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ACCORD EUROPEEN ET MEDITERRANEEN
SUR LES RISQUES MAJEURS
(EUR-OPA)

EUROPEAN AND MEDITERRANEAN
MAJOR HAZARDS AGREEMENT
(EUR-OPA)

RESEAU DES CENTRES EURO-MEDITERRANEENS SPECIALISES DE L'ACCORD EUR-OPA RISQUES MAJEURS

**ACTIVITES PROPOSEES* DANS LE CADRE DES
PROGRAMMES COORDONNEES POUR 2011**
Provisoire

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

**ACTIVITIES PROPOSED* WITHIN THE
COORDINATED PROGRAMMES FOR 2011**
Draft

** REMARQUE IMPORTANTE :*

A ce stade, les projets sont simplement des propositions à discuter lors de la Réunion des Directeurs de Centres : pas de soutien final leur est garanti

** IMPORTANT REMARK:*

At this stage, the projects are only proposals to be discussed at the Meeting of Directors of Centres: no final support is guaranteed yet

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LEGISLATIVE ASPECTS / ASPECTS LEGISLATIFS

DEVELOPPEMENT DU SITE [WWW.ISPU.EU](http://www.ispu.eu) (ISPU - Institut Supérieur de Planification d'Urgence, Florival)

PAYS CIBLES : Etats membres à l'Accord Eur-Opa en fonction de leur participation et du montant de la subvention allouée pour cette activité.

COORDINATEUR LOCAL: ISPU (Monique BERNAERTS, Alexandra SONCK)

AUTRES PARTICIPANTS : Correspondants permanents et Centres spécialisés

OBJECTIF DU PROJET

Objectifs globaux (2007-2015):

- Avoir une vue globale, pour chaque pays analysé, du rôle joué par les autorités locales dans la gestion des risques majeurs et des mécanismes de coordination mis en place ;
- Echanger les bonnes pratiques existantes tant au niveau local (gestion des risques) que national (appui aux autorités locales dans leurs missions de gestion des risques)

Objectifs spécifiques pour 2011:

- Rendre le site plus performant et interactif

RESULTATS ATTENDUS EN 2011

Des développements pourraient être envisagés afin de rendre le site plus dynamique :

- Page spécifiquement dédiée aux liens : page spécifique permettant d'ajouter des liens, avec un champ texte qui permettrait de fournir une description à chaque lien.
- Prévoir la possibilité de pouvoir rajouter une rubrique si le besoin s'en faisait sentir, (dans un souci de développement ultérieur – par exemple élargir les bonnes pratiques aux provinces, communes, ...),
- Lay-out d'une rubrique qui pourrait être rajoutée,
- Système de classement des fiches.
- Possibilité d'avoir une analyse transversale par questions, selon le pays choisi,
- Développer des outils pour permettre aux Etats membres de télécharger leurs informations...
- Envisager la possibilité d'être averti par mail quand une nouvelle fiche ou une réponse à une question a été envoyée par un utilisateur...

ACTIVITES ASSOCIEES EN 2011

Activités continues:

- Promotion, mise à jour et appel à manifestation d'intérêt visant à analyser l'implication des autorités locales et régionales dans la réduction des risques majeurs dans les pays membres de l'Accord – voir fiche n°2 - subvention annuelle
- Alimentation du Site www.ispu.eu – voir fiche n°3 - subvention annuelle

Activités spécifiques 2011:

- Atelier « autorités locales » - voir fiche n°2 - programmes coordonnés

RESULTATS OBTENUS ANTERIEUREMENT

Le site www.ispu.eu offre:

- la possibilité de consulter les réponses fournies par l'Algérie, l'Arménie, la Belgique, la Croatie, Chypre, la France, la Grèce, le Grand Duché de Luxembourg et la Principauté de Monaco à l'enquête par questionnaire ;
- la possibilité de consulter les bonnes pratiques déjà postées

ATELIER "AUTORITES LOCALES" (ISPU - Institut Supérieur de Planification d'Urgence, Florival)

PAYS CIBLES : Etats membres à l'Accord Eur-Opa, en fonction de leur participation et du montant de la subvention allouée pour cette activité.

COORDINATEUR LOCAL: ISPU (Monique BERNAERTS, Alexandra SONCK)

AUTRES PARTICIPANTS : Correspondants permanents et Centres spécialisés

OBJECTIF DU PROJET

Objectifs globaux:

- Avoir une vue globale, pour chaque pays analysé, du rôle joué par les autorités locales dans la gestion des risques majeurs et des mécanismes de coordination mis en place ;
- Echanger les bonnes pratiques existantes tant au niveau local (gestion des risques) que national (appui aux autorités locales dans leurs missions de gestion des risques)

Objectifs spécifiques pour 2011:

Organiser un atelier d'échange et de réflexion dans la même logique que les deux précédents.

I. La Croatie, Chypre et la Principauté de Monaco, auteurs des 3 dernières analyses, présentent:

- leurs structures administratives
- leur système de gestion des risques majeurs
- le rôle de leurs autorités locales
- deux difficultés et deux bonnes pratiques

(Un résumé pour les pays ayant déjà réalisé cet exercice sera mis à la disposition de tous)

II. Tous les participants à l'étude (Algérie, Arménie, Belgique, Chypre, Croatie, France, Grèce, Grand-Duché de Luxembourg et en Principauté de Monaco) participent à un débat (à structurer) pour une meilleure gestion des risques en tenant compte des analyses fournies et des bonnes pratiques déjà analysées.

RESULTATS ATTENDUS EN 2011

Atelier sur un ou deux jours en marge de la réunion des Correspondants permanents OU à part en novembre.

ACTIVITES ASSOCIEES EN 2011

Activités continues:

- Promotion, mise à jour et appel à manifestation d'intérêt visant à analyser l'implication des autorités locales et régionales dans la réduction des risques majeurs dans les pays membres de l'Accord EUR-OPA – voir fiche n°2 – subvention annuelle
- Alimentation du Site www.ispu.eu – voir fiche n°3 – subvention annuelle

Activités spécifiques 2011:

- Développement du Site www.ispu.eu – voir fiche n°1 – programmes coordonnés.

RESULTATS OBTENUS ANTERIEUREMENT

Deux ateliers ont déjà été organisés par l'ISPU dans le cadre de son analyse comparative sur l'implication des autorités locales et régionales dans la gestion des risques majeurs (décembre 2008 : préparation et gestion et juin 2009 : identification et prévention). Les participants (Algérie, Arménie, Belgique, France, Grèce, Grand-Duché de Luxembourg) avaient préparé un exposé portant sur les compétences des autorités locales et régionales en matière de gestion des risques et les mécanismes de coordination existants, les difficultés rencontrées et les bonnes pratiques qui pourraient être utiles aux autres.

MUTUAL ACTIVITIES OF LOCAL EXECUTIVE POWER AND MUNICIPALITIES IN THE PREPARATION OF PEOPLE, ECONOMY AND ENVIRONMENT FOR THE PROTECTION WITHIN THE HYOKO PROGRAM OF COMMUNITIES (ECMHT- European Centre on Training and Information, Baku)

TARGET COUNTRIES: Azerbaijan

LOCAL COORDINATOR: ECMHT- Baku office of European Training Information Centre

OTHER PARTICIPANTS:

SPECIALIZED CENTRES: Turkey, Russia, Georgia

NATIONAL AUTHORITY: ECMHT, Ministry of Emergency Situations, Republic City and Village Municipalities Associations, Executive Power Bodies, "FOVGAL" Association

OBJECTIVE OF THE PROJECT

Global objective:

Arrangement of actions against the constantly growing natural disasters occurring in connection with climate changes, in such cases majority of victims and losses are not the results of directly occurring emergency situations, careless attitude of people to their life - settling in dangerous areas, inobservance of construction rules, disregard of necessary preventive measures etc. Investigations of 2010 show that neither of the hundreds of families that lost their homes and all their property insured themselves.

Regulation of the sphere by the legislation (filling of existing gaps in laws and strengthening of control, organization of enlightening and training of the population) is in the focus of attention.

The project is considered for 2 years.

"Provision of resistance to emergency situations, preparation of the population and communities for it" in 2011.

"Practical importance of state care to the restoration of villages and settlements, schools, hospitals and other public buildings; roads, bridges, water, gas and electric lines, and other infrastructure, and involvement of businessmen to this sphere" in 2012 (we believe, that the experience of Azerbaijan in the sphere of restoration works carried out for the removal of damages occurred during emergency situations in 2010).

Special objective for 2011:

To improve management for the mitigation and prevention of emergency risk by prioritization of preventive measures.

RESULTS EXPECTED IN 2011

Based on the analysis of the past years (especially of 2010, when there occurred terrible torrents, floods, large-scale landslides) to assess the works carried out and experience obtained in the area of evacuation and accommodation of people from the disaster regions, organization of medical assistance, shore protection works, direction of torrent-flood waters, retardation of landslides; to draw up appropriate recommendations for the arrangement of actions against emergency situations by the analysis of existing shortcomings, and made mistakes etc, and present them to executors.

PREVENTION

COASTLINE AT RISK: METHODS FOR MULTI-HAZARD ASSESSMENT (CERG - European Centre for Seismic and Geomorphological Hazards, Strasbourg)

TARGET COUNTRIES: France, Italy, Portugal, Malta

LOCAL COORDINATOR: Prof. M. Soldati, University of Modena e Reggio Emilia, (Italy), Prof. O. Maquaire, CERG Executive Secretary & University of Caen Basse-Normandie (France), Dr. J. L. Zezere, CERG Executive Member & Faculty of Geography, Lisbon (Portugal), others.

OTHER PARTICIPANTS:

SPECIALISED CENTRES: Euro-Mediterranean Centre on Insular Coastal Dynamics (ICoD), Malta

OBJECTIVE OF THE PROJECT

Global objectives

In recent years, the interest in coastal instability has increased significantly due to disasters that occur every year in different parts of the World, often inducing risk situations. This research project can be included within this context and aims at investigating coastal instability in the island of Malta (Mediterranean coastline) and in the Lower Normandy (Channel coastline) compare the results to be obtained with those achieved in recent years by the proponents of this project in the different parts of the European countries.

This will provide a significant opportunity for scientific discussion based on the assessment and comparison of data regarding instability situations in the context of multi-hazards assessment. The latter has been until now slightly dealt with in the island of Malta and in the Normandy coast, despite significant risk issues, as evidenced from a series of accidents/damages recorded after landslide events (crisis).

The project aims at the reconstruction of the recent geomorphological evolution and to assess landslide hazard of the north-west coast of the island of Malta, that is mainly due to rock spreading and rock falling, and of the north-east coast of Lower Normandy, that is mainly due to rotational and translational landslides with regular crises. The objectives of the project will be pursued through multidisciplinary investigations which will foresee a geomorphological and engineering geological approach. Integrated avant-garde research methods and techniques, both traditional and innovative, will be applied with special reference to mapping, monitoring and modelling coastal instability phenomena. For hazard assessment, research will take into account different scenarios of global change with sea level rise.

The final objective (third year) is to propose a method for multi-hazard assessment allowed to define the assessment of susceptibility (spatial probability and magnitude) and assessment of hazard (temporal probability and intensity) for coastline hazards.

Specific objectives for 2011:

The following objectives are envisaged for the year 2011:

1. Monitoring of landslides – follow-up
2. Landslide modelling
3. Landslide susceptibility/hazard mapping by means of GIS
4. Proposal of method(s) for multi-hazards assessment
5. Identification of strategies to sensitize technical and administrative staff from public institutions

EXPECTED RESULTS IN 2011

On the basis of the results achieved during the past two years of the Project, and with reference to the outputs of landslide monitoring to be continued during the year 2011, it is expected to model the behaviour of the most significant cases of landslides within the study areas (north-west coast of Malta, Lower Normandy and Central Portugal), to produce landslide susceptibility/hazard maps and to propose methods for multi-hazard assessment.

The research outputs are expected to provide a significant opportunity for scientific discussion based on the comparison of data regarding instability situations in the context of multi-hazards assessment. Before this Project, the latter have slightly been dealt with in Malta, Normandy and Portugal, despite significant risk issues there present, as evidenced from a series of accidents/damages recorded as a result of landslide events.

A Workshop to sensitize technical and administrative staff from public institutions and/or an Intensive Course to train young scientists on themes related to landslide hazard and risk management in coastal areas are foreseen.

ASSOCIATED ACTIVITIES IN 2010

The results of the Project *Coastline at Risk: methods for multi-hazard Assessment* obtained during the first two years of the research have been presented at the Third International Conference on the Management of Coastal Recreational Resources (Grosseto, Italy, 27-30 October 2010) organized by the Euro-Mediterranean Centre on Insular Coastal Dynamics (ICoD), Malta, that is a Participant of the Project itself. The related paper will be published on a special issue of the Journal of Coastal Research.

RESULTS OBTAINED PREVIOUSLY

Integrated research methods and techniques are applied with special reference to the recognition, mapping and monitoring of coastal instability phenomena along the coastlines of north-west Malta, Lower Normandy and Central Portugal. The results obtained so far show a high potential for multi-hazard assessment. They mainly derive from retrospective studies of landslide occurrence, geomorphological survey and mapping, as well as the application of monitoring techniques. From the integrated use of different techniques and models, it has been achieved not only a significant advance of the scientific knowledge regarding the coastal stretches considered, but also relevant methodological outputs regarding coastal landslide hazard assessment in general. The latter can be of interest for the entire scientific community and for public institutions dealing with coastal risk issues, even for planning purposes. In fact, the results deriving from the testing of an integrated approach for hazard assessment within this project might be extended with positive outputs to other environmental contexts in Europe where similar risk conditions are to be faced.

Dissemination of results :

HENRIQUES C. & ZEZEZE J.L. (2010) – *Avaliação da erosão hídrica e da instabilidade de vertente no contexto da Reserva Ecológica Nacional: Aplicação no Concelho de Caldas da Rainha*. In: Congresso Planeamento Municipal, Balanço e Desafios, Instituto de Geografia e Ordenamento do Território, Lisboa, 1 p.

HENRIQUES C., CARDINALI M., REICHEMBACH P., SANTANGELO M., GUZZETTI F. & ZEZEZE J.L. (2010) - *Relationship between slope movements and structural setting in the Tornada river basin (central western Portugal)*. *Geophysical Research Abstracts*, Vol. 12, EGU2010-10593, 2010, EGU General Assembly 2010.

HENRIQUES C., CARDINALI M., REICHEMBACH P., SANTANGELO M., GUZZETTI F. & ZEZEZE J.L. (2010) - *Relação entre movimentos de vertente e a morfoestrutura na bacia hidrográfica da Tornada (sector Centro-Oeste de Portugal)*. V Congresso Nacional de Geomorfologia, Porto (accepted).

GONZÁLEZ DíEZ A., BRUSCHI V., BONACHEA J., REMONDO J., SOLDATI M., PASUTO A., MANTOVANI M., PIACENTINI D., DEVOTO S. & CORATZA P. (2010) - *Propuesta de una metodología para el análisis de la evolución temporal de laderas mediante el uso de fotogrametría digital*. In: X. Ubeda, D. Vericat & R.J. Batalla (eds.), *Avances de la Geomorfología en España 2008-2010*. XI Reunión nacional de Geomorfología - Solsona, 20-24 Septiembre 2010. Sociedad Española de Geomorfología, 51-54 (ISBN: 978-84-693-4551-1).

LISSAK C., MAQUAIRE O., MALET J.-P., GOMEZ C. & LAVIGNE F. (2010) - *A multi-technique approach for characterizing the geomorphological evolution of a Villerville-Cricqueboeuf coastal landslide (Normandy, France)*. European Geosciences Union General Assembly, Vienna, May 2010. *Geophysical Research Abstracts*, Vol. 12, EGU2010-7866. NH3-11. Oral communication & abstract

LISSAK C., MAQUAIRE O., MALET J.-P., DÉPREZ A., MASSON F., ULRICH P. & PETERS E. (2010) - *Multi-technique permanent monitoring of a slow-moving coastal landslide in Normandy*. In: Malet, J.-P., Glade, Th., Casagli, N., (Eds.) *Proceedings of the International Conference on 'Mountain Risks: Bringing Science to Society'*, Florence, CERIG Editions, 267-273.

SOLDATI M., BONACHEA J., BRUSCHI V.M., CORATZA O., DEVOTO S., GONZALEZ DIEZ A., MANTOVANI M., PASUTO A., PIACENTINI D., REMONDO J., & SCHEMBRI J.A. (2010) - *A comprehensive approach to investigate Maltese coastal landslides*. In: Third International Conference on the Management of Coastal Recreational Resources, Grosseto, 27th-30th October 2010, Grosseto, Tuscany, Italy. Euro-Mediterranean Centre on Insular Coastal Dynamics, Institute of Earth Systems, University of Malta, p. 59.

SOLDATI M., MAQUAIRE O., ZEZEZE J.L., PIACENTINI D., & LISSAK C. (2010) - *Coastline at risk: methods for multi-hazard assessment*. In: Third International Conference on the Management of Coastal Recreational Resources, Grosseto, 27th-30th October 2010, Grosseto, Tuscany, Italy. Euro-Mediterranean Centre on Insular Coastal Dynamics, Institute of Earth Systems, University of Malta, p. 60.

LANDSLIDE FORECAST USING REMOTE SENSING DATA (*GHHD - Geodynamical Hazards of High Dams, Tbilissi*)

TARGET COUNTRIES: Georgia, Armenia, Azerbaijan, Turkey

LOCAL COORDINATOR: T. Chelidze

OTHER PARTICIPANTS:

SPECIALIZED CENTRES: CERG (Strasbourg), ECMHT (Baku), ECTR (Armenia)

COUNTRIES AUTHORITIES: Ministry of Environment Protection and Natural Resources of Georgia

OBJECTIVE OF THE PROJECT

Global objectives:

Application of remote sensing data on rainfall for big landslide forecast

Specific objectives for 2011:

Combining map of location and intensity of landslides on the territory of Georgia with satellite data on heavy rainfalls.

RESULTS OBTAINED PREVIOUSLY (if any)

Earlier the prognostic map of potentially landslide-prone areas has been compiled.

EXPECTED RESULTS IN 2011

Combining map of location and intensity of landslides on the territory of Georgia with satellite data on heavy rainfalls allow probabilistic forecast of big landslides. It has been shown recently (EOS, vol.88, N 37, 2007) that these two data provide the basis for forecast with a probability 0.76. We'll use GIS-based landslide susceptibility maps and remote sensing data on precipitation from the web-site <http://trmm.gsfc.nasa.gov> in order to validate the technique for Georgia and Caucasus.

ASSOCIATED ACTIVITIES IN 2011

Collection of data on the date, location and intensity of landslides on the territory of Georgia and Caucasus (March)

Collection of remote sensing data on the precipitation on the territory of Georgia and Caucasus (August)

Probabilistic forecast of big landslides on the territory of Georgia and Caucasus (November)

EARLY WARNING SYSTEM FOR ASSESSMENT OF SAFETY OF LARGE DAMS (*GHHD - Geodynamical Hazards of High Dams, Tbilisi*)

TARGET COUNTRIES: Georgia, Russia, Switzerland, France, Italy, Spain, Turkey

LOCAL COORDINATOR: T. Chelidze

OTHER PARTICIPANTS:

SPECIALIZED CENTRES: CERG (Strasbourg), E CMHT (Baku), TESEC (Kiev)

COUNTRIES AUTHORITIES: Ministry of Environment Protection and Natural Resources of Georgia, Ministry of Fuel and Energy, Ministry of Internal Affairs

OBJECTIVE OF THE PROJECT

Hundreds of Large Dams have been constructed all over the world. As the water retained in large reservoirs can cause major catastrophe, the safe exploitation of Large Dams is of vital importance for population of nearby regions and for economics of the country. Meanwhile it is known (Safety of dams, 1985) that on average one significant dam failure and many more near-failure accidents happen each year somewhere in the world. The M. Nodia Institute of Geophysics (MNIG) and Georgian-European Centre "Geodynamical Hazards of High Dams" operating in the frame of Open Partial Agreement on Major Disasters at the Council of Europe will develop the real time geotechnical telemetric monitoring system of large dams (see Figure below). This low-cost early warning system designed by MNIG and the company LTD "ALGO" (Tbilisi) consists of sensors (tiltmeters, APPLIED GEOMECHANICS Model 701-2) connected to terminal and central controllers and by the GSM/GPRS Modem - to the diagnostic center. The innovation in comparison with similar systems (say at Coolidge dam: Holzhausen, 1991) is implementation of new methodology (nonlinear dynamics) for processing geotechnical time series and assessment/prediction of the dam behavior. According to project goals in order to ensure correct statistical and dynamical investigation of dam stability problem, modern methods of time series linear and nonlinear analysis will be used.

RESULTS OBTAINED PREVIOUSLY

M. Nodia Institute of Geophysics was involved in the Enguri dam related research process since 1970 and GHHD joined the activity in 1996. Tectonic and man-made deformations (tilts, strain) and gravimetric observations have been carried out on regular basis in the body of the dam and reservoir neighboring territory on both banks of the river Enguri. Later observations were continued by means of modern, manufactured in USA high-precision electrolyte and hydrostatic tilt meters purchased by the Council of Europe grant in 2005 as well as by means of quartz strainmeters (4 stations). At the moment we have 30 year databases of measurements of tilts of Enguri dam abutments from 1970, as well as of Enguri dam body (since 1997).

EXPECTED RESULTS IN 2011

- Development of Enguri dam geotechnical characteristics' (dam body tilts) real time telemetric monitoring and storage system
- Developing qualitative and quantitative methods of analysis of time series to dam deformation;
- Creation of "Enguri arch dam-foundation" system Finite Element Method (FEM) model;
- Definition of the range of significant departures of dam dynamical characteristics from FEM-predicted, which will signal damage and approaching the pre-failure state;

ASSOCIATED ACTIVITIES IN 2011

- Creation of data bases of additional dam characteristics necessary for dam model verification (May)
- Retrospective analysis of dam deformation dynamics at various loading conditions; comparison of measured and FEM data (October)

TRAINING / EDUCATION

COASTAL HAZARD ASSESSMENT AND RISK MANAGEMENT 19-25 June 2011 - , Post-graduate Training School (CERG - European Centre on Geomorphological Hazards, Strasbourg)

TARGET COUNTRIES: Several Euro-Mediterranean and Eastern countries

LOCAL COORDINATOR: Prof. Olivier Maquaire, University of Caen Basse-Normandie (France).

Organization committee: Prof. Olivier Maquaire & Stéphane. Costa, University of Caen Basse-Normandie (France); Prof. Mauro. Soldati, University of Modena e Reggio Emilia (Italy), Dr. Jose Luis Zezere, Faculty of Geography, Lisbon (Portugal), Dr. Jean-Philippe Malet, University of Strasbourg (France), Dr. Alessandro Pasuto, [Consiglio Nazionale delle Ricerche](#), Padova (Italy)

OTHER PARTICIPANTS :

SPECIALISED CENTRES : Euro-Mediterranean Centre on Insular Coastal Dynamics, (ICoD), Malta ; Centre européen spécialisé sur les Risques Côtiers ([CerCo](#)), Biarritz, France

NATIONAL AUTHORITIES: not yet planned, but possible

OBJECTIVE OF THE PROJECT

Global objectives

To provide high-level training school in the field of coastal hazard assessment and risk management to European young scientists and promote scientific and technological excellence in the science of coastal hazard and risk by organizing a multi-disciplinary high-level school in 2011 (in addition of the previous FORM-OSE schools focused on 'Living with hydro-geomorphological risks: from theory to practice', Strasbourg (2004); 'Multi-Risks: concepts to approach multiple hazards', Bonn (2006), 'Quantitative Risk Assessment', Barcelona (2008).

Specific objectives for 2011 :

In recent years, the interest in coastal instability issues has significantly increased due to disasters which have been occurring with increasing frequency, even as a result of climate change (but not only), in different parts of the world, and particularly in Europe. It must be emphasized that the consciousness that environmental protection should take place especially through a deep knowledge of the natural processes, among which geomorphological ones, is increasing. This fact, together with the availability of surveying and monitoring instrumentation which are becoming more accurate and reliable, can render hazard assessment promising and effective, in terms of predictability and mitigation of hazardous phenomena.

The coast of Normandy which offers a great diversity of the coastal shoreline (cliffs, sand beach, dunes ...) can be considered as an open-air laboratory for this kind of study. In fact, the distinct geological conditions, especially the super-imposition of the lithologies having different mechanical behaviour determine the development of exemplary cases of coastal instability phenomena (slow moving landslides, rock falls, ...) inducing the retreat of the shoreline and of the cliffs. Several open large valleys are orthogonal to the shoreline and cliffs. Inhabitants and economic activities are located in the bottom of these low elevation valleys. In case of storm surges phenomenon, a gravel beach leaned with a seawall do not playing its part of protective plug and the results are very often inundations for several days with direct and indirect consequences. Also, by this diversity of phenomenon, this area is ideal for successful application of a series of methods and techniques during the course field training.

The aim of the course is to provide the participants with updated knowledge on traditional and innovative multidisciplinary methods and techniques for the investigation of coastal instability processes and related hazards (landslides, coastal erosion, storm surges on low valleys ...).

The course will include theoretical lessons and practical training to enable the participants to be acquainted with high-standard methods for the recognition, monitoring and modeling of coastal processes. Particular emphasis will be given to field work to make the participants familiar with the use of specific instrumentation, such GPS, laser scanner, georadar and different types of monitoring devices etc.

Duration of the course: six full days including two days of field works & one day for cultural activities (visit of the Mont Saint Michel abbey with presentation of the specificity of the bay and the works conducted to maintain the insularity character of the Mont Saint Michel inlet ...).

EXPECTED RESULTS IN 2011

The attendees will gain basic knowledge on current state-of-the-art concepts of addressing coastal hazard assessment and risk management. The basic knowledge includes (a) the principles of sustainable coastal risk management strategies, (b) the procedures and methods to obtain information on coastal hazards and risks, (c) the analytical capability to perform hazard and risk analysis on various temporal and spatial scales for different types of coasts, and (d) to link respective results to general land use planning procedures. Field-trips will demonstrate already implemented strategies for characteristic examples.

ASSOCIATED ACTIVITIES IN 2011

The course will benefit from the results of the CERG Project: '*Coastline at Risk: methods for multi-hazard Assessment*' (2009-2011)

USING BESAFENET WEB SITE FOR STRENGTHENING OF SCHOOL TEACHES AWARENESS ON RADIOLOGICAL RISK (TESEC, European Centre of Technological Safety, Kiev)

TARGET COUNTRIES: Ukraine, Armenia, Belgium, Bulgaria, France, Turkey, Russia

LOCAL COORDINATOR: European Centre of Technological Safety

OTHER PARTICIPANTS:

- **SPECIALISED CENTRES:** Armenia, Belgium, Bulgaria, Cyprus, France, Turkey

- **NATIONAL AUTHORITIES** Ukraine, Armenia, Belgium, Bulgaria, France, Luxemburg, Turkey, Russia

OBJECTIVE OF THE PROJECT

Global objectives

To foster better radiological protection and information for populations living in areas that might be affected in the case of an accident at a Nuclear Power Plant or any other nuclear facilities through dissemination of best European experience on emergency planning; early warning procedures; iodine prophylaxis and other elements of radiological protection.

Specific objectives for 2011:

Using BeSafeNet web site for engagement of school teaches, from cities near NPP, for better public awareness on radiological risk

EXPECTED RESULTS IN 2011

Organizing on-line competition of school teaches, from cities near NPP, in awareness on radiological risk.

Organizing for winners training course and engagement of school teaches, from cities near NPP, for better public awareness on radiological risk.

ASSOCIATED ACTIVITIES IN 2011

- Using BeSafeNet information and knowledge data base for organizing **on-line competition of school teaches**, from cities near NPP, in awareness on radiological risk (development of on-line questionnaire, registration, answers evaluation, BeSafeNet information and data base adjustment)
- Organizing for **winner of on-line competition** the training course in Kiev with programme and training materials, based on developed jointly with ASN France and other experts

RESULTS OBTAINED PREVIOUSLY

The international workshop "**Public authorities and civil society together for a safe European nuclear future**" have been organized and was held in Kiev, Ukraine **22-23 September 2008**. The participants of Workshop – representatives of international organizations: European and Mediterranean Major Hazards Agreement of the Council of Europe (EUR-OPA), Congress of Local and Regional Authorities of the Council of Europe, International Atomic Energy Agency (IAEA), national, regional and local authorities and communities' representatives, mayors of cities from 15 countries: Armenia, Belgium, France, Italy, Spain, Sweden and others – discussed and adopted conclusions of Workshop. Workshop conclusion is basis of this project.

Task Force Group Meeting "To foster better radiological protection and information for populations living in areas that might be affected in the case of an nuclear or radiation accident" was held in Kiev, Ukraine 2-4 September, 2009.

The meeting with ASN France about collaboration on public awareness on radiological risk was organized, programme and training materials have been developed.

THE PROMOTION OF RISKS PREVENTION REGARDING THE NATURAL DISASTERS AND THE IMPLEMENTATION OF ANTI-RISK EDUCATION ACTIVITIES IN SCHOOLS (*ECMNR - European Centre for Mitigation of Natural Risks, Chisinau*)

TARGET COUNTRIES: Member states of EUR-OPA

LOCAL COORDINATOR: European Centre for Mitigation of Natural Risks (ECMNR)

OTHER PARTICIPANTS:

SPECIALISED CENTRES : European Centre for Risk Prevention (Sofia, Bulgaria), European Centre for Social Research in Emergency Situations (Madrid, Spain), BeSafeNet (Cyprus)

NATIONAL AUTHORITIES: Ministry of Education of the Republic of Moldova, Institute of Education Sciences, Department of Civil Protection and Emergency Situations of the Ministry of Internal Affairs

OBJECTIVE OF THE PROJECT

Global objectives:

For the elaboration of the global objectives were taken into account several psycho-pedagogical principles and demands of basic training capacities: elementary notions, methods of protection, safety rules, risks identification. The Emergency situations throughout the Europe (Europe et Mediterranee) demonstrates us that over the past years a large part of the population, including the didactic framework, are showing a reduced competence and even ignorance about the rules of organization of emergency actions regarding rescue and protection in exceptional situations.

The basic objectives are primarily humanitarian, to protect the population against hostilities or disasters, to help them to overcome their immediate effects, providing the necessary conditions for surviving.

The multiple data demonstrates that the destructive force of natural disasters is constantly increasing, which requires us to organize and conduct the educational process in a new way: awareness of the complexity and importance of anti-risk education, identification of the available resources and experiences in education and learning effective modern methods of protection in case of natural hazards.

The elaboration of an educational project in English language for the didactic framework and other persons interested in the promotion of the culture of risks prevention regarding the natural hazards and the implementation of the anti-risk activities in schools.

The development of the directions for solving the problems related to management of emergency situations.

Specific objectives for 2011 :

- The elaboration of the suggestions for carrying out studies in the field of training high qualified teachers for the management of natural hazards.
- Popularization of the security rules in case of exceptional situations.
- The elaboration of the conceptual parts of education regarding the strategy against natural hazards in educational institutions.

EXPECTED RESULTS IN 2011

1. The elaboration of the suggestions for carrying out the studies in the field of training high qualified teachers for the management of natural hazards and the directions for improving the didactic framework and management of the pre-university educational institutions.
2. The elaboration of educational principles in the domain of the protection in case of natural hazards with major risks and the popularization in pre-university institutions of the rules of security in case of exceptional situations.

ASSOCIATED ACTIVITIES IN 2011

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ITALIAN VERSION OF THE BESAFENET WEBSITE (CEMEC - European Center for Disaster Medicine, San Marino)

TARGET COUNTRIES: Italy, San Marino

LOCAL COORDINATOR: Prof. Alessandro Barelli

OBJECTIVE OF THE PROJECT

Global objectives :

To make the BeSafeNet web site available in Italian Language.

Specific objectives for 2011 :

Translate the finalised material and implement it in the website.

EXPECTED RESULTS IN 2011

Italian version of BeSafeNet website operational

ASSOCIATED ACTIVITIES IN 2011

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INFORMATION AND AWARENESS / INFORMATION ET SENSIBILISATION

NATIONAL AND MUNICIPAL CAMPAIGNS ON INFORMING AND WARNING THE POPULATIONS ABOUT EMERGENCIES AT CENTRAL AND MUNICIPAL LEVELS: DEVELOPMENT OF INFORMATION MATERIALS FOR THE MOST VULNERABLE PEOPLE (*ECRM - European Interregional Scientific and Educational Centre on Major Risk Management, Yerevan*)

TARGET COUNTRIES: Armenia, the Southern Caucasus countries and neighboring countries, states – members of EUR-OPA Major Hazards Agreement, other concerned countries.

LOCAL COORDINATOR: European Interregional Scientific and Educational Centre on Major Risk Management (Yerevan, Armenia)

OTHER PARTICIPANTS:

SPECIALIZED CENTRES: ISPU, Belgium; TESEC, Ukraine; other interested Centers.

COUNTRIES AUTHORITIES: Rescue Service of Armenia under Emergency Management Ministry, State Academy of Crisis Management of the Emergency Management Ministry, “Emergency Channel” Information Agency.

OBJECTIVE OF THE PROJECT

Global objectives:

Short term

- Developing and updating the “Methodology and Plan for action aiming to develop and hold of national and municipal “Campaigns” on informing and warning the population about emergencies at central and municipal levels”, developing relevant information materials for all segments of the population, including the most vulnerable people: children, the elderly and people with disabilities.
- Developing and holding national and municipal “Campaigns” on informing and warning the population about emergencies in order to keep all the segments of the population of the Republic of Armenia, including the most vulnerable people, aware of likely risks (natural, industrial, nuclear, transport) threatening each particular region of the country, of likely specific disaster scenarios, mechanisms and tools, used to inform and warn the population about emergencies and about what to do when warned on an imminent hazard and in the case of a particular disaster.
- As local governance bodies are the first who must protect the population, this Project has to be implemented at the both: central and municipal (local) levels. Leaders of local governance bodies, heads of schools, hospitals, policlinics, industrial enterprises, offices and mass media are called to engage into the development and realization of this Project.

Long-term

- The acquisition by the population of the Republic of Armenia of the required knowledge about existing hazards of natural, manmade and other nature, threatening the community; the degree of vulnerability and the level of risks, that communities are exposed to; how to prepare beforehand for a likely disaster and to act adequately in times of a specific disaster, and fundamental skills in properly reacting when warned about an impending event or at the actual disaster situation. The recurrent holding of nation-wide and municipal “Campaigns” is required for meeting this goal.
- The Project has to make provision for some organization-technical procedures (if the latter have failed to be carried out beforehand) such as:
 - developing and improving monitoring systems for emergencies typical of this particular region;
 - establishing centres specializing in processing and capturing monitoring systems’ data
 - setting up universal control tower posts;
 - establishing around o’clock crisis management centres;
 - updating communication and warning systems, through sustaining their constant readiness to functioning;
 - updating territorial automatic informing and warning Systems and setting up a centralized automatic informing and warning System.
- The Methodology and Plan for action aiming to develop and hold of the national and municipal “Campaigns” on informing and warning the population about emergencies at central and municipal levels, as well as relevant information materials for all segments of population, including the most vulnerable people, developed in the framework of this project, can be submitted as an essential component for the development of national and regional informing and early warning systems for all interested countries and regions, through factoring their geographical, natural - climatic and other specifics.
- Pooling the experience gained in the training of the population of the Republic of Armenia in skills of behavior in time of disasters typical of Southern-Caucasus countries and adjacent states at holding the similar “Campaigns” in adjacent countries through factoring their geographical, natural -climatic and other specifics.
- Basing on the Armenian expertise to develop a Regional early warning system for population of the Southern Caucasus countries and adjacent states about trans-frontier emergencies.

- Profound mitigation of consequences and reducing of losses which likely to be caused by trans-frontier emergencies

By fostering cooperation on the population protection, trans-frontier disaster risk reduction and emergency recovery to promote trust building between nations and thereby facilitate mitigation of a political tension in the region.

Specific objectives for 2011:

- ongoing further developing, discussing and polishing the information materials developed in 2010 for the most vulnerable segments of the population, particular children and people with disabilities,
- ongoing further carrying out of the necessary organizational measures;
- preparing suggestions on further building of the material-technical basis for informing and early warning system, drawn on the modern technologies;
- participation in ongoing preparation and running training courses, round tables and workshops, aimed to preparedness raising of local authorities and local communities to risk reduction and emergency management, with involvement of the relevant specialists from member-states of EUR-OPA Major Hazards Agreement and European Union to disseminate the local best practices, particularly from specialized European Centres (ISPU, Belgium, TESEC, Ukraine);
- participation in holding complex regional and municipal exercises aiming to organize and provide governance to measures aimed at informing, early warning and protection of population in the case of probable accidents occurred at potentially dangerous installations(such as the nuclear power plant or installations involved into storing, using or producing hazardous substances, reservoirs and etc.), as well as during simulated exercises aiming to respond to disasters with the natural trigger through developing them into regional and municipal “Campaigns” on informing and warning the populations about emergencies.
- undertaking organizational measures to ensure a close bi- and multilateral cooperation and support by relevant international organizations, who have the interest into the mission.

EXPECTED RESULTS IN 2011

1. Development and submitting of the updated final variant in English “A manual on preparedness and rules of behavior for people with disabilities if an earthquake is real or seems imminent (the priorities for action), which preliminary variant was created in 2010 and submitted to EUR-OPA Major Hazards Agreement’s Secretariat.
2. Development of information materials for specialized educational and other institutions where people with disabilities, especially children, are taken care of.
3. The brief analyses of a current state of an organization-technical provision system available in the Republic of Armenia aiming to deepen and institute a project “National and municipal “Campaigns” on informing and warning the population about emergencies at central and municipal levels”. Taking into account, that one of the main tasks of the National Platform will be the development of proposals on the creation and updating the state system of informing and warning the population about emergencies
4. The submitting of a final variant of the “Methodology and Plan for action aiming to develop and hold national and municipal “Campaigns” on informing and warning the population about emergencies at central and municipal levels” and relevant informational materials, developed within the Project, to the future Administrative Council of the National Platform and to the Ministry of Emergency Situations of Armenia for discussions to elaborate the draft Plans on developing policy aimed to prepare and hold regular national and municipal “Campaigns” in the Republic of Armenia.
5. Editing and polishing of the final variant “Basic tests and general recommendations for assessing and increasing safety for educational establishments, school administration and parents” developed earlier (including the preparation of the final English variants of the mentioned document). Reviewing, coordination and assertion, in cooperation with the State Crises Management Academy, of the final variant of basic tests and general recommendations, their duplication, choosing of experimental schools and submitting of these materials to the mentioned schools.
6. Development of the final variant of “Memorandum first aid pocket – book”. Testing a “Memorandum first aid pocket – book” for different users primarily for rescuers, school children and students, its improving built on comments and suggestions.
7. Participation in running the teaching courses in ongoing, preparation and running training courses, round tables and workshops, aimed to preparedness raising of local authorities and local communities to risk reduction and emergency management, with involvement of the relevant specialists from member-states of EUR-OPA Major Hazards Agreement and European Union to disseminate the local best practices, in particular from specialized European Centres (ISPU, Belgium; TESEC, Ukraine)
8. Participation with Crisis Management Academy and Yerevan office of United Nations Development Program in running awareness raising and emergency preparedness courses for local authorities and civil communities at special risk in relevant different regions of Armenia.

9. Learning and analyses of the experience on trans-frontier cooperation – Belgium, France, Netherlands in collaboration with European Centre in Belgium. Building on the above experience to develop proposals to create a regional early warning system for the population of Southern Caucasus states and neighboring countries in emergencies of trans-frontier nature within the frames of our proposed Programme.

RESULTS OBTAINED PREVIOUSLY

Basing on the outcomes of the activities performed within the Project in **2006**, the comprehensive Activity Report (containing 27 pages) that includes the detailed description of the performed activities together with analyses of some challenges for development and especially for practical implementation of the Project has been prepared. The ways to resolve the above challenges have been considered as well as some corrections during the Project development and implementation phases have been made. The Activity Report **2007** had been focused on the basic outcomes with references if necessarily to the results of analyses 2006.

In **2008** the preliminary variant in English of The Methodology and Plan for action has been elaborated. The final variant in English of basic information materials has been elaborated:

- Information Leaflet: What to do first
- Brief information for the population what to do first when warned on an imminent disaster
- The priorities for action to be undertaken by the population when warned on an imminent disaster or in case of disasters likely to occur in Armenia

The preliminary variants of the information materials for municipalities at special risk in English have been prepared: one for municipalities at a possible radiation risk, another for the municipalities in whose territories some hazardous substances are being produced, used or stores; and the third one for the municipalities, located in flood-prone vicinities adjacent to high pressure dikes.

In **2009** the pursued goals were supplemented and corrected, drawn on the new priorities and requirements of the guidelines of the EUR-OPA Major Hazards Agreement and the actual events that have taken place. The need to insert these supplements and amendments has also been dictated by the significance of the issues discussed during the International Workshops held under support of the EUR-OPA and attended by EUR-OPA representatives in line with ECRM specialists as presenters and panelists. By taken into account the above, the new priorities and requirements of the guidelines of EUR-OPA, in particular, ensuring the provision of equal opportunities for the most vulnerable segments of populations: the children, elderly and people with disabilities (the disabled) to education, informing, warning and relevant public services in regard to the observance of their rights, equitable access to meeting their needs in the field of disaster risk reduction, the protection of life and health, the administration of first aid and first psychological aid in emergencies, the Yerevan European Centre (ECRM) in 2009 within the present Project: "National and Municipal Campaigns" has conducted some additional researches addressing the above venues;

In particular, there was analyzed the text of "The Standard Rules on the equalization of opportunities for people with disabilities" (adopted by the UN's General Assembly) in the Appendix to Resolution 48/96 of 20 December 1993 and there have been given some suggestions to supplement the texts of the Standard Rules addressing the above direction. In a part dealing with ensuring the provision of equal opportunities in the above area to the disabled of all age groups requires in line with resolving legislative and other strategic goals, there have been prepared some suggestions aimed at meeting the above three important objectives:

- To educate emergency and relief managers and workers about the special and heterogeneous needs of the people with disabilities (including, the preparing and publication of correspondent information materials)
- To bring the people with disabilities to the emergency management table with the first responders to introduce the two sides to each other:
 - to educate first responders to work adequately with disabled, to ensure adequate preparedness and equip rescuers and related to them the personnel servicing the disabled to rescue and search the disabled and show them first aid and first psychological assistance
 - to make people with disabilities active participate in disaster planning and preparedness, teach them how to survive in emergencies, encourage them to cultivate creative skills, first- and self-aid skills included;
- For the people with disabilities to be insured equal rights and enhanced education and preparedness, the development of relevant information materials assigned to them and their training should be implemented through regular organizing and holding national and municipal Campaigns on informing and warning the population about emergencies

The research outcomes have been submitted by ECRM specialists at the following International Workshops held by the support of EUR-OPA in 2009:

- "Human rights in Disasters: Search and Rescue operations in disasters, especially for vulnerable people", (5-6 November 2009, Athens, Greece)
- "International Workshop on disaster education/training", (23-24 November, 2009, Antalya, Turkey)

The suggestions drawn on the outcomes of the above researches as supplements and amendments have been mainstreamed into methodological and informational materials developed within the given Project: "National and Municipal "Campaigns", being briefly quoted in the relevant sections of the present report.

In 2009 the final universal variant of "The Methodology and Plan for action" has been prepared as well as the final variants in English of the following informational materials assigned to the municipalities at special risks:

- A manual for the population on how to act when radiation pollution is real or seems imminent
- A manual for the population on how to act when a flood is real or seems imminent
- A manual for the population on how to act when chemical pollution is real or seems imminent

An updated final version of the "A manual for the population on how to act when an earthquake is real or seems imminent" have been developed. All above materials are being submitted to the Agreement's Secretariat.

In 2010, specific objectives were:

- further development, discussion and editing of final versions of general and supplementary information materials together with other materials included into "The Methodology and Plan for action" for the use of the municipalities at special risks and special targeted groups of the population (most vulnerable people);
- further development, discussion and editing of final version of the "The Methodology and Plan for action"

The pursued goals were corrected according to new priorities and requirements to the documents prepared and approved at the 12th Ministerial Session. This refers to 2 priority directions specially noted in the "Medium Term-Plan 2011-2015" and in the "Draft Resolution 2010-2 " On Ethical Values and Resilience to Disasters", namely:

- vulnerable people
- national platforms

Within the first direction, we developed in 2009 some "Suggestions on the equalization of opportunities for people with disabilities". These results were presented at relevant international workshops held with the support of EUR-OPA, in particular at the Meeting of the Working Group on Ethics (January 2010, Paris).

The suggestions drawn on the outcomes of the above researches as supplements and amendments have been mainstreamed into methodological and informational materials developed within the given Project: National and Municipal "Campaigns". Some substantial supplements have also been made to Section 4, in Sub-section 2.6. "Specific targeted groups of the population" of the "Methodology and Plan for action".

However, main work done in 2010 is the development of a Pilot Project (a preliminary variant) of the first of the information materials targeted for vulnerable people:

"MANUAL ON PREPAREDNESS AND RULES OF BEHAVIOR FOR PEOPLE WITH DISABILITIES IF AN EARTHQUAKE IS REAL OR SEEMS IMMINENT"

The above brochure, being one of the information modules from the unique set of information materials developed during 2006-2009 and polished in 2010, has the similar construction principle, unique emblem, basic scenario and motto. On the other hand, it is larger in size and more complex in its composition.

First of all, proceeding from the specifics typical of the people with disabilities, including children, as well as by taking into account that this brochure is a first from an array of information materials addressed to people with disabilities, it contains more extensive introduction part. More over, it is designed to three categories of people with disabilities, including children:

- People with impaired mobility
- Who are blind or have impaired vision and
- Who are deaf or have impaired hearing.

Simultaneously, it is designed to their family members, guidance, neighbors and administration and personnel of specialized educational and other institutions where they are take care of.

The next step could be the formation and creation of a separate informational materials aimed at children with disabilities, taking care in specialized educational and other institutions. Alongside, were the final variants of the information materials assigned for the municipalities at special risk were edited and updated.

In 2010 the updated and edited final variant of the "Methodology and Plan for action" was submitted to the Ministry of Emergency Situations of Armenia for discussions to elaborate the draft Plans on developing policy aimed to prepare and hold regular national and municipal "Campaigns" in the Republic of Armenia.

However, the development of a draft Plan was delayed till the National Platform on disaster risk reduction is built, as one of the main tasks of the National Platform will be the development of proposals on the creation and updating the state system of informing and warning the population about emergencies. Some initial steps addressing this venue have already made in 2009 and continued in 2010. In particular ordered by the Minister of the Emergency Situations dated August 4, 2010 a Commission on the creation of National Platform on Disaster Risk Reduction (including the ECRM Director) was set up that began developing suggestions connected to its establishment. Drawn on the analyses of international experience gained in the creation of national platforms, the materials of the Meetings dealing with the above issue organized under support of EUR-OPA in the office of UNESCO in Paris, an extensive paper "Building and strengthening of National Platforms on disaster risk reduction as an effective tool for bi-, multilateral and regional cooperation (the case of Armenia)" was created and underlined the presentation of the Minister of Emergency Situations of the Republic of Armenia, made at the 12-th Ministerial Session.

I-PHONE APPLICATION EUR-OPA (*CEMEC - European Center for Disaster Medicine, San Marino*)

TARGET COUNTRIES: Italy, San Marino

LOCAL COORDINATOR: Prof. Alessandro Barelli

OBJECTIVE OF THE PROJECT

Global objectives :

To plan, to build and to implement an I-phone application to publicise the work of the Agreement to gain visibility and support for its activities.

Specific objectives for 2011:

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EXPECTED RESULTS IN 2011

i-Eur-opa Application available in app stores.

ASSOCIATED ACTIVITIES IN 2011

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FOREST FIRES / FEUX DE FORETS

REGIONAL UNECE/FAO/COE FORUM ON CROSS-BOUNDARY FIRE MANAGEMENT *GFMC - Global Fire Monitoring Center, Freiburg*)

TARGET COUNTRIES: CoE / UNECE member states. Emphasis of financial support: Countries of the EECCA region.

LOCAL COORDINATOR: Prof. Dr. Johann G. Goldammer (GFMC), Prof. Dr. Nikola Nikolov (RFMC)

OTHER PARTICIPANTS:

SPECIALISED CENTRES: European Center for Forest Fires (ECFF; Athens, Greece)

NATIONAL AUTHORITIES: Focal points and regional / government representatives of the UNISDR Regional Southeast Europe / Caucasus and Eurasia Wildland Fire Networks

OBJECTIVE OF THE PROJECT

Global objectives

Prepare the rationale / justification and a concept for the development of a regional voluntary or legal agreement on transboundary cooperation in fire management. This is a multi-year endeavor.

Specific objectives for 2011

2011 activities are scheduled at a crucial stage of a regional dialogue (both within the CoE and UNECE activities) and in the aftermath of severe wildfire episodes, notably the fire episode in Western Russia in 2010. In 2011 a "UNECE-FAO / CoE Regional Forum on Cross-boundary Fire Management" (to be hosted by Italy, October 2011) will be prepared and conducted, in conjunction with the overall objectives of the UNISDR Global Wildland Fire Network and its 4-annual Global Forum, the 5th International Wildland Fire Conference (South Africa, May 2011) (follow-up of the 4th Int. Conference in Sevilla, Spain, 2007). For the preparation of the Forum representatives from EUR-OPA signatory states that are active in the ongoing work of the GFMC and the newly established RFMC and its associated UNISDR Regional Southeast Europe / Caucasus and the Regional Eurasia Wildland Fire Networks will organize an internal side meeting at the South Africa Conference, at the same time contribute to the conference and jointly formulate the recommendations of the conference. The second step will be the Forum itself in which these representatives shall attend on behalf of their government agencies. . Given the uncertainties of organizing the Forum (Italy has withdrawn its availability to host, due to funding and personnel constraints) the Forum may be held in Geneva, or postponed to 2012. In this very case the travel funding would be used for a preparatory meeting in Geneva or Freiburg during 2011.

EXPECTED RESULTS IN 2011

Draft of a Regional Agreement on Cross-boundary Cooperation in Fire Management in the UNECE Region, associated with EUR-OPA.

ASSOCIATED ACTIVITIES IN 2011

Activities of the GFMC in Southeast Europe / Caucasus in conjunction with the ENVSEC Project Phase II (and proposed Phase III) "Enhancing National Capacity on Fire Management and Wildfire Disaster Risk Reduction in the South Caucasus" (financed by ENVSEC through OSCE Secretariat). Outreach work of the UNISDR Regional Southeast Europe / Caucasus and Eurasia Wildland Fire Networks and the newly established Regional (SE Europe/Caucasus) Fire Monitoring Center(<http://www.rfmc.mk/>); see also: http://www.fire.uni-freiburg.de/GlobalNetworks/SEEurope/SEEurope_1.html.

RESULTS OBTAINED PREVIOUSLY

Between 2004 and 2010 a series of Regional Consultations of the UNISDR Regional Southeast Europe / Caucasus Wildland Fire Network were held, the last two hosted at the Ministry of Agriculture, Forestry and Water Economy, Skopje, 4-6 December 2008, and followed by the 2009 Regional Advanced Seminar on "Fire Management on Terrain contaminated by Unexploded Ordnance (UXO), Land Mines and Radioactivity (Kiev/Chernobyl, 6-8 October 2009). In 2010 CoE supported the participation of delegates/focal points from EUR-OPA member states at the joint meetings of the UNISDR Wildland Fire Advisory Group / Global Wildland Fire Network (Freiburg, 26-29 June 2010, with participation of the EUR-OPA Executive Secretary) – resulting in a recommendation to further develop regional agreements on transboundary cooperation in fire management.

SEISMIC RISK / RISQUES SISMIQUES

DEVELOPMENT OF A COMMON METHODOLOGY AND TOOLS FOR EMERGENCE MANAGEMENT
(CERU - European Center on Urban Risks, Lisbon)

TARGET COUNTRIES: Portugal, Morocco, Italy, France and Italy

LOCAL COORDINATOR: Luis Mendes-Victor

OTHER PARTICIPANTS:

SPECIALISED CENTRES: CERU, CEPRIS, CUEBC, EMSC, CERG, ECILS

NATIONAL AUTHORITIES: IDL, University of Lisbon, IM – Department of Geophysics

OBJECTIVE OF THE PROJECT

Global objectives:

To create a unified framework for seismic hazard assessment and emergence management.

Specific objectives for 2011:

Evaluate the methodologies of the different participants

EXPECTED RESULTS IN 2011

Publication of the Book “State of the Art on Earthquake Prediction”

ASSOCIATED ACTIVITIES IN 2011

Workshop organized by the Portuguese Academy of Engineering - Working Group on Earthquake Prediction, July 2011.

SEISMIC ANALYSIS APPROACH OF THE HISTORICAL BUILDINGS AGGREGATES (CERU, European Center on Urban Risks, Lisbon)

TARGET COUNTRIES: Portugal, France, Italy, Morocco, Algeria, Macedonia

LOCAL COORDINATOR: Luis Mendes-Victor

OTHER PARTICIPANTS :

SPECIALISED CENTRES : CERU, CERG, CUEBC, ECILS, CEPRIS

NATIONAL AUTHORITIES: IDL, University of Lisbon, IM – Department of Geophysics

OBJECTIVE OF THE PROJECT

Global objectives: Analysis of the seismic impact on the historical buildings aggregates considering environmental sources.

Specific objectives for 2011:

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EXPECTED RESULTS IN 2011

Didactic examples from Macedonia, France, Italy and Morocco

ASSOCIATED ACTIVITIES IN 2011

- Classification of the sources and sites. Date: April 2011
Details: Use of the GIS to compile the present knowledge:
- Definition of plans to manage the resilience of historical buildings. Date: September 2011
Details: 3 days Meeting of 10 to 15 individual participants
- Diagnosis of the distinct aggregates on the chosen sites. Date November 2011

RESULTS OBTAINED PREVIOUSLY (if any)

Portugal, Macedonia, France and Morocco Projects

DEVELOPMENT OF A COMMON VULNERABILITY METHODOLOGY FOR RISKS -TSUNAMI INUNDATIONS MODELING ON THE NORTH ATLANTIC AREAS (CERU - European Center on Urban Risks, Lisbon)

TARGET COUNTRIES: Portugal, Morocco, France, Spain and Italy

LOCAL COORDINATOR: Luis Mendes-Victor

OTHER PARTICIPANTS:

SPECIALISED CENTRES: CERU, CEPRIS, EMSC, specialised European centre on coastal risks

NATIONAL AUTHORITIES: IDL, University of Lisbon, IM – Department of Geophysics

OBJECTIVE OF THE PROJECT

Global objectives: To create a unified framework for inundations assessment and propose a comprehensive probability model.

Specific objectives for 2011:

Evaluate the methodologies of the different participants

EXPECTED RESULTS IN 2011

Depending on the workshops that will be organized

ASSOCIATED ACTIVITIES IN 2011

Participation in the workshops organized by the Working Group of the UNESCO-COI

RESULTS OBTAINED PREVIOUSLY

Tsunami Warning and Mitigation Activities developed under the framework UNESCO-COI

IMPLEMENTATION OF EC8-Part3 FOR SEISMIC ASSESSMENT and RETROFITTING of EXISTING BUILDINGS (ECPFE - European Center on Prevention and Forecasting of Earthquakes, Athens)

FIELD OF ACTIVITY: Education, Legislation

TARGET COUNTRIES: ALL THE COUNTRIES OF THE ACTIVITIES

LOCAL COORDINATOR: EARTHQUAKE PLANNING AND PROTECTION ORGANIZATION (E.P.P.O.) AND EUROPEAN CENTER ON PREVENTION AND FORECASTING OF EARTHQUAKES (E.C.P.F.E.)

OTHER PARTICIPANTS:

NATIONAL AUTHORITIES: EARTHQUAKE PLANNING AND PROTECTION ORGANIZATION (E.P.P.O.)

OBJECTIVE OF THE PROJECT

Global objectives:

It is already known that, from January 2011, all EC countries are obliged to implement the Eurocodes. Eurocode 8 deal with Earthquakes. Parts 1 and 2 refer to new structures, while Eurocode 8-Part 3 deals with Seismic Assessment and Retrofitting of Existing Buildings.

Nevertheless EC8-Part3 doesn't serve in detail the demands of an intervention study. It is obvious that an existence of a more detailed Intervention Code is necessary.

On 2001, EPPO assigned a Task Group to prepare a National Code concerning Seismic Assessment and Retrofitting of Existing RC Buildings. A first Draft was submitted to selected Technical Offices in order to conduct Implementation Studies and thus to check the functionality, the adequacy as well as the feasibility of the Code.

The Task Group after elaboration of the conclusions and recommendations suggested by the Technical Offices completed the final Draft Code on September 2010.

Also the Administrative Council of EPPO, after the relevant announcement, selected Applied Research Studies correlated to the Code.

Under the present proposal a specific Working Group should be nominated by ECPFE in collaboration with EPPO in order to harmonize the National Code with EC8-Part3 so as to put in force the National Code as a non-contradictory complementary document elaborating specific objects and facilitating the implementation of EC8-Part3.

Obviously, in order to facilitate the dissemination of the above and train the engineers the design framework special seminars are needed.

Specific objectives for 2011 :

In the framework of this activity two sub activities are proposed.

- i. Firstly a Working Group should take over the job to prepare a non-contradictory complementary document elaborating specific objects of EC8-Part3 and provide material suitable for presentation at seminars.
- ii. Secondly, seminars should be held to facilitate the implementation of EC8-Part3 supplemented by the non-contradictory complementary National document.

EXPECTED RESULTS IN 2011

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ASSOCIATED ACTIVITIES IN 2011

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CLIMATE CHANGE IMPACT / IMPACT CHANGEMENT CLIMATIQUE

CLIMATE CHANGE, CULTURAL HERITAGE AND RISK : ENERGY, MOBILITY AND POLICY (CUEBC - Centre Universitaire Européen pour les Biens Culturels, Ravello)

DOMAINE D'ACTIVITE : Education. Cours de niveau Master-Doctorat.

PAYS CIBLES : Ensemble des pays

COORDINATEUR LOCAL: R.-A. Lefèvre, Professeur émérite à l'Université Paris Est Créteil

AUTRES PARTICIPANTS : Cristina Sabbioni, Institut des Sciences Atmosphériques et du Climat – ISAC-CNR Bologna

OBJECTIF DU PROJET

Objectifs globaux:

Exposé didactique des connaissances actuelles sur les impacts du changement climatique sur le patrimoine culturel bâti (monuments, musées, bibliothèques, archives et réserves) par une approche scientifique, politique, technique, économique et managériale.

Objectifs spécifiques pour 2011:

Evaluation pour le patrimoine culturel des risques liés à la consommation d'énergie et à la mobilité des citoyens. En effet, la consommation non maîtrisée d'énergie et le droit à la mobilité privée comportent des risques car ils changent le climat local et global, et diminuent les ressources naturelles. Leur impact sur le patrimoine culturel et sur la possibilité d'accès aux sites historiques et archéologiques doit être évalué et enseigné, car il crée de nouveaux défis pour le management de ce patrimoine culturel.

De nouvelles approches de la gestion du patrimoine culturel doivent envisager de réduire la consommation d'énergie et devraient développer une nouvelle philosophie de la conservation en prenant en charge le risque climatique.

Les objectifs sous-mentionnés s'inscrivent dans le Plan à Moyen Terme 2011-2013 de l'Accord EUR-OPA Grandes Risques, et notamment dans la Priorité II « MOBILISER LES CONNAISSANCES POUR REDUIRE LA VULNERABILITE », points c) *Améliorer la résilience environnementale et évaluer le risque entraîné par le changement climatique* et d) *Utiliser les connaissances pour former des spécialistes*.

RESULTATS ATTENDUS EN 2011

Ce cours 2011 abordera l'incertitude et la complexité de la prise de décision fondée sur des faits tangibles dans un monde en changement. Il donnera un aperçu des liens existant entre énergie, mobilité, accessibilité aux monuments et sites, et politique dans le domaine du changement climatique en liaison avec le patrimoine culturel. Il donnera de plus des perspectives de gestion des sites culturels pris comme exemples de durabilité pour un large public. Le but ultime est de créer un dialogue entre les gestionnaires du patrimoine et les décideurs pour une politique plus rigoureuse dans ces domaines.

ACTIVITES ASSOCIEES EN 2011

- Publication du cours « *Management and Protection of Cultural Heritage facing Climate Change* » tenu du 4 au 9 octobre 2010 à Ravello.
- Rédaction du plan de gestion du site UNESCO « Côte d'Amalfi », en collaboration avec la Soprintendenza BAP d Salerno et Avellino et la Comunità Montana « Monti Lattari ».

RESULTATS OBTENUS ANTERIEUREMENT (si pertinent)

Le Conseil de l'Europe a participé à l'organisation et au financement de 3 manifestations importantes en 2009 et 2010 sur la même thématique :

1- Un Colloque international « *Climate Change and Cultural Heritage* » tenu à Ravello du 14 au 16 mai 2009. Il a réuni 42 participants de 17 pays et organismes internationaux.

2- Un Cours de niveau Master-Doctorat « *Vulnerability of Cultural Heritage to Climate Change* » tenu à Strasbourg du 7 au 11 septembre 2009. Il a réuni 36 étudiants de 13 pays et 17 professeurs de 7 pays.

Ces deux premières manifestations ont donné lieu à l'édition des Actes du Colloque et des Textes des Cours en un volume de 201 p. illustrées : « *Climate Change and Cultural Heritage* » (Edipuglia, édit, Bari).

3- Un 2ème Cours de niveau Master-Doctorat « *Management and Protection of Cultural Heritage facing Climate Change* » tenu du 4 au 9 octobre 2010 à Ravello. Il a réuni 22 étudiants de 7 pays et 16 professeurs de 8 pays.

CLIMATE CHANGE: NONLINEAR DYNAMICS PREDICTIONS OF REGIONAL EFFECTS (GHHD - *Geodynamical Hazards of High Dams, Tbilissi*)

TARGET COUNTRIES : Georgia, Armenia, Azerbaijan, Turkey

LOCAL COORDINATOR: T. Chelidze

OTHER PARTICIPANTS :

SPECIALIZED CENTRES : CERG (Strasbourg), ECMHT (Baku), ECTR (Armenia)

COUNTRIES AUTHORITIES : Ministry of Environment Protection and Natural Resources of Georgia

OBJECTIVE OF THE PROJECT

Most models of climate changes are based on extrapolation of observed linear trends. At the same time, though global warming is well established, the question of persistence of trends on regional scales remains controversial. Indeed, climate change for specific region and specific time interval by definition includes more than the simple average of weather conditions. Either random events or long-term changes, or more often combinations of them, can bring about significant swings in a variety of climate indicators from one time period to the next. Therefore in order to achieve further understanding of dynamics of climate change and prevent related disasters, the character of stable peculiarities of analyzed dynamics should be investigated. Analysis of the character of long range correlations in climate time series or peculiarities of their inherent memory is motivated exactly by this goal. Such analysis carried out on different scales will help to understand and predict spatial and temporal features of regional climate change during general global warming.

RESULTS OBTAINED PREVIOUSLY

Our former results indicate that variation of daily or monthly mean temperatures reveals clear dependence in the time and space domains. It was shown that extent of persistence of regional air temperature variation is unstable for large time scales. It was also shown that dynamics of climate change on temporal and spatial scales in East Georgia for last century is characterized by much lower variability (i.e. it is more stable) than for West

EXPECTED RESULTS IN 2011

As a result of proposed project in 2011 we expect to obtain general dynamical characteristics of air temperature variation in Georgia, its persistence and memory characteristics as well as their relation to anthropogenic influences; global climate processes for the last century will be revealed. The well known problem of controversy in dynamics of air temperature variation in West and East Georgia will be resolved based on proper using of modern data analysis methods.

In order to carry out full scale analysis we propose to carry out associated activity to find colleagues worldwide who are interested in comparative analysis of climate change on different spatio-temporal scales as well as revealing appropriate data sets and funding resources. Such activity will help to resolve problem on relation between global and local climate change dynamics and will help to recognize main disaster related changes in local climate characteristics.

ASSOCIATED ACTIVITIES IN 2011

Specific objective of project for 2011 is assessment of persistence and memory characteristics of regional air temperature variation in Georgia in the light of global climate change.

For this purpose longest available temperature time series of Tbilisi meteorological station (since 1890) will be analyzed. Similar time series on shorter time scales of five stations in the West and East Georgia will also be used as well as monthly mean temperature time series of five stations (1906-1995) in the West and East Georgia. As far as most incorrect conclusions about dynamical properties of complex dynamics are related to "data bleaching" procedures, in order to avoid destruction of original dynamics caused by linear filtering in the present research special noise reduction procedure of time series will be used. Both mono- and multivariate reconstruction procedures of climate change dynamics will be used. Additionally, temporally and spatially averaged daily and monthly mean air temperature time series will be analyzed. Extent of persistence in mentioned time series will be evaluated using R/S analysis calculation. Detrended and Multifractal Detrended Fluctuation Analysis as well as multi scaling analysis based on CWT will also be used.

- Collection of data on temperature (March)
- Nonlinear Analysis of data (July)
- Creation of scenario of expected climate change (November)

COASTAL RISK CO-OPERATION BETWEEN MALTA AND TURKEY FOR THE DEVELOPMENT OF RISK AND VULNERABILITY MAPS FOR SELECTED COASTLINES WITH REGARD TO SEA LEVEL RISE & TSUNAMIS (ICoD - Euro-Mediterranean Centre on Insular Coastal Dynamics, La Valletta)

TARGET COUNTRIES : Malta; Turkey; Other Mediterranean countries.

LOCAL COORDINATOR: Dr Anton Micallef, Director, ICoD

OTHER PARTICIPANTS : Middle East Technical University, Turkey; UNESCO Malta National Commission; University of Malta; International Ocean Institute, Malta

OBJECTIVE OF THE PROJECT

Global objectives :

Identification and mitigation of risk and vulnerability to Sea Level Rise and Tsunamis for selected low lying coastal areas in the Maltese islands and Turkey.

Specific objectives for 2011 (Year 2 of the project):

As for Global objectives (ongoing project)

EXPECTED RESULTS IN 2011

Development of regional / local scenarios (e.g. forecasted climate change impact on Sea Level Rise and possible tsunami events, downscaling from global to regional to local scenarios); Correlation of Mediterranean regional history of tsunamis to local vulnerability, wind and wave climate studies for selected sites, wave transformation studies, tsunami simulations and computations of the nearshore tsunami parameters at selected sites, development of database for the vulnerability risk maps.

ASSOCIATED ACTIVITIES IN 2011

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RESULTS OBTAINED PREVIOUSLY

Identification of historical events, selection of study areas from Turkey and Malta subject to possible effects of tsunamis, collection of necessary data (nearshore bathymetry and topography, distribution of coastal and marine structures and their characteristics, wind, wave and sea level data), public surveys, processing of data and database development for the computational tools.

WORKSHOP "COASTAL ECOSYSTEMS VULNERABILITY TO GLOBAL CHANGE AND EXTREME EVENTS : AT THE CROSSROADS OF KNOWLEDGE TO THE BENEFIT OF COASTAL AND MARINE ECOSYSTEM SERVICES" (CERCO – Centre Européen des Risques Côtiers, Biarritz)

TARGET COUNTRIES : all member countries.

LOCAL COORDINATOR: Françoise Pautrizel, Cerco

OTHER PARTICIPANTS :

SPECIALISED CENTRES : Centre Euro-méditerranéen sur la dynamique côtière insulaire – IcoD, Centre Européen sur les risques urbains – CERU, Centre pour la réduction des risques naturels – ECMNR, Centre Européen sur les risques géomorphologiques – CERG

NATIONAL AUTHORITIES : IFREMER, CNRS, IRD, Université de Pau et des Pays de l'Adour, Ville de Biarritz

OBJECTIVE

Global objective

The coastal zone and coastal ecosystems at the land-sea interface are the primary target of Biarritz 2011 international symposium for many reasons :

- They are areas of high biodiversity and intense productivity while they support high human densities with the multiple uses and economic activities that come with.
- Coastal areas represent about 75% of the ocean production while they cover only 5% of the oceans total surface. They are the place of multiple uses hence conflicts as regards the use of space and resources through activities like fisheries, aquaculture, tourism, energy production, port development, and urbanisation. Following the *Millennium Ecosystem Assessment*, it is estimated that about 60% of the coastal ecosystems of the world are degraded.
- Coastal ecosystems are highly constrained and have been through tremendous changes in the level of the sea. The coastline is generally highly unstable in the short and mid-term.
- Coastal ecosystems status depends on landward activities up to the top of the watershed including rivers fluxes and trajectories strong modifications. Dam building, which has been on the increase throughout the 20th century and consequently altered most of the European rivers, is still developing in Asia and Africa for energy production or water reservoir, which also has a strong impact on most of the great rivers and hence on coastal areas.
- While coastal ecosystems provide many ecological services, their degradation is reflected in the world ecological footprint which is now well beyond the Earth biological capacity to provide the necessary resources and absorb the wastes. The issue of integrated coastal management related to the preservation of these ecosystem goods and services is more urgent than ever.

Specific objectives for 2011

In this context, the conference, associated with a large marine resource users and maritime activities technical exhibition (Oceanovation) will cover the watershed hydrology and water run-off including estuaries as well as ocean and coastal waters changes as regards its biological productivity throughout the multiple trophic levels.

The conference will link the thematic approaches to understand the nature of the main physical, chemical and biological processes that occur on changing the structure and function of coastal ecosystems, an approach to cross-disciplinary allowing to combine scientific knowledge, but also all the knowledge to better understand the dynamic interactions between physico-chemical, biological, and socio-economic development.

These highly diverse ecosystems are exposed to extreme hazards (tsunamis, flooding, surges) and global changes including climate change. These pressures threaten up the very functions and services that are provided by coastal ecosystems and *in fine* human well-being.

The range of coastal risks is linked to the coastal ecosystem vulnerability to global changes, either directly (e.g. climate change) or indirectly (e.g. demography) generated as defined in the *Millennium Ecosystem Assessment* logical framework.

Vulnerability is a function of three interconnected elements : exposition to risk, sensitivity and resilience level, or capacity to adapt to the factors of change.

Considering risk relate strongly with the *Precaution Principle* as stipulated in the 1992 Rio declaration in a two steps approach : *i)* scientifically-based risk analysis to improve forecasting accuracy and, *ii)* forms of risk management that makes it acceptable from the social, environmental and economic point of view.

Sustainable development lies at the crossroad of social, environmental and economic aspects, which suppose the crossing up of scientific disciplines, which should lead to collective learning between scientific communities and beyond, with the many other groups contributing to knowledge development.

Such an ambition should be underpinned by an extended but coherent network of partnerships between stakeholders and institutions involved in the governance and management of complex coastal socio-ecosystems.

The conference will make the link between the different topics at stake in order to promote a fair understanding of the main physical, chemical and biological processes determining the structure and the functioning of coastal ecosystems. This will require a pluridisciplinary approach, combining scientific but also traditional and local

ecological knowledge in regard to the interconnection dynamics in between physico-chemical, biological and socio-economic factors.

EXPECTED RESULTS IN 2011

Organize an international scientific symposium on the coastal risks entitled "Vulnerability of coastal ecosystems to global change and extreme events" which will run from October 18 to 21, 2011 in Biarritz. Alongside the conference will be held a trade show for bridging the gap between scientific knowledge and technological applications. Its holding will contribute to the creation of an Ocean "pôle" in Biarritz consisting of scientific, economic and environmental mediation activities on the theme of ocean and coastlines, this conference being a way to federate joint actions between scientific and economic partners. It will aim to be renewed on a biennial basis in the lineage of OCEAN-EXPO held in Bordeaux every three years from 1971 and BORDOMER who took over from 1985 to 1995.

Sessions/topics :

1 – Understanding ecosystem functioning and processes

The 1st session aims at highlighting the ecological and physical functions which play a key role in the response of ecosystems to pressures and extreme events for a wide range of issues related to the goods and services provided by the coastal zone. Understanding such functions will allow to answer the following questions :

- What is the intensity of changes and are these changes reversible ?
- What are the processes involved and what are the controlling factors ?
- What temporal and spatial scales do the processes interact, do these interactions result in cascade effects ?
- Can we predict the speed at which natural systems change, the occurrence and the intensity of these changes ?
- What types of monitoring and surveys are the most appropriate to detect changes ?
- How models and operational tools can be used to provide guidance to decision makers and stakeholders ?
- What are the impacts of changes on goods, services and human activities ?

Key words: *Scientific surveys; sampling and observation design; technology / instrumentation; long term monitoring system; data bases; physical effects (tsunami, waves, sea level rise, temperature increase, coastal erosion, meteo-climatic extremes,...); chemical effects (eutrophication, contaminants, acidification, bioaccumulation,...); biological effects (bacteriological, fisheries and aquaculture, invasive species,...); social and economical effects (market, user conflicts, energy costs, ...); modelling of processes and interactions: biophysical, biochemical or bioeconomical; biological cycle; trophic chain; habitats.*

2 – Assessment of system response :

The 2nd session will focus on assessment of coastal ecosystem response to global change or extreme events, including human factors which can sometimes turn a natural hazard into a disaster, and their impact on human communities.

This session will cover in particular:

- Assessment strategies to evaluate sensitivity and exposure to a given pressure,
- Sampling programs and methodologies to evaluate ecological resilience and good ecological status,
- Indicators of ecological, economical and social changes and historical perspectives,
- Ecological risk assessment,
- Physical impact on coastal lands such as tsunamis, waves, wind erosion,...

Key words: *Forecast of pollution extents, river plume; evolutions of physical, biological and economical traits at different scales; forecast of population abundances; risk assessment; indicators of sustainability and acceptability from social, economical or ecological point of view, modification of ecosystem functioning, scenarios of changes, system trajectories.*

3 – Management tools and strategies :

The 3rd session is concerned with the improvement of coastal ecosystems resilience through the reduction of human activities pressures leading to the current degradation of habitats and living communities (including human communities).

In the context of an increasing socio-economic demand for good and services from the natural environment through human activities like fisheries, aquaculture, tourism, urbanization, harbour development, energy :

- How can we protect the ecosystems biodiversity and restore part of the functionality for those strongly affected by anthropogenic impacts ?
- How can we mitigate global change impacts and extreme events consequences in regard to the socio-ecosystem sustainability ?
- How can we develop and combine tools to help managers and stakeholders to incorporate scientific and traditional knowledges and know-hows into public policies (especially with regard to the European Framework Directives) and to implement adaptative environmental management ?

Key words: *GIS and network of knowledge; biodiversity conservation (including definition of reference/pristine states); ecosystem resilience; effects reversibility; integration of scientific knowledges into public policies (especially with reference to WFD and MSFD); minimization of ecological prints of aquaculture and fisheries and energy production on ecosystems; impacts of Marine Protected Areas; artificial reefs.*

4 – Integrated Coastal and Ocean Management :

The 4th session is about the ecosystem approach for integrated coastal and ocean management, which focuses on ecosystem links to preserve the structural integrity, healthy functioning, and resilient processes of marine ecosystems and strives to upscale to transboundary considerations and regional cooperation in their management. More comprehensive than single-species or sectoral management, from both scientific and governance perspectives, it is an holistic approach that considers the entire socio-ecosystem to sustain vital services to humans. If institutions can be designed flexibly to manage complex social-ecological systems, incorporating broad yet effective participatory and intergovernmental decision-making strategies, the ecosystem approach in connection with any sector like the fisheries might lead to adaptive management that will give robustness in the face of scientific uncertainty. In this context:

- If we consider integrated coastal and ocean management as an expression of adaptive policy, how to make it an experimental tool for progressive integration of reliable knowledge into public policies?
- How can we define and propose the most appropriate type of governance?
- How can we deal with the numerous uncertainties from and between the various scientific disciplines (natural and social), and at the border between science and policy?
- What should we know about human behaviour in order to properly adapt the way of communicating knowledge?
- How to incorporate the different time and spatial scales at each stage of the coastal and ocean management process?

Key Words: *Integrated coastal and ocean management; ecosystem-based management; adaptive management; nested governance; multi-scale approach; institutional arrangement; ecosystem approach to fisheries; upscaling; partnership and participatory approach; scientific uncertainty, socio-ecosystem complexity, ecosystem services; costs/benefit analysis, marine protected areas; traditional ecological knowledge; historically based restoration.*

VEILLE PHÉNOLOGIQUE DES ESPÈCES STRATÉGIQUES ET PATRIMONIALES (CRSTA – Centre de Recherche Scientifique et Technique sur les Régions Arides, Biskra)

PAYS CIBLES : Pays Méditerranéens

COORDINATEUR LOCAL: LAKHDARI Fatoum /Directrice du CRSTRA

AUTRES PARTICIPANTS :

AUTORITIES NATIONALES: Institution Scientifiques et Techniques

AUTRES: Les Agriculteurs

OBJECTIF DU PROJET

Objectifs globaux:

- Déceler les premiers stades de l'influence des changements climatiques dans le cycle phénologiques des espèces cultivées.
- S'adapter par des techniques culturelles, le choix des espèces voir des variétés adaptées en valorisant le patrimoine biologique local.
- Elaborer une stratégie à long terme par l'utilisation rationnelle des ressources naturelles tout en s'appuyant sur le savoir faire local.
- Contribuer à la stabilité des populations locales en œuvrant pour la durabilité des agro systèmes et l'amélioration des revenus.
- Elaborer le modèle de gestion efficace pour la durabilité des oasis dans le contexte des changements climatiques.

Objectifs spécifiques pour 2011:

- Elaborer la méthodologie d'étude à mettre en œuvre à travers l'organisation d'un atelier international à cet effet.
- Prospection pour le choix des sites d'observations et d'expérimentation dans les oasis selon un transect Sud-Nord.
- Description des oasis retenues, de leur agro biodiversité en relation avec le changement climatique et l'anthropisation.

RESULTATS ATTENDUS EN 2011

- Une méthodologie adaptée est élaborée ;
- Le transect des Oasis retenues est réalisé ;
- Description des Oasis retenues dans le transect.

ACTIVITES ASSOCIEES EN 2011

Utilisation et valorisation des ressources en eau pour le développement durable des écosystèmes arides

RESULTATS OBTENUS ANTERIEUREMENT

- Etablissement de la carte de distribution des cultivars de palmier dattier du Sud/Est Algérien dans les zones de piémont et présahariennes.
- Réalisation de l'étude régionale de la vallée de l'oued Righ, une des régions les plus anciennement cultivée et qui recèle une agro biodiversité à haute potentialité malgré la salinité du milieu.

THE ARCTIC AS A “WEATHER BACKROOM” ON A PLANET SCALE. NEW GLOBAL CHALLENGES AS A RESULT OF INCREASED DEVELOPMENT OF THE ARCTIC TERRITORY (*European Centre for new technologies on Risk Management, Moscow*)

TARGET COUNTRIES : All EUR-OPA member countries

LOCAL COORDINATOR: V. Akimov

OTHER PARTICIPANTS :

NATIONAL AUTHORITIES :

OBJECTIVE OF THE PROJECT

Global objectives :

Guidelines and recommendations on global security measures in the Arctic.

Specific objectives for 2011 :

Collection of required data. Preliminary analyses.

EXPECTED RESULTS IN 2011

ASSOCIATED ACTIVITIES IN 2011

RESULTS OBTAINED PREVIOUSLY

**OTHER SCIENTIFIC AND TECHNICAL CO-OPERATION / AUTRES
COOPERATIONS SCIENTIFIQUES ET TECHNIQUES**

CONTRIBUTION TO THE ORGANIZATION OF THE INTERNATIONAL CONFERENCE "TWENTY-FIVE YEARS AFTER CHERNOBYL ACCIDENT. SAFETY FOR THE FUTURE ". KIEV, APRIL 2011 (TESEC, European Centre of Technological Safety, Kiev)

TARGET COUNTRIES : Ukraine, Armenia, Belgium, Bulgaria, France, Turkey, Russia

LOCAL COORDINATOR: European Centre of Technological Safety

OTHER PARTICIPANTS :

NATIONAL AUTHORITIES : Ukraine, Armenia, Belgium, Bulgaria, Germany, France, Russia

OBJECTIVE OF THE PROJECT

Global objectives :

In many countries nuclear technology is seen as one of the increasingly important solutions for meeting rising energy demands, reducing greenhouse gas emissions, mitigating climate change, counterbalancing fluctuating prices of fossil energy sources. At the same time lessons learned from the Chernobyl accident should be carefully taken into account.

How to use Chernobyl lessons for the safety of nuclear power and other hazardous technologies to protect people and the environment from emergency - this is the main objective of the international conference

Specific objectives for 2011 :

Development of conference programme and invited reports presentation

EXPECTED RESULTS IN 2011

Conference programme and invited reports presentation

ASSOCIATED ACTIVITIES IN 2011

RESULTS OBTAINED PREVIOUSLY

First announcement and draft of programme have been developed.

REGIONAL CENTRE FOR SECURITY (ECRP - European Centre for Risk Prevention, Sofia)

TARGET COUNTRIES : Central and Eastern European countries

LOCAL COORDINATOR: ECRP - Sofia

OTHER PARTICIPANTS :

SPECIALISED CENTRES : with practice in this area

NATIONAL AUTHORITIES : Ministry of Defense

OBJECTIVE OF THE PROJECT

Global objectives :

To decrease the damage to the countries of Central and Eastern Europe in crisis situation such as massive forest fires and floods;

To enhance the effectiveness of fire-extinguishing and rescue operations;

To drain large-scale flooded areas with the use of powerful pumps that will be stationed in defined GPS coordinates and delivered by helicopters

Creation of the specialize section.

Specific objectives for 2011 :

Land Fire Protection Module

EXPECTED RESULTS IN 2011

- Presentation of the Project;
- Creation of the action Plane;
- Start of the Project on the second half of the year.

ASSOCIATED ACTIVITIES IN 2011

Seminar "Regional Centre for Security" (February/June)

RESULTS OBTAINED PREVIOUSLY (if any)

Conclusions of the Conference "Systems and Politics for Security"

PSYCHOLOGICAL AID / AIDE PSYCHOLOGIQUE

GUIDED TRAINING OF PSYCHOLOGISTS IN DISASTER, CRISIS AND TRAUMA PSYCHOLOGY (EFPA - European Federation of Psychologists' Associations, Brussels)

TARGET COUNTRIES : all member countries, and specially Eastern European countries

LOCAL COORDINATOR: Mag. Eva Munker-Kramer, Atle Dyregrov, Jana Malikova, Nuray Karanci

OBJECTIVE OF THE PROJECT

Global objectives :

In the last ten years there have been various activities mostly in western European countries to establish a basic knowledge on disaster, crisis and trauma psychology and to build up first networks to be set on scene if needed. These attempts range from basic education already in the universities (above all Turkey and Scandinavian countries) to established networks and post-graduate trainings and the knowledge of disaster and crisis psychology in public and among psychologists themselves (e.g. Austria, Netherlands and again Scandinavia). It seems to be crucial to have official governmental structures (like CZ, B...), connections with NGOs (like Red Cross e.g. in Finland) and strong psychological associations with psychologists, who are experts in the field and able to help to develop consciousness concerning the importance of contributions of disaster and crisis psychology and psycho-traumatology and building up skills.

The EFPA Standing Committee establishes and exchanges these concepts, standards and skills within a part of EFPA-countries (A, B, D, E, F, GB, S, N, TR, I, L, GR, DK, SF) for 9 years now. It has brought together various reports as one on the work done after Tsunami in the affected European countries or a report on "lessons learned", which reflects the work done in the different countries after major disasters in a standardized way. Parts of this work and additional theoretical reflections have been the topic of presentations in symposia organized by the SC regularly in the European congresses of psychology. Several members of the SC are involved in either in working abroad to build up skills in other countries (e.g. Sri Lanka) in general or in Eastern European countries especially (e.g. Slovakia, Ukraine...).

Thus the Standing Committee has come to the decision to offer Eastern European countries useful and transferable parts of these concepts, contents and skills. The Council of Europe has accepted a project plan and offered support by financing practical trainings and know-how transfer. After several discussions we agreed upon colleagues from LT, LV, EST, SR, PL, H, UA, RO, BG, SLO, HR, Bosnia-Herzegovina who are aware of disaster and crisis Psychology, who are in a position and interested to function as disseminators.

Specific objectives for 2011 :

After the basic workshop (basic training in disaster and crisis psychology and psycho-traumatology, acute trauma -early intervention) there should be focuses on specialties that are named by the participants following their situations and needs. Additionally there should be support (mentoring, consulting) concerning strategies to set up standards and concepts (as the members of the SC did by exchanging with each other in the last 9 years). After the initial workshop of 4,5 days the plan is to have about 3 days every 6 months (one day to reflect/supervision and two days with additional contents and/or exercise) to offer coaching and consulting via email in the meantime if needed.

The main aims are thus to :

- support interested Eastern European countries with focused know how transfer in psycho-traumatology, disaster and crisis psychology and special interventions like CISM
- offer specialties later that are seen to be needed (children, acute trauma, ...)
- offer experience in building up useful and practical structures based on the national needs and backgrounds
- enable these experts to go on with new colleagues within the country themselves

EXPECTED RESULTS IN 2011

Skilled and trained colleagues within the countries spread the knowledge based on national needs, structures and cultural specialties and address concrete persons if needed for border-crossing necessities and networking in disaster and crisis psychology.

ASSOCIATED ACTIVITIES IN 2011

Second Training for trainers session (7-9 September 2011, Vienna)

RESULTS OBTAINED PREVIOUSLY

First Training for trainers session: Guided training of psychologists in disaster, crisis and trauma psychology in Eastern European countries (30 August-3 September 2010, Vienna) attended by 10 psychologists from 6 countries (Bulgaria, Croatia, Latvia, Lithuania, Malta, Slovakia and Ukraine).