
A Community approach on the prevention of natural and man-made disasters

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1. INTRODUCTION

Between 1990 and 2007 the European Union witnessed a marked increase in the number and severity of both natural and man-made disasters, with a particularly significant increase in the former. The loss of human life, the destruction of economic and social infrastructure and the degradation of already fragile ecosystems is expected to worsen as climate change increases the frequency and magnitude of extreme meteorological events, such as heat waves, storms and heavy rains.

Analyses carried out by the UN and other international organisations have highlighted a growing vulnerability to disasters, partly as a consequence of increasingly intensive land use, industrial development, urban expansion and infrastructure construction.

The Community has already developed a set of instruments to address various aspects of disaster preparedness, response and recovery. There are also a number of sector-specific initiatives covering floods, technological disasters, and oil spills which deal with elements of disaster prevention. There is, however, no strategic approach, at the Community level, for disaster prevention.

The objective of this Communication is to identify measures which could be included in a Community strategy for the prevention of natural and man-made disasters, building upon and linking existing measures. Prevention is understood as (i) where possible preventing disasters from happening, and (ii) where they are unavoidable taking steps to minimise their impacts.

This Communication follows up on the commitment made by the Commission to develop proposals on disaster prevention and responds to the calls of the European Parliament and the Council for increased action at Community level to prevent disasters and mitigate their impacts. It contributes to the implementation of the Hyogo Framework for Action 2005-2015 and is part of a package comprising an external and internal dimension. It does not cover conflict-related complex emergencies or acts of terrorism.

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1 reported in the CRED (Centre for Research on the Epidemiology of Disasters) database
2 ISDR, Global Trends Report, 2007
3 Directive 2007/60/EC on the assessment and management of flood risks
5 For example, Regulation 1726/2002 banning single-hull tankers from European ports and Regulation 2038/2006 on multi-annual funding for the action of the European Maritime Safety Agency in the field of response to pollution caused by ships
6 COM(2008)130
7 European Parliament Resolution of 19 June 2008 on stepping up the Union’s disaster response capacity
8 European Parliament Resolution of 14 November 2007 on the regional impact of earthquakes
9 Council Conclusions of 16 June 2008
10 Adopted at the World Conference on Disaster Reduction
2. **THE NEED FOR A COMMUNITY APPROACH FOR THE PREVENTION OF NATURAL AND MAN-MADE DISASTERS**

There are a number of reasons why disaster prevention needs to be considered at the European level. Most obviously, disasters do not respect national borders and can have a transnational dimension (as was the case with the 2002 floods, and the 2007 forest fires). Disasters can have a negative impact on existing Community policies such as agriculture and infrastructure. The economic impacts of disasters\(^\text{11}\) may adversely affect the economic growth and competitiveness of EU regions (and hence the EU as a whole). Finally, Community funding is often required to deal with the aftermath of disasters.

Member States already have, to varying degrees, policies aimed at the prevention of disasters. Action at the Community level should complement national actions and should focus on areas where a common approach is more effective than separate national approaches. In particular, the EU will seek to reduce the impact of disasters within the EU by:

- the development of knowledge based disaster prevention policies at all levels of government;
- linking the relevant actors and policies throughout the disaster management cycle;
- improving the effectiveness of existing policy instruments with regard to disaster prevention.

A Community approach to disaster prevention should explicitly seek to build on measures that have already been taken at European level – either sector legislation or the possibility of using Community funds for prevention activities\(^\text{12}\).

3. **KEY ELEMENTS OF A COMMUNITY APPROACH ON PREVENTION**

3.1. **Creating the conditions for the development of knowledge based disaster prevention policies at all levels of government**

A better understanding of disasters is a pre-requisite for developing efficient disaster prevention policies.

3.1.1. **Creating an inventory of information on disasters**

Available data on disasters is currently limited and suffers from a lack of comparability: several criteria are used, such as the number of victims, the amount of damage, the number of events occurring in a given period. Data on the physical and economic impacts of disasters remains indicative at best.

The Commission will develop a comprehensive inventory of existing sources of information related to disasters. This will make it possible to identify comparability issues as well as information gaps. It will also provide the basis for assessing how to better share information within the EU.

Information on the economic impacts of disasters is particularly important since it can allow policy makers to properly assess the costs and benefits of different disaster prevention

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\(^{11}\) The economic impact of disasters in Europe has been estimated at €15 billion yearly. (ABI (2005) and Munich Re (2008))  
\(^{12}\) These include the European Agricultural Fund for Rural Development, the Civil Protection Financial Instrument, LIFE+, the ICT Policy Support Programme and the Research Framework Programme. Furthermore, €5.8 billion is directly allocated to “risk prevention” measures under the 2007-2013 Cohesion Policy.
measures. The Commission will launch a stakeholder group to review the existing information. On the basis of this assessment, the Commission will take the measures necessary to fill any identified knowledge gaps.

3.1.2. Spreading best practices

The Commission will launch an inventory of best practices and facilitate the exchange of information between stakeholders. Studies and cooperation projects involving Member States and other stakeholders will be carried out.

The experience from implementing existing prevention legislation will be used to assess if approaches that are currently applied to specific sectors could be more widely used. For example, the Floods Directive includes hazard and risk mapping and risk management procedures while the Seveso Directive includes provisions on land use planning, safety reports and emergency plans. It may be that these techniques could be useful with the prevention of other disasters.

3.1.3. Developing guidelines on hazard/risk mapping

Hazard mapping aims to identify the areas prone to particular risks. It provides essential information to the public and is an important tool for planning authorities.

Member States are in the process of developing a number of initiatives relating to hazard and risk mapping. The diversity of methodological approaches has reduced comparability of information and makes it difficult for information to be consolidated at the European level. As a result there is no overall picture of the risks the EU is facing. Policy makers and businesses (e.g. infrastructure developers, the insurance sector) would benefit from better comparability of hazard/risk information across the EU.

The Commission will carry out a study on current practices of hazard and risk mapping in Member States. On this basis, Community guidelines for hazard and risk mapping will be developed, building upon existing Community initiatives. These should focus on disasters with potential cross-border impacts (e.g. floods or accidental release of chemicals and radi-nuclear agents), exceptional events (major storms), large-scale disasters (earthquakes), and disasters for which the cost of recovery measures appears to be disproportionate when compared to that of preventive measures. The possibility of developing a specific initiative on forest fires will also be explored.

3.1.4. Encouraging research activities

Several themes under the Seventh Framework Programme for Research and Technological Development (2007-2013) address natural and man made hazards. Through the implementation of this Programme the Commission will:

– Improve coordination of Community-financed research in this area, particularly with regard to high-priority topics, such as those generated by climate change;
– Invest in research on the development of early warning systems and on interoperability of information and monitoring systems;
– Continue the research activities of the Joint Research Centre linked to the disaster management cycle;

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13 such as the GMES (Global Monitoring for Environment and Security) initiative
14 Environment, Infrastructures, Space/ Copernicus, Security, and Information & Communication Technology.
Make research results easily and systematically available to actors in the field of prevention and develop a database for experts with specialist knowledge.

3.2. Linking the actors and policies throughout the disaster management cycle

A range of Community and national policies can be managed in a way that supports the disaster management cycle — prevention, preparedness, response, recovery. This requires linking the actors involved in developing and implementing measures that can have significant impacts on disaster prevention. The Commission will work to foster best practice across the EU.

3.2.1. Extending the lessons learnt exercises to disaster prevention

The Commission has established a programme of "lessons learnt" from interventions conducted within the framework of the Community Mechanism for civil protection. Evaluation of the direct response given to disasters is used to identify potential improvements. The Commission will extend the lessons learnt programme to look at potential improvements to disaster prevention.

3.2.2. Training and awareness-raising in the area of disaster prevention

The Commission is preparing proposals for enhancing Community-level disaster management training. The Commission will integrate prevention into these proposals and develop specific courses on prevention within the Community civil protection training programme.

Awareness-raising of the general public can also contribute to disaster prevention – for example, citizens should be aware of what to do in the event of an earthquake. The Commission will use the upcoming calls for cooperation projects under the Civil Protection Financial Instrument to include the possibility to support projects on public awareness and education, such as for example the identification of best practices and the preparation of school curricula.

3.2.3. Improving the linking between actors

Experience in some Member States demonstrates the usefulness of setting-up coordinated mechanisms for crisis management, involving different public and private stakeholders.

The Commission encourages the Member States to implement such initiatives. This should cover (i) linking the actors involved in disaster prevention, e.g. land planners need to communicate with agencies responsible for hazard and risk mapping, and (ii) linking the actors active in different phases of disaster management, e.g. forest recovery projects should facilitate the intervention of emergency response services.

A European network composed of representatives of the various national departments concerned of all the Member States could provide a useful forum for elaborating recommendations on best practices. The Commission intends to create such a network covering the departments in charge of land planning, risk and hazard mapping, protection of the environment, and emergency preparedness and response. Circulation of information within the network will be facilitated through a web-based tool.

The network will be used to form working groups that will develop recommendations on policy coordination measures to be taken at Community, national, or sub-national levels. The first priorities of the network will concern:

- The identification of best practices in linking the relevant actors and policies through the disaster management cycle;
– Linking the relevant actors and policies that should be involved in the prevention of forest and other wild fires in the EU.

3.2.4. Reinforcing early warning tools

The ability of citizens and policy makers to mitigate disasters depends, to a great extent, on access to reliable early warning tools. The Commission will reinforce the link between early warning systems by:

– Strengthening cooperation with the network of European meteorological services to integrate short-term flood alerts (including coastal floods) in the early warning systems;

– Reducing alert times of existing early warning systems;

– Linking existing alert systems for forest fires (EFFIS) and floods (EFAS) in the Global Disaster Alert and Coordination System (GDACS);

– Continuing the cooperation with the southern Mediterranean countries that aims at improving the access of existing early warning systems to real time information;

– Increasing the awareness of the citizens regarding the European Emergency Number 112 in partnership with the Member States.

3.3. Making existing instruments perform better for disaster prevention

Several Community financial and legislative instruments support Member States action in the field of prevention. The Commission will ensure that prevention concerns are taken into account in a more consistent and efficient way across policies and programmes (such as common agricultural or rural development policies).

3.3.1. A more efficient targeting of Community funding

Disaster prevention should be viewed as a sensible investment since the costs of preventative measures are typically many times less than those of remediation. To improve the effectiveness of Community funding for the prevention of disasters the Commission, in close cooperation with Member States, will:

– Establish, in 2009, an inventory of existing Community instruments capable of supporting disaster prevention activities. The objective would be to assess the degree of use of such instruments, as well as to identify any gaps in their coverage;

– Develop a catalogue of prevention measures that could be considered by the Member States for EU funding (for example, include measures integrating preventive action in reforestation/afforestation projects).

On this basis, the Member States will be invited to assess the possibility of improving the integration of disaster prevention in national operational programming of EU funding. When such needs are identified, the Commission would support improving national operational programmes.

The review cycles of EU funding instruments and the definition of the next financing perspectives will provide additional opportunities to further consider integrating risk prevention in EU funding.

3.3.2. Taking account of disaster prevention in existing Community legislation

Prevention concerns should be taken into account during the planned reviews of a number of items of EU legislation. These include:
– Council Directive 85/337/EEC\(^{15}\) on the assessment of the effects of certain public and private projects on the environment (EIA Directive) as amended by Directives 97/11/EC\(^{16}\) and 2003/35/EC\(^{17}\). This could potentially examine whether the environmental impact assessment of individual projects sufficiently addresses the direct and indirect effects on disaster risk prevention.

– The Seveso Directive 1996/82/EC which provides important links to land use and spatial planning.

The Commission will also work to mitigate the impacts of earthquakes by encouraging Member States to fully integrate the common European design codes for buildings and civil works (in particular “Euro code 8”) into their national planning regulations. In this context, Member States are invited to make full use of the opportunities provided by the public procurement directives\(^{18}\)

4. REINFORCING INTERNATIONAL COOPERATION IN THE FIELD OF PREVENTION

The Commission will emphasise disaster prevention in upcoming cooperation initiatives with third countries, in particular:

– With Candidate Countries and potential Candidate Countries via their participation in, or association with, the Community Mechanism and implementation of the Disaster Risk Reduction Initiative;

– Within the European Neighbourhood Policy (ENP)\(^{19}\), by reinforcing the disaster prevention chapter in existing agreements;

– Through the programme for prevention, preparedness and response to natural and man-made disasters (PPRD)\(^{20}\) in the framework of the Euro-Mediterranean Partnership;

– With Eastern ENP partners on prevention to natural and manmade disasters.

The Commission will coordinate with the International Strategy for Disaster Risk Reduction (UN-ISDR) and ensure close ties with the EU Strategy for Disaster Risk Reduction in developing countries.

5. CONCLUSION AND WAY FORWARD

This Communication sets out an overall European approach to the prevention of disasters. It identifies areas for action and outlines specific measures to boost disaster prevention in the short term. The implementation of these measures will take account of actions already undertaken by the Community, thus creating the necessary conditions for bringing the latter together under a consistent and effective Community framework.

\(^{15}\) OJ L 175, 5.7.1985

\(^{16}\) OJ L 73, 14.3.1997

\(^{17}\) OJ L 156, 25.6.2003

\(^{18}\) Directives 2004/17/EC and 2004/18/EC (OJ L134, 30.4.2004) provide that technical specifications shall be formulated according to mandatory national technical rules compatible with applicable Community law or by reference to national standards transposing European ones

\(^{19}\) COM(2004) 373

\(^{20}\) Barcelona Process: Union for the Mediterranean ministerial conference - Final declaration, Marseille 4th November 2008
The European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions are invited to provide the Commission with further input with a view to consolidating a Community strategy for the prevention of natural and man-made disasters.

The Commission will carry out further consultations and liaise with stakeholders from the public and private sector to promote this approach and if appropriate will propose to develop it further.