

AP/CAT (2011) 04

OPEN PARTIAL AGREEMENT ON THE PREVENTION OF, PROTECTION AGAINST AND ORGANISATION OF RELIEF IN MAJOR NATURAL AND TECHNOLOGICAL DISASTERS

12th Ministerial Session of the European and Mediterranean Major Hazards Agreement (EUR-OPA)

St Petersburg, Russian Federation, 28 September 2010

ADOPTED TEXTS

Resolution 2010 – 1 Working together in Europe and the Mediterranean for the Prevention of Disasters, Preparedness and Response: Priorities for Action
 Resolution 2010 – 2 Ethical values and resilience to disasters Medium Term Plan 2011-2015

- Recommendation 2010-1 Reducing vulnerability in the face of climate change

CONTENT

RESOLUTION 2010 – 1 WORKING TOGETHER IN EUROPE AND THE MEDITERRANEAN FOR THE PREVENTION OF DISASTERS, PREPAREDNESS AND RESPONSE: PRIORITIES FOR ACTION	5
RESOLUTION 2010 – 2 ETHICAL VALUES AND RESILIENCE TO DISASTERS	

RESOLUTION 2010 – 1

WORKING TOGETHER IN EUROPE AND THE MEDITERRANEAN FOR THE PREVENTION OF DISASTERS, PREPAREDNESS AND RESPONSE: PRIORITIES FOR ACTION

The Ministers,

- A. Warmly thank the government of the Russian Federation for the excellent preparation and hosting of the 12th Ministerial Session of the European and Mediterranean Major Hazards Agreement (EUR-OPA).
- B. Express their concern for the increase in the effects of disasters having occurred in Europe and the Mediterranean since they last met in Marrakech in October 2006 and extend their sincere condolences and sympathy to the communities affected by those disasters.
- C. Note that many of those disasters are linked to extreme weather conditions, coastal hazards and forest fires, threats which are all likely to increase with climate change.
- D. Welcome the accession of the Republic of Serbia to the European and Mediterranean Major Hazards Agreement and hope other States may accede in the coming years.
- E. Welcome the Memorandum of Cooperation signed between the Council of Europe (European and Mediterranean Major Hazards Agreement, EUR-OPA) and the Secretariat of the United Nations International Strategy for Disaster Reduction (UN-ISDR) in April 2008 and note its successful implementation since its signature.
- F. Welcome the establishment in December 2009 of a European Forum on Disaster Risk Reduction grouping European National Platforms for Disaster Risk Reduction and Hyogo Framework of Action Focal Points and its close cooperation with the EUR-OPA Agreement.
- G. Take note with interest of the summary report on the implementation of the Medium Term Plan adopted at the last Ministerial Session held in Marrakech in October 2006 and express their satisfaction for the way in which it has been steered by the Committee of Permanent Correspondents, supported as appropriate by the Executive Secretariat of the EUR-OPA Agreement.

RESOLVE to:

- 1. continue promoting that disaster risk reduction including prevention, preparedness and efficient response to emergencies becomes a political priority at all levels of government and that international negotiations recognise the need to prepare societies to the challenges of increased risk from climate change and other phenomena;
- 2. invite European and Mediterranean States which are not part of the Partial Agreement to join this co-operation structure so as to create coherent European and Mediterranean synergy;
- 3. support an increased collaboration with the European Union, the United Nations and other appropriate organisations and fora concerned with disaster reduction and relief;
- 4. adopt the Medium Term Plan 2011-2015 (document AP/CAT 2010 05 rev.) of the European and Mediterranean Major Hazards Agreement (EUR-OPA) as guidelines for priority action in this field over the next five years;
- 5. instruct the Committee of Permanent Correspondents of the Agreement to follow the implementation of the Medium Term Plan, adapting it as required to new circumstances and making proposals and recommendations to improve its effectiveness:
- 6. instruct the network of twenty-six Euro-Mediterranean Specialised Centres of the Agreement to support, in their respective spheres of competence, the implementation of the priorities set in the Medium Term Plan, working in a cross-sectoral manner, pooling their expertise in the accomplishment of sound, coordinated programmes.

Furthermore **REQUEST**

The Committee of Ministers of the Council of Europe to support as appropriate the implementation of the Medium Term Plan 2011-2015 of the European and Mediterranean Major Hazards Agreement (EUR-OPA) and to encourage the member States of the Council of Europe which are not party to the Partial Agreement to consider joining this intergovernmental co-operation framework.

RESOLUTION 2010 – 2

ETHICAL VALUES AND RESILIENCE TO DISASTERS

The Ministers.

- A. Noting the increase in the risks of natural and technological disasters and their frequency;
- B. Considering that disasters pose a major threat not only to the survival of populations and society as a whole, but also to the dignity of individuals;
- C. Noting that the disorder which disasters cause may result in serious infringements to human rights;
- D. Considering the various potential consequences for human life, safety, dignity, property, cultural heritage, the environment and sustainable development;
- E. Considering that, through their impact on the environment, disasters jeopardise sustainable development, while environmental degradation entails economic and social vulnerability by increasing all forms of inequality and contributing to increased risks;
- F. Convinced that the vulnerability of communities and the environment is a major factor in exposure to disaster risks, which limits the potential for resilience, but these risks do not affect everybody in the same way and convinced that poor people and socially disadvantaged groups suffer most from disasters;
- G. Drawing attention to the increasing risks of disasters and population movements because of climate change, and their consequences for human rights, which requires disaster risk reduction to be incorporated in climate change impact management strategies;
- H. Taking due note of the Council of Europe objectives to protect human rights, fight discrimination, sustain the rule of law and find common solutions to the challenges facing modern societies;
- I. Considering the impact of disasters on human rights and the need to incorporate this aspect into prevention, relief and reconstruction strategies;
- J. Considering that such strategies, should help to strengthen resilience to disasters by ensuring that everyone, both among the victims and among the relief workers, is protected both physically and in terms of human dignity;

- K. Considering that increased resilience is dependent on reducing vulnerability as a whole, whether it is linked to poverty, gender, health, insecurity, family breakups, fear or panic, and that ethically responsible practices are required to achieve this:
- L. Considering that the international community and regional and national authorities have a duty to adopt prevention, assistance and reconstruction measures to protect individuals, natural, historical and cultural heritage, property and means of development and survival from the risks of a disaster, while taking account, at all times, in all places and without discrimination, of the need to protect the fundamental human rights of those concerned;
- M. Considering that the cross-border impact of disasters requires preventive measures, a common, concerted response, co-operation between governments, communities and regional authorities and the involvement of civil society;
- N. Considering that some public and private development projects may increase the risk of disaster and that they must therefore include a sustainable development and human rights component, assessing through impact studies what risks may affect human rights in the event of a disaster, focusing in particular on vulnerable people, and taking account of these effects in various disaster prevention measures and plans designed to strengthen resilience to disasters;
- O. Taking note of the wish of the Committee of Ministers of the Council of Europe in their reply of 8 July 2009 to Recommendation 1862 (2009) of the Parliamentary Assembly that the EUR-OPA Major Hazards Agreement works on ethics and disasters;
- P. Sharing the principles and provisions of the international humanitarian law, international human rights law, refugee law and taking note of the Humanitarian Charter and Minimum Standards in Disaster Response and of the Code of Conduct for International Red Cross and Red Crescent Movement and Non-Governmental Organizations in Disaster Relief;

RESOLVE to:

recognise the value of applying best ethical principles in disaster risk reduction, in improving the resilience of societies and in responding efficiently to emergencies.

MEDIUM TERM PLAN 2011-2015

WORKING TOGETHER IN EUROPE AND THE MEDITERRANEAN FOR THE PREVENTION OF DISASTERS, PREPAREDNESS AND RESPONSE

INTRODUCTION

The impact on people, property, livelihoods, heritage and the environment of natural and human-caused disasters has grown in Europe and the Mediterranean over the last ten years. While the increased vulnerability of our societies to disaster is partly the result of inappropriate urban planning, more intensive land use, environment degradation and insufficient preparedness, climate change seems to be causing a rise in the frequency and intensity of extreme weather events resulting in more drought, heat waves, wildland fires, storms, floods and coastal catastrophic events.

European and Mediterranean governments have much improved in recent years their response capacity to disasters, increasing their co-operation and developing new mechanisms of coordination and mutual help in case of emergencies. International co-operation is proving an efficient tool to facilitate access to aid and expertise, to mitigate the effects of disasters and to speed recovery. Reduction of vulnerabilities and improved preparedness of societies is proving a far more complicated task because it involves a considerable number of actors including experts, decision makers and the public who are not necessarily aware of all potential risks.

The European and Mediterranean Major Hazards Agreement (EUR-OPA), created as an open co-operation group by the Committee of Ministers of the Council of Europe in 1987, is an appropriate tool to forward the Disaster Risk Reduction agenda in Europe and the Mediterranean. In its twenty three years of existence, the Agreement has promoted at European and Mediterranean scales, co-operation on prevention, preparedness, response and relief on major disasters owing to a number of political and technical strategies such as:

- the development of disaster risk reduction guidance to inspire and promote appropriate policies and improve governance of prevention and response;
- the development of knowledge-based technical instruments to assess and reduce vulnerability through science, education and training;
- the promotion of a coordinated regional approach in operational mechanisms to ensure effective response, rapid assessment of the effects of disasters and support to victims.

The activities of the Agreement receive their political support from a number of international initiatives:

- The Hyogo Framework of Action 2005-2015 "Building the resilience of nations and communities to disasters", adopted at the World Conference on Disaster Reduction held in January 2005 in Kobe (Hyogo, Japan). The Hyogo Framework of Action provides guidance at world level for preparing societies to disasters limiting their effect on people, the economy and the environment and improving response and recovery. The United Nations International Strategy for Disaster Reduction (ISDR) is in the process of a mid-term review of the Hyogo Framework of Action, assessing its effectiveness and proposing new fields of work. Such preparatory work has been integrated as appropriate in the present Medium Term Plan.
- The Council of Europe included in its Action Plan (Warsaw Summit 2005) the strengthening of the security of European citizens. The Heads of State and Government of member States of the Council of Europe instructed the Organisation to further develop and support integrated policies in the field of prevention and management of natural disasters in a sustainable development perspective.

With regard to the technical aspects, the activities of the Agreement are supported *inter alia* by the following input:

- scientific and technical work developed by the 27 specialised Centres integrated in the network of European and Mediterranean Specialised Centres of the Agreement;
- the reports prepared by consultants to meet the specific requests of its governance bodies;
- the contributions from governments of member States on projects or research of particular relevance to other States;
- the information compiled by working groups created under the Agreement to examine technical matters of common interest;
- the collaboration projects carried out by other national and international bodies in disaster risk reduction, in particular with the International Strategy for Disaster Risk Reduction and the European Forum for Disaster Risk Reduction.

The objective of this Medium Term Plan is to provide a political and technical instrument containing priorities and guidelines for the action of the European and Mediterranean Major Hazards Agreement (EUR-OPA) for the next five years, improving its effectiveness in a context of moderate financial resources and increased vulnerability of European and Mediterranean societies.

PRINCIPLES APPLIED

- 1. It is essential that disaster risk reduction activities within the Agreement cover the whole disaster management cycle. Thus priorities set for **rapid response** have to be matched with those of **reduction of vulnerability**, not only through science and engineering but also **involving communities** through education and empowerment and promoting **preparedness** at all levels.
- 2. The Agreement will continue to streamline its action with other Council of Europe political priorities and will maintain and strengthen its co-operation with the Council of Europe Development Bank, the Parliamentary Assembly and the Congress of Local and Regional Authorities of the Council of Europe.
- 3. Co-operation with other international organisations is a key element of future work, strengthening synergies and avoiding duplication of work. Special efforts will be made towards strengthening collaboration with the European Union and to fulfil with specific action the Memorandum of Co-operation signed with UNISDR in 2008, becoming a regional body to promote the implementation of the Hyogo Framework of Action 2005-2015 in Europe and the Mediterranean. Ongoing collaboration with UNESCO in the field of education and awareness to risk will be continued and reinforced. The Agreement will also be attentive to building up a good partnership with the Union for the Mediterranean as well as with regional European and Mediterranean organisations involved in disaster risk reduction.
- 4. The new Medium Term Action plan will focus its attention in a limited number of fields of action linked to the implementation in the geographical space of the Agreement of the Hyogo Framework of Action (following its mid-term review in 2010).

These will include:

- improving values, law and governance: new policies for disaster risk reduction and promoting education and risk awareness;
- using science and technical co-operation to assess risks, reduce vulnerability and improve resilience of societies;
- ensuring early warning, efficient response and attention to victims.
- 5. The statutory organs of the Agreement (Committee of Permanent Correspondents, Bureau and network of Specialised Centres) will improve their synergies and streamline their activities to increase their efficiency. Openness to collaboration with non-member States and other partners will ensure a greater visibility of the Agreement's activities in other fora.
- 6. Concerning the governance of the Agreement, national platforms for disaster risk reduction and the European Forum for Disaster Risk Reduction will be closely associated to the work of the Agreement and will become privileged partners of its action.

7. The network of Specialised Centres of the Agreement will be maintained and reinforced as necessary, making sure that they provide the technical support needed to fulfil the disaster risk reduction objectives and goals set by member States. Funding by the Agreement to Specialised Centres will focus on projects identified as priority fields of action.

PRIORITIES FOR ACTION

I. FOCUSING ON PREPAREDNESS FOR EMERGENCIES: USING INFORMATION TO SAVE LIVES AND HELP VICTIMS

The limited financial means of the Agreement do not permit it to mobilise relief efforts in case of emergencies, nor to develop operative actions when disasters occur. Yet decisions in emergency situations much depend upon the information available for managers and the population, upon the previous development of effective early warning systems, upon the rapid damage assessment and upon the training of rescuers, doctors and upon the psychological attention given to victims of disasters. The latter is an area in which the Agreement has proven expertise. The following aspects could be of interest:

Using information to assess the magnitude of events, to alert the population and to promote communication between governments during emergencies

The Agreement will promote the development of early warning systems permitting a rapid response and it will support efforts to improve their effectiveness and universality.

The Agreement will help maintain the European Warning System at the Euro-Mediterranean Seismological Centre and will promote other information exchanges between different States in case of emergencies which, due to their dimension, may affect more than one State or for which national response may not suffice. It will promote co-operation of States in events, for example during catastrophic flooding, which may affect several countries, with a special emphasis on transboundary assistance.

The Agreement will promote regional cooperation among neighbouring States which may share common risks and for which coordinated regional policies on specific issues may help improve resilience or facilitate an efficient management of emergencies.

It will promote the maintenance and information update of the EXTREMUM data base which permits rapid assessments of predicted damage in the minutes following an event, particularly in the case of earthquakes. This post disaster assessment will be communicated to the concerned authorities as well as to governments of the Agreement which may have capabilities to deploy if so requested, thus helping decision making during events.

Promoting disaster medicine and psycho-social preparedness

The Agreement will promote exchange of experiences and procedures and dissemination of best practice in disaster medicine and psycho-social help to victims of disasters, reinforcing co-operation with the appropriate professional associations.

Particular effort will be devoted to the training of specialists for emergencies, to the establishment of networks of experts and, when required, to the analysis of events to assess what procedures have worked and which ones need to be improved, and to improve psychological preparedness of populations to disasters.

II. USING KNOWLEDGE TO REDUCE VULNERABILITY

The Agreement has acted since its creation as a laboratory of ideas and a platform for communication and exchange of scientific and technical information on hazards, vulnerability and possible solutions to improve the resilience of societies to potential disasters. This work will continue using the strengths of the governments involved, the network of Specialised Euro-Mediterranean Centres and the technical knowledge and experience gathered by national platforms for disaster risk reduction, as well as input from other international bodies. The following fields of special concern can be identified in this context.

Promoting research and use of knowledge in disaster risk reduction

The Agreement will continue to favour exchange of knowledge and experience on particular events having affected their parties and on the lessons learnt from recent or past disasters. This will concern both how prevention measures worked – or failed to be effective – and how response was organised. Information on the request and effectiveness of international aid will be relevant in this context.

Particular efforts will be devoted to promoting research and to supporting improvement of the technical expertise of the network of Specialised Centres, to favouring exchange of knowledge amongst them and to favouring transversal projects involving several countries. Priority subjects will include earthquake risk assessment, earthquake engineering, floods, drought, heat waves, landslides and other geomorphological hazards, marine risks, snow avalanches and forest fires. Research leading to prevention plans will be carried out. Special attention will be paid to the compilation and analysis of updated information on a particular subject with the aim of presenting to the Committee of Permanent Correspondents specific "state-of-the-art" reports which may serve as guidance for further research on disaster risk reduction.

Evaluating and mapping risk and using information in spatial planning

Assessing and mapping risks, as an integral part of prevention, will continue to be promoted, as well as new methodologies and techniques in the field, particularly multi-hazard mapping, remote sensing and space-based technologies. Priority will be granted to the promotion of the use of risk information into spatial planning and the assessment of risk both to new developments and to re-assess the vulnerability of existing homes or infrastructures from known or emerging risks. The Agreement will promote the assessment of the manner in which risk mapping by States takes into account climate change and other emerging risks.

The Agreement will continue to promote the reduction of vulnerability of buildings in seismic areas and the retrofitting of public buildings such as schools or hospitals and key infrastructures, thus favouring exchange of experiences and dissemination of best practices. Efforts will continue to promote and disseminate disaster-resistant building methods and to keep improving building codes in seismic areas. Work focusing on

assessing vulnerability of cultural heritage to earthquakes, floods and marine risks in a context of climate change will be pursued.

Improving environmental resilience and assessing increased risk from climate change

The Agreement will examine how climate change may affect a number of hazards related to climate variables (floods, landslides, drought, heat waves, marine risks, forest fires) and how these affect the vulnerability of populations. Particular attention will be devoted to the interaction of risks with a view to identifying areas under special risk from a changing climate. For instance drought–forest fires may cause repetitive degradation and erosion making certain areas more prone to catastrophic floods.

The Agreement will promote practical work and appropriate policy coordination between climate change and disaster risk reduction, favouring adaptation to climate change to reduce vulnerabilities in related policies (water management, health, spatial planning, agriculture and environment).

Particular attention will be allotted to promoting a safer more sustainable management of ecosystems as a condition for more resilient natural cycles. Relationships between disasters and environmental degradation will be explored and remedial action proposed.

Using knowledge to train specialists

The Agreement will continue to work on the use of knowledge provided by risk sciences to improve resilience and preparedness. It will thus support the promotion of appropriate masters concerning risks and the training of rescuers and specialists involved in the different aspects of the disaster cycle. The Agreement will look for a greater involvement of universities, of expertise and facilities emanating from the different schools of civil protection and where possible from the network of Specialised Centres of the Agreement. Particular effort will be made in this context to reach local and regional government officials, planners and, where possible, decision makers, encouraging them to acquire knowledge on disaster risk prevention and in particular on the identification of local risks, on early warning and on the management of emergency situations.

Preventing technological risks

The Agreement will continue to promote work aimed at improving attentiveness and preparedness for technological risks, both those resulting from industrial activities and radiological installations as well as from transport and dumping of hazardous substances, including radioactive materials. Improvement of regulations and best standards are to be promoted. Particular effort will be devoted to the creation of networks of specialists, gathering knowledge and communicating technological risks to decision makers, including the local and regional levels.

III. PLACING PEOPLE AT THE HEART OF DISASTER RISK REDUCTION: IMPROVING PREVENTION AND PREPAREDNESS AND PROMOTING GOOD GOVERNANCE.

Human values and attitudes are at the heart of disaster risk reduction. The way in which people and societies perceive risks conditions the political attention given to disasters and influences its governance. A proper consideration of ethical and social aspects is

fundamental to improving preparedness, as vulnerable populations are likely to be less fortunate and less informed.

The following fields of action will be covered by the Agreement:

Promoting efficient disaster risk reduction policies

In keeping with Resolution (87) 2 setting up the Agreement, it will continue to work in the political spheres as an intergovernmental co-operation group for the prevention of and preparedness for major natural and technological disasters and in the management and organisation of relief in emergency situations. As such it will continue to ensure that disaster risk reduction receives high political priority and appropriate resources at national level, at the Council of Europe and in other international fora. It will also promote improvement and update of prevention preparedness and response policies, publicise good practice and serve as a platform for exchange of experiences and ideas. The Committee of Permanent Correspondents will continue to fulfil its central role in directing the work of the Agreement.

Improving governance of disaster risk reduction

The Agreement will continue to promote best policy and law and analyse legislation of member States relevant both to preparedness and prevention policies and to management of emergencies and recovery. Exchange of information on international standards will continue, with the idea of encouraging States to update, if necessary, their laws and policies. The role of the Committee of Permanent Correspondents in recommending appropriate policy and practice will be maintained.

Special attention will be devoted to the strengthening of institutional arrangements for disaster risk reduction and the need to involve all levels of government and to improve coordination, particularly with local and regional authorities which already have great competency in the field. Promotion of the important role of local and regional authorities in disaster risk reduction will be continued, also examining aspects of the financial and institutional needs. Networks of local and regional authorities for specific problems will be promoted.

The Agreement will promote the involvement of the civil society in all fields of disaster risk reduction, especially those of concerned non-governmental organisations and those formed by volunteers that support authorities during emergencies and contribute to the preparedness of populations.

The Agreement will also continue promoting the creation of national platforms, supporting as appropriate States which want to create them and helping their networking in the framework of the European Forum for Disaster Risk Reduction.

Special attention will be paid to further integrating the activities of the national platforms into the work of the Agreement and to establishing useful synergies with the activities carried out by the Centres so that exchanges of experiences and information may benefit all.

Improving resilience and preparedness through education and awareness

The building of a culture of risk reduction is to remain a priority of the Agreement as well informed populations protect themselves better against risks and can cope more efficiently with danger in an emergency. The Agreement will continue to promote national initiatives and campaigns, exchange of experiences, dissemination of useful educational material, pilot projects aimed at children or other vulnerable groups and will elaborate new materials as teaching aids, to be carried out in the framework of the BeSafeNet project. The data base is to be extended both in content and in languages.

The Agreement will also promote the elaboration of appropriate risk awareness publications, web and multimedia materials, participate in international campaigns and liaise with interested governments and agencies at European and Mediterranean levels for the promotion of such campaigns. In this context, the Agreement will also work with the media to encourage their *positive* role in making people aware of threats and in supporting authorities to convey accurate and useful information during emergencies.

A particular effort will be devoted to better publicising the work of the Agreement to gain visibility and support for its activities.

Taking care of ethical aspects

The Agreement will promote work on ethical principles, rights, duties and protection of people affected or threatened by disasters as a means to improve the resilience of populations and facilitate the respect of human dignity and rights in emergency situations, linking as appropriate with other Council of Europe work on ethics, human rights and non-discrimination. Special attention will be given to victims and vulnerable groups. Work will deal both with general principles and rights and with guidance on operative procedure in case of emergencies. In addition the Agreement will promote appropriate participation of the public in disaster planning and management and also the networks of volunteers for emergency situations.

RECOMMENDATIONS

RECOMMENDATION 2010 - 1

REDUCING VULNERABILITY IN THE FACE OF CLIMATE CHANGE

The Ministers,

- A. Noting that human induced climate change makes European and Mediterranean societies more vulnerable to a number of hazards, particularly those linked to extreme climate events, marine risks and other water-related hazards. A non exhaustive list include drought and shortages in food production, heat waves, increased wild fires, desertification and aridification of natural systems, environmental stress, floods and flash floods, landslides, storms, and coastal and marine risks;
- B. Noting furthermore that environmental degradation linked to climate change is a threat to sustainable development of societies, as reduced availability of food and water and possible human migration may weaken the capacities of certain communities in Europe and the Mediterranean to cope with growing hazards and may impede an adequate response to disasters;
- C. Aware that climate change is a powerful supplementary reason to reinforce and deepen the disaster risk reduction agenda, paying particular attention to integrate climate change and disaster risk reduction concerns, thus improving governance and creating the appropriate partnerships with a varied range of stakeholders (authorities at all levels, industry, rescuers, scientist and technicians, volunteers, insurers, environmentalists, etc.) so that the issue of protecting lives, property, livelihoods and the environment becomes a common concern of the whole society;
- D. Highlighting that governments have a particular responsibility and should show leadership, promoting more education to risk, creating the fora for debate, proposal and innovation in promoting sustainability and disaster risk reduction, such as the national platforms for disaster risk reduction being built in many countries;
- E. Convinced that an integration and harmonisation of policies is essential to success and that economic and development policies need to consider disaster risk reduction, safety of populations and sustainability as the inspiring driving forces for change, thus giving adaptation to climate change high priority;
- F. Noting that international cooperation, exchange of knowledge and experiences and solidarity will be key factors to control or limit the effects on people of climate change and the expected rise in risk and recognising the pioneering and important role of United Nations programmes and initiatives, in particular the International

- Strategy for Disaster Reduction (ISDR) and encouraging the European and Mediterranean Major Hazards Agreement (EUR-OPA) to be a key player in that field;
- G. Aware that societies need to identify the areas and sectors where climate change may produce an increase in vulnerability and set up appropriate prevention policies and early warning and rapid response mechanisms;

RECOMMEND that member States of the European and Mediterranean Major Hazards Agreement (EUR-OPA):

I. Identify problems and vulnerabilities

- 1. Identify how climate change, in the context of global change, will affect the vulnerability of population, paying special attention to the following:
 - a. the way climate change will affect specific hazards, such as floods, marine risks, wild land fires, droughts, heat waves, melting of permafrost, landslides and storms on local and regional scale;
 - b. identification of populations at risk, specially the most vulnerable because of social inequalities;
 - c. risk mapping, paying attention to areas and regions that may become more vulnerable as a result of climate change, such as mountains, areas prone to flooding, coastal areas and urban areas, arid and semi-arid areas, as well as the Arctic and the Mediterranean Regions;
- 2. Evaluate the human, economic and environmental costs of the increase in vulnerability of populations, assessing at the same time the cost of preventive adaptation action and improvement of response in emergencies, so that decisions on action may be supported on reliable data and appropriate cost-benefit analysis;

II. Reinforce the disaster risk reduction agenda and integrate it with the climate change agenda

- 3. Reinforce as appropriate at the national level the disaster risk reduction agenda, devoting adequate resources to improve the resilience of populations and ensuring that adaptation to climate change are integrated into development and act as a driving force for change and modernisation of societies, making sustainability and safety principles of good governance and progress;
- 4. Improve existing legal and technical tools for early warning, response and prevention of disasters to integrate the new or increased threats brought by global warming, changes in rainfall patterns and rise of sea level; devise new tools specially as "aid to decision" in crisis situations

- and prevention, reinforce in this context the building of a culture of risk, integrating as appropriate climate change;
- 5. Improve governance of disaster risk reduction, involving all authorities, integrating science, industry and citizens into appropriate partnerships and encouraging all to act both for mitigation of climate change and contribute to the implementation of adaptation measures that may reduce vulnerability; take account, in that framework, of the important federating role of multi-stakeholder national platforms for disaster risk reduction;

III. Adopt a knowledge-based approach to prevention and response. The role of science and innovation

6. Recognise the role of knowledge, both science and traditional knowledge, in disaster risk reduction, using existing resources to encourage innovation and favouring exchange of knowledge and good practices; integrate social sciences in to disaster risk reduction, as the human dimension is a key aspect of both preparedness and response;

IV. Recognise the role of cooperation and solidarity

7. Reinforce international cooperation on disaster risk reduction at the global and the European and Mediterranean levels, making disaster risk reduction an important part of the climate change negotiations and supporting global and regional mechanisms of cooperation.

INVITE the member States of the Council of Europe which are not parties to the European and Mediterranean Major Hazards Agreement (EUR-OPA), to examine the above recommendations and to use them as a source of inspiration for their policy and practice.