on for weeks or months like the coordination of assistance and conveying of equipment in the case of the sunken tanker Prestige.

The response centre MIC is equipped with means for communication needed to handle emergencies, and an on-duty-system insures permanent availability of personnel. Regular exercises, communication tests as well as real events allow for constant check of procedures and training of officers. Moreover, evaluation of major disasters and exercises will help to further improve planning and response.

RISK MANAGEMENT, INDUSTRIAL ACCIDENT PREVENTION AND PREPAREDNESS

Secretariat Contact/Addresses:
"Chemical Accident Prevention, Preparedness and Response"

Website**:** http://europa.eu.int/comm/environment/seveso/index.htm

"Major Accident Hazards Bureau (MAHB)"

Website**:** http://mahbsrv.jrc.it

Mandate/Overview
The European Commission's formal involvement in the area of chemical accident prevention, preparedness and response dates from the passage of the original "Seveso" Directive (82/501/EEC) in 1982. Today the Commission's activities in this domain are divided among two units, one of

them in the Environment Directorate-General, and one, more scientific, in the Joint Research Centre.

Administration

In addition to the Commission's own services, the Commission also co-ordinates the Committee of (Member State) Competent Authorities for the Seveso Directives, and through that Committee several Technical Working Groups dealing with various aspects of the Directives.

Furthermore, the Commission also acts directly within the framework of the UN/ECE Convention on Transboundary Accidents, hosting and participating at meetings, and supporting further activities such as workshops and study meetings.

Activities related to chemical accidents

The Commission has three activities directly related to chemical accidents.

Its Civil Protection Unit deals with the policy issues of the control of chemical hazards arising from fixed installations. Particular responsibilities of this sector include the "Seveso" Directives (82/501/EEC and 96/82/EC) on the control of major-accident hazards involving dangerous substances.

Moreover, the Civil Protection Unit plans for and responds to emergencies of all kinds, including those involving dangerous substances. A sector of the Unit runs an emergency response service and a Monitoring and Information Centre. In the framework of the Community mechanism to facilitate reinforced co-operation in Civil Protection Assistance Intervention it can arrange and dispatch EU assessment and co-ordination expert advice and provide for co-ordination of assistance in the event of serious natural, environmental and technological incidents and disasters, including cases of accidental marine pollution. The Unit emergency response runs on a Contingency Planning tool and on an Operational Manual describing civil protection 24h contacts and arrangements in EU Member States, the EU Candidate Countries as well as Norway, Iceland and Liechtenstein (31 countries).

The Major Accident Hazards Bureau of the Joint Research Centre provides scientific and technical support for all aspects of the control of major-accident hazards. This includes the documentation centre CDCIR, running the MARS database of accidents notified, and organising seminars and studies. Further details can be found on the MAHB Website.

Publications

Vade-Mecum of Civil Protection in the European Union, updated October 1999. Office for Official Publications of the European Union

The MAHB has published a large number of books, monographs, articles, journals, databases, and guidance documents covering the areas of risk analysis, risk management, risk communication, safety management systems, land-use planning round chemical sites, lessons learnt from accidents, analysis of accident data, consequence analysis, preparation of safety reports, and emergency response preparation and execution.

Literature including guidance documents can be downloaded from the Website: http://mahbsrv.jrc.it where there can also be found a full list of MAHB documents available.

For natural hazards, please consult http://natural-hazards.jrc.it/

ACTIVITIES TO COMBAT ACCIDENTAL POLLUTION AT SEA

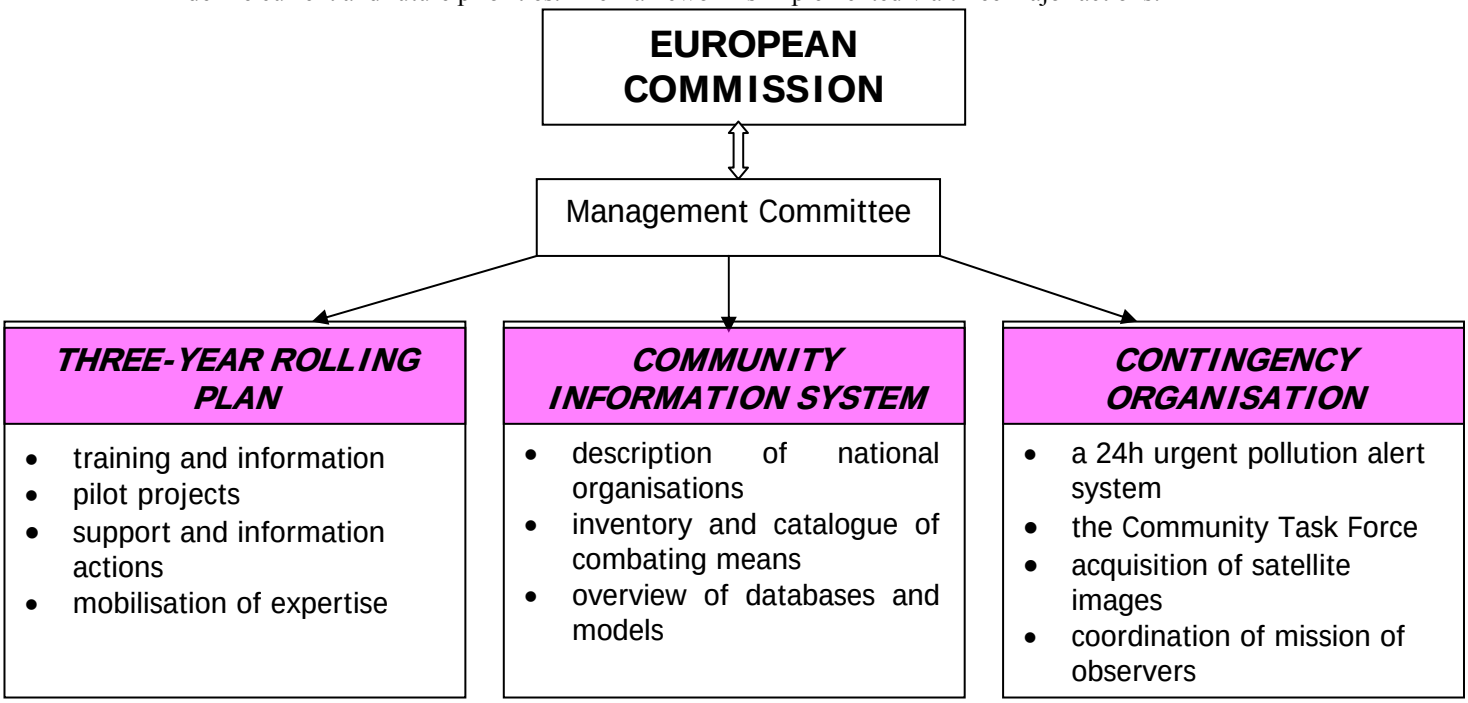
The European Community has played a vital role in the field of response to marine pollution, through the Community action, which has been in force since a Council resolution of 26 June 1978. The role of the European Community now finds its legal basis in Decision No 2850/2000/EC of 20.12.2000 of the European Parliament and the Council. The decision sets up a Community framework for co-operation in the field of accidental or deliberate marine pollution which runs from1 January 2000 to 31 December 2006. Its aim is to:

- ✓ support and supplement Member States' efforts;
- ✓ contribute to improving the capabilities of the Member States for response in case of incidents;
- ✓ strengthen the conditions for and facilitate efficient mutual assistance and co-operation;

The financial framework for the implementation for the period from 2000-2006 is set at € 7 million.

To help implement the framework for co-operation, a Management Committee was set up, formed by high-level government experts, acting as an interface between the services of the Commission and national administrations. In principle, the Committee meets twice a year to exchange views, express opinions on action to be taken and to define current and future priorities. The framework is implemented via three major actions:

To help implement the framework for co-operation, a Management Committee was set up, formed by high-level government experts, acting as an interface between the services of the Commission and national administrations. In principle, the Committee meets twice a year to exchange views, express opinions on action to be taken and to define current and future priorities. The framework is implemented via three major actions:



THREE-YEAR ROLLING PLAN
The three-year rolling plan provides for the following type of actions for:

- ✓ training and information
- ✓ improving techniques, methods of response and rehabilitation
- ✓ Support and information actions
- ✓ Mobilisation of expertise

Details of past and present actions can be found at the following address: http://europa.eu.int/comm/environment/civil

COMMUNITY INFORMATION SYSTEM (CIS)
Past experience has clearly shown that the exchange of information is vital for every operational intervention. The Community information system has been developed to cover this need for 'quick consultation' of the information within the system; it also allows for updating the information in 'real time' by Member States.

The goal of this system is to provide a modern-day operational tool for those directly involved in responding to accidental pollution, by using a modern automatic data processing system, with categories of data rationalised and distributed to users connected in the same network via the Internet.

The Internet site contains general background information at Community level on the Community home page, and information related to national intervention resources on the national home page.

CIS web site: www.marpol-cis/index.htm

CONTINGENCY ORGANISATION
The European Commission contingency organisation consists of different elements. With these arrangements, the Commission is in a position to provide administrative and technical assistance to operational authorities confronted with an emergency situation.

✓ **Urgent pollution alert system**
The permanent organisation consists of a contact person within the Environment DG: Civil Protection and Accidents Unit — acting as 'on-call person' and ensuring, if appropriate, the activation of a Crisis Team. This person can be contacted around the clock, 365 days a year.

✓ **Satellite images**
In the context of the charter, 'Space and major disasters', the European Commission or affected Member States may request satellite images of the polluted area.

✓ **Observers**
When an accident happens, Member States are usually interested in sending observers to the scene. The EC may act as coordinator if there is a need to organise joint missions of observers coming from national competent authorities.

✓ **Community Task Force**
In 1987, the Community Task Force for combating accidental pollution was set up. In the event of a serious incident, experts can be seconded to the scene and if requested by the Member States give their advice to the responsible national authorities. The Task Force is composed essentially of government experts, and are therefore particularly well qualified to give effective assistance. The costs of the Task Force assistance are borne by the Commission.

DIRECTORATE GENERAL FOR SCIENCE, RESEARCH AND DEVELOPMENT

GENERAL DESCRIPTION

The Community's first Research and Development Programme in the field of climatology dates back to 1979. It set out to contribute to the knowledge and understanding of the mechanisms of climate change, to investigate the causes of such change that are related to human activity and to assess the impact of climate change on land and water resources in Europe. A number of programmes dealing with these issues were run in the ensuing years.

Dedicated EC funded research into natural hazards in the Commission began in 1987 with the launching of a seismology project as part of the Research Programme on Climatology and Natural Hazards.

During the Fifth Framework Programme (FP5, 1998-2002) over 80 multi-national projects were financed under the Generic Activity on supporting the fight against major Natural and Technological Hazards. Research has addressed floods, landslides, avalanches, forest fires, earthquakes, volcanic eruptions, and technological risks. Advances have been made particularly in the areas of flood forecasting, design of earthquake resistant structures, forest fire hazard mapping and suppression, volcanic monitoring, landslide and avalanche hazard assessment, and industrial process safety related to the implementation of the Seveso II Directive.

Research under the "Global Change Priority" of the Sixth Framework Programme (2003-2006) focuses on a more holistic approach in which hazard, vulnerability and risk assessment are addressed in an integrated manner with the aim of mitigating the environmental, social and economic effects of natural disasters. In addition, the Commission has launched the EU-MEDIN (Euro-Mediterranean Disaster Information Network) initiative, with the aims of disseminating research results, promoting data integration and harmonisation of methods in the field of disaster science.

The Commission is a founder of the Global Monitoring of Environment and Security (GMES) initiative, in co-operation with the European Space Agency (ESA). The objective of GMES is to build a European capacity for Global monitoring of environment and security by 2008, based on the integration of observation data from all available sources and taking into account EU policies, directives and data standardisation initiatives (i.e.: INSPIRE). Research activities will promote user-driven development of information and services also in the area of natural and technological disasters

Floods

How can we prevent and mitigate the damages caused by floods? The flood research supported since 1989 by the European Commission is focusing on the development of new and improved methodologies and tools to forecast and mitigate floods and on activities leading to more reliable operational decisions before, during and following catastrophic flood events. The sustainable management of rivers has improved significantly, mainly due to the possibility of analysing flood risks and recognising the inherent uncertainties in a more timely and efficient manner. Using radar, satellites, information technology and modelling, rainfall and resulting floods, can be predicted more accurately in order to disseminate related information to users. While risk warning and public awareness do not entirely rule out floodwater damage, they enable public authorities to implement measures to protect the population. To improve flood protection measures it is also very important to better understand and quantify the impact of climate change and variability on the hydrological cycle.

Management of floods
Good flood management calls for an integrated approach at river basin level. This requires development of a catchment view of flood defence activities, integrated with environmental effects, the development of appropriate integrated catchment modelling tools and decision support techniques identifying the differences between the options, between the implications of the different objectives and between the different stakeholders and therefore supporting the dialogue between the stakeholders. Such tools have been developed within the context of the EUROTAS project and have been successfully used by public authorities during flood events.

Forecasting of future events
ACTIF establishes a focus on flood forecasting research in Europe. It facilitates the development of methods, techniques and know-how, the enhancement of complementarity and synergy between different FP5 projects on flood forecasting (i.e.: European Flood Forecasting System -EFFS; Multi-Sensor Precipitation Measurements Integration, Calibration and Flood Forecasting -MUSIC), the coordination of data collection and interpretation of project results, and the dissemination of information to the public, policy makers, end-users and other stakeholders.

Knowledge of past events
Extreme flood events warn of the critical need for hydrologic data over long-time scales, because one can not estimate the risk of future extreme flood events without an in depth knowledge of the past. Investigating inundation traces in sediments close to rivers as well as historical documents in old archives, provides information on hydrological variability over long time intervals (up to 10,000 years ago). SPHERE has produced a catalogue of major past floods, which has contributed to the understanding of extreme floods and their associated climatic forcing in the long-term. This enables improved risk estimation of extreme flood events, which are infrequent but increasingly common in Europe.

Earthquakes
The European Commission has been taking this danger seriously. Since 1987, it has provided financial support for around fifty research projects in the field of earthquakes. As is the case for the other types of disasters, the emphasis is on a multi-disciplinary approach, bringing together all the necessary skills and scientific disciplines. The projects have various strategic objectives. Some aim to define methods for predicting earthquakes, and in this respect there is still much ground to cover. Where and when could the earthquake hit? How long might it last? How powerful will it be? Other projects are working towards strengthening buildings, bridges and other types of constructions, so as to make them more resistant to shock waves.
In 1996, the Commission drew up a veritable European "battle plan" designed to ensure greater protection for citizens of the Union from the risk of earthquakes. Member States are called upon to strengthen their information and communication systems, develop international cooperation (particularly with Japan), and systematically implement Eurocodes, the anti-earthquake standards system for the construction industry.

Unbreakable pipelines
VULPIP studied the resistance of underground gas and water pipelines based on two experiments in Greece and France. The project observed the effects of seismic waves along these pipes - effects that can be felt far from the earthquake's epicentre. It also offered a choice of materials and joints to prevent the pipelines from breaking in the event of an accident which would cause other types of disasters.

Protecting infrastructure from earthquake damage

The protection of transport infrastructure, industrial plants and strategic buildings from earthquake damage is of paramount importance, particularly to Southern areas of the European Union. SPACE develops innovative systems for reducing the effects of seismic induced vibrations. Newly developed devices have been manufactured and successfully tested. These devices have already found practical application: in a 112m long bridge over the Rhine-Main-Danube channel in Forchheim (DE); in a 142 m long architectural bridge (Abandoibarra Bridge) in Bilbao (ES); on the anti-seismic protection of an ancient Roman vessel discovered near Ercolano (IT).

Protecting historic cities
The TOSQA project was designed to protect the historic centres of some "at risk" cities from the effects of earthquakes. It was based on a comparative study of four cities : Naples and Castiglione Causeria (Italy), Rhodes (Greece), and Lisbon (Portugal). Following an experiment in Lisbon, for example, a new protection system has been developed on a larger scale for the façades of vulnerable buildings.

Volcanic Eruptions
A major eruption in Europe would have serious consequences for the population and for the environment. Of course, we cannot prevent such a disaster. What we can do, however, is predict eruptions more and more accurately and take timely measures to save lives and reduce economic damage.
For research, the main challenge is to gain a better understanding of volcanic processes and detect the warning signs in time. To do so, it is best to combine several scientific approaches. Standardised measuring techniques should also be designed to facilitate comparison between volcanoes of different types.
In this respect, European-level research adds significant value by supporting multiple research projects in different high-risk areas:

Etna - Italy
Etna is the most imposing and active volcano in the European Union. It is the perfect testing ground for developing advanced research. Here, the European Commission supported no fewer than four projects. They were examining the various seismic movements of the volcano, studying the magma, developing computer systems for risk assessment, and improving monitoring instruments

Mt. Vesuvius - Italy
TOMOVESS is a volcanic project where the inner structure of Mt. Vesuvius was investigated by seismic methods, down to a depth of 3-4 km. It is a project that contributes to the protection of people and territory.

Santorini - Greece
Santorini's volcano is at the centre of a chain of islands in the Greek Aegean. It has been "dormant" since 1950. However, experts do not rule out an eruption sometime in the future, which would threaten the safety of the 10,000-strong population and of the many tourists that spend the summer there. Thanks to European funding, researchers were designing highly reliable monitoring systems.

Forest fires
Research in forest fires has addressed the understanding of fires, how they propagate, and how they may be suppressed. The Research Directorate General has been supporting multi-national research in this area since the mid 1980's. Current research funded under FP5 (1998-2002) deals with the **development of improved methodologies and tools for** improved fire fighting safety and efficiency, fire spread and suppression modelling, assessing wild land fires and fires at the interface

with urban and industrial areas, characterising socio-economic aspects of forest fires and assessing forest silviculture and pasture management as fuel management tools.

Considerable advances have been made this field of research, including fire behaviour modelling, fire risk mapping and impact assessment, fire management and monitoring, prescribed burning, fire suppression techniques, and post-fire damage assessment. The majority of the research work done thus far relates to forest fires in the Mediterranean. In fact, the Mediterranean basin is particularly vulnerable to forest fires due to its high population densities, intense seasonal pressure, and hot and dry summers, and has been considered a sensitive area in Europe. Fire risk in this region is exacerbated by the possible impact of climate change.

Forest fire spread prevention and mitigation
The SPREAD project supports ecosystems preservation and the mitigation of forest fires impacts and develops and implements an integrated European forest fire management system. The project integrates experimental, field and earth observation data to assess human induced fire risks, and assimilation of these data in fire fighting and fire propagation models. Close cooperation with regional and national forest protection agencies and strong interdisciplinary cooperation supports the improvement of forest fire management.

Fire prevention and suppression
The ERAS project studies how chemical retardant type additives could improve fire prevention and suppression performance, without altering the ecosystem. It aims at reducing fire occurrence on one hand and improving fire suppression performance on the other. For this purpose, the project extends the utilization of fire retardant products and studies their possible impact on the environment. Thus it will lead to the reduction of disastrous consequences of a fire, such as air pollution, soil erosion, irreversible landscape alterations and unemployment.

Technological hazards
Research activities dealing with the fight against major technological risks are targeted to prevent and mitigate accidents leading to large-scale consequences for people and environment. These accidents could result from natural and/or man-made causes related to major hazardous facilities, i.e.: industrial plants, transport systems & interfaces, maritime disasters. Main research areas are the understanding of processes, risk assessment and forecasting as well as risk management and mitigation.

Coastal and marine pollution alert and tracking
The CLEAOPATRA project improves and updates an existing pre-operational and operational system to detect pollution spills, forecast slick propagation, and to assess impacts on the coastal and marine environments. Different environmental protection authorities will benefit from such improvements in terms of greater timeliness and specificity of pollution combating actions and in a greater accuracy in the prediction of pollutant drift in order to predict nearly real time evolution and identify potentially damaged areas.

Corrosion testing of ships
Major pollution of the maritime environment and the affected coast can appear due to disasters of corroding oil tankers. The normal ship survey, which depends on time-dependent and expensive testing methods with random testing points, shall be replaced by an integral corrosion detection system based on acoustic methods is being developed in the context of this project. Permanent installation on ships as well as spot testing in the harbour shall be checked after establishing a database for corrosion detectiong. At the end of the project the method will be introduced in the normal survey program of the European registration agencies.

Transport and storage of fireworks
The project CHAF aims to provide a better understanding of critical conditions that give rise to explosions in packaged fireworks, and improved methods of predicting performance in large scale storage. The produced framework for the safe storage of bulk fireworks will have direct benefits to the EU in terms of improving worker safety and reducing the work-related hazards to which members of the public are exposed. Reduction of the severity of large scale fireworks storage accidents has also beneficial environmental effects in terms of minimising the release of toxic fumes and reducing off site blast damage.

DIRECTORATE GENERAL REGIONAL POLICY – INTERREG UNIT

Website : http://europa.eu.int/comm/regional_policy/interreg3/index_en.htm

The Commission of the European Communities decided on 28 April 2000 to establish a Community Initiative concerning trans-European cooperation intended to encourage harmonious and balanced development of the European territory. The objective of INTERREG is to strengthen economic and social cohesion in the Community by promoting cross-border , transnational and interregional cooperation and balanced development of the Community territory. The list of priority topics and eligible measures that can be undertaken in the framework of this initiative includes i.a. the possibility for the Member States to develop some activities in the field of civil protection.

DIRECTORATE GENERAL INFORMATION SOCIETY

Since 1994 the Directorate General XIII for Telecommunications, Information Market and Exploitation of Research has launched an exploratory action on Telematics applications for Environment, several projects have worked on the following categories of risk:

- **On forest fire:**
  - **DEDICS** information systems forest fire
  - **FORFAIT** Forest fire risk and hazard assessment: a holistic approach
- **On seismic risks:**
  - RADATT earthquakes
  - **GEOWARN** Geo-spatial warning systems Nisyros volcano (Greece). An emergency case study
  - ***ROBOVOLC*** *A Robot For Volcano Exploration*
- **On Oil spills:**
  - **ENVISYS**
  - **RAPSODI** : the project developed an airborne Synthetic Aperture Radar (SAR) remote sensing system, dedicated to oil-spill. I has been. developed in close co-operation between signal processing experts and pollution remediation experts
- **On Flood**
  - **TELEFLEUR** was mainly dealing with flash floods issues
  - **RAMFLOOD** is developing a decision support system for risk assessment and the management of flood
  - **OSIRIS**. Operational Solutions For The Management Of Inundation Risks In The Information Society

In addition the following projects were dealing with **emergency management operations:**

- **FORMIDABLE** developed a European Standard Methodology for Natural Hazards Management based on the consensus of major Mediterranean Civil Protections, together with an interoperable support system prototype which integrates the resulting guidelines

- **EGERIS** this on-going project objective is to provide Civil Protection organisations (and different actors in Emergency Management) with Information and Communication technologies that improve their overall efficiency during the preparedness and the response phases of a crisis

Finally support measures were financed to consolidate the lessons learnt from the various project

- **RISK_FORCE** is an accompanying measure focused on the management of natural risks: fires, floods and landslides. To serve the GMES objectives, it uses the results and assures the continuity of EC projects and studies together with national operational achievements, RISK_FORCE will produce a shared European protocol for natural risks management, a service specification, and an implementation plan. RISK_FORCE is a decisive step towards the design of a generic European platform for natural risks management, fostering co-operation between European entities dealing with prevention, early warning, crisis management and post crisis assessment, and providing a significant contribution to both the GMES feasibility assessment, and to the preparation of a Risk integrated project as part of the 6th FP.
- CLIFF produced a set of documents providing the framework for the standardisation of critical components for disaster management activities.: standardised flood and fire information collection, integration, and exchange; the provision of new business models for environmental information services; improved decision support strategies, decision support tools and their integration into open networks; provide new concepts for and experiences.

Last but not least, in the field of road accident:

- **E-MERGE** is working on the availability and functioning of vehicle based emergency call systems from any vehicle anywhere in Europe via the development of a X-112 call. The key objective of ***E-MERGE*** is to develop, test and validate common specifications for the vehicle emergency call at all levels along the vehicle emergency call chain and to ensure that the technical, organisational and business structure is available for a European wide take-up of the solution. Other main objectives are to remove current cross-border and language problems and to make an interoperable solution covering the whole of Europe and including all European vehicle manufactures, which after the project will be adopted by the involved vehicle manufactures, E-Call service centres, PSAPs and emergency agencies

Improving risk management is a strategic objective of the IST priority within the sixth Framework Programme It aims at implementing the latest scientific methods into applications and services, it will also take advantage of the GMES action to optimise the use of global monitoring technologies within the risk assessment process.

PREVENTION ACTIVITIES FOR THIRD COUNTRIES IN THE FORM OF STRUCTURAL CONSOLIDATION

EXTERNAL ECONOMIC ACTIVITIES

A certain number of activities have been embarked upon in the context of external economic relations. Projects concern regions outside Europe and the Mediterranean Basin and will not be discussed here.

DEVELOPMENT POLICY

Food security and risk management

Risk prevention activities are of strategic importance for food security. As a result, the food aid department of the Directorate General for Development is funding stockpiling and rapid alert activities in order to reduce the risks of famine in vulnerable countries. It also funds a large number of monitoring operations (early warning systems) in these same countries.

In 1993, the Community devoted a total of 3,178,000 ECU to funding such operations. By way of example, 1,089,450 ECU were granted for stockpiling activities carried out by non-governmental organisations.

One of the uses to which this finance was put was the building of a warehouse for food stockpiles in Nicaragua and Zimbabwe. It has also contributed towards the establishment of a food security and alert system in the Darfur region of Sudan.
770,000 ECU were also placed at the disposal of international organisations (World Food Programme, United Nations High Commissioner for Refugees) for the building of warehouses for food aid stockpiles in several countries in Africa, Asia and the Middle East.

One of the most effective ways of dealing with the risk of famine in countries concerned is the constitution of food security stockpiles. The Community is funding the constitution and management (deliveries, turn-over etc) of such security stockpiles in several countries regularly afflicted by food crises.

Similarly, the Community is financing the development of a computerised risk mapping programme together with the United Nations Food and Agriculture Organisation (FAO) and the non-governmental Save the Children Fund. With the support, amongst other things, of satellite images, the programme should make a significant contribution to controlling the risks hanging over food security in the most vulnerable countries.

The co-operation project run together with the FAO covers all Third World countries. Its aim is to enhance the capacity of the Global Information and Early Warning System (GIEWS).
Other projects relate primarily to countries in Africa.

ACTION TO PREVENT FOREST FIRES

The European Union attaches particular importance to the protection of its forestry heritage. Fires prevent all sustainable development in almost half of the forests in the Union. This is why it supports a series of activities to help member states in their efforts to protect forests. Since 1979, regional development programmes have also incorporated measures to prevent forest fires. Furthermore, in 1986 the Council of Ministers of the European Community adopted a specific action plan to protect forests against fires and this action plan was strengthened in 1992 and 1997.

Specific action

This action is designed to boost the efforts of member states to prevent forest fires while making sure that forestry measures financed by the Community (such as tree planting) in areas where there is a risk of fire are accompanied by protective measures. The action is carried out by the Permanent Forestry Committee, in close co-operation with member states and the European

Commission, and makes use of the Community system of information on forest fires which is designed to afford a better assessment of fire prevention measures.

Fire risk areas

As part of this action, the Commission has approved lists of areas of high and medium fire risk submitted by Portugal, Spain, France, Greece, Italy and Germany, covering a total of 60 million hectares (about half of Europe's forests).

Plans to protect forests against fires

It has also approved 80 plans to protect forests against fires submitted by the member states concerned. These plans, which cover practically all the medium and high fire-risk areas, are particularly important tools, as they set out the measures taken by member states to protect their forests and thus offer a better guarantee of success of the forestry action co-financed by the European Union.

Prevention schemes

Between 1992 and 1998, 700 fire-prevention schemes were submitted by member states and approved for Community financial aid totalling 84 million ECU. These included information campaigns, preventive forestry measures such as clearing of brushwood, protective infrastructures such as trails, firebreaks and water supply points, and surveillance measures such as summer patrols or building watchtowers. Training schemes for specialised staff and the implementation of geographical information systems are also receiving support.

Support for preventive measures in the framework of Rural Development

Restoring forestry production potential damaged by natural disasters and fire and introducing appropriate prevention measures, as well as maintaining fire-breaks trough agricultural measures can be supported under the Rural Development Policy being part of the Common Agricultural Policy financed by the European Agricultural Guidance and Guarantee Fund. Member States/region can insert appropriate measures in their Rural Development Plans.

The Community system of information on forest fires

The Community system of information on forest fires today contains information on more than 500 000 fires in 320 provinces of the European Union, compiled over 13 years from 1985 to 1997. It is a useful tool for monitoring and evaluating the protective action taken by member states and the Commission.

It shows that fires are still the fundamental problem facing endangered forests in the European Union, with an annual average of 40 000 outbreaks and 500 000 hectares burned. However, there has been a gradual fall in the total area burned since 1985 and the average time taken for firefighters to arrive at the scene and the average time for which fires have burned have also fallen, which shows that there has been an overall improvement in efficiency and that it is important for these efforts to continue.

On the other hand, the number of fires continues to rise alarmingly. As man is responsible for most outbreaks, the fight against the causes of fires remains a priority.

The system also makes it possible to take a regional approach. For example, it can be seen that certain provinces have a very high number of fires, others are characterised by the length of time taken for firefighters to arrive, and others still by fires mainly being started deliberately or being more frequent in winter. It then becomes possible to suggest ways of improving protection systems to deal with each type of problem.

This system has also made it possible for international co-operation to be developed, both at continental level and in the Mediterranean basin, as part of the follow-up to the pan-European conferences on the protection of forests in Europe (Strasbourg 1990, Helsinki 1993 and Lisbon 1998).

COMMUNITY ARRANGEMENTS FOR THE EARLY EXCHANGE OF INFORMATION IN THE EVENT OF A RADIOLOGICAL EMERGENCY (Council Decision of 14 December 1987)

The Chernobyl accident of April 1986 highlighted the lack, at international level, of a system for the transmission of information following a nuclear accident. As early as September 1986, the International Atomic Energy Agency (IAEA) Conference adopted a Convention on Early Notification of a Nuclear Accident, according to which IAEA Member States must inform the Agency and potentially threatened countries of the occurrence of a nulcear accident likely to affect neighbouring countries.

In 1987, the Council of Ministers of the European Community adopted Decision 87/600/Euratom to establish a parallel system in the Community. This Council Decision covers notification of radiological emergencies detected on the territory of a Member State which are not necessarily the result of an accident occurring on that territory. The system, known as ECURIE (European Community Urgent Radiological Information Exchange) backs up the IAEA system and is run by the Directorate General of the Environment, of Nuclear Safety and Civil Protection together with the Member States.

The arrangements apply to the notification and provision of information whenever a Member State decides to take measures of a wide-spread nature in order to protect the
general public in case of a radiological emergency following, in particular, accidents from which a significant release of radioactive materials occurs or is likely to occur.

The Member State that takes such measures immediately notifies the Commission and the Member States affected or likely to be affected, stating the reasons for taking them and providing available information relevant to minimizing the foreseen radiological consequences, if any, in those States.

The information to be provided, without jeopardy to matters of national security, and as far as practicable and appropriate, includes the following:

- the nature and time of the event, its exact location and the facility or the activity involved;
- the assumed or established cause and the foreseeable development of the accident relevant to the release of the radioactive materials;
- the general characteristics of the radioactive release, including the nature, probable physical and chemical form and the quantity, composition and effective height of the radioactive release;
- information on current and forecast meteorological and hydrological conditions, necessary for forecasting the dispersion of the radioactive release;
- the results of environmental monitoring;
- the results of measurements of foodstuffs, feeding-stuffs and drinking water;
- the protective measures taken or planned;

- the measures taken, or planned, to inform the public;
- the predicted behaviour over time of the radioactive release.

On receipt of this information, the Commission forwards it to all other Member States.

The Council Decision also relates to information conveyed by Member States (following notification) to the Commission on measures taken and levels of radioactivity measured in foodstuffs, feeding-stuffs, drinking water and the environment. The Commission then forwards this information to all other Member States.

Points of contact and the Commission department responsible are available on a 24 hour basis.

RADIATION PROTECTION

Following the accident at the Chernobyl nuclear power plant in April 1986, the Community adopted common arrangements for the monitoring of foodstuffs to protect the health of Community citizens and avoid disrupting the internal market. These arrangements, relating specifically to agricultural imports from third countries, were extended by a Council regulation of March 1990, which provides for the setting up of a procedure governing the subsequent and gradual return to normal.

The Chernobyl accident also illustrated the need to improve the flow of information at international, national and local levels. The Community has taken two important decisions in this respect:

- The establishment in December 1987 of the information system ECURIE, compatible with the similar system launced by the International Atomic Energy Agency (IAEA) in the context of the Convention on Early Notification of a Nuclear Accident.
- The adoption in November 1989, of a directive on information to the public on health protection measures to be adopted in the event of a radiological emergency. This directive, supplemented by a later statement, defines the content of information to be given to the public under normal circumstances and in the event of an emergency.

The Community has also taken a series of other measures in the field of information given to the public, including the publication and distribution of manuals, brochures and video films produced for the media, professional circles and the general public.

Among the many activities designed to improve the state of preparedness with regard to a potential nuclear accident, mention should be made of a certain number of initiatives already taken to secure mutual assistance in the event of a nuclear accident or radiological emergency. They include regular meetings of experts whose work consists in creating the conditions for the more effective use of available resources the day an accident occurs. A first provisional inventory of available resources to counter the effects of situations of this kind has already been compiled.

The Council Regulation 3954/87 (EURATOM) of 22 December 1987, as amended by Council Regulation 2218/89 (EURATOM) of 18 July 1989, lays down the maximum admissible levels of radioactive contamination for foodstuffs and feeding-stuffs in the wake of a nuclear accident or in any other radiological emergency situation. These regulations institute a system for authorising the introduction of common ceilings for foodstuffs placed on the market following any future accident that would necessitate such action.

OCCUPATIONAL HEALTH AND SAFETY

The objective of Commission policy in the area of occupational health and safety is, and will remain, to reduce occupational accidents and illnesses to a minimum. The Commission, on the basis of more than thirty years experience, together with the Community's track record in this area , intends to continue to build on this policy whilst at the same time respecting the principle of subsidiarity.

Community occupational safety and health activities began in 1957. Pilot activities were launched by the Commission in the context of the ECSC Treaty to foster research into the health and safety of workers in the coal and steel sectors, and the Council established both the Commission for the promotion of the health and safety of workers in the extractive industries (referred to as the Commission) and the Advisory Committee on Safety, Hygiene and Health Protection at Work (referred to as the Advisory Committee).
Two action programmes followed in 1979 and 1984 , as part of which, certain measures were adopted.

The Single European Act's introduction in 1987 of a legal basis specifically for the protection of the health and safety of workers, Article 118A, has given Community action a tremendous impetus. It was on this basis that the Commission drew up its third action programme in this field in 1988, the Council having recognized it as a useful context for commencing with the implementation of Article 118A.

The aim of Community legislation, in the framework of the internal market and the free movement of workers, is to provide a core of minimum prescriptions guaranteeing an adequate level of protection against occupational accidents and illnesses, and therefore encouraging the free movement of workers.

In the course of recent years, a significant body of legislation has been enacted at the level of the Community, with the adoption by the Council, on a proposal from the Commission, of a framework directive and a series of particular directives, some of which were intended to supplement measures already the subject of technical harmonisation with a view to the completion of the internal market, and others intended to cover specific risks and high risk sectors. The majority of the directives which have been adopted have been transposed by the Member States.

Mention should be made of co-operation with international organisations such as the International Labour Office (ILO) and the World Health Organisation (WHO) in the context of risk assessment and management and the drafting of international instruments.

By way of example, one could quote the International Chemical Safety Cards (ICSC) project being run as part of the International Programme on Chemical Safety (IPCS). These safety cards provide a clear summary of all vital health and safety information relating to toxic chemicals.

The Commission adopted a general framework mapping out its activities in the occupational safety, hygiene and health field (1994-2000) in November 1993. In July 1995 the Commission adopted a Communication on its programme in the field of occupational safety, hygiene and health (1996-2000) . An intermediate evaluation report is currently underway on this subject.

RISK MANAGEMENT TO PROTECT THE HEALTH AND SAFETY OF WORKERS

The first legal provisions to be adopted date back to 1977, and took the form of a directive on safety signs at the workplace. It was followed in 1978 by the first directive on a specific chemical agent, monovinyl chloride, a substance causing considerable alarm at the time due to the discovery of its carcinogenic effects.

In 1980, in the context of the first action programme it was decided not to embark on the study of other specific agents unless absolutely necessary, and to define a more general strategy for the monitoring of chemical, physical and biological agents, leaving the detailed implementation up to the laws and practices of Member States. The resulting 'framework directive' on agents (Council Directive 80/1107/EEC) sought to prevent or limit exposure of workers to chemical, physical and biological agents at the workplace and to protect workers likely to be exposed to such agents.

Member States have been invited in the short-term to take measures to inform workers about asbestos, arsenic, cadmium, mercury and lead and to ensure the health control of persons exposed to asbestos and lead. Shortly afterwards, specific and more detailed arrangements were adopted on lead (Council Directive 82/605/EEC) and asbestos (Council Directive 83/477/EEC).

The 1980 framework Directive included a series of measures to be incorporated into domestic legislative provisions pertaining to the Directive's implementation. The Directive was amended in 1988 to include more specific reference to occupational exposure limits.

With the new Article 118, member States must henceforth pay particular attention to encouraging improvements at the workplace in order to protect the health and safety of workers.

The Treaty makes the harmonisation of existing conditions in this sector a Community objective, whilst at the same time welcoming improvements made at national or Community level.
The adoption of the SEA also contributed to accelerating the decision-making process, through the introduction of a qualified majority voting procedure to replace that of unanimity, which had been the case previously.

One of the first signs of progress to be attributed to the new Article 118A was the adoption by the Council on the 12 June 1989 of a Directive to establish the principles and framework of other Community initiatives designed to encourage occupational health and safety improvements (Directive 89/391/EEC). It contains general principles relating to the prevention of occupational risks, health and safety protection, the provision of detailed information, the full consultation and participation of workers and their representatives , training and general provisions on the implementation of these measures. It defines the respective roles and obligations of employers and workers in achieving these aims and makes provision for the establishment at the workplace of prevention, protection and emergency services.

These measures are designed to protect workers in all establishments and administrations (with certain specific exceptions), irrespective of their scale. In addition, the Directive covers sectors and types of activity which up until then had not been covered adequately by Community health and safety measures. The text lays down guidelines and procedural rules applicable to other activities.

The legislative text also makes provision for the adoption of "specific directives", in this instance, directives dealing primarily with "safety" considerations, which to a large extent had been overlooked in texts prior to 1989 that were more specifically concerned with the "health" aspects of chemical,

physical or biological agents at the workplace. The balance has been gradually restored, although the directives on carcinogenic agents and biological agents have been adopted.

This battery of different texts rounds off provisions governing the management of major accident hazards. In that these accidents are of a complex nature, any controls exercised must necessarily form part of an integrated approach taking account both of man and the environment within an establishment.

With regard to chemicals in general, the main legislative work has consisted in updating the part of the 1980 Directive on chemicals to draw up a new text giving broader treatment to the problem of risks involving the presence of chemicals at the workplace. This Directive was adopted in April 1998 (Council Directive 98/24/CE).

The proposal consolidates, updates and adapts existing provisions relating to chemical agents in the light of present knowledge and brings them into line with the measures envisaged in Directive 89/391/EEC, making more explicit the alignment of Community provisions on ILO Convention No.170 and accompanying Recommendation No.177 on chemicals at the workplace.

NUCLEAR SAFETY

At its plenary meeting in December 1991, the Working Group of the European Commission on reactor safety decided on a plan of work on the subject of regular safety inspections of nuclear power plants in the Member States of the European Union.
The first phase involved gathering information on the solutions opted for by Member States. In the light of the report drawn up it emerges that all countries were implementing safety inspection programmes relating to their ageing nuclear installations.
The second phase of the plan entailed drawing on the experience gained during previous work in order to broaden the study's scope to include current practices in 10 European countries.

The Commission is currently considering the desirability of drafting a Code of Good Practice for use by license holders and licensing authorities.

Resolution of 18 June 1992

The Council Resolution of 22 July 1975 obliged Member States and the Commission to progressively harmonise safety practices and regulations within the Community. The Resolution of 18 June 1992, whilst endorsing the same Community objectives, recommended greater concertation between the Community's safety authorities and added the need to transfer to the countries of Central and Eastern Europe and the former Soviet Union the know-how and experience gained within the European Community.

The fundamental objective of establishing *a safety system* which guarantees adequate protection of the public and the environment against the risks arising out of the use of nuclear energy is being achieved with the aid of two Community working groups set up by the Commission. The Reactor Safety Working Group brings together representatives of all the organisations involved in the safety of installations: power station suppliers, electrical utilities, safety authorities and their technical support organisations. The Nuclear Regulators' Working Group consists solely of the representatives of safety authorities.

The *safety system* focuses on three aspects:

- organisation of safety, in particular at public authority level;
- methods of assessment;
- technical regulations.

Severe accident management

Certain activities in the field of severe accidents have already been launched by the Commission of the European Communities, via its Working Group on reactor safety. An interim report was published in 1989 which took stock of accident management procedures in Member States of the European Union (plus Finland and Sweden) to avoid the expulsion of molten core fragments under high pressure, to guard against the production of hydrogen in the containment system, for cooling molten corium and for controlling rising pressure in the containment system due to a corium-concrete interaction.

Activities forming part of the technical assistance programme for countries of the Commonwealth of Independent States, TACIS

TACIS has recently launched a call for tenders for the implementation of a pilot radiation early warning system in the Republics of Ukraine and Belarus. This pilot system consists of a single distributed radiation monitoring network around the nuclear power plants of Ignalina (Lithuania), Rivne and Zaporizhya (Ukraine). In each republic the information from sensors is concentrated at local processing centers at Minsk and Kiev. The national centers in Minsk and Kiev are then able to manage the national monitoring systems as required. Alarms may be raised at either local and national centers.

THE ENVIRONET PROGRAMME (ENVIRONMENT NETWORK) OF THE "EUROPEAN NERVOUS SYSTEM"

The ENVIRONET project, launched on the initiative of the European Community, deals with the implementation of computer applications and transmission networks designed to prevent and manage crises involving the pollution of maritime coasts, the air and rivers. More specifically, these systems are intended to improve the conditions for triggering an alert and the real-time transmission of information at European level. In other words, the aim of the project is to establish a European information and exchange system relating to the environment between different public authorities in Europe.
The project's value lies in facilitating the monitoring of accidental pollution and providing a useful operational tool in the event of an accident or serious crisis.

ENVIRONET is a viewdata network using highly sophisticated technology in the data processing and telecommunications fields specially devoted to tasks relating to the environment, such as alarm and incident management, crisis management, control and monitoring activities, situation assessments and data exchange.

Pilot scenarios, known as ECASE (Emergency Control and Alarm Systems based on ENVIRONET) have demonstrated the feasibility of the ENVIRONET concept in several environmental emergency and crisis management situations in different regions in Europe.

ECASE AIR illustrates alarm and incident management, both in the event of an accident involving hazardous substances leading to air pollution, and in a normal situation, as well as the exchange of relevant information.

ECASE RIVER illustrates alarm, reporting and decision support functions for use by river authorities in the event of a pollution alert.

ECASE COAST illustrates alarm and incident management in the event of the pollution of coastal waters.

ASSISTANCE PROGRAMMES FOR THE COUNTRIES OF CENTRAL AND EASTERN EUROPE AND THE COMMONWEALTH OF INDEPENDENT STATES

In the area of nuclear safety, the assistance programme of the European Union includes, inter alia, design studies for the improvement of less safe existing installations, assistance on the ground and support given the relevant regulatory authorities.
The two programmes dealing with nuclear safety , TACIS and PHARE, are run by the Directorate General "External Relations: Europe and new independent States, foreign policy and common safety, external department" in close co-operation with the other specialised Directorates General.

THE TACIS REGIONAL PROGRAMME FOR THE REHABILITATION OF TERRITORITIES AFFECTED BY THE CHERNOBYL DISASTER

In 1994 the TACIS programme of the European Union launched a 6 MECU programme for the rehabilitation of the territories affected by the Chernobyl disaster. The objective of the TACIS regional programme is to stimulate the economic regeneration of the affected territories and to help Ukraine, Russia and Belarus to cope with social and health problems resulting from the accident and its effect on the populations.

The following topics were launched during 1994:

- Training of medical staff engaged in the diagnosis and treatment of thyroid cancer. This programme complements an ECHO initiative to provide medical equipment.

- Optimisation of the supply in hormone L-Thyroxine necessary for the lifetime of people affected after surgical treatment of the cancer.

- Optimisation of supply of iodised table salt necessary for prevention of the endemic diseases affecting the regions around Chernobyl. The former Soviet Union had to stop the campaign of providing such salt two years before the accident because of the lack of financial support.

It should be noted that the TACIS Chernobyl programme favours concrete projects which are able to demonstrate tangible results in the short/medium term. All the "radiation related" projects are first discussed with the Directorate General for Science, Research and Development, which has already developed expertise in this specific field.

The TACIS programme for Chernobyl also includes components addressing rehabilitation of contaminated areas, support to economic development and public information towards prevention and control of food products.

JOINT RESEARCH CENTRE (JRC)

Web site : http://www.jrc.cec.eu.int

Under the sixth Framework Programme for Research and Development, the JRC will continue to provide scientific and technical support to develop a European framework for forecasting, assessing, managing and reducing risk. In its Multi Annual Work Program 2003-2006, the JRC will develop an integrated approach towards the management of natural and technological hazards. The relevant R&D activities will continue during the 2003-2006 FP, planning also the extension of some of the above systems to Candidate Countries.

Institute for Environment and Sustainability (IES)

In the field of natural hazards IES-JRC focuses its efforts on:

- Development of a European Forest Fire Information System (EFFIS) including forest fire risk forecasting, forest fire damage assessment, risk zoning and environmental related applications. This system will include the European Forest Fire Risk Forecasting System (EFFRFS), which delivers during the fire season harmonized daily risk maps for the whole of Europe.

- Development and testing of a European Flood Alert System (EFAS) for trans-national catchments areas, based on the LISFLOOD methodology following COM (2002)481.

- Evaluation of flood defense and mitigation plans in major European trans-national catchments through scenario modeling of engineering measures and land use changes on flood risk, based on a harmonised methodology.

- Development of a methodology towards a European flood hazard map.

- Feasibility study on flash flood forecasting

Horizontal activities:

Contribute to the development of Global Monitoring for Environment and Security (GMES).

Contribute towards the development of a European Spatial Data Infrastructure through participation in INSPIRE (Infrastructure for Spatial Information in Europe).

Contribute to the JRC emergency response mechanism for civil protection and environmental emergency situations.

ECHO : EUROPEAN COMMUNITY HUMANITARIAN OFFICE

http://europa.eu.int/comm/echo/index

The European Union as a whole (i.e., the 15 Member States and the Commission) is one of the world's main humanitarian aid donors; the Humanitarian Aid Office (ECHO) is the service of the European Commission responsible for this activity.

ECHO's main function is to launch operations that are designed to meet immediate humanitarian needs. It is in charge of implementing European Community decisions granting humanitarian aid to victims of natural disasters or armed conflict in non-member countries. These decisions are aimed at saving lives and/or ensuring people's short-term survival by providing relief in the form of food, medicines, temporary shelter, etc. Operations are, however, actually carried out by non-governmental organisations (NGOs) and specialised organisations

Thanks to ECHO, humanitarian action occupies a key position in the EU's external action. ECHO is the world's main player in this field.

Through ECHO funding, some 18 million people are helped each year in more than 60 countries through 200 partners (NGOs, ICRC, and UN agencies like the UNHCR and the WFP). The Humanitarian Aid Office spends more than €500 million a year on financing humanitarian projects.

This importance is due to the growth in the number of serious crises in the world and reflects the EU's willingness to take on a leading role in international humanitarian efforts. It is against this background that the European Community Humanitarian Office (ECHO) was established in 1992.

The EU aims to make its aid to third countries struck by natural disaster or conflict more effective and more humanitarian. ECHO reflects this desire.

ECHO aid was modest at the outset, but it rose rapidly to reach a level similar to the assistance provided bilaterally by the EU Member States. It is now also comparable to the levels of humanitarian aid provided by the United States.

The European Union's mandate to ECHO [**Regulation (CE) n° 1257/96**] is to provide emergency assistance and relief to the victims of natural disasters or armed conflict outside the European Union. The aid is intended to go directly to those in distress, irrespective of race, religion or political convictions.

ECHO's task is to ensure goods and services get to crisis zones fast. Goods may include essential supplies, specific foodstuffs, medical equipment, medicines and fuel. Services may include medical teams, water purification teams and logistical support. Goods and services reach disaster areas via ECHO partners.

Since 1992, ECHO has funded humanitarian aid in more than 85 countries. Its grants cover emergency aid, food aid and aid to refugees and displaced persons worth a total of more than € 500 million per year.

What does ECHO finance?

A significant proportion of ECHO funding is used to cover the full costs of operations. There are also situations in which it co-finances activities together with other funding agencies, international organisations or EU Member States.

Community-financed humanitarian actions can be implemented at the request of international organisations and bodies, NGOs, Member States, beneficiary third countries, or on the Commission's own initiative.

In compliance with the legal provisions, these actions are taken for the benefit of people in developing countries, ACP states and other third countries who are victims of natural catastrophes and man-made crises (wars, conflicts etc) or of comparable exceptional situations. Support is provided for the period of time required to tackle the resulting humanitarian needs, as well as for demining activities - including awareness-raising among local people of the threat posed by antipersonnel mines.

- The type of assistance that is provided includes medical teams and equipment, medicines, tents, food, various kinds of emergency equipment, diesel generators and fuel - indeed any product or material that is needed to implement humanitarian actions.
- Specific and highly targeted food aid, supplied to meet humanitarian needs, is provided to people facing serious food shortages as a result of a catastrophe (such as drought, floods or an earthquake)
- The funds are also used for the purchase of any products or materials required to carry out humanitarian actions, including house and shelter construction for the affected populations, short-term rehabilitation and reconstruction works (notably of infrastructure and equipment), external personnel costs (whether expatriate or local), storage, international and national haulage, logistical support, distribution of relief supplies and any other activity aimed at facilitating access to the people for whom the aid is destined.
- ECHO's mandate includes the funding of training and studies in the humanitarian field, of activities designed to highlight the "Community" character of the aid, and of information and awareness-raising actions. These actions are targeted, in particular, towards public opinion in Europe and in those third countries where the Community is funding significant humanitarian work (Article 4, Council Regulation 1257/96 of 20 June 1996). Thus, there are two types of subsidy available - for training, studies and network actions and for awareness-raising actions.
- Finally, ECHO also awards service contracts to answer some of its needs.

Related activities

ECHO does more than just fund humanitarian aid.

- It carries out feasibility studies for its humanitarian operations.
- It monitors humanitarian projects and sets up coordination arrangements.
- It promotes and coordinates disaster prevention measures by training specialists, strengthening institutions and running pilot micro-projects.
- It gives its partners technical assistance.

- It raises public awareness about humanitarian issues in Europe and elsewhere, through actions carried out directly or by call for proposals (12 subsidies were granted in 2002 by ECHO in order to promote the awareness of humanitarian aid).

It finances network and training study initiatives in the humanitarian field (NOHA): Network on Humanitarian Assistance.

NOHA is the first network of universities at European level dealing with the development of Humanitarian Assistance Education. It seeks greater professionalism among humanitarian workers through the provision of solid intellectual grounding and the development of sound concepts and principles that would in turn lead to "good practice". It also contributes to greater awareness of humanitarian issues among the broader public and among policy makers. It has been a model of inspiration for other quality networks.

4. EUROPEAN SPACE AGENCY (ESA)

Web site: http://www.esa.int

The European Space Agency (ESA) was established by an Intergovernmental Convention of 1975 with the aim of promoting European co-operation in space research and space technology and their applications.

The programmes run by the Agency are divided into two categories: obligatory and optional programmes

Member States must subscribe to the obligatory programmes in proportion to their Gross National Product. These obligatory programmes concern basic activities (technological research, study of future projects, education, etc) and scientific activities (satellites and space sciences).

With regard to optional programmes, member States can freely decide whether they wish to contribute to activities. These optional programmes include:

Earth observation, in particular GMES (Global Monitoring of Environment and Security);
telecommunications;
navigation by satellite, in particular GALILEO
launchers (Ariane and FLTP Programmes)
manned flights (European participation in the International Space Station, flights of European astronauts
microgravity research.

GMES and GALILEO are joint endeavours with the European Commission.

The Agency is also a founding member of the International Charter “Space and Major disasters” signed in 2000.

The Agency, whose headquarters are in Paris, oversees the activities of specialised institutes elsewhere in Europe, the main ones being:

the European Space Research and Technology Centre (ESTEC) in Noordwijk, The Netherlands;
the European Space Operations Centre (ESOC) in Darmstadt, Germany;
the European Space Research Institute (ESRIN) in Frascati, Italy.

The Agency’s total budget for 2002 amounts to approximately 2,800 Million Euros.

5. THE COUNCIL OF EUROPE

THE COUNCIL OF EUROPE's EUR-OPA MAJOR HAZARDS AGREEMENT

Site web: http://www.coe.int/europarisks

PRESENTATION OF THE AGREEMENT

The Committee of Ministers of the Council of Europe adopted Resolution (87) 2 in March 1987 establishing an intergovernmental Open Partial Agreement known as the EUR-OPA Major Hazards Agreement". It is named "Open, Partial" because any State, whether it be a member or not of the Council of Europe, may apply to accede to it.

This Open Partial Agreement has to date 25 member States : *Albania, Algeria, Armenia, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, France, Georgia, Greece, Lebanon, Luxembourg, Malta, Republic of Moldova, Monaco, Morocco, The Former Yugoslav Republic of Macedonia, Portugal, Romania, Russia, San Marino, Spain, Turkey, Ukraine*. Japan has the status of observer.
Austria, Germany and Switzerland are regularly invited to attend the Agreement's meetings.

The European Commission, UNESCO, WHO and the Office for Co-ordination of Humanitarian Affairs (OCHA) of the United Nations participate in the Agreement. The International Federation of Red Cross and Red Crescent Societies is associated in its work.

MAIN OBJECTIVE

To reinforce and promote co-operation between member States in a multi-disciplinary context to ensure better prevention, protection and organisation of relief in the event of major natural or technological disasters by calling upon present day resources and knowledge to ensure an efficient and interdependent management of major disasters.

PRESIDENCY

Since December 2003 :

Presidency of the Agreement ensured by Spain
Vice-Presidency ensured by Morocco and Romania

MINISTERIAL MEETINGS

The last Ministerial meeting was held in Valdragone, Republic of San Marino, on 12 December 2003.

ACTIVITIES

Activities are carried out at several levels:

a. Political level

- establishing a forum for risk managers to deal with risk prevention, crisis management and rehabilitation issues;

- setting up of a permanent network of Euro-Mediterranean centres (26, see list below), allowing member states to play a concrete, ongoing role in co-operation programmes in the risk management field;

- on-going co-operation with other international and European organisations with a view to identifying opportunities for synergy through joint programmes : (the European Commission, the European Space Agency, UNESCO, ISDR (United Nations International Strategy for Disaster Reduction), the European Federation of National Insurance Associations, the European Bank for Reconstruction and Development, the European Investment Bank, OCHA (United Nations Office for the Coordination of Humanitarian Affairs).

Kosovo: at the request of the Special Representative of the Secretary General of the United Nations based in Pristina, a risk analysis was carried out in the Kosovo area (March-April 2000). The Agreement participated in the setting up of the Kosovo School of Civil Protection, with a view to transforming the UCK into a civil defence system- the Kosovo Protection Corps (KPC). A six-month course was organised to train the staff of this new school. A Handbook for the training of the instructors of the School of Civil Protection was published. Nine of the Agreement's Euro-Mediterranean Centres participated in this initiative.

Democratic Republic of Congo (DRC): At the request of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), contribution to the Emergency Plan between Goma (DRC) and Gisenyi (Rwanda), linked to the volcanic activity of the Nyragongo, and training and setting up of a civil defence corps in Goma (DRC) with the plan for its extension to the whole of the Congo and if possible to the Great Lakes region.

b. Technical level :

- Raising awareness among risk managers of the potential uses of space technology in the risk management sphere: telecommunications systems, processed space imagery and positioning techniques (the STRIM programme);

- Implementing an experimental space telecommunications network (Intranet) between risk managers, which circulates "knowledge" (processed data) to assist decision-making and co-operation in the risk management field: the EDRIM programme implemented in conjunction with the European Commission (RIMS project);

- Initiatives to motivate the international scientific community to develop new "products" that can immediately be deployed within the EDRIM (Intranet) system without disrupting the existing systems.

- Setting up of a programme on scientific community's contribution to forecasting and prevention of disasters "Assistance in risk management decision making":

  - seismic risk

- early warning systems : coast surveillance and tsunamis detection
- coastal risks in the Mediterranean, the Black Sea and the Caspian Sea
- environmental security
- cultural heritage in risk areas.

- Project for the setting up of a monitoring system of the environmental radioactivity in the Chernobyl exclusion zone in liaison with the European Centre of Technological Safety (TESEC) in Kiev, Ukraine.

- Implementation of the IRIS Programme (International Risk Information System) based on the setting up of radio programmes twinned with Internet :

i. for the general public : Nîmes region (France)
ii. for schools: Bordeaux, France
Casablanca, Morocco
Ain-Temouchent, Algeria
Sofia, Bulgaria

c. Training:

- In schools:

Setting up of a Euro-Mediterranean network of schools, implementing a joint approach to foster risk prevention awareness among children (regarded as a prime target for such activities, as through children it is possible to reach entire families, giving the project a snowball effect);.

Programmes for raising children's awareness to risk prevention: pilot actions in Algeria, Bulgaria, Morocco, Russia, France and Democratic Republic of Congo.

Implementation of the "Street Net" programme (risk prevention to socially excluded children).

- In universities:

Introduction of a Master in risk science (a new multi-disciplinary course of study, approved by the French Ministry of Education, on offer at Montpellier University).

Introduction of a European master's degree in disaster medicine at the instigation of the European Centre for Disaster Medicine in San Marino.

Preparation of European Masters on :

- the legal aspects of risk management at the University of Gent in Belgium (English language) and at the University of Montpellier 1, France (French language)
- seismic engineering at the University of Skopje, Macedonia
- "Local authorities and risk management" at the Technological University of Cergy Pointoise, France
- disaster medicine in Algiers.

Preparation of a training course for field operators to detect children having undergone a trauma following a disaster: programme of psychological support, Algiers.

d. Publications:

- Ethics and disaster medicine (in French only) Council of Europe, Edition 2002
- Handbook for the training of instructors of the Schools for Civil Protection, 2002
- Ancient Buildings and Earthquakes (CUEBC, Ravello)
- Final Report : Mobilisation of the Scientific Community to improve Risk Management (Council of Europe, 2002)

Audio-visual productions:

- Concerted management of forest fires : EDRIM/RIMS
- Assistance in decision-making : New Technologies
- the Agreement's activities in Kosovo.: "On the road to peace in Kosovo".

The European Advisory Evaluation Committee for Earthquake Prediction

This Committee is responsible for giving enlightened advice on the earthquake predictions put forward by scientists. It was established in the context of the Council of Europe EUR-OPA Major Hazards Agreement in the light of the problems raised by earthquake predictions made by groups of scientists, announced directly or through the press, involving considerable potential damage and loss of life.

Seismologists, aware of this kind of problem, had themselves adopted a European Code of Ethics on information relating to earthquake prediction during the International Conference organised by the Council of Europe in Strasbourg from 15-18 October 1991.

It is a rare example, at international and European level, of governments producing a scientific assessment tool to assist in political decision-making on the basis of a European Code of Ethics.

The Committee has been operational since 10 June 1994 and is in a position to reply to requests forwarded by the governments of Member States of the EUR-OPA Major Hazards Agreement.

The European Warning System

The objective of the European Warning System (SAE) is to foster information and concertation between member States of the Agreement in the assistance provided to a State hit by a disaster. It concerns mainly earthquakes of a magnitude higher than or equal to 6 on the Richter scale. The European Warning System is also used for other types of major disasters.

In order to ensure the effectiveness of assistance provided to populations affected by major disasters, the European Early Warning System seeks to promote co-operation between:

- the country affected,
- the member States of the EUR-OPA Major Hazards Agreement,
- international institutions participating in the Agreement.

In the event of an earthquake whose magnitude is more than or equal to 6 on the Richter scale and of an earthquake whose magnitude is less than that, but whose destructive effects are important, the Euro-Mediterranean Seismological Centre in Paris (EMSC) informs in real time, the 24-hour stand-by team

responsible for the warning system at the Council of Europe of the location of the earthquake's epicentre and its magnitude.

Seismic surveillance is carried out by 33 networks of seismometres. Prompt determination of epicentres allowing the location of the epicentre within the hour following the seismic event is achieved by processing the data of the 33 networks by EMSC. The networks are situated in : Germany, Israel, Turkey, United Kingdom, Norway, Switzerland, Greece, Slovenia, Belgium, USA, Canada, Djibouti, Polynesia, Russia, Italy, Spain, France, Netherlands, Lebanon, Rumania, Portugal, the Ivory Coast, Nepal, Mongolia.

As soon as the person responsible for the European Warning System is informed of the occurrence of an earthquake, he triggers the system addressing two types of messages:

A first message is addressed to the country affected, requesting for additional information on the situation in the country as well as its decision on a request for aid from the other member States and the institutions participating in the EUR-OPA Major Hazards Agreement. On the basis of the response of the affected country, the person responsible for the European Warning System (SAE) immediately sends the information to the member States (operational structures and Permanent Correspondents) and to the institutions participating in the Agreement.

Parallel to the first message, a second message giving technical data on the earthquake is addressed to the member States and to the institutions participating in the Agreement : European Union, Office for the coordination of Humanitarian Affairs (OCHA), WHO, UNESCO of the United Nations.

The intervention of the European Warning System (SAE) is limited to the dissemination of technical data on an earthquake (time, location, magnitude) as well as to a first evaluation of damages among member States and international organisations participating in the Agreement. Humanitarian aid is then ensured by the Commission of the European Union (through DG XI and ECHO) and by OCHA of the United Nations.

This share of duties was taken during a tripartite meeting in Geneva in December 1994 in the framework of the follow up to Resolution 4 adopted at the Ministerial meeting on the reinforcement of the links between international institutions in the field of risk management adopted during the 6th Ministerial meeting on 6 October 1994 in Brussels.

NETWORK OF EURO-MEDITERRANEAN CENTRES OF THE EUR-OPA MAJOR HAZARDS AGREEMENT

A permanent platform for scientific and technical co-operation has been established through the Euro-mediterranean network of 26 specialised Centres with their functions of research, training and expertise. These structures allow for a multinational and pluridisciplinary approach to the risk issue.

List of specialised Centres

1. ***CEMEC*** *- European Centre for Disaster Medicine (San-Marino) / Centre Européen pour la Médecine des Catastrophes, (Saint-Marin)*

2. ***CUEBC*** *- European University Centre for the Cultural Heritage (Ravello, Italy) / Centre Universitaire Européen pour les Biens Culturels, (Ravello, Italie)*

3. ***AFEM*** *- European Natural Disasters Training Centre (Ankara, Turkey) / Centre Européen de Formation sur les Risques Naturels, (Ankara, Turquie*

4. ***ECPFE*** *- European Centre on Prevention and Forecasting of Earthquakes (Athens, Greece) / Centre Européen pour la Prévention et la Prévision des Tremblements de Terre (Athènes, Grèce)*

5. ***EMSC*** *- European Mediterranean Seismological Centre (Bruyères-le-Châtel, France)/* ***CSEM*** *- Centre Sismologique Euro-Méditerranéen, (Bruyères-le-Châtel, France)*

6. ***CERG****/ European Centre for Seismic and Geomorphological Hazards (Strasbourg, France) Centre Européen sur les Risques Géomorphologiques (Strasbourg, France*

7. ***CETICA-*** */Centre euro-méditerranéen des TIC (Technologies de l'information et de la communication)(Draguignan, France))/Euro-Mediterranean Centre for Technologies of information and Communications (Draguignan, France)*

8. ***ECGS*** *- European Centre for Geodynamics and Seismology (Walferdange, Luxemburg) / Centre Européen de Géodynamique et de Sismologie, (Walferdange, Luxembourg)*

9. ***ICoD*** *- Euro-Mediterranean Centre on Insular Coastal Dynamics (Valletta, Malta) /-Centre Européen de la Dynamique Côtière Insulaire (La Valette, Malte)*

10. ***ECNTRM-*** *European Centre of New Technologies for the Management of Natural and Technological Major Hazards (Moscow, Russian Federation) / Centre Européen des Nouvelles Technologies pour la Gestion des Risques Naturels et Technologiques Majeurs (Moscou, Russie)*

11. ***ISPU*** *- Higher Institute of Emergency Planning (Florival, Belgium) / Institut Supérieur de Planification d'Urgence (Florival, Belgique)*

12. ***CEISE*** *- European Centre for social Research in Emergency Situations (Madrid, Spain) / Centre Européen de Recherche sociale dans des Situations d'Urgence (Madrid, Espagne)*

13. ***CERU*** *- European Centre on Urban Risks, (Lisbon, Portugal) / Centre Européen sur les Risques Urbains (Lisbonne, Portugal)*

14. ***ECTR*** *- European Interregional Educational Centre for Training Rescuers (Yerevan, Armenia) / Centre Européen de Formation Inter-Régionale pour les Sauveteurs ,(Erevan, Arménie)*

15. ***GHHD*** *- European Centre on Geodynamical Risks of High Dams (Tbilisi, Georgia) / Centre Européen sur les Risques Géodynamiques liés aux Grands Barrages (Tbilisi, Géorgie)*

16. ***ECMHT*** *- European Centre on Training and Information of Local and Regional Authorities and Population in the Field of Natural and Technological Disasters (Baku, Azerbaijan) / Centre Européen de Formation des Autorités Locales et Régionales dans le Domaine des Catastrophes Naturelles et Technologiques (Baku, Azerbaïdjan)*

17. ***CEPRIS*** *- Euro-Mediterranean Centre for Evaluation and Prevention of Seismic Risk (Rabat, Morocco) / Centre Euro-Méditerranéen sur l'Evaluation et la Prévention du Risque Sismique (Rabat, Maroc)*

18. ***ECRP****- European Centre for Risk Prevention (Sofia, Bulgaria) / Centre Européen sur la Prévention des Risques (Sofia, Bulgarie)*

19. ***CRSTRA*** *- Centre Euro-Méditerranéen sur les régions arides (Ksar Chellala, Algérie) / Euro-Mediterranean Center on research in arid zones(Ksar chellala, Algeria)*

20. ***TESEC -*** *European Centre of Technological Safety, (Kiev, Ukraine) / Centre Européen de Sécurité Technologique, TESEC, (Kiev, Ukraine)*

21. ***ECILS*** *- European Centre on the Vulnerability of Industrial and Lifeline Systems, (Skopje, Former Yugoslav Republic of Macedonia) / Centre Européen sur la Vulnérabilité des systèmes et réseaux industriels (Skopje, Ex-République Yougoslave de Macédoine)*

22. ***ECMNR*** *– European Centre for Mitigation of Natural Risks / Centre européen pour la réduction des risques naturels (Kishinev, Moldavia)*

23. ***Be-Safe-Net*** *- European Centre for Disaster awareness with the use of the Internet (Nicosia, Cyprus) / Centre européen pour la sensibilisation aux désastres (Nicosie, Chypre)*

24. EMORIM- *Euro-Mediterranean Observatory on Risk Management (MontpellierFrance) /Observatoire euro-méditerranéen sur la gestion des risques (Montpellier, France)*

25. ***AECRIS-*** *European Centre for Rehabilitation of Buildings (Bucharest, Romania) / Centre européen pour la réhabilitation des bâtiments, (Bucarest, Roumanie)*

26. ***AECFF-*** *European Centre on Forest Fires (Athens, Greece) / Centre européen sur les feux de forêt, (Athènes, Grèce)*

- EUROPEAN CENTRE FOR DISASTER MEDICINE
CEMEC, San Marino

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Web	www.diesis.com/cemec

President of the Centre and Scientific Committee: Prof. Corrado MANNI
General Secretary and Director : Prof. Giovanni GALASSI

Set up in 1987.

Objective
The centre was set up in 1987 to encourage and develop training and research in the field of disaster medicine.

Activities
Since 1987, CEMEC has always been involved in *training and research activities* aimed at health personnel, volunteers involved with emergency situations.

Training
CEMEC has organised over the last few years:
- Intensive training courses on the main themes related to Disaster Medicine;
- International seminars and congresses on topical themes in the field of natural and technological disasters
- Courses specific to veterinary actions in disasters;
- Courses on the ethical and psychological aspects of disasters;
- The European Master in Disaster Medicine (EMDM). The Master is organised by CEMEC in collaboration with the Universities of San Marino, Novara and Brussels. This one-year post-university course is reserved for doctors. The course is based on a period of study in San Marino and on a distant learning study period by Internet. The working language is English. For further details, please contact CEMEC (cemec@omniway.sm) or Professor Francesco Della Corte (fdcorte@tin.it).

Research activities
Research activities are carried out in cooperation with other European Specialized Centres and International institutions.

EUROPEAN UNIVERSITY CENTRE FOR THE CULTURAL HERITAGE

CUEBC
, Ravello, Italy

Coordonnentro Universitario Europeo per i Beni Culturali
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Tel. +39 089 857669 / +39 089 858101
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www.cuebc.amalficoast.it

Objective

The European University Centre for the Cultural Heritage (CUEBC) was set up on the initiative of the Italian authorities and the Council of Europe. The institution's aim is to become a multidisciplinary European workshop, to promote cultural cohesion and to act as a forum for exchange between researchers and as a training centre for young graduates and students.
The Centre enjoys the status of a non-profit-making association recognised by decree of the President of the Italian Republic.

Activities

1. Training of technicians and public officials (engineers, architects, geologists, heritage managers, civil protection officers) concerned with the protection of historic buildings in seismic zones by performing analyses and involving the local community, in order to rediscover and re-evaluate the technical aspects of local seismic culture.
2. Production and dissemination of operational and communication material to support research activities aimed at reducing vulnerability by rehabilitating local seismic cultures.
3. Organisation of meetings and development of interdisciplinary scientific projects on techniques and procedures for the protection of the cultural heritage in seismic zones.

EUROPEAN NATURAL DISASTERS TRAINING CENTRE

AFEM, ANKARA, TURKEY

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Ministry of Public Works and Settlement
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Website: http//afem.bayindirlik.gov.tr
Director : Mrs. Hülya İLGEN

The European Natural Disasters Training Centre (AFEM) is a non-profit organization, which delivers training on hazard reduction activities.
AFEM was established within the EUR-OPA framework in **1988** and affiliated to the Ministry of Public works and Settlement of Turkey.

Objectives

Turkey is situated on one of the highest seismically active parts of the world. Each year the Mediterranean Region faces earthquake disasters in various degrees. Therefore, Italy, Greece, Algeria, Portugal, Turkey, etc. the countries in this region is disaster prone in general, where earthquake constitute the major share of causalities and physical damages. Within this context, AFEM aims to reduce effects of disasters in general and earthquake in particular through education and training seminars. The objective of AFEM is also to train the staff of local administrations and public, in disaster management and awareness campaigns. AFEM seeks new techniques of training on disaster management.

EUROPEAN CENTRE ON PREVENTION AND FORECASTING OF EARTHQUAKES
E.C.P.F.E., ATHENS, GREECE

32 Xanthou Str., 154 51 Athens, Greece
Tel.+30.10.6728000 Fax +30.10.6728240
Director : Mr. Nikitas PAPADOPOULOS,
e-mail:ecpfe@oasp.gr
website: www.ecpfe.gr

Objectives
The Centre deals with various aspects of earthquake prevention and mitigation, prediction and forecasting of earthquakes and disaster management. It also supports research regarding numerous aspects of earthquake protection, keeping a multidisciplinary approach.

Main Activities
The Centre's objectives are achieved through:
- supporting research projects
- organizing conferences, symposia and seminars
- issuing training material and editing of neo-tectonic maps
- participating in European and international events on disaster protection and forming partnerships with public and private agencies
- Publication of a Newsletter once a year
- Edition of technical handbooks on emergency operations
- Monitoring of seismic activity along the Aegean Volcanic Arc
- Edition of the neo-tectonic maps of Greece.

EUROPEAN CENTRE ON GEOMORPHOLOGICAL HAZARDS

CERG, STRASBOURG, FRANCE
3 rue de l'Argonne, F – 67083 STRASBOURG cedex
Tél. : 33 3 90 24 09 36 Fax : 33 3 90 24 09 00
E mail **:** cerg@equinoxe.u-strasbg.fr Web **:** www.cerg.u-strasbg.fr

Founded in 1988.

Objectives

- to facilitate scientific and technical co-operation between its European members and individuals or external organisations
- to prepare, conduct and co-ordinate research
- training, the provision of expert advice and active involvement aimed at understanding and preventing geomorphological hazards, particularly landslides resulting from earthquakes and flash floods

Main activities

- Several research programmes have been carried out over recent years on landslides triggered by earthquakes and on the monitoring of flash floods and catastrophic mudflows.
- In 1999, CERG undertook a feasibility study on the drawing up of an inventory of existing national, regional or local data bases on landslides in Europe, their location, structure, type of content, organisation, technical access paths, administrative or legal, financial conditions, etc. The aim being to offer to CERG members and to other researchers and organisations the possibility to accede to the information recorded in these different data bases.

EUROPEAN MEDITERRANEAN SEISMOLOGICAL CENTRE

EMSC, BRUYERES-LE-CHATEL, FRANCE
European Mediterranean Seismological Centre(EMSC)
CSEM c/o LDG, BP 12, F-91680 Bruyères-le-Châtel
France
Tel : 33 (0) 1 6926 7814 Fax : 33 (0) 1 6926 7000
E-mail : csem@emsc-csem.org Web : http://www.emsc-csem.org

The European-Mediterranean Seismological Centre (EMSC) was founded in 1975, following a recommendation from the European Seismological Commission and in 1987 it was instructed by the Council of Europe to provide the latter with seismic warnings in the framework of the EUR-OPA Major Hazards Agreement.

Objectives

Set up a rapid system for determining the epicentres of earthquakes and to transmit information to the relevant authorities.
Responsible for calculating the chief parameters of major seismic events in the Euro-Mediterranean region,
Collecting all earthquake information in a database and encouraging countries and laboratories to co-operate in the field of seismological research.

The European Alert System
The EMSC has set up an operational alert system triggering to any earthquake whose magnitude is greater than 5.0 over the European-Mediterranean region. The EMSC maintains a 24h/24 and 7d/7 operational activity under the control of the engineer on duty. About 30 seismological station

networks are contributing, in quasi-real time, parametric data related to seismic activity to the EMSC alert system. The EMSC location and magnitude are released in an alert message sent to appropriate authorities, international organisations, EMSC members and none members.

EUROPEAN CENTRE FOR GEODYNAMICS AND SEISMOLOGY
ECGS, LUXEMBOURG

E.C.G.S.
19 rue Josy Welter , L- 7256 Walferdange, Grand.Duchy of Luxembourg
Tel : (352) 33 14 87 1
Fax : (352) 33 14 87 88
e-mail: olivier.francis@ecgs.lu e-mail: patricia.codran@ecgs.lu
http://www.ecgs.lu

Set up in 1988.

Objectives

The main objectives of the European Centre for Geodynamics and Seismology (ECGS) are to develop European co-operation in scientific research in geodynamics and seismology, applied to the prevention of natural disasters. The two major natural hazards explicitly concerned are earthquakes and volcanic eruptions. The Centre acts as a link between scientific research and its application to the prevention and interpretation of hazards. Innovatory techniques for managing risks call for prior scientific research into their causes, in order to secure a better understanding of how they develop and if possible identify their precursors. The Centre sets out to create synergetic relationships between European scientific institutes. It is also concerned to disseminate low cost techniques which make it possible to expand the number of monitoring points in active zones.

Activities

The Centre is developing research programmes directly related to its educational activities. Its links with the Underground Geodynamics Laboratory in Walferdange, part of Luxembourg's National Museum of Natural History, give it access to important scientific and technical information on deformations of the earth's crust.

The Centre is also developing the European research and training programmes on the physics and dynamics of solid earth and on the instrumental techniques for the measurement of ground deformation. The teaching activities (Journées Luxembourgeoises de Géodynamique, workshops and scholarships) as well as the research activities (project financing) are continuing in 2003.

THE EURO-MEDITERRANEAN CENTRE ON INSULAR COASTAL DYNAMICS
ICoD, VALLETTA, MALTA

Foundation for International Studies
St. Paul Str., Valletta VLT 07;
Malta
Tel: +356 21 240746
Fax: +356 230551
e-mail: a.micallef@icod.org.mt
Web page: http://www.icod.org.mt/

Director: Mr A. MICALLEF

Set up in 1988.

Objective

The main brief given to ICoD was to work at three main levels, namely **education**, through the organisation of intensive training courses, symposia, workshops and seminars, **research actions** at the European and international level and **information-related activities**, including those of information gathering and dissemination.

Activities

ICoD's education, research & training activities are carried out under the three thematic programmes of Coastal Zone Management, Remote Sensing and Numerical Modelling. The objectives of these programmes are:

· To promote interaction between local & overseas academics and government authorities through the organisation of symposia, conferences, workshop activities dealing with the coastal environment.
· To carry out research, training and education activities at a Euro-Mediterranean level on interactive processes at the coast, with special reference to insular environments and to develop a better understanding of the interaction of the human/natural interface at the coast.
· To carry out research on technical methodologies related to environmental data gathering, such as water quality criteria, assessment of biological impact to marine pollutants and land use/cover.
· To address maritime risks through the development of a capability for forecasting and prediction of extreme hazardous marine and coastal events. (e.g. Coastal flooding, Extreme storm events, Maritime traffic accidents, Eutrophication phenomena)
· To develop training programmes in Integrated Coastal Zone Management for local and overseas students.

EUROPEAN CENTRE OF NEW TECHNOLOGIES FOR THE MANAGEMENT OF NATURAL AND TECHNOLOGICAL MAJOR HAZARDS

ECNTRM, MOSCOW, RUSSIA

European Centre for New Technologies in Management of Major Natural and Technological Disasters,
Chief of the Agency for Monitoring and Forecasting Emergencies,
7, Davydkovskaya, 121352 MOSCOW
Tel/Fax. 7.095.443.83 44/ 443 83 15
direktor@ampe.ru; direktor@amp.mtu-net.ru; website : www.ampe.ru

Mr. M.A. SHAKHRAMANIAN,
Director

Objectives

- Use of space technologies for forecast, prevention and relief in major natural and technological disasters.
- Analysis of results of the ESA's works in the field of further use of space technologies in interest of risk management. Realisation of demonstration projects.
- Use of space information for flood evaluation in the rivers of the European part of Russia.
- Use of space information for mapping of seismic-prone regions of Northern Caucacus (with GIS technologies).

Activities

- Carrying out legal, economic, organisational and technical projects on the risk management in case of emergency aimed to protect human rights in the field of safe life and work.
- Analysis of present international agreements and other kind of legal acts, declarations adopted by the Council of Europe as well as other international organisations in the field of protection of population and economy in case of natural and man-made disasters.
- Development of the memorandum in the field of human rights, human property and human environment in case of natural and man-made disasters, initiated by the Russian Federation for further adoption by member states of the EUR-OPA Major Hazards Agreement**.**
- Development of the project and the creation of the international field for testing of the complex technology aimed to reduce human and material losses caused by earthquakes, volcano eruptions and tsunami in the Kamchatka region,
- Development of works on the forecast, seismic risk and verification of the forecast's authenticity with use of the mathematic statistic methods.
- Detection of the disaster-prone areas for the technological catastrophes caused by the tectonic activity of territories including platform type areas,
- Organisation of the international exhibitions, seminars, symposiums and training schools to exchange experience of use of the new technologies in the field of risk management,
- Preparatory activities and publication of materials on the most updated developments in the field of new technologies of the risk management.

HIGHER INSTITUTE OF EMERGENCY PLANNING

ISPU, FLORIVAL, BELGIUM

Institut Supérieur de Planification d'Urgence
Château de Florival
B – 1390 Archennes
Tel +32.10.84.82.30
Fax +32.10.84.16.42

Set up in 1991.

Objective

The Institute officiates as a think-tank, in which authorities and industries can consult on the methods of training and informing, on planning and on managing crisis situations.

Activities

- Organise specific courses concerning the problems of emergency planning for officials in public office ;
- improve the exchange of ideas about internal and external emergency planning, between public authorities and the proprietors of industrial plants which may run a risk of serious accident ;
- regularly brief interveners and assistance teams on the various kinds of risks.

These objectives are reached through the organisation of conferences, seminars, information meetings, training sessions and simulation exercises. As a study and documentation centre on the legal aspects of emergency planning and crisis management, the Institute main activities include :

· comparative study related to disaster medicine and human rights
· comparative study related to insurance legal aspects
· Legal aspects related to earthquakes
· Comparative analysis of regulations related to risk management and bilateral assistance agreements. Legal advice and assistance for the new member states of the EUR-OPA Agreement.

EUROPEAN CENTRE ON SOCIAL RESEARCH IN EMERGENCY SITUATIONS

CEISE, MADRID, SPAIN

Direccion General de Proteccion Civil,
c/ Quintiliano 21,
E - 28002 MADRID
Fax. 34.9.1.562.89.26 / 562.89.41
Tel. 34.9.1.537.31.00
E-mail: agarcia@procivil.mir.es / jplahore@procivil.mir.es
Contact : M. Andrés García / M. J.P. LAHORE

Set up in 1988.

The CEISE (*Centro Europeo de Investigación Social de Situaciones de Emergencia*), is a research centre under the authority of the Ministry of the Interior, General Directorate of Civil Protection in accordance with Decree 1449/2000 of 28 July which recommended the development of research, sociological, legal and economic studies in the field of civil protection.
The CEISE also maintains the functions attributed previously to the European Research Centre on Techniques of Information of the Population in Emergency situations. From now on, this function has expanded to cover the numerous aspects not only to the administration of emergency situations,

but also to the analysis and the prevention of risks which require in order to be understood and resolved the human sciences aspects: psychology, sociology, economy, legal sciences, education sciences.

EUROPEAN INTERREGIONAL CENTER OF TRAINING RESCUERS
ECTR, YEREVAN, ARMENIA

European Interregional Centre for Training of Rescuers, 10, Byron Str.,
375009 YEREVAN ARMENIA
Tel./Fax +374 1.54.49.92 Fax. +374.1.54.49.93
e-mail : ectr@europe.com; badalayans@hotmail.com
Director : Mr. S. BADALYAN,

Set up in 1995.

Objectives
- Training and development of the risk prevention culture in different categories of people, training the population on basic security of daily life, mastering skills in administering first aid, including those calling upon improvised means.
- Organization and implementation of training school children on the basic principles of everyday security and on first aid skills.
-Training and further training of the different categories of rescuers and instructor-rescuers in the Republic of Armenia and in its neighbouring States, in the member States of the EUR-OPA Major Hazards Agreement of the Council of Europe and in other countries.
- Retraining of the former combatants as well as the regular reserve officers and retired officers for mastering civil trades, corresponding to their professional and personal abilities.

Activities
- Preparation and publication of programmes for training school children, including the most socially, psychologically and physically vulnerable children (for the children from child homes and reformatories as well as for disabled children) on basic everyday security, preparation of the teaching and methodological aids, textbooks, brochures and posters.
- Activity on acquisition, analyses and dissemination of the information including the involvement of mass media means in the area of training the rescuers, carrying out rescue operations and ensuring everyday security.

EUROPEAN CENTRE "GEODYNAMICAL HAZARDS OF HIGH DAMS"

GHHD, TBILISI , GEORGIA

Institute of Geophysics, 1 Alexidze Str.
380093 TBILISI - Republic of Georgia
Tel/Fax: 995 32 33 2867/- 995.32.983425
Tel. 995.32.94.28.61 / 94.3591 / 94.8591
tchelidze@hotmail.com; tamaz@geopht.acnet.ge
Director Mr Tamaz CHELIDZE

Set up: December 1995

Objectives

The development of a multinational, multidisciplinary approach to the problems of geodynamical hazards, generated by high dams.

Activities

i. development and testing of modern methods of multidisciplinary monitoring of local and regional geodynamical processes in the proximity of large dams,
ii. mathematical modeling of geodynamical processes at large dams,
iii. prediction of impending geodynamical events (earthquakes, tectonic deformations, landslides) and prognosis of response of large dams to these impacts
iv. monitoring of physical-chemical processes and associated variations in physical properties of foundation rocks
v. creation of databases of geodynamical observations on large dams
vi. analysis and generalization (in collaboration with other European centres) of possible geodynamical hazards, creation of scenarios of possible damage and instructions for public education on what to do in case of alarm, during and after the disaster.

EUROPEAN TRAINING INFORMATION CENTRE
ECMHT, BAKU, AZERBAIJAN
370012 Azerbaïjan, Baku
Tbilisski Avenue 69 "A"
Tel /Fax : 994 12 31 49 55
E-mail: babayev@bakinter.net
Director : G. BABAYEV

Objective
This Centre specializes in the field of the organisation of training the population, the local and regional authorities as regards emergency situations.

Its aim is to spread international experience in the field of notification, protection of the population and elimination of consequences of disasters.

Activities
· Preparation of a respective concept and a draft programme on the protection of the population living in the rural areas,
· Preparation and distribution of material for the international seminar on "Estimation of chemical pollution hazard in the urban areas" published in English and Azeri.
· "Emergency situations and their evaluation " booklet published and released for distribution.

EURO-MEDITERRANEAN CENTRE ON EVALUATION AND PREVENTION OF SEISMIC RISK

CEPRIS, RABAT, MOROCCO
52, Bld Omar Ibn Khattab, B.P.8027
10102 AGDAL-RABAT / MAROC
Tel. 212 37 77 28 03 / 77 42 15 Fax 212 37 77 12 88
e-mail : directeur@cnr.ac.ma cepris@cnr.ac.ma cnr@cnr.ac.ma
Director : M. Said BELCADI

Set up in 1995.

Objective
CEPRIS's main aim is to develop a unified strategy and common framework for co-coordinating and correlating activities relating to regional seismotectonic zoning and assessment of seismic hazards and risks in the Mediterranean region.

Activities
- a standard regional catalogue of instrument-recorded seismicity;
- a regional catalogue of historical seismicity;
- regional seismotectonic maps showing active faults and seismic source zones;
- paleoseismicity studies in test areas;
- seismic hazard studies.

Scientific activities:
- support for specific research and on-site projects;
- organization of seminars on themes of regional interest;
- routine scientific assessment (annual meeting of the science committee);
- participation in and organization of sessions devoted to the western and central Mediterranean during science congresses in Europe;

EUROPEAN CENTRE FOR RISK PREVENTION TRAINING AT SCHOOL LEVEL

CSLT, SOFIA, BULGARIA
European Centre CSLT,
4, Blvd. Vitocha, Office 316, Postbox 862
1000 SOFIA / BULGARIE
Tel/Fax. +359.2.988.35.54: Fax: +359.2.517075
E-mail: kolio.kolev@cslt.org
web site : www.e-lifestyle.bg/CSLT

Director: Mr. Kolio P. KOLEV

Set up in 1997.

Objectives
· To improve the level of information and adequate reaction of the population in crisis situation.
· To develop European cooperation in the field of scientific research, evaluation and dissemination of experience in risk prevention training and management of crisis on school level.

Activities
Promotion and coordination of consultation between the member countries of the Council of Europe, other countries and international organizations in the field of risk prevention training at school level. In order to reach its goals the Centre solves the following major problems:

- Summarizing, analyzing and promoting the European and world experience in the field of risk prevention training at school level and identifying the corresponding trends.
- Developing and promoting the general approaches to disaster prevention training in the broad sense of the concept.
- Developing, experimenting and promoting the forms and methods of risk prevention training at school level for different age groups aiming at heightening and retaining the students attention to the problems and improving the practical results from the training.
- Developing, experimenting and promoting the training programmes as well as preparing and introducing the pilot programmes for risk prevention training at school level.
- Developing, experimenting and promoting the training programmes for the teachers who will conduct the risk prevention training at school level with different age groups.

- Organizing and conducting the training of managers, specialists and teachers from the member countries, other countries and international organizations as well as Bulgaria, who carry out the risk prevention training at school level.
- Developing and promoting the different teaching materials and literature in the field of risk prevention training at school level for the different age groups.
- Summarizing and promoting the experience in using the media in favour of the risk prevention training at school level.

EURO-MEDITERRANEAN CENTER FOR SCIENTIFIC AND TECHNICAL RESEARCH ON ARID ZONES

CRSTRA, Biskra, ALGERIA
Centre Euro-Méditerranéen sur les Zones Arides, (CRSTRA),
B.P. 1680,
07000 BISKRA / Algeria
Tel/Fax . 213.33.73.42.14
Portable 213.61.50.48.00
E-mail: crsta@netcourrier.com /

Directeur : Monsieur Abdelaziz GAOUAR

Objectives
- carrying out scientific and technical research programmes on arid zones and zones threatened with desertification and drought.
- constituting a scientific and technical databank on arid zones and processing, storing and disseminating these data.
- undertaking or participating in any multidisciplinary research (economic, social, agricultural-economic and cultural development) on arid zones.
- studying the prerequisites for inter-sectorial integration, technology management and efficient macro- and micro-economic management.

- undertaking economic and socio-economic research with a view to ensuring national food security through increasing agricultural production and productivity.

Activities
The centre's scientific objectives are geared to regional evaluation of the climate:
- Producing an accurate, up-to-date inventory of natural resources.
- Ongoing surveillance of areas.
- Evaluating processes of erosion and deterioration of arid and semi-arid environments.
- Determining the potential of the environment and mapping the state of surface soil using space technology.
- Developing methods of processing and analysing data on the arid and semi-arid environment.
- Using new systems of Earth observation from space.
- Setting up structured databases.
- Exploiting and encouraging the spread of Saharan plant species.

EUROPEAN CENTRE OF TECHNOLOGICAL SAFETY
TESEC, KIEV, UKRAINE
of European Centre of Technological Safety,
TESEC, General Naumov St., 13,
03164 KIEV 164 / UKRAINE
Tel+380.44.4238145 /380.44.452.0678 Fax. 380.44.4238144
E-mail: vap@mipk.kiev.ua
http://www.tesec-int.org
http://www.tesec-int.org/Chernobyl.htm

Director : Mr. V. POYARKOV

TESEC was set up in June 1997.

Aims and objectives
- to join and concentrate the efforts and scientific potential of the worldwide scientific, research, technological centres and laboratories in designing technical means and technologies (including conversion), to define an approach to the risk assessment of potentially dangerous activities and to conduct activities on prevention and an effective response to the consequences of extraordinary technological situations and natural disasters, especially the consequences of the Chernobyl catastrophe;
- to establish a reliable mechanism to attract the world community to conduct scientific-technological research works in enterprises with a high industrial risk level in Ukraine;
- to establish the partners and business contacts among the Ukrainian scientists and scientific research institutions and leading world scientific research centres and laboratories;
- to create a reliable integration mechanism of applied science in Ukraine in the field of technological safety into the world scientific community;
- to coordinate methodological, technical and financial help in the field of technological safety;
- to provide effective implementation of the international co-operation and assistance programmes in the field of forecasting and response to extraordinary situations, and to the attenuation of the Chernobyl disaster consequences.

EUROPEAN CENTER ON VULNERABILITY OF INDUSTRIAL AND LIFELINES SYSTEMS
ECILS, SKOPJE, FORMER YUGOSLAV REPUBLIC OF MACEDONIA

ECILS, Institute of Earthquake Engineering and Engineering Seismology, University "St. Cyril and Methodius", Salvador Allende St. 73, P.O.Box 101
91000 SKOPJE ,
Tel:+389.23.176.155
Fax 389.23.112.163 e-mail:zoran@pluto.iziis.ukim.edu.mk
Director : Mr Zoran MILUTINOVIC

ECILS was founded in March 1997.

Objective

· Promotion of programs for theoretical and applied research of the urban vulnerability associated with the physical (sanitary: water, waste water and solid waste disposal; power: electric power, natural gas and liquid fuel; transportation: highway and railway; and information and communication), social (health care, education) lifelines and industrial systems;
· Strengthening of the cooperation between local and national authorities, industry and research institutions for rational planning of measures for reduction of natural hazards' consequences caused by physical damage or functional interruption of physical and social lifelines and industrial systems;
· Improvement and further development of experimental research facilities, strong motion instrumentation and monitoring of physical lifeline and industrial systems, especially those located in seismically active regions;
· Promotion of the international cooperation through organization of joint research projects, conferences, symposia, workshops and seminars in the field of vulnerability of lifelines and industrial systems;
· Increase of public awareness on problems related to vulnerability of lifelines and industrial systems, mitigation policies and measures;
· Dissemination of relevant information

EUROPEAN CENTRE ON URBAN RISKS
CERU, LISBON, Portugal

Professeur Luis A. MENDES VICTOR,
Director C.E.R.U., Centro de Geofisica,Universidade de Lisboa,
Rua da Escola Politecnica, 58,
P – 1250-102 LISBOA
Tel: 351 21 390.33.11/396.15.21/392 18.71 / 73
Fax. 35121.395.33.27 E-mail: lmvictor@fc.ul.pt

Set up in September 1998.

Objectives

The main objective of the CERU will be the definition of a unified strategy and of a common frame to co-ordinate the different activities performed on technical and scientific research in the urban risks domain. In more detail, the objectives will be oriented to:

Organisation of training courses to formers

These courses, of one or two weeks duration, will be offered once every two years. They will be directed to a restricted group of about 30 people, selected from new graduate students, university assistants, civil protection technicians and other specialists related with the security in case of disaster. The courses will be structured in a way to allow a large participation and an interactive

discussion between the teachers and the students, and they will aim to provide the necessary tools and means to the characterisation, analysis and reflection of the urban risks question, providing a concentrated intervention in the knowledge of the mitigation and minimisation measures of those risks.

Organisation of workshops and conferences on the urban risks
These workshops and conferences will have their periodicity and their objectives defined in agreement with the activity plan proposed by the administration of the CERU, and will be composed by thematic meetings of urban risks specific areas. They will constitute a space to stimulate dialogue and to share the knowledge and the development of the main technical and scientific contributions achieved in this area.

Organisation of seminars concerning the public information and training
Directed to several sectors of the economic, social and political life, such as the health, the transportation, the insurance companies, the social communication, the modern top industries, the representative associations or institutions of the citizens, among others, they will be an enlarged forum of discussion related with the prevention measures diffusion and the emergency protection and management. These seminars will be also framed in the activity plan of the centre but, as an extended action, they should be addressed to a number of about 100 participants.

Preparation of specialised publications
The diffusion of the achieved results on the technical and scientific research in the urban risks domain is considered also as a priority area of the CERU intervention. This activity will allow the cognitive sedimentation of the different works related with the approach of the urban risks questions, either on the fundamental scientific research domain, or on the operational production of the prevention and protection tools and rescue organisation and either more related with the emergency management systems.

Organisation of a specialised library
A library will be organised, concentrating the set of produced publications in the research work performed in the scope of the CERU, as well as by other existing documents in this domain. Different texts, papers, books, journals, etc. will be collected and catalogued.

EUROPEAN CENTRE ON FLOOD PROBLEMS
EACFP, KISHINEV, MOLDOVA

European Associated Centre on Flood Problems, General Director of the Department of Emergencies of the Republic of Moldova, Office 86, 1, Alecu Russo Street, Building “Acvapriect” Institute, 2068 KISHINAU / MOLDOVA
Tel./fax : 373.2.49.50.61 E-mail: eacfp_ch@moldtelecom.md
Director : Professor Dr. Anatolie BANTUS

Set up in June 1999.

The Centre’s mission is to study and provide assistance for the solution of flood problems in the Mediterranean Region, including Moldova and neighbouring countries, also including NGOs, governmental institutions, private sector, local communities and other kind of stakeholders in order to develop an efficient exchange of information, increase involvement of public into the process of

decision making thus contributing to the development of flood protection and prevention systems.

Objectives
- Scientific research
- Training
- Elaboration of normative and juridical bases
- Expertise.

In order to attain the goals, EACFP-Moldova has to perform the following activities:
- Study the flood problems caused by heavy rainfall or rapid snowmelt, perform risk analysis, collaborate with specialized centres and organizations from other European and Mediterranean countries;
- Take part in training programs for the local and central authorities, organization dealing with flood protection and prevention.;
- Elaboration of flood prevention and public awareness programs, elaboration of measures of decrease the damages from floods, protect the population and material values;
- Elaboration and implementation of projects in this field;
- Expertise and consultancy in respective fields;
- Contribution into the process of information exchange and publication of information about flood hazards, providing access to the national data bases, using already existing structures and facilities, publication of circulars, reference books and others;
- Provision of methodological assistance to the education process, development of knowledge in the respective fields;
- Organization of meetings and aggregation of efforts for the solution of flood problems, analysis of flood protection concepts, durable development and interaction between the governments, NGOs and other interested parties;
- Provision of information of juridical and insurance character;
- Contribution for the creation training bases for water guards;
- Active participation in the elaboration of a specialized sector complex scheme;
- Creation of a specialized library and database;
- Organization of publications, references, informative reports, handbooks, guidance and others.

EUROPEAN CENTER FOR DISASTER AWARENESS WITH THE USE OF THE INTERNET – CYPRUS *« BE SAFE NET »*, CYPRUS

P.O. Box 23830,
1686 LEFKOSIA, Cyprus
Tel: +357 22 40 34 13
Fax: +357 22 31 56 38
mail: ge.cd@cytanet.com.cy
Director : Mr . Christos KYRIAKIDES

Set up in 2002.

The development of an organized Network among countries, in a first step at school level, with the use of the Internet, aiming at the provision of information and knowledge to groups of people, for prevention, preparedness, immediate reaction and rehabilitation for risks and disasters.

Objectives
The program will consist of developing a Network among countries, supporting the effort for facing risks and disasters. Using the Internet, the Network will provide exchange of information

and allow communication between specific groups of people, focusing at risk prevention, preparedness, immediate reaction and rehabilitation.
To accomplish this, a development of a Network at school level will be studied as a first stage in the framework of FORM-OSE and in cooperation with the European Centre For School Level Training in Risk Prevention, in Sofia, Bulgaria and the Technical Secretariat in Salerno – Ravello, Italy.
The Network will provide information and knowledge for managing an earthquake situation, and it will expand to cover other risks and hazards among countries that share similar vulnerability to disasters.
Using Internet, games, cartoons, animations, groups of discussions and parallel education, the Network will provide a friendly and interactive environment in order to interest and introduce school children to risk prevention, awareness and action in such a crisis situation.
This Network will be a powerful tool offering exchange of information and communication with other countries that share a similar vulnerability to disasters, same or different. In addition, people will find a common ground to express their thoughts and fears and have support either from each other, or from experts.

EUROPEAN CENTRE ON FOREST FIRES, ATHENS, GREECE (ECFF)

European Centre for Forest Fires (ECFF),
General Secretariat for Civil Protection
Evagelistrias 2
ATHENS 10563 Greece
Tel . :+30 210 32 48 128 Fax : +30 210 32 48 122, +30 210 33 59 935
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Set up in 2003.

The European Centre for Forest fires is accommodated and run at the headquarters of the General Secretariat for Civil Protection in Athens, which provides the Centre with secretarial support.

Objectives

The Centre will focus on the chemical and civil protection issues of civilians and fire fighters. These issues will cover important problems, which are related to the chemical analysis of smoke and its effects on civilians, personal protective equipment for fire fighters and chemical field analysis with mobile instruments as a tool for early detection of a hazardous atmosphere.

Activities

The Centre :

- will process research projects and case studies for the transfer of knowledge and know-how from research groups to organizations.
- will evaluate new technologies, means and methods for application in all phases of forest fire fighting (early detection, prediction, suppression, restoration). Systems such as GIS, satellite imaging, teleconferences are among those that can be evaluated for further use.
- will carry out a study on the legal frame of each country in order to facilitate the cooperation between the member States providing insurance during the transfer of assistance from one country to another.
- will carry out a study on the different technical procedures, equipment and tools in order to examine compatibility and communication issues.
- will support an INTERREG project for fire management on islands e.g. Corsica, Azores, Sardinia, Ibiza, Malta, Cyprus, Samos-Ikaria, Rhodes etc.

EUROPEAN CENTRE ON REHABILIATION OF BUILDINGS, (ECBR)
BUCHAREST, ROMANIA

Postal Address: *ECBR* at *INCERC, National Institute for Building Research*,
266 Pantelimon Sos., 021652, Bucharest, Romania;
Phone: 0040.21.255.02.70;
Fax: 0040.21.255.00.62;

Contact person in charge: Prof. Dr. Eng. Dan Lungu, Director;
E-mail: lungud@cons.incerc.ro.

In the MEMORANDUM of association of Romania to the *EUR-OPA Major Hazards* Agreement adopted by the *Romanian Government* on 4 October 2001, it has been agreed that the Rehabilitation of Buildings Centre should be established at *INCERC, National Institute for Building Research*, under the authority of the *Ministry of Transports, Constructions and Tourism* in Bucharest, Romania.

Objectives

The existing building stock in Romania and in many countries of Europe has various age, comfort and safety.

The change of occupancy of buildings during the building lifespan, the cumulative structural damage produced by natural hazards and the upgrading of knowledge, standards and materials used for design of buildings and their technical equipments make the rehabilitation of buildings a major challenge for contemporary society in Europe.

Romania has adopted in the last years several national laws requesting and supporting the identification and strengthening of buildings damaged by earthquakes as well as the upgrading of thermal comfort in buildings.

The new Centre should search and should perform activities devoted to rehabilitation of buildings at the national, regional and European levels.

Activities

The center is located at the *INCERC* premises in Bucharest and it is intended to: perform technical activities devoted to: (i) rehabilitation of the building thermal comfort & building technical equipment, (ii) strengthening of the building structures damaged by earthquakes and (iii) appropriate legislation for rehabilitation of buildings. The Center should monitor the progress in the above fields.

The Center should benefit from the facilities of existing laboratories in *INCERC*, as well as from the consultancy of *UTCB (Technical University of Civil Engineering), CNRRS (National Center for Seismic Risk Reduction)* and *INCERC* staff.

EURO-MEDITERRANEAN OBSERVATORY ON RISK MANAGEMENT (AGROPOLIS)

AGROPOLIS, Avenue Agropolis, 34394 MONTPELLIER Cedex 5 - France
Tél. : +33 (0)4 67 04 75 40 - Fax : +33 (0)4 67 04 75 99
e-mail : europarisk@agropolis.fr

Contact : Mr. André PAVIA.

Objectives

To assist, at regional, national and Euro-Mediterranean level, in developing, co-ordinating and harmonising scientific and technical activities in the various phases of risk management: knowledge of risks, forecasting/prevention, issuing warnings, crisis management, rehabilitation/return to normal.

Activities

a) to provide a service that will monitor the issue of tenders for research, development, consulting and training programmes, opened to the scientific and technical community by :

- national bodies,
- multilateral bodies,
- Euro-Mediterranean bodies (particularly on the basis of European Union programmes), and
- international bodies (programmes from United Nations agencies, the World Bank, EBRD, etc);

b) to establish a databank on programmes funded by the European Commission on priority themes identified by the Observatory's network of partners. The information gathered, particularly about projects and participants, will concern programmes that have been recently completed (within three years at the most) or are still on-going.

This electronic monitoring and warning system should make it possible to inform all network partners of major funding opportunities in good time, so that they can prepare their co-operation effectively and co-ordinate activities.

The Observatory will send this information to:

- the EUR-OPA Major Hazards Agreement's network of 25 Euro-Mediterranean Centres;

- the EUR-OPA Major Hazard Agreement's Permanent Correspondents;
- those Euro-Mediterranean research centres and universities which request it;
- the networks in the European Federation of Scientific and Technical Co-operation Networks;
- various AGROPOLIS laboratories, Montpellier universities and those laboratories and research centres which request it;
- the various services of the Languedoc-Roussillon Conseil Régional and other interested territorial authorities.

With a view to facilitating the decision-making process, the Observatory then intends to participate in a virtual consultation activity, in order to make the needed information available to interested decision-makers, where necessary, in an appropriate and authenticated form.

EUROPEAN FEDERATION OF COORDINATION NETWORKS OF SCIENTIFIC AND TECHNICAL COOPERATION (F.E.R.)

The European Scientific Co-operation Networks originally created in 1971 under the aegis of the Council of Europe, became in January 1993 the European Federation of Scientific Networks under the partnership of UNESCO and the Council of Europe comprising to date 28 European networks (i.e. more than 2000 institutions or research/training teams).

The European Federation of Scientific Networks (FER) contributes to the stimulation of European efforts for co-operation in the area of training, research and technological developments.

The European Federation of Scientific Networks (FER) facilitates scientific exchanges between different participating networks and contributes to the strengthening of the co-operation within the European scientific community and facilitates the reaction of the scientific community to the calls for proposals launched in the framework of the main European programmes.

The networks, members of the European Federation, cover, *inter alia*, the following areas :

CULTURAL FIELD
- *PACT NETWORK* (*Science & techniques for cultural heritage*)
Objective : the use of sciences and techniques to the benefit of the knowledge, preservation and protection of the cultual heritage
Members : 430 laboratories from 31 countries

HEALTH FIELD
- *The European Network on Medicine and Human Rights*
Objective: create efforts for co-operation between medical specialists, legal experts, industrialists and health practitioners to study the ethical problems of the different areas of the medical professions (general medicine, disaster medicine, bio-technology medicine, etc …)
Members : The network covers 25 institutions from 11 European countries

- *The UPIGO Network (International Union of gynaecologists and obstetrics)*
Objective : strengthen the co-operation in the field of gynaecology and Obstetrics)
Members: Specialists from 24 European countries

- *The European Network on Endoscopy and Radiology*
Objective: define and organise European intensive courses in the field of endoscopy and radiology
Members : 600 endoscopics from the SMIER (médicale imagerie enseignement recherches)

NATURAL SCIENCES FIELD
E-MRS Network (The European Material Research Society)
Objective : to strengthen the co-operation in the field of research and development of advanced materials. Since its creation in 1983, 20,000 specialists have followed the E-MRS activities.

AESTM (European Association of Marine Sciences and Techniques)
Objective : Strengthen the European co-operation in the field of training, research and development .
Members : 120 laboratories from 16 countries

EARSeL (European Association of remote sensing laboratories)

Objective : strengthen the co-operation between the laboratories working in the area of earth observation
Members: 270 laboratories from European countries

The European network on Exobiology
Objective : to study the origin and evolution of life in the universe
Members : 104 members from 11 countries

CERCO (European Committee for Higher Officials in Cartography)
Objective : to promote mutual information and communication in geo- information
Members : 31 organisations from 30 countries

European network for Environment Counselling
Objective : to strengthen the co-operation from training and expertise points of view in the field of environment

European Network in Geo-Dynamics
Objective : Strengthen European efforts in the field of Geo-dynamics
Members : 150 members from 50 laboratories from 15 countries

SOCIAL SCIENCES FIELD

European Network on Womens' Studies
Objective : facilitate co-operation efforts for research in the field of human studies
Members : 1800 research workers from 24 countries

COMMUNICATION SCIENCES FIELD

*The European Network INECAM (Euro-Latino American Observatory on audio visual matters, - Antonio Machado Institute)*Objective : strengthen the integration of the new technologies on communication and information in the framework of the Euro-Latino American co-operation for training, research and information
Members : 65 institutions from 15 countries

INTERDISCIPLINARY FIELDS

The European Network UNIMED (Mediterranean Universities)
Objective : facilitate the co-operation in developing a multi-lateral co-operation and policy between universities and research institutes
Members : 43 Euro Mediterranean Universities
========

President : Prof. Michel VIGNEAUX (France)

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Tel : +33 (0) 3 88 41 26 14
Fax : +33 (0) 3 88 41 27 87
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THE COUNCIL OF EUROPE DEVELOPMENT BANK

Web site : http://www.coebank.org

The **Council of Europe Development Bank** was set up on 16 April 1956 in order to provide solutions to the problems of refugees. Since then it has adapted to changes in social priorities in Europe. Its activities are founded on the principle of strengthening social cohesion in Europe.

OBJECTIVES
The Council of Europe Development Bank (CEB) is a multilateral development bank with a social vocation. It is a key instrument of solidarity policy in Europe.

Since its inception in 1956, the Bank has helped to finance social projects and responded to emergency situations, thereby contributing to the improvement of living conditions in the least privileged regions of Europe.

THE COUNCIL OF EUROPE AND THE CEB

The Bank is legally and financially independent. It has its origins in a Partial Agreement among Council of Europe member states and is subject to the Council's overall authority.
Its administrative headquarters are in Paris.

The Council of Europe Development Bank (first known as the "Council of Europe Resettlement Fund for National Refugees and Over-Population in Europe", and then as the "Council of Europe Social Development Fund") was the subject of the first Partial Agreement, which was signed by eight countries on 16 April 1956. Today it comprises 35 member states.

Relations between the Bank and the Council of Europe are reinforced by the action of the Strasbourg-based Secretariat of the Partial Agreement. The Secretary General of the Council of Europe issues an opinion concerning the political and social admissibility of each project submitted to the Bank.

ACTIVITIES

The Bank grants loans to finance projects with a social purpose. Its activities complement those of the other intergovernmental financial institutions.

Loans are granted in accordance with precisely defined criteria. **Statutory priority** is given to projects which "help in solving the social problems with which European countries are or may be faced as a result of the presence of **refugees**, displaced persons or migrants consequent upon movements of refugees or other movements of populations and as a result of the presence of victims of **natural or ecological disasters**".

Since its inception, forty-six years ago, the Bank has gradually broadened its fields of action. **New priorities** have been set, embracing all the activity areas that directly contribute to strengthening social cohesion in Europe: job creation and preservation in SMEs, social housing, health, education and rehabilitation of disadvantaged urban areas.

Lastly, the CEB is also active in **other fields**: protection of the environment, rural

modernisation, conservation and rehabilitation of the historic heritage.

FINANCIAL RESOURCES

Paid-up capital, reserves and capital raised on the financial markets constitute the basis for the Bank's operations, since it does not receive annual subscriptions from its members. Public issues and private placements enable it to raise funds directly on the capital markets, to which it enjoys access on the best possible terms.

Established in 1956 with a capital equivalent to 5.7 million euros, the Bank had a subscribed capital of 3.2 billion euros as at 31 December 2002. Leverage is particularly impressive: since its inception the Bank has been able to pay out more than 18 billion euros in loans.

For its long-term operations the Bank has been awarded the best rating by the three agencies Fitch Ratings (AAA), Moody's (Aaa) and Standard & Poor's (AAA).

PROJECTS

CHARACTERISTICS OF THE OPERATIONS :
The Bank offers two main types of operations

Loans, disbursed either directly to the borrowers responsible for carrying out the projects (States, local authorities) or, in the case of project with several beneficiaries, to financial institutions ;

Guarantees, within the framework of operations provided for by other sources of financing.

Loan amounts
The total loan amount can generally cover up to 50 % of the total investment cost.

Loan duration
The Bank's loans are long-term loans and repayment schedules are establish according to the type of project involved and the situation of the borrower. The grace period for capital repayment varies, generally ranging form 1 to 5 years.

Currencies

The Bank lends in all the major currencies according to borrower preference, market conditions and currency availability.

Interest rates
Thanks to the quality of its rating, the Bank obtains the most favourable terms on the international financial markets, to which a small margin is added to cover operating costs.

KEY FIGURES

in million euros

	2002	*2001*	*2000*	*1999*	*1998*
Loans disbursed during the year	**1 537**	**1 749**	**1 855**	**1 712**	**1 056**
Projects approved during the year	**1 605**	**1 664**	**1 888**	**2 052**	**2 257**
Loans outstanding	**9 350**	**8 630**	**8 442**	**7 743**	**6 403**
Own assets (after allocation of profit)	**4 254**	**3 962**	**2 466**	**2 381**	**2 283**
Tangible net worth (after allocation of profit)	**1 384**	**1 293**	**1 221**	**1 133**	**1 046**
Balance sheet total	**14 217**	**13 926**	**14 434**	**12 659**	**11 096**
Profit	**95.2**	**88.3**	**95**	**91.4**	**81.4**
Selective Trust Account (total appropriations from profit)	**63.5**	**58,3**	**55**	**45**	**35**

6. ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD)

Web site : http://www.oecd.org/home

GENERAL DESCRIPTION

The Organisation for Economic Co-operation and Development (OECD) began its activities on 30 September 1961, following the signature of the Convention founding the Organisation on 14 December 1960. It replaced the Organisation for European Economic Co-operation (OEEC) set up on 16 April 1948 to administer Marshall Plan aid from the United States. One of the international institutions established in Western Europe after the Second World War, the OECD is the major forum for the analysis and observation of economic trends within its 30 member States, namely the market-economy democracies of North America, Western Europe and the Pacific.

STRUCTURE

The *Council,* the highest authority of the Organisation, is composed of one representative for each member State. All member States have a permanent delegation to the Organisation in the form of normal diplomatic representation under the authority of an ambassador.

Sessions of the Council, which are chaired by the Secretary General, are normally held once a week. The Council meets yearly at ministerial level when it is chaired by one or two ministers from a given country who are elected for the purpose each year.

Numerous *specialised committees,* groups of experts and working parties are responsible for preparing and carrying out the work of the Organisation.

Generally speaking, the committees and other bodies are made up of representatives who are appointed nationally or sent by the permanent delegations to the Organisation. An *international Secretariat ,* headed by the Secretary General of the Organisation, ensures the smooth running of the work of the committees and other bodies.

The OECD is financed out of the annual contributions of member States, the level of which is calculated essentially on the GDP (Gross Domestic Product) of individual countries. Member States also have the option of contributing to work which is of particular importance to them, on a temporary basis.

Given the broad spectrum of the OECD's activities, the Secretariat is subdivided into a number of specialised directorates, corresponding for the most part to the major committees which in turn reflect ministerial portfolios at national level. They are the following:

the Environment Directorate
the Development Co-operation Directorate
the Trade Directorate
the Science, Technology and Industry Directorate
the Food, Agriculture and Fisheries Directorate
etc.

In addition, several autonomous or semi-autonomous organs, each with their own steering body, have been

established within theOECD framework:

the International Energy Agency
the Agency for Nuclear Energy
etc.

RELATIONS WITH EXTERNAL ORGANISATIONS

International organisations

The Commission of the European Communities normally participates in the work of the OECD in accordance with a protocol signed at the same time as the Convention establishing the OECD. The European Free Trade Association (EFTA) may also send representatives to attend meetings of the Organisation. Further, the OECD has official relations with the International Labour Organisation, the Food and Agricultural Organisation, the International Monetary Fund, the World Bank, the International Atomic Energy Agency and a great many organisations forming part of the United Nations system.

Special arrangements were adopted in 1962 for close ties with the Council of Europe.

Non- governmental Organisations

Non-governmental organisations (NGO's) deemed representative of general economic considerations or of a specific sector of the economy can be granted observer status in accordance with a Council decision of 13 March 1962. This status enables them to discuss questions of mutual interest with a liaison committee chaired by the Secretary General. NGO's may also be consulted with regard to a specific activity by the relevant committee of the OECD or by other decision-making bodies.

ENVIRONMENT DIRECTORATE

The functions which are those of the Environment Directorate are:

to draw up an inventory of ways of integrating economic and environmental policy-making as a means of promoting sustainable economic development;
to analyse the energy/environment interface and encourage the adoption of measures which reconcile the goals of energy security, environmental protection and economic growth;
to examine the incentives and the obstacles in the development and dissemination of "clean" technologies which are less harmful to the environment;
to devise economic methods of combating the dangers certain industrial products(for instance chemical products) and certain industrial processes (emissions, waste, accidents) represent for health and the environment;
to analyse different solutions for the improvement of the urban environment and the impact of urban policies on the local, national and global environment.

Environment, Health and Safety Division

Within the Environment Directorate, the Environment, Health and Safety (EHS) Programme works to:

ensure the high quality of chemical testing and evaluation, keeping animal welfare in mind;
increase the efficiency and effectiveness of chemical management;
minimize non-tariff barriers to trade in chemicals and products containing chemicals.

Chemical Accidents Programme

Within the EHS division, a programme of work on chemical accidents was launched in 1992, with the aim of assisting Member countries in preventing accidents and respond appropriately if one occurs. The Programme works in three areas:

developing guidance on preventing, preparing for, and responding to chemical accidents;
facilitating the sharing of information and experience among both OECD and non-member countries;
analyzing special issues.

The objective is to ensure that appropriate safety measures are in place at potentially hazardous installations, including measures to prevent accidents. Guidance is provided to public authorities and industry in the form of the "Guiding principles for Chemical Accident Prevention, Preparedness and Response". The first edition of the Guiding Principles was published in 1992. It was then revised and the second edition was published in May 2003.

MEASURES IN THE FIELD OF INFORMATION

DECISION-RECOMMENDATION CONCERNING PROVISION OF INFORMATION TO THE PUBLIC AND PUBLIC PARTICIPATION IN DECISION-MAKING PROCESSES RELATED TO THE PREVENTION OF, AND RESPONSE TO, ACCIDENTS INVOLVING HAZARDOUS SUBSTANCES (adopted by the Council on 8 July 1988)// //
The Guiding Principles are designed to facilitate the implementation by Member countries of programmes and policies to ensure that the potentially affected public is well-informed about existing or planned hazardous installations and to facilitate the opportunities for the public to provide input, as appropriate, into decision-making by public authorities concerning such installations. These Principles do not prejudice public authorities from instituting more extensive requirements related to provision of information to the public or public participation.

These Guiding Principles relate to such hazardous installations defined under applicable law as being capable of giving rise to hazards sufficient to warrant the taking of precautions off-site, excluding nuclear or military installations.

These Guiding Principles focus on objectives to be achieved with respect to provision of information to the public and public participation, and not on the procedural approaches which should be followed. It is recognised that Member countries allocate responsibility differently between the public and private sectors and among national, regional and local governments and that Member countries have differing legal and administrative frameworks with regard to prevention of accidents and development of community emergency plans.

Public authorities have the responsibility of ensuring that adequate and timely information is provided to the potentially affected public and that appropriate opportunities are available for public participation in certain decision-making processes. Public authorities also have the responsibility of ensuring that adequate community emergency plans are in effect.

Provision of information to the public

Those members of the public who might be affected were an accident to occur should be provided with certain information, without request, so that they will be aware of the hazards arising from the installation and will be able to respond appropriately should an accident occur.

This information should include specific guidance related to public response in the event of an accident, such as:

details on how the potentially affected public will be warned in the event of an accident;
details of the actions and behavior the potentially affected public should take in the event of an accident;
the source of post-accident information (e.g. radio and television frequencies).

The public should have access upon request, to certain additional information to allow it to understand the nature of the hazards arising from hazardous installations, understand the reasons for guidance provided, and participate effectively in decision-making processes, as appropriate.

Public participation

Whenever possible and appropriate, the potentially affected public should be given the opportunity to participate, by providing their views and concerns, when decisions related to siting and licensing of hazardous installations and the development of community emergency plans are being made by public authorities.

Publications

The following reports deal with the various aspects of chemical hazards and safety:

OECD Guiding Principles for Chemical Accidents: Prevention, Preparedness and Response. Second edition – OECD Environment, Health and Safety Publications, Series on Chemical Accidents, No. 10.
OECD Guidance on Safety Performance Indicators. OECD Environment, Health and Safety Publications, Series on Chemical Accidents, No. 11. (in press)

DECISION-RECOMMENDATION ON THE EXCHANGE OF INFORMATION CONCERNING ACCIDENTS CAPABLE OF CAUSING TRANSFRONTIER DAMAGE
(adopted by the Council on 8 July 1988)
Member countries concerned exchange information and consult one another, on a reciprocal basis if they wish, with the objective of preventing accidents capable of causing transfrontier damage and reducing damage should such an accident occur.

Provisions relating to the exchange of information are the following:

Exchange of information on hazardous installations

Relevant information supplied by the country of the installation includes the following, in so far as it is available in accordance with domestic law to the public authorities of that country:

location and description of the hazardous installation;
the common chemical names (or generic names or general danger classifications) of the main hazardous

substances which may cause transfrontier damage in the event of a major accident;
general information concerning the nature, extent and likely effects of a major accident on human health or the environment, including property;
information on off-site emergency plans relevant to the exposed country.

Other information may be provided:

distribution of the population, including sensitive groups;
location and general description of relevant property and activities likely to be adversely affected;
location of natural resources, protected areas, sensitive ecosystems and historical monuments which could be damaged.

Proposals for a hazardous installation

The country where a hazardous installation is planned transmits to the exposed countries a copy of the documents concerning such proposals which are made available to the public in the country of the intended installation in accordance with its domestic law.

Organisation of emergency measures

Countries concerned consult one another with a view to co-ordinating their off-site emergency plans relating to a hazardous installation capable of causing transfrontier damage. They inform one another of the communication systems to be used, the main features of their emergency plans and the resources available for emergency response in the event of an accident capable of causing transfrontier damage. They also inform one another of the instructions given to their respective populations on how to respond in the event of an accident, and on any evacuation or protection measures to be taken in the event of such an accident or imminent threat of such an accident.

Transmission of emergency warnings

In the event of an accident or imminent threat of an accident capable of causing transfrontier damage, the country of the installation immediately transmits an emergency warning to the exposed countries.

Organisation of the subsequent transmission of information relating to the accident

In the absence of an agreed system for transmitting information relating to an accident, the country of the installation communicates to the authorities responsible for receiving emergency warnings in the exposed countries appropriate information relating to the accident or imminent threat of an accident.
The countries concerned draw up, as need be, procedures and practical arrangements for rapid and effective transmission of information relating to an accident or to the imminent threat of an accident capable of causing transfrontier damage, and set up systems for the communication of pertinent information following an accident (accident location and brief description of the circumstances, immediate effects of the accident, emergency measures planned and action taken, chemical identity, quantity and physical form of the hazardous substances which may affect an exposed country, data available on the probable impact of the accident in the exposed country).

The obligations of the countries concerned to transmit the relevant information referred to are subject to domestic law limitations concerning the protection of confidential information, including both proprietory data and information protected for reasons of national security.

Countries receiving information respect its confidential nature. They do not make available to their public

information that is not available to the public in the country supplying it.
The countries concerned co-operate in ensuring that persons in the exposed country who might be affected by an accident in the country of the installation receive the same information that is provided to persons who might be affected in the country of the installation.

CHEMICAL ACCIDENT PREVENTION, PREPAREDNESS AND RESPONSE

RECOMMENDATION OF THE COUNCIL CONCERNING CHEMICAL ACCIDENT PREVENTION, PREPAREDNESS AND RESPONSE – [C(92)1]
(adopted by the Council on 27 February 1992)
IMPORTANT: This Council Recommendation is being updated in connection with the publication of the second edition of the Guiding Principles and the new Guidance on Safety Performance Indicators.

The C(92)1 Council Recommendation includes the following different aspects:

national prevention, preparedness and response programmes applicable to accidents involving hazardous substances;
general safety aims;
control provisions covering all aspects of accidents;
control of the safety of hazardous installations and of the respect of instructions forming part of the body of control provisions;
formulation and implementation of emergency response plans both on and off the site of hazardous installations;
support and encouragement of research;
encouragement to apply the OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response in the context of technology transfers and international investments as well as technical and financial bilateral assistance.

The OECD's Guiding Principles were drawn up on the basis of contributions from all parties with an interest in chemical accidents. Their essential features reflect the debates and conclusions of five major workshops. Each one was attended by approximately 100 experts from government, industry, trade unions, government bodies and from developing countries and countries of Central and Eastern Europe. The preparatory documents and conclusions of these workshops have been published as Environment Monographs to enable interested parties to communicate their views and comments. Use has also been made of the conclusions on the transfer of technology, and investments and subsidies relating to hazardous installations adopted by the Ad-hoc Group of Experts on Accidents Involving Hazardous Substances at an extraordinary session. All these activities benefited from the active contributions of several interested international organisations whose positions could therefore be co-ordinated. They included the United Nations Environment Programme (UNEP), the United Nations Centre for Transnational Corporations, the International Labour Office (ILO), the World Health Organisation (WHO), the World Bank and the International Maritime Organisation (IMO). The Business and Industry Advisory Committee (BIAC) to the OECD , and its Trade Union Advisory Committee (TUAC) played a very active role in the scrutiny of the Guiding Principles and comments were received from various sectors of the OECD (Committee on International Investment and Multinational Enterprises, the Development Asistance Committee, the Development Co-operation Directorate, the Directorate of Financial, Fiscal and Enterprise Affairs, the Trade Directorate and OECD nuclear energy agencies.

This Draft Council Act recommends to Member countries the establishment or reinforcement of national programmes aimed at chemical accident prevention, preparedness and emergency response, stressing, in particular, safety objectives, the development and implementation of control systems, monitoring the safety of hazardous installations and regulating urban development in the vicinity of existing installations.

Member countries are reminded of the need to be guided in their action by the OECD's Guiding Principles.

There are a number of potential advantages for Member countries arising from the implementation of these recommendations. Similar safety systems and objectives would lead to economic gains by reducing distortions of competition and contributing to the establishment of "fair rules for everyone". Multinational enterprises stand to gain in practical terms if operational safety controls of hazardous installations in different countries were to be made easier. Co-operation among Member countries would increase, with the result that international problems, which may arise when hazardous installations are sited in transfrontier areas, could be dealt with more easily, especially in the event of plans to site new installations or the development of areas around existing installations.

As Environment Ministers stressed at their meeting in January 1991, the interaction between Member countries and non-Member countries is rapidly gaining in importance. The sections within the OECD Guiding Principles that deal with technology transfer, international investment and technical and financial bilateral assistance in relation to hazardous installations situated in non-Member countries are therefore of particular relevance and are specifically mentioned in paragraph III of the Recommendation. These sections of the Guiding Principles highlight certain aspects and introduce additional principles for consideration in the context of the transfer of technology or investments, in order to attain " a level of safety in hazardous installations situated in developing countries equivalent to that of comparable installations situated in countries of the OECD". This principle was endorsed by Ministers in the final declaration of the high-level OECD Conference on Accidents involving Hazardous Substances. It is stated in the Guiding Principles that they should be applied by importing countries in a non-discriminatory fashion: imported technology and foreign investments should be governed by the same standards as those applying to national technology and investments. With regard to bilateral and multilateral technical and financial assistance, the Guiding Principles are based on the concept that assistance relating to hazardous installations should be compatible with rational ecological development and that assistance projects should not augment the risks of chemical accidents or allow them to persist.

Each of the five workshops was responsible for different aspects of prevention, emergency preparedness and response, as follows:

The prevention of accidents involving hazardous substances: good management practice - Workshop hosted by the Federal Republic of Germany (Berlin, May 1989), Environment Monograph No.28;

The provision of information to the public and the role of workers in accident prevention and response - Workshop hosted by Sweden (Stockholm, September 1989), Environment Monograph No.29;

The role of public authorities in preventing major accidents and in major accident land-use planning - Workshop hosted by the United Kingdom and the Netherlands, in conjunction with the Commission of the European Communities (London, February 1990), Environment Monograph No.30;

Emergency preparedness and response and research in accident prevention, preparedness and response - Workshop hosted by the United States and Canada, co-sponsored by the United Nations Environment Programme (Boston, May 1990), Environment Monograph No.31;

The prevention of accidents involving hazardous substances: the role of the human factor in plant operations - Workshop hosted by Japan (Tokyo, April 1991), Environment Monograph No.44.

RECOMMENDATION ON THE APPLICATION OF THE POLLUTER-PAYS PRINCIPLE TO ACCIDENTAL POLLUTION

(adopted by the Council on 7 July 1989)

The Guiding Principles concern some aspects of the application of the Polluter-Pays Principle to hazardous installations. According to the Recommendation of the Council of 26 May 1972, on the Guiding Principles Concerning International Economic Aspects of Environmental Policies, the "principle to be used for allocating the costs of pollution prevention and control is the so-called Polluter-Pays Principle". The implementation of this principle will "encourage rational use of scarce environmental resources". According to the Recommendation of the Council of 14 November 1974 on the Implementation of the Polluter-Pays Principle, "the Polluter-Pays Principle .means that the polluter should bear the expenses of carrying out the pollution prevention and control measures introduced by public authorities in Member countries, to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption". In the same Recommendation, the Council recommended that " as a general rule, Member countries should not assist the polluters in bearing the costs of pollution control whether by means of subsidies , tax advantages or other measures".

NUCLEAR ENERGY AGENCY (NEA)

Web site: http://www.nea.fr/

The OECD Nuclear Energy Agency (NEA) was established on 1st February 1958 under the name of the OEEC European Nuclear Energy Agency. It received its present designation on 20th April 1972, when Japan became its first non-European full Member. NEA membership today consists of 28 OECD Member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities also takes part in the work of the Agency.

The mission of the NEA is:

to assist its Member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes, as well as

to provide authoritative assessments and to forge common understandings on key issues, as input to government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development.

Specific areas of competence of the NEA include safety and regulation of nuclear activities, radioactive waste management, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

The activities of the NEA in the field of accident management from the perspective of safety and radiation protection are concentrated in the following areas:

the prevention and mitigation of severe nuclear accidents;

the assessment of the consequences of accidents off-site, involving an international comparison of the main computerised models and calculation programmes used to predict the consequences of nuclear accidents;

off-site emergency response plans (examination of the criteria and methods used in exercises to implement emergency response plans and in the organisation of such exercises).

With regard to these and other related activities, the NEA works closely together with the International Atomic Energy Agency, with whom it has concluded a Co-operation Agreement, and with other international organisations active in the nuclear field.

NUCLEAR SAFETY

The vast programme of the Nuclear Energy Agency (NEA) in the field of nuclear safety and regulations focuses for the most part on current problems of reactor safety and on the improvement of systems in operation. This work encompasses studies on feed-back and human factors, structure and component integrity, accident prevention and management, and co-operation and the exchange of information in the area of regulations.

The Agency also devotes particular attention to handling the radiological consequences of nuclear accidents. Criteria for action in this area are constantly being defined as part of the revision of the Basic Safety Standards for radiation protection. The Agency also makes its own original contribution to international co-operation in the specific area of technical aspects of emergency planning. The Agency has focused its efforts here on the organisation of international exercises in the implementation of emergency plans, carried out in conjunction with the International Atomic Energy Agency and the Commission of the European Communities.

MANAGEMENT OF SEVERE ACCIDENTS

A " severe accident " is normally one which goes beyond the conditions adopted in the design basis of a nuclear power plant, and which seriously damages the reactor core. The design basis includes basic specifications to ensure that the plant can stand up to a given range of operating incidents, accidents and external aggression without radioactive releases exceeding well-defined levels. The severity of an accident depends on the timing and the scale of fuel degradation and when and on what scale the reactor housing breaks down if there is loss of integrity.

The need for technical procedures and measures in response to severe accidents is something widely accepted. Strategies for the management of severe accidents have to a large extent shaped national policies and regulations.

NEA member countries have implemented severe accident management programmes. Senior experts regularly analyse and integrate the results of severe accident management research and implementation. Over the last decade, several reports have described the major decisions associated with severe accident management, the remaining open items and areas of uncertainty, and the status of implementation in member countries.

The Agency has also launched a programme to study the major uncertainties that still remain with regard to the factors involved in severe accidents and their evolution. The programme covers three aspects:

an examination of resources available for responding to severe accidents, of the possible reaction of current or enhanced systems and of the consequences for R&D;

an exchange of information on phenomena occurring during severe accidents to assist in the formulation of management strategies;

development and improvement of calculation tools and models, primarily on the basis of the International Standard Problems (ISP).

INTERNATIONAL EMERGENCY EXERCISES

As part of its work programme on the off-site consequences of nuclear accidents, the Committee on Radiation Protection and Public Health is focusing its efforts on the organisation of international exercises in the implementation of emergency plans. Following important changes in national radiological emergency response provisions and the drafting of new international conventions in the area of emergency response, the Committee has been testing during the past few years the state of readiness of different countries to respond to this type of situation. Thanks to these international exercises it has been possible to better define the interfaces between national emergency plans, ascertain common ground and highlight inadequacies.

7. THE NORTH ATLANTIC TREATY ORGANISATION (NATO)

Web site: http://www.nato.int/

OVERVIEW OF NATO CAPABILITIES AND FIELDS OF ACTIVITY IN THE AREA OF CIVIL PROTECTION

A. CAPABILITIES

1. The North Atlantic Treaty Organisation (NATO) has since the 1950's developed a wide range of Civil Emergency Planning (CEP) capabilities, including protection of the civilian population from the consequences of war and natural disaster. As a result of the changes to the security environment during the 1990s, these capabilities have been adapted to include the response to terrorist threats, including possible attacks with Weapons of Mass Destruction (WMD). As a result of the 11 September 2001 terrorist attacks against the United States, the existing initiatives have been considerably accelerated and widened in scope. However, despite the increased importance that is currently being attached to terrorism, NATO's civil protection capabilities continue to cover the entire range of possible contingencies, including natural and technological disasters.

2. The core of the NATO capability is the Senior Civil Emergency Planning Committee (SCEPC) which, in permanent session, is made up of members of national delegations to NATO, while representatives at Plenary level compromise the Heads of national CEP organisations. A senior advisory body to the North Atlantic Council, the SCEPC meets as often as is necessary, but on average at least every fourteen days. The SCEPC is an integral part of the Alliance's crisis management machinery and can be convened within two hours should the need arise. Its primary function is to plan for and advise the Council on the efficient use of civil resources in the framework of the Alliance and on the protection of civilian populations. The SCEPC's business is supported by the Civil Emergency Planning Directorate (CEPD) of NATO's International Staff (IS).

3. The work of the SCEPC is assisted by eight technical Planning Boards and Committees which are tasked with planning and advice in the following areas: civil protection, medical matters, civil communications, food and agriculture, industrial planning, civil aviation, ocean shipping and inland surface transport. All these committees deal extensively with civil protection issues.

4. The planning body specifically charged with civil protection matters is the Civil Protection Committee (CPC). This committee also coordinates the work of the other planning bodies in civil protection matters. The CPC maintains a number of sub-groups that deal with a range of diverse issues such as warning and detection, critical infrastructure protection, public information, and population movements in crises.

5. Through the Planning Boards and Committees, the Alliance maintains a cadre of currently over 300 experts who can advise the SCEPC, and through it the Council and the Military Committee, on all civilian aspects of crisis management, including humanitarian assistance, civil protection, WMD, medical, and transportation issues. These experts are regularly trained in NATO procedures and can be called up to NATO Headquarters to form, together with personnel from the CEPD, a CEP Crisis Management Element to support the SCEPC in its crisis management role.

6. Another Alliance CEP crisis management instrument is the Euro-Atlantic Disaster Response

Coordination Centre (EADRCC) which is permanently established at NATO Headquarters and staffed both by IS personnel and secondees from NATO and Euro-Atlantic Partnership Council (EAPC) Partner nations. Established in 1998 in close consultation with UN-OCHA, the role of the EADRCC is to coordinate NATO and Partner nations' humanitarian response to natural and technological disasters or WMD incidents occurring within the EAPC geographical region. To this end, the EADRCC maintains Initial Points of Contact in all 46 EAPC nations, as well as a non-standing Euro-Atlantic Disaster Response Unit composed of national elements which could be made available to assist a stricken nation. By providing the EAPC with a 24/7 capability to promulgate assistance requests, coordinate offers of assistance, and disseminate verified situation reports, as well as a planning cell for large scale exercises, the EADRCC is a cornerstone of Allied and Partners' civil protection capabilities.

7. Various other bodies, while not directly concerned with civil protection, contribute to NATO's capability in this field. Among them is the WMD Centre which serves as the Alliance's focal point for WMD expertise and makes regular contributions to CEP work by providing Intelligence, but also by co-sponsoring seminars.

8. The NATO Situation Centre (SITCEN) monitors global events 24 hours a day, seven days a week. In doing so, it backs up the EADRCC, especially by notifying the EADRCC Duty Officers of events that occur overnight.

9. A very important part of NATO's capability in civil protection is provided by the NATO Military Authorities (NMAs). Indeed, the successful interaction of the civilian and military spheres, especially with regard to military support to civilian authorities in WMD contingencies, is considered as vital to the Alliance's overall consequence management efforts. The new Military Concept for Defence Against Terrorism, which was approved by the North Atlantic Council on 6 December 2002, describes a consequence management support role for NATO military forces. This will be further developed and will serve to strengthen civil-military cooperation and the overall ability of Allies and Partners to assist one another in the case of major chemical, biological, or radiological incidents. Notwithstanding an enhanced NATO military role, the overall coordiniation/clearinghouse function for disaster assistance within the Alliance rests with the EADRCC.

B. FIELDS OF ACTIVITY

10. NATO's civil protection efforts, carried out through structures described above, cover the preparedness, response, and recovery phases of civil emergencies, including those arising from terrorist attacks. The North Atlantic Council has tasked the SCEPC in October 2001 to intensify its efforts with a view to enhancing NATO's existing capabilities to support national authorities in WMD consequence management. The Council furthermore decided that these activities should be carried out together with EAPC Partners to the maximum extent possible. As a result, the overwhelming majority of activities are carried out 'at 46'; that is to say with the full involvement of the 27 Partner nations. Regarding WMD consequence management, there are four main operational areas of activity:

Disaster Response Coordination (EADRCC)

- Liaison with national Points;
- promulgation of situation reports and assistance requests;
- coordination of humanitarian response of 46 EAPC nations to:
    - natural disasters
    - technological disasters

  - WMD incidents
  - other humanitarian emergencies, as directed.
- activation, where appropriate, of pre-identified national response units;
- liaison with UN-OCHA and other international bodies as appropriate.

Military Consequence Management Support

- Arrangements are in place for NATO Military Support to International Disaster Response Operations. In the context of the Military Concept for Defence Against Terrorism, the NATO Military Authorities are currently developing practical modalities for military consequence management support to civil authorities.

Exercises (EADRCC/EADRU; CPC Group of Experts on Warning and Detection)

- planning and conduct of large scale disaster response field exercises involving national units from EAPC countries. These exercises are carried out by the EADRCC in conjunction with a host nation. Recent examples include:
- Transcarpathia 2000 (hosted by Ukraine: 450 participants from 10 nations – Flood scenario)
- Taming the Dragon 2002 (hosted by Croatia, 2000 participants from 38 nations – wild fire scenario);
- Bogorodsk 2002 (hosted by Russia, over 1,000 participant from 13 nations – terrorist attack scenario).
- Ferghana 2003 (hosted by Uzbekistan, over 1,700 participants from 26 nations – landslide/flood scenario)
- one more field exercise is planned for autumn 2003: Dacia 2003 (hosted by Romania – terrorist attack scenario with a radiological dispersal device);

- planning and conduct of EADRCC Command Post Exercises;
- planning and conduct of annual command post exercises involving warning and detection of radiological and chemical incidents. (INTEX series of exercises carried out by the CPC Group of Experts on Warning and Detection Systems (GOEWDS)).

EADRU and Inventory of National Capabilities (International Staff, WMD Centre, EADRCC)

- The EADRCC maintains a non-standing Euro-Atlantic Disaster Response Unit (EADRU) composed of a mix of national civil and military assets that nations might be willing to make available to assist a nation stricken with a natural or technological disasters.
- NATO Civil Emergency Planning Directorate maintains an inventory of capabilities that nations might be willing to make available to assist an EAPC nation stricken by a terrorist attack with WMD. By decision of the North Atlantic Council of 24 October 2001, the inventory is available to the EADRCC to assist in its response coordination role for CBR incidents.
- NATO and Partner nations contribute information on their capabilities, points of contact, deployment details and conditions, etc. to the inventory.
- Supreme Headquarters Allied Powers Europe (SHAPE), in close cooperation with the EADRCC, will develop, update, and maintain a list of NATO-owned and NATO and Partner nations military assets that could be used in a consequence management context in defence against terrorism.

8. INTERNATIONAL CIVIL DEFENCE ORGANIZATION (ICDO)

web site: http://www.icdo.org/

The International Civil Defence Organisation (ICDO) is an inter-governmental organisation whose objective is to contribute to the development by States of structures ensuring the protection and assistance of populations and safeguarding property and the environment from natural or man-made disasters. These structures are generally known as civil protection, civil defence or civil safety and are all concerned with the management of emergency situations. The ICDO federates the national structures established by States for this purpose with the aim of favouring cooperation and mutual solidarity between them.

The tasks of national civil protection, defence and safety structures and the management of emergency situations are laid down in this definition. Protection covers all disaster prevention activities; it is necessary in fact to take all measures aiming at preventing disasters and limiting their consequences, in particular by sheltering people and their property. Assistance includes all measures intended to reduce the consequences of disasters, mainly rescue and rehabilitation operations during and after disasters. The ICDO is the umbrella organisation of national structures. Its objective is to contribute to their creation and reinforcement.

The ICDO also plays the role as the federating organisation which:
brings together the capacities of all its Members and partners so as to attain common objectives;
unites national civil defence structures and endeavours to give them a common identity through universally recognised and accepted values;
furthers and encourages solidarity between its Members.

The ICDO's mandate is based mainly on its Constitution (1966) and on the Amman and Beijing Declarations adopted respectively by the 10th (1994) and 11th (1998) World Conferences on Civil Defence. The Beijing Declaration adopted a World Action Plan for the Development of Civil Defence proposed by ICDO and entitled: **Protection and assistance for all in the face of disasters in the 21st Century**

This plan comprises:
- a basic doctrine relating to national civil defence structures;
- a framework convention on mutual assistance in civil defence matters;
- an appeal for the harmonisation of procedures relating to emergency situations;
- fundamental principles of civil defence based on universally recognised and accepted values;
- a plan for the promotion and diffusion of International Humanitarian Law (IHL) relating to civil defence.

ICDO ACTIVITIES

The ICDO is active in the following main fields:

1. National Civil Defence structures capacity building

In relation to the development and reinforcement of national civil defence structures, the ICDO works on the following three axes:

1.1 Training of Civil Defence personnel
Design and implementation of training programmes for civil defence personnel in all matters concerning population protection and assistance and the safeguard of property and the environment in case of disaster. These programmes are implemented in the ICDO regional training centres (Burkina Faso, Egypt, Pakistan, Russian Federation, Senegal and Tunisia), as well as in Switzerland.

1.2 Audit and consultancy
Evaluation of State Civil Defence systems with a view to reinforcing them in particular in the following fields: planning (e.g. design and implementation of national organisation and rescue plans) management of emergency situations, of human and material resources, and of public communication.

1.3 Doctrine
Conception of elements of doctrine, namely of notions enabling activities in favour of populations and the safeguard of property and the environment to be oriented or directed.

2. International cooperation in civil defence matters

In its role of federating organ of national civil defence structures, the ICDO allows them on the one hand to attain their common objectives and on the other to further and encourage solidarity, the bonding element of their unity.

In this spirit, the ICDO:
- contributes to the design and implementation of means of cooperation between national civil defence structures (Framework Convention on Civil Defence Assistance of 22 May 2000 entered into force in 2001, International Civil Defence Directory) ;
- coordinates mutual assistance operations between national civil defence structures in matters of disasters prevention as well as intervention when they occur (exchange of expertise, coordination of rescue activities, etc.);
- encourages and favours standardisation of civil defence matters and of the management of emergency situations through normative actions;
- promotes a common culture in civil defence matters, for example through the diffusion of the fundamental principles of civil defence and of the rules of International Humanitarian Law (IHL) relating to Civil Defence.

3. Promotion of disaster prevention

As regards the management of emergency situations, the ICDO pleads essentially in favour of disaster prevention and preparedness measures.

Its action in this respect consists of:
- the training of civil defence personnel who will have the task of promoting and developing within populations an awareness of disaster prevention («Training the trainers» programmes);
- designing and creating for the population training and information material on disaster prevention.

9. INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM)
Web site : http://www.iom.int

Aim and General Description

IOM is committed to the principle that humane and orderly migration benefits migrants and society. As the leading international organization for migration, IOM acts with its partners in the international community to assist in meeting the growing operational challenges of migration management; to advance understanding of migration issues; to encourage social and economic development through migration; and to uphold the human dignity and well-being of migrants.

The Organization was established in December 1951 in Brussels with the objective of addressing the needs of a large number of displaced persons in Europe requiring transportation and special migration assistance to countries of permanent resettlement.

Ever since, IOM expanded its activity to other continents as more non-European countries joined the organization. Accordingly, member states updated the Organization's name and mandate over the years as circumstances and needs have evolved. Member States formally recognized the Organization's global role in 1980 and changed the name to the present "IOM" in 1987.

As of end 2003, IOM has 102 member states and over 30 observer states. While not part of the United Nations system, IOM maintains close working relations with UN bodies and operational agencies and has concluded many cooperation agreements with a wide range of international and non-governmental organizations.

IOM's Policy towards Emergency Situations

The constitutional mandate of the IOM stipulates that IOM "concerns itself with the organized transfer of refugees, displaced persons and other individuals in need of international migration services for whom arrangements may be made between the Organization and the States concerned …" (Art.1.1 (b) of the IOM Constitution). Under this mandate, IOM analyses population displacement in emergency and post-conflict situations and determines which kinds of IOM assistance are urgently required, for example:

- **Transportation assistance** by air, land and sea, to remove people from danger or to other countries for resettlement and to return them to their homes when local conditions permit.
- **Medical assistance** in movements; in evacuation for specialized medical treatment; and in emergency medical capacity-building to limit the need for evacuation.
- **Registration, survey, and processing** of migrants. A Migrant Management and Operational Systems Application database programme captures data for individuals and families, and relates this as needed to IOM or other agency programmes.
- **Population stabilization activities** (shelter and community-based socio-economic assistance) to reduce the need for people to leave their homes.
- **Integration or reintegration assistance** tailored to the needs of specific groups (e.g. IDPs, refugees or persons with special and needed qualifications), but which also benefit the larger community.
- **Capacity-building** to provide local administrations with the skills to manage emergency population displacements.

IOM defines "emergency" as a "situation in which the lives and well-being of people are at such risk that an extraordinary action must be mobilized to ensure their survival, protection and well-being, as local resources are inadequate to address urgent, life-threatening needs"[4].

By doing so, IOM does no base its criteria of intervention on any specific causes of population displacement. Whether a humanitarian crisis is natural, man-made or driven by armed conflict, IOM concerns itself with those who are cut off from their subsistence and/or move to places to avoid high-risk zones in hope for a better livelihood.

Emergency Response Capacity

The Emergency and Post-Conflict Division (EPC) was established in January 2000 as the focal point in IOM for emergency preparedness and response. It succeeded the defunct Emergency Response Unit (1992-1997), and is clearly highlighting its role in transition and recovery. EPC coordinates or assists IOM's response to migration emergencies. It initiates contingency planning for IOM and early intervention action by supporting field missions in addressing emergency situations. In close consultation with relevant IOM HQ units, EPC is responsible for preparing and coordinating the rapid deployment of human and material resources in emergencies. It also acts as IOM's early warning instrument required to maintain close watch on emerging humanitarian crises, for which it also undertakes rapid assessment missions and assists with project development.

EPC is further the repository in IOM for humanitarian transition initiatives. To this end, EPC handles aspects of interagency humanitarian coordination, be it by bilateral contacts or in the OCHA / IASC context. It advises field missions and relevant IOM HQ units on the same.

Emergency Fund

IOM has three "ordinary" emergency special funding mechanisms albeit limited.

The Humanitarian Emergency Operations Account (HEOA) is meant to provide humanitarian emergency transport assistance to stranded individual or small group of migrants in distress, i.e. those who find themselves in very difficult migratory circumstances for which funding is not readily available from any sources.

The Emergency Preparedness Account (EPA) was set up, as a revolving fund for emergency use where there is clear need for immediate assessment and for other operational expenditures prior to actual receipt of external funding. Any use of EPA is considered a loan against the specific emergency operations that it initially supports, and used funds are to be fully reimbursed as soon as possible.

The Rapid Response Transportation Fund (RRTF) is a joint IOM-UNHCR effort to support movement operations particularly during emergencies and has a current balance of around one million dollar. To activate the funds, UNHCR has to request IOM in writing to move a certain caseload.

[4] *Emergency Operations Manual*, EPC/IOM, 2002 Edition, xiii

Activities and Programmes related to natural hazard

IOM has wide experience in managing projects providing assistance to vulnerable populations, displaced or returned populations affected by earthquake, flood or hurricane. IOM's traditional and most visible service provided to migrants lies in transport assistance. However, transport programmes have been increasingly linked to more complex reintegration, population stabilization programmes and capacity building with the aim to ensure a long-term self-sustainable living condition upon arrival.

Transport and Population Stabilization Assistance

- In 2001, IOM delivered emergency assistance to the displaced families of the ***earthquake in El Salvador***. Nearly thousand temporary housing arrangements with water and sanitation facilities were constructed and the same number of emergency kits distributed during the three months of project execution.

- Similar emergency assistance was provided to the victims of the ***earthquake in Gujurat, India*** in 2001. Displaced migrant workers, primarily from the salt industry were recruited to assist in the construction of the dwellings. Female heads of household were given priority for receiving the housing at the earliest time.

  IOM also organized workshops / training activities for NGO representatives, to advance their knowledge and sensitivities of migrant- related issues and strengthen their capacities particularly in emergency situations. The programme was budgeted to USD 6.9 million.

- In the aftermath of the ***Hurricane Mitch*** in 1998, IOM provided emergency kits/shelter and constructed temporary service infrastructure such as schools, health centers and infant care in the affected areas of ***Honduras, Nicaragua*** and ***Guatemala***. It further facilitated access to permanent housing to the families making return possible under stable conditions.

  Special effort was made to go beyond mere unilateral assistance. Community development and sense of ownership were encouraged by decentralizing the decision-making procedure and by ensuring active participation of the local communities. Vocational trainings were also organized to encourage entrepreneurial initiatives.

- IOM implemented a pilot project in ***Tajikistan*** with Shelter Now International in 1996-1998. The Panjekent Adaptive Resettlement Project resettled two villages affected by ***mudslides*** to nearby areas.

Capacity Building

- In 2003, IOM Nairobi, ***Kenya*** was chosen as an executing agency of the programme of the project "Urgent Support to the Development of new UNDP Projects under the new Government and for the New Programming Cycle" to support the project design and start-up process. The project helps the Kenyan government to *inter alia,* define its disaster management policy, in both technical and advisory capacity.

- IOM has an established record of capacity building particularly in Central Asia. IOM launched a Seismic Hazard Reduction Initiative in 2003 in close cooperation with the local authorities of ***northern Tajikistan***. Particularly since the break-up of the USSR, seismic research has come to a near-halt in the region; this project is to create, demonstrate and raise awareness of seismic hazard reduction which targets the most vulnerable persons.

- A small but effective project was launched in 2001, in forms of a radio soap opera on Risk Management and Disaster Prevention to strengthen local capacity in view of emergencies and disasters in ***Central America***. This initiative arose from the high vulnerability in Central America, as illustrated by Hurricane Mitch.

- In ***Kosovo***, IOM was mandated in 1999 by UNMIK-KFOR to assume, among others, the responsibility for training 5,052 selected members of the Kosovo Protection Corps (KPC) programme. The KPC is composed of former KLA combatants and civilians (including minorities), as part of the transformation process of the former KLA combatants into a civilian, uniformed, multi-ethnic corps. It offers emergency preparedness and services to the population during natural and man-made disasters, including fires, industrial accidents and spills. The total programme budget amounted to USD 21 million.

  (The Kosovo Protection Corps played a significant role in the initial response to the heavy earthquake that took place on April 24, 2002, in the town of Gjilane/Gnjilane in south-eastern Kosovo.)

- In 1997, IOM organized the first conference on the impact of the dam break of ***Lake Sarez*** and the resulting flood into valleys in case of a critical earthquake. The dialogue was conducive to related emergency preparedness programmes for competent field actors.

- In 1994, IOM launched a programme in ***Tajikistan*** to enhance the capacity of State Migration Authorities to mitigate potential for population displacement caused by natural disasters. This programme involved institutional reform advocacy and training of officials.

Coordination at the field level

IOM is an active member of the UN Disaster Management Team in many countries where IOM has a record of natural disaster-related activities. High level of coordination is observed especially in the field of assessment, contingency planning (regarding human and financial resource, equipment, logistics and transport) and information sharing.

Other *ad hoc* bilateral arrangements have been concluded with various NGOs and UN agencies such as UNDP, WHO, WFP, UNICEF, FAO, UNHCR, ILO for the implementation of specific projects.

NON-GOVERNMENTAL ORGANISATIONS

1. INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES (FEDERATION)

Web site: http://www.ifrc.org/

GENERAL DESCRIPTION

The International Federation of Red Cross and Red Crescent Societies is the world's largest humanitarian organization, providing assistance without discrimination as to nationality, race, religious beliefs, class or political opinions. Founded in 1919, the International Federation comprises 179 member Red Cross and Red Crescent societies, a Secretariat in Geneva and more than 60 delegations strategically located to support activities around the world.

MISSION & STRUCTURE

The Federation's mission is to improve the lives of vulnerable people by mobilizing the power of humanity. Vulnerable people are those who are at greatest risk from situations that threaten their survival, or their capacity to live with an acceptable level of social and economic security and human dignity. Often, these are victims of natural disasters, poverty brought about by socio-economic crises, refugees, and victims of health emergencies.

The Federation carries out relief operations to assist victims of disasters, and combines this with development work to strengthen the capacities of its member National Societies. The Federation's work focuses on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.

The unique network of National Societies - which cover almost every country in the world - is the Federation's principal strength. Cooperation between National Societies gives the Federation greater potential to develop capacities and assist those most in need. At a local level, the network enables the Federation to reach individual communities.

The role of the Secretariat in Geneva is to coordinate and mobilize relief assistance for international emergencies, promote cooperation between National Societies and represent these National Societies in the international field.

The role of the field delegations is to assist and advise National Societies with relief operations and development programmes, and encourage regional cooperation.

The Federation, together with National Societies and the International Committee of the Red Cross, make up the International Red Cross and Red Crescent Movement.

STRATEGIC DIRECTION

Policies provide detailed direction for the International Federation's humanitarian action in specific areas. They serve as a point of reference to ensure consistency in decision-making worldwide. Policies define the boundaries for the conduct of the Federation and the people working within it.

In the area of disaster preparedness and response, four sets of policies establish overall direction:

Disaster Preparedness, Emergency Response, Food Aid & Nutrition, and Post-Emergency Rehabilitation. Further, the Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in disaster relief set standards for disaster response and are used to monitor our own performance along with SPHERE Project standards.

Strategy 2010 is a set of interrelated strategies that guide the Federation's actions from the years 2000 to 2010. It defines three strategic directions for the Federation and its member National Societies to follow in order to achieve a common mission: to improve the lives of vulnerable people by mobilizing the power of humanity.

These three directions are:
National Society programmes that are responsive to local vulnerability and focused on the areas where they can add greatest value. The four core areas are:
- promotion of humanitarian values and principles
- disaster response
- disaster preparedness
- health and care in the community

Well-functioning National Societies which can mobilize support and carry out their humanitarian mission, contributing to the building of civil society.
Working together effectively through programme cooperation, long-term partnerships and funding, as well as more active advocacy.

Adopted by the Federation's General Assembly in October 1999, Strategy 2010 was the culmination of a two-year process of consultation with National Societies. Along with an analysis of trends in the external environment, it draws on the lessons learned by the Federation from its performance during the 1990s, as captured in the evaluation report Learning from the Nineties.

DISASTER PREPAREDNESS ACTIVITIES

The readiness to reduce the impact of disasters, and where possible, predict and even prevent disasters occurring, is central to the work of the International Federation and its member Red Cross and Red Crescent Societies around the world.

This is carried out alongside work to help National Societies cope with the consequences of disasters at local, national and international levels. The following four approaches have been identified:
reducing the vulnerability of households and communities in disaster-prone areas and improving their ability to cope with the effects of disasters,
strengthening the capacities of National Societies in disaster preparedness and post-disaster response,
determining a role and mandate for National Societies in national disaster plans, and
establishing regional networks of National Societies that will strengthen the Federation's collective impact in disaster preparedness and response at the international level.

The International Federation is meeting these challenges by developing new policies, frameworks and tools to support the capacity building required within National Societies to reach to vulnerable segments of their nation. National Societies have responded favourably with those Societies in economically affluent countries providing financial and human resources to support the initiatives developed by National Societies with limited resources.

The development of national capacities is essential if Red Cross & Red Crescent is to be able to serve the needs of the most vulnerable effectively. National Societies are acutely aware that greater attention has to be paid to preventive strategies aimed at saving lives and protecting resources and assets before

they are lost.

This task includes the continuous collection and analysis of relevant information and activities such as:

Predicting hazards by identifying and mapping key threats.
Assessing the geographical distribution of areas vulnerable to seasonal threats.
Defining which groups and communities are most at risk.
Assessing the strengths and coping mechanisms of vulnerable groups and their capacity to respond to local hazards.
Determining the other players in disaster preparedness and response and developing a network to support a comprehensive programme.
Assessing the capacity of National Societies to mitigate and respond to disaster threats.
Identifying gaps in government preparedness plans and advocating with policy makers to ensure that plans are developed to reduce the impact of disasters on vulnerable communities.

Mitigation programmes are developed in cooperation with vulnerable groups and which complement national development strategies have already begun to demonstrate their scope to lessen the impact of local disasters while raising the capacities of at-risk groups.

EMERGENCY ASSISTANCE

Bringing emergency relief to refugees and victims of poverty and disasters has been a key activity of the International Federation and its member Red Cross and Red Crescent Societies for more than 80 years.

The emergency phase of a relief operation aims to provide life-saving assistance; shelter, water, food and basic health care are the immediate needs; along with a sense of humanity and a sign that someone cares. Subsequent needs include reconstruction and rehabilitation. These needs can continue for several years, particularly in the case of refugees and victims of socio-economic collapse.

The response system is based on the right of National Societies to request support in a crisis, and of the Federation's Secretariat to offer support. The Secretariat's role is that of coordinator; it launches international appeals to raise funds for the relief operations, and then mobilises personnel and relief goods.

Through its regional and country field offices, the Federation can also provide managerial, technical and administrative expertise and support to the National Society as required.

The Federation's Appeal 2002-2003 seeks 270 million Swiss francs to fund 72 humanitarian assistance programmes. In addition, the Federation launches on average 30 new emergency appeals each year as disasters strike, and also supports smaller operations from its disaster relief emergency fund.

With increasing needs and decreasing resources in many disaster prone countries, the Federation finds its National Societies engaged well beyond the initial response into long periods of rehabilitation and reconstruction work. This work is also supported by the Federation as it plays an important role in decreasing people's vulnerability and strengthens their coping capacities.

2. **MEDECINS SANS FRONTIERES** (MSF)

Web site : http://www.msf.org/

GENERAL DESCRIPTION

Médecins Sans Frontières was founded in 1971 at a meeting of two groups, the first comprising doctors sent by the Red Cross to work in Biafra, the second having responded to an appeal launched by the medical journal " Tonus " in1970 during the floods in Eastern Pakistan, the future Bangladesh.

Initially, and without any material resources to speak of, Médecins Sans Frontières understood its role as that of a supplier of doctors to the various international organizations specialised in assistance to the Third World.

Starting in 1979, the association began to adopt a central structure and logistical units, engaging in missions, recruitment and, later, fund-raising and communication. Médecins Sans Frontières missions became more numerous and varied, especially as of 1980, with the opening of new sections in Europe and different regions of France.

In the course of thirty years of activities, Médecins Sans Frontières has perfected a methodology governing medical intervention and also appropriate logistics, whilst continuing to lay emphasis on the notion of solidarity as defined in its Charter.

In legal terms, Médecins Sans Frontières is a non-profit making organisation established under the law of 1901. 98% of its resources accrue from private donations , the remaining 8% is made up by institutional financing, (the United Nations High Commissioner for Refugees, the European Union or governments).

The internationalisation of Médecins Sans Frontières began in 1980 with Belgium, Switzerland and Holland, and later Spain and Luxembourg.

OBJECTIVES AND MISSIONS

Médecins Sans Frontières provides relief to distressed populations, to the victims of natural or man-made disasters and situations of war, without any discrimination.

Present in most crisis regions, Médecins Sans Frontières teams, through their action, defend the right of populations to have access to medical care. In situations of extreme precariousness brought about by natural disasters (drought, flooding, earthquakes) or resulting from situations of war or exclusion, Médecins Sans Frontières acts by reinforcing or even rebuilding failing or destroyed health services and by offering access to quality medical services.

TYPES OF ACTIVITY

Intervention context and Medical activities

Conflict/Post conflict
Acute emergency phase: selection of the wounded, work of medical and surgical teams
Emergency phase: installation of temporary medical/surgical services, supply of equipment and

medicines, epidemiological screening
Rehabilitation phase: rekindling of local health structures, transfer of responsibility, pharmacy management.

Epidemics/Endemics
Emergency interventions by vaccination and medical coverage of declared cases
Programme for the control of a specific transmittable disease.

Natural disasters
Emergency intervention after evaluation of the needs: sanitary and/or medical action.

Revival of the health system
Periphery intervention, generally at district level with populations having no access to health services.

Exclusion
Setting up of health care services for groups or ethnic groups excluded from the existing health services , whatever the motive.

Health activities

water supply, storage and treatment, and drinking water distribution
sanitation arrangements, disposal of excrement (latrines, waste), drainage

Logistical activities

food aid (Nutrition Emergency and Development)
temporary shelter : plastic sheeting, tents, blankets
logistical back-up: transport, electricity generators, tele-communications

EPICENTRE : EUROPEAN GROUP OF EXPERTS IN PRACTICAL EPIDEMIOLOGY

The activities of EPICENTRE are of an internal nature, serving the needs of Médecins sans Frontières ,or of an external nature, serving governments, international organisations, the World Health Organisation (WHO) etc.

The European Group of Experts in Practical Epidemiology, EPICENTRE, together with the other European sections of Médecins Sans Frontières, co-ordinates all the Organisation's practical training courses in international health. EPICENTRE is responsible for the teaching of practical epidemiology and medical information.

Each teaching module deals with the technical, and also socio-political and anthropological, aspects of medical intervention. Courses are open to all and already constitute a bench-mark in international health. Training sessions are also organised abroad in conjuction with other bodies or local Health Ministries.

Teaching content is decided upon in close co-operation with the different sections of Médecins Sans Frontières.

All modules can be organised on request and tailored to meet the specific needs of the requesting authority.

These courses may be run:

- as part of other European programmes,
- in developing countries.

Expert opinions in epidemiology cover programme assessment, epidemiological surveillance systems, surveys, education, medical information, nutritional strategies etc.

Operational research concerns the consideration of patients' medical coverage and the strategies of action in the intervention contexts of Médecins Sans Frontières. It covers the analysis of local data in order to gauge and enhance intervention (data collection or monitoring systems, data processing etc), applied nutritional research, vaccinology, data processing and public health.

MEDECINS SANS FRONTIERES LOGISTICS, Bordeaux-Mérignac

Médecins Sans Frontières Logistique (MSFL) is a non-profit making association. Its aim is to ensure that its missions receive the best possible provision, whether it be for emergencies or regular supplies. MSFL is a central purchasing unit and a pharmaceutical establishment of humanitarian nature recognised by institutional sponsors and the French State. MSFL is also an operational research centre which develops medical material and logistics used by its missions. Finally it is a centre offering support and technical advice to its missions, it evaluates the local and regional purchasing channels and trains the logisticians. MSFL supplies medical and logistic products mainly to the French and Swiss sections, but also to the other sections of the movement and to other humanitarian organisations (MDM, ICRC)

Background

In the eighties, MSF decided that in order to assist populations affected by a crisis, it was imperative to be equipped with a quality logistic tool.
In order to reply rapidly to the needs whilst maintaining total control of the supply chain, MSF set up a central purchasing unit in 1986, linked to its medical and logistic technical support department. MSF Logistic moved premises in October 1992 from the Aude region (Narbonne then Lézignan-Corbières), where it had been situated since its establishment, to set itself up in Mérignac. This new site of 36.000 m², of which 2700 m² serve as a warehouse, was bought by the MSF Foundation, with the support of local and territorial authorities and private partners.

In 1999, MSF Logistic was recognised as a Pharmaceutical Establishment by the French Ministry of Health.

En 2003, MSF Logistic doubled its storage capacity bringing it up to over 5.000 m².

Organisation

Carrying out emergency operations means reacting quickly, but particularly being capable of replying to the populations' needs and the constraints of the missions' environment. It quickly became evident that it was necessary to master a high performance supply chain made up of essential links, i.e. buying, stocking, checking of the quality of the products and their dispatch. Just one faulty link can compromise the whole emergency operation.

Mission supplies include the reliability and the quality of:

the medical supply (medicine, medico-surgical material, etc.)
the non-medical supply (vehicles, water containers, food, etc.)
the transport (time limits, insurance).

MSF Logistic has at its disposal a very varied stock of emergency goods, which are permanently maintained operational. This stock is available 24 hours a day, 7 days a week, and can be mobilised immediately thanks to a subsidiary customs system for emergency operations.

3. INTERNATIONAL TECHNICAL COMMITTEE FOR THE PREVENTION AND EXTINCTION OF FIRE (ITCF)

web site: http://www.ctif.org/

GENERAL DESCRIPTION

The International Technical Committee for the Prevention and Extinction of Fire (ITCF), was founded in Paris in 1900. The ITCF is an international technical organisation for the exchange of experience in the area of fire protection and rescue operations.
The Organisation represents firemen in 42 member States, and associate members who may be states, countries, associations, federations, enterprises or individuals. They include, for example, industralists who manufacture fire-fighting equipment or who are concerned by certain aspects related to dangers.

STRUCTURE

The structure of the Organisation is composed of:

The *Permanent Council* , the central deliberating body, is made up of the President and the first delegates of the National Committees or their representatives. It meets at least once a year.
Among its attributes, the Permanent Council has particular responsibility for determining the Organisation's fields of activity, defining technical missions , organising symposia, fixing the level of contributions, preparing the General Assembly and adopting the draft budget. The Permanent Council also elects the Vice Presidents and the Secretary General and appoints a Treasurer.

The *Executive Committee* meets at least one a year under the chairmanship of the President. It has particular responsibility for executing the decisions of the General Assembly and the Permanent Council.

The *General Assembly* , comprising the President and national delegates, meets to take decisions at least once every four years.

The financial resources of the Organisation are made up of members' annual contributions.

OBJECTIVES AND AIMS

The aims of the ITCF are the following:

- to encourage, support and develop international technical and scientific co-operation in the areas of fire-fighting and prevention, the saving of human lives and technical relief required during fires or natural disasters, with the exception of civil defence matters;

- to forge and nurture friendly relations between representatives of Firemen and Emergency Fire Services in countries throughout the world, on the basis of equal and peaceful co-operation.

The Organisation's different activities cover:

- the definition of work programes which serve as directives for the bodies of the ITCF and their activities;

- the applied and constant quest for information on scientific and technical advances and innovations in the field of fire protection and rescue operations.

- the periodical publication of an information bulletin containing articles, reports, suggestions etc on practical, technical and scientific issues of general interest dealing with fire protection and rescue operations;

- the consideration and dissemination of scientific, technical and practical experience and lessons learnt in fire protection and rescue operations and the drafting of corresponding recommendations;

- the sessions and periodic meetings of the organs of the ITCF, international symposia, exhibitions on fire protection techniques, competitive trials for firemen, etc;

- the continued co-operation with all the international organisations dealing with fire

-fighting and prevention and rescue operations.

4. INTERNATIONAL COUNCIL OF MONUMENTS AND SITES (ICOMOS)

Web site: http://www.icomos.org/

GENERAL DESCRIPTION

The International Council of Monuments and Sites (ICOMOS), was founded in Warsaw in June 1965 by the 25 countries having ratified the Venice Charter.

ICOMOS is an international, non-governmental organisation that works together with UNESCO (General Sub-Division for Culture and Communication) in the implementation of its programme of safeguarding architectural heritage throughout the world. It is entrusted by UNESCO with responsibility for the study of various doctrinal, technical or organisational issues and, among other things, examines the applications submitted by States for the registration of monuments or sites under the International Convention for the Protection of World Cultural and Natural Heritage.

ICOMOS also co-operates with a wide variety of other international organisations, including the Rome Centre (ICCROM), the International Council of Museums (ICOM), the International Union of Architects (IUA), the World Tourism Organisation (WTO), the Council of Europe, etc.

The *General Assembly ,* which meets every three years is the supreme authority, bringing together all ICOMOS members. It lays down programmes, decides on the budget for the coming years and oversees the implementation of the Organisation's aims.

The administration of ICOMOS includes an *Executive Committee*, the Organisation's governing body, and an *Advisory Committee*, made up of the Presidents of the National and International Committees.

The annual budget of ICOMOS is made up of revenue accruing from three major sources:

- membership fees,
- grants,
- contracts.

OBJECTIVES

The main objectives of ICOMOS are the following:

- to provide a forum affording every possibility for dialogue and exchange to professionals in the area of conservation;
- to collect, evaluate and disseminate information on conservation principles, techniques and policies;
- to contribute, at national and international level, to the creation of specialised documentation centres;
- to encourage the adoption and implementation of international conventions and recommendations on the protection, conservation and development of monuments, ensembles and sites;
- to participate in drawing up programmes for the training of conservation specialists;
- to make available to the international community its network of choice, highly-qualified experts.

DISASTER PREVENTION

Active disaster prevention is carried out at various levels:

Preparedness

ICOMOS seeks to mobilise the expertise and experience of world conservation experts through improved training and documentation, and the establishment of a network of professionals.

Immediate assistance

The aim of immediate assistance is to respond quickly to cultutral heritage needs in the event of armed conflict or natural disasters, avoiding government interference or red tape.

Awareness-raising

Awareness-raising activities seek to mobilise and use financial, documentary and social resources to foster awareness and readiness.

One of ICOMOS' priorities has consisted in taking stock of the experience gained by experts in the field during crises in order to incorporate this practical dimension into theoretical considerations of a legal or administrative nature. This with a view to providing more immediate professional assistance and more effective prevention and protection measures in extraordinary circumstances brought about by natural or man-made disasters.

The primary aim consists in drawing up specific action programmes and strategies common to both governmental and non-governmental organisations. Plans are afoot for the production and distribution of manuals and guidelines for the conservation of the cultural heritage in exceptional circumstances (hazard preparedness and general site management). These tools are intended to support and complement existing documentation and structure it in the light of the specific needs of conservation of the cultural heritage at risk and the enhancement of preparedness measures.

TERMINOLOGY: BASIC TERMS OF DISASTER RISK REDUCTION

The ISDR Secretariat presents primary terms related to disaster risk reduction to practitioners and experts for their consideration and further refinement. The terms are based on a broad review of different international sources, with the purpose of developing a common understanding of terminology on disaster reduction, which is useful for the public, authorities and practitioners. This is a continuing effort to be reflected in future reviews, responding to a need expressed in several international venues, regional discussions and national commentary.

Acceptable risk
The level of loss a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions.

In engineering terms, acceptable risk is also used to describe structural and non-structural measures undertaken to reduce possible damage at a level, which does not harm people and property, according to codes or "accepted practice" based, among other issues, on a known probability of hazard.

Biological hazard
Processes of organic origin or those conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Examples of biological hazards: outbreaks of epidemic diseases, plant or animal contagion, insect plagues and extensive infestations.

Building codes
Ordinances and regulations controlling the design, construction, materials, alteration and occupancy of any structure for human safety and welfare. Building codes include both technical and functional standards.

Capacity
A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster.

Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.

Capacity building
Efforts aimed to develop human skills within a community or organization needed to reduce the level of risk.

In extended understanding, capacity building also includes development of institutional, financial, political and other resources, such as technology at different levels and sectors of the society.

Climate change
Refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer).

Climate change may be due to natural internal processes or external forcing, or to persistent anthropogenic changes in the composition of the atmosphere or in land use (IPCC, 2001).

Note that the United Nations Framework Convention on Climate Change indicated in 1999: "climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Coping capacity
The manner in which people or organizations use existing resources and abilities to face adverse consequences that could lead to a disaster.

In general, this involves managing resources, both in normal times, as well as during adverse conditions. The strengthening of coping capacities usually builds resilience to withstand the effects of natural and other hazards.

Counter measures
All measures taken to counter and reduce disaster risk. They most commonly referred to engineering (structural) measures but can also include non-structural measures and tools designed and employed to avoid or limit the adverse impact of natural hazards and related environmental and technological disasters.

Disaster
A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

A disaster is a function of the risk process. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.

Disaster risk management
The systematic process of using administrative decisions, organization, operational skills and abilities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Disaster risk reduction (disaster reduction)
The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

The disaster risk reduction framework is composed of the following fields of action, as described in ISDR's publication 2002 "Living with Risk: a global review of disaster reduction initiatives", page 23:

- Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis;
- Knowledge development including education, training, research and information;
- Public commitment and institutional frameworks, including organisational, policy, legislation and community action;
- Application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments;
- Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.

Early warning
The provision of timely and effective information, through identified institutions, that allow individuals exposed to a hazard, to take action to avoid or reduce their risk and prepare for effective response.

Early warning systems include of three primary elements (i) forecasting of impending events, (ii) processing and dissemination of warnings to political authorities and population, and (iii) undertaking appropriate and timely actions.

Ecosystem
A complex set of relationships of living organisms functioning as a unit and interacting with their physical environment.

The boundaries of what could be called an ecosystem are somewhat arbitrary, depending on the focus of interest or study. Thus the extent of an ecosystem may range from very small spatial scales to, ultimately, the entire Earth (IPCC, 2001).

El Niño-southern oscillation (ENSO)
(in revision)
An irregularly occurring pattern of abnormal warming of the surface coastal waters off Ecuador, Peru and Chile This coupled atmosphere-ocean phenomenon is associated with the fluctuation of inter-tropical surface pressure pattern and circulation in the Indian and Pacific oceans, called the Southern Oscillation.
There have been a number of attempts to define El Niño, both quantitatively and qualitatively, but none has achieved universal recognition. This phenomenon triggers a shift in seasonal patterns of weather systems over many subtropical and mid-latitude parts of the globe.

La Niña
(in revision)
Is the opposite of an El Niño pattern, during which waters in the west Pacific are warmer than normal and trade winds are stronger.

Emergency management
The organization and management of resources and responsibilities for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation.

Emergency management involves plans, structures and arrangements established to engage the normal endeavours of government, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs. This is also known as disaster management.

Environmental impact assessment (EIA)
Study undertaken in order to assess the effect on a specified environment of the introduction of any new factor, which may upset the ecological balance.

EIA is a policy making tool that serves to provide evidence and analysis of environmental impacts of activities from conception to decision-making. It is utilised extensively in national programming and for international development assistance projects. An EIA must include a detailed risk assessment and provide alternatives solutions.

Environmental degradation
The reduction of the capacity of the environment to meet social objectives and needs.

Potential effects are varied and may contribute to an increase in vulnerability and the frequency and intensity of natural hazards.

Some examples: land degradation, deforestation, desertification, wildland fires, loss of biodiversity, land, water and air pollution, climate change, sea level rise, ozone depletion.

Forecast
Definite statement or statistical estimate of the occurrence of a future event (UNESCO, WMO).

This term is used with different meaning in different disciplines.

Geological hazard
Natural earth processes or phenomena, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Geological hazard includes internal earth processes or tectonic origin, such as earthquakes, geological fault activity, tsunamis, volcanic activity and emissions as well as external processes such as mass movements: landslides, rockslides, rock falls or avalanches, surfaces collapses, and debris and mud flows.
Geological hazards can be single, sequential or combined in their origin and effects.

Geographic information systems (GIS)
Analysis that combine relational databases with spatial interpretation and outputs often in form of maps. A more elaborate definition is that of computer programmes for capturing, storing, checking, integrating, analysing and displaying data about the earth that is spatially referenced.

Geographical information systems are increasingly being utilised for hazard and vulnerability mapping and analysis, as well as for the application of disaster risk management measures.

Greenhouse gas (GHG)
A gas, such as water vapour, carbon dioxide, methane, chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), that absorbs and re-emits infrared radiation, warming the earth's surface and contributing to climate change (UNEP, 1998).

Hazard
A potentially damaging physical event, phenomenon and/or human activity, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydrometeorological and biological) and/or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability.

Hazard analysis
Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behaviour.

Hydrometeorological hazards

Natural processes or phenomena of atmospheric, hydrological or oceanographic nature, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Examples of hydrometeorological hazards are: floods, debris and mud floods; tropical cyclones, storm surges, thunder/hailstorms, rain and wind storms, blizzards and other severe storms; drought, desertification, wildland fires, temperature extremes, sand or dust storms; permafrost and snow or ice avalanches.
Hydrometeorological hazards can be single, sequential or combined in their origin and effects.

La Niña
(see El Niño-southern oscillation).

Land-use planning
Branch of physical planning that determines the means and assesses the values or limitations of various options in which land is to be utilized, with the corresponding effects on different segments of the population or interests of a community taken into account in resulting decisions.

Land-use planning involves studies and mapping, analysis of data acquired, formulation of alternative land-use decisions and design of a long-range plan for different geographical and administrative scales.
Land-use planning can help to mitigate disasters and reduce risks by discouraging settlements and construction of key installations in hazard prone areas, control of population density and expansion, and in the siting of service routes for transport, power, water, sewage and other critical facilities.

Mitigation
Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

Natural hazards
Natural processes or phenomena occurring in the biosphere that may constitute a damaging event.

Natural hazards can be classified by origin namely: geological, hydrometeorological or biological.

Preparedness
Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary removal of people and property from a threatened location.

Prevention
Activities to provide outright avoidance of the adverse impact of hazards and means to minimize related environmental, technological and biological disasters.

Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education, related to disaster risk reduction changing attitudes and behaviour contribute to promoting a "culture of prevention".

Public awareness
The processes of informing the general population, increasing levels of consciousness about risks and how people can act to reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

Public awareness activities support changes in behaviour leading towards a culture of prevention. This involves public information, dissemination, education, radio or television broadcasts and the use of printed media, as well as, the establishment of information centres and networks.

Public information
Information, facts and knowledge provided or learned as a result of research or study, available to be disseminated to the public.

Recovery
Decisions and actions taken after a disaster with a view to restoring the living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Recovery (rehabilitation and reconstruction) is an opportunity to develop and apply disaster risk reduction measures.

Relief / response
The provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Resilience / resilient
The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and improve prevention measures.

Retrofitting (or upgrading)
Reinforcement of structures in order to be more resistant to the forces of natural hazards.

Retrofitting involves consideration of changes in the mass, stiffness, damping, load path and ductility of materials, as well as radical changes such as the introduction of energy absorbing dampers and base isolation systems. Examples of retrofitting includes the consideration of wind loading to strengthen and minimize the wind force, or in earthquake prone areas, the strengthening of structures.

Risk
The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human induced hazards and vulnerable conditions. Conventionally risk is expressed by the notation Risk = Hazards x Vulnerability.

Beyond expressing a possibility of physical harm, it is crucial to appreciate that risks are always created or exist within social systems. It is important to consider the social contexts in which risks occur and that people therefore do not necessarily share the same perceptions of risk and their underlying causes.

Risk assessment/analysis
A process to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend.

The process of conducting a risk assessment is based in a review of both the technical features of hazards such as their location, intensity, frequency and probability; and also the analysis of the physical, social, economic and environmental dimensions of vulnerability, while taking particular account of the coping capabilities pertinent to the risk scenarios.

Structural measures
Engineering measures and construction of hazard-resistant and/or protective structures and infrastructure.

Sustainable development
Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and the future needs. (Brundtland Commission, 1987).

Sustainable development is based on socio-cultural development, political stability and decorum, economic growth and ecosystem protection, which all relate to disaster risk reduction.

Technological hazards
Danger originating from technological or industrial accidents, dangerous procedures, infrastructure failures or certain human activities, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Some examples: industrial pollution, nuclear activities and radioactivity, toxic wastes, dam failures; transport, industrial or technological accidents (explosions, fires, spills).

Vulnerability
A set of conditions and processes resulting from physical, social, economic, and environmental factors, which increase the susceptibility of a community to the impact of hazards.

Positive factors, that increase the ability of people and the society they live in, to cope effectively with hazards and can reduce their susceptibility, are often designated as capacities.

Wildland fire
Any fire occurring in vegetation resources regardless of ignition sources, damages or benefits.