



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 20.4.2005
COM(2005) 153 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE
EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

Reinforcing EU Disaster and Crisis Response in third countries

1. INTRODUCTION

This Communication is the Commission's response to the EU Action Plan presented by the Luxembourg Presidency at the General Affairs and External Relations Council (GAERC) of 31 January 2005 following the tsunami of 26 December 2004.

Europe's response to the disaster precipitated by the tsunami was immediate and generous. The European Community played an important part in this effort. While its response demonstrated the depth and extent of the collective resources that the Union can draw upon through Community and bi-lateral programmes, as well as its new military capabilities, it also brought home both the operational and political complexity of disaster and crisis preparedness and response.

The Presidency's Action Plan addresses three main issues:

- Measures taken to address the needs of the tsunami-affected regions;
- Measures to improve the EU's response capacity, its coherence and efficiency;
- Measures to enhance prevention, early warning and preparation for future disasters.

The President of the Commission responded to the EU Action Plan at the GAERC with a report on the Community's financial assistance to the tsunami-affected regions, and a plan for the longer term development of the Union's capacity to anticipate and respond to future disasters and crises. This Communication builds on that plan.

The Communication includes two annexes. The first is an updated report on the measures taken by the Commission to address the needs of the areas affected by the Indian Ocean Tsunami. This describes its €103 million programme of humanitarian support, its €350 million programme of longer term reconstruction and a series of flanking measures, including trade concessions and the European Investment Bank's activities.

The second annex illustrates the range of Community instruments and programmes which contribute to early warning and disaster preparedness across the world.

2. ENSURING A COHERENT AND EFFICIENT RESPONSE

The Community has developed a number of distinct instruments for its external action. These respond to a variety of policies and mandates: humanitarian, stabilisation, reconstruction and sustainable development goals, economic cooperation and fundamental rights. The Community's response to the tsunami illustrated the wealth of instruments at its disposal to address disasters and crisis. It showed that in addition to the relevant external relations instruments, many internal policy instruments can be mobilised in a coordinated way to strengthen the overall response. These include not only the Community Civil Protection Mechanism, but also programmes in the field of research, information society and justice, liberty and

security and fisheries. The strength of the Community response lies in its ability to integrate the capabilities built up under its internal policies with the measures delivered under its specialised instruments for external action.

A further dimension is brought by the military and civilian capabilities being developed under the Common Foreign and Security Policy.

This diversity of capabilities is one of the strengths of the Union. The double challenge is to ensure an efficient, rapid and flexible response in the face of emergencies as well as to mobilise and develop these resources in a coherent manner, and to build on their respective strengths.

The measures set out in this Communication share the common objective of promoting efficiency, coherence and coordination between the different external policy instruments of the Union in situations of disaster and crisis, while preserving their distinct mandates, and in particular what is known as the 'humanitarian space'¹. They are intended to ensure that the Commission can:

- make an effective contribution to the development of policies and practices at EU level relating to disaster and crisis response;
- support improved operational coordination between the Commission, the Member States and the General Secretariat of the Council;
- address major gaps in administrative capacity;
- contribute to the strengthening of the wider international framework for disaster and crisis response.

The EU has already established a number of important fora within which the questions of policy and operational coherence of disaster and crisis can be addressed or which provide models for taking such work forward. These include the GAERC's annual debate on the effectiveness of EU external action, the programme of implementing the 'Barcelona Commitments'² on harmonisation of policies and procedures for external assistance, the ongoing reflection between the Commission and the Member States on the quality of EU humanitarian aid and the strategic planning scenarios to be developed by the civil-military cell. The Commission will play a full role in these fora as well as in relevant international instances such as the OECD Development Assistance Committee and the International Meetings on Good Humanitarian Donorship.

¹ The operational conditions necessary to allow neutral, impartial and non-discriminatory delivery of humanitarian aid, and to ensure free and direct access to disaster victims.

² The Council adopted the 'Barcelona commitments' on 14 March 2002. These are based on internationally agreed best practices including from the OECD Development Assistance Committee Task Force on donor practice and form part of a process of harmonisation of policies and procedures for external assistance agreed between the Member States and the Community.

3. REINFORCING THE RESPONSE CAPACITIES OF THE UNION - IMPROVING EXISTING INSTRUMENTS, THEIR EFFICIENCY AND OVERALL COHERENCE

The principal instruments for immediate EU disaster response remain Community humanitarian aid delivered under Council Regulation (EC) No 1257/96, and the Member States' capabilities mobilised under the EC Civil Protection Mechanism. EU military assets may complement and strengthen delivery of aid under both of these mechanisms. Furthermore, strategic planning scenarios for so-called 'Petersberg' humanitarian tasks using both civilian and military assets are currently being developed.

These instruments are closely followed by short and medium term EC disaster and crisis assistance under its Rapid Reaction Mechanism³ and its core external assistance programmes. The precise sequencing of this assistance depends on the nature of the event and a wide variety of civilian and military actors may be present in the field at any one time.

This section identifies measures to strengthen existing Community instruments and their linkages to, and coherence with, the broader EU and international response.

3.1. Humanitarian Aid

The sole aim of Community humanitarian aid is to prevent or relieve human suffering. The Community's humanitarian response is determined by the needs of victims alone and is not based on or subject to, political considerations. It is delivered according to international humanitarian law and by the humanitarian principles of neutrality, impartiality and non-discrimination. These established principles are now enshrined in the Constitution. They are key operational considerations for the effectiveness of aid and for the safety and protection of both aid workers and victims.

The tsunami has demonstrated the value of military logistical assets in complementing and supporting humanitarian organisations where their rescue and aid delivery capacities are overstretched or insufficient. It is necessary, however, to ensure that any humanitarian operation using military assets retains its civilian and impartial nature. This is of particular importance in complex emergencies⁴ where there is an absolute need to avoid confusion of roles between military and humanitarian actors. For this reason, and in order to preserve the neutrality of the 'humanitarian space' the Commission attaches great importance to compliance with the UN Guidelines on the use of Military and Civil Defence Assets in Humanitarian Operations⁵ in both conflict and non-conflict situations. These internationally agreed guidelines provide for the mobilisation of military assets for humanitarian and relief operations at the request of and in close cooperation with the civilian humanitarian operators. These guidelines are also key operational elements in ensuring the safety and protection of relief workers and victims.

³ Council Regulation (EC) No 381/2001 of 26 February 2001 creating a rapid reaction mechanism.

⁴ The term 'complex emergency' refers to a humanitarian crisis in a conflict zone.

⁵ The 1994 'Oslo Guidelines' relating to natural disasters, and the 2003 'MCDA Guidelines' relating to man-made disasters.

The Commission recognises and supports the primary role of the UN in co-ordinating international humanitarian aid efforts.

The Commission will work with the Council's Civil-Military Cell to ensure that these principles and guidelines are appropriately reflected in any relevant strategic planning scenarios developed by the Cell.

3.1.1. Enhancing preparedness

Community humanitarian aid is channelled primarily through the specialised agencies of the United Nations, the Red Cross family and European NGOs. Many of these organisations are operating under an international mandate and are recognised as lead organisations in their respective fields of expertise⁶.

The European Community Humanitarian aid Office's (ECHO) partnerships with these organisations gives the Community has a well-established capacity to respond quickly to sudden disasters. Its presence in some 70 countries throughout the world, its focus on vulnerable countries and its rapid funding procedures, which allow emergency funding decisions to be taken in the first hours of a crisis, mean that the Community is a front-line donor in sudden disasters.

The Commission will work to enhance the delivery capacity of major partners through financing preparedness measures, notably the pre-positioning of vital immediate relief items. The Commission is already funding UNICEF to pre-position basic emergency items in regional hubs and to prepare response plans in 16 vulnerable countries and has a similar programme with WHO. It is now engaged in discussions to extend such programmes to International Federation of the Red Cross, as well as other international non-governmental organisations. In addition, it is evaluating the feasibility of reinforcing logistical capacity of its implementing partners – notably air transport - in order to enhance the rapid deployment of relief staff and aid.

3.1.2. Improving the rapid analysis and evaluation capacity

In a major disaster good coordination and reliable and rapid evaluation of needs are key factors for the effectiveness of the humanitarian response. The Commission will, therefore increase its assessment capacity, building on its existing network of 69 humanitarian aid experts and 250 local staff located in regional field offices across the world. These experts are specialised in key relief and humanitarian sectors (such as health, water and sanitation, provision of food, shelter and housing) and can already be deployed within 24 hours to the site of any disaster. It will improve the interoperability of EU assessment capacity with the UN and Red Cross systems. It will work in support of the UN lead in disaster response coordination:

The following concrete measures will be taken:

- progressively increasing the number of field-based experts from 69 to 150;

⁶ eg UNHCR for refugees, UNICEF for children, ICRC for the protection of civilians and prisoners and for the application of international humanitarian law, UNOCHA for humanitarian aid coordination etc.

- training experts in the UN Office for Coordination of Humanitarian Affairs’ (OCHA) UNDAC⁷ and the Red Cross’ FACT⁸ assessment and coordination methodologies in order to develop synergies and cross-fertilisation when conducting needs assessments;
- developing a surge capacity pre-positioned at the level of ECHO regional field offices allowing deployment of emergency specialised multi-sectoral teams within 24 hours.

Funding is in place and recruitment is underway for an initial increase to 100 experts. Once all are in place ECHO will reassess the performance of the network before conducting a further reinforcement exercise.

3.1.3. Reinforcing the UN rapid assessment capacity and the interoperability of teams

The lead role of OCHA in disaster coordination is recognised by the EU, and the EU post-Tsunami Action Plan rightly stresses the desirability of the “interoperability” with the UN. In addition to the measures outlined above, the Commission is providing direct support to OCHA’s capacity for coordination, through both funding and technical collaboration with the EC Joint Research Centre. It is also funding the development of OCHA’s handbook on the implementation of the guidelines on the use of military assets in humanitarian operations.

3.1.4. The European Volunteer Corps for Humanitarian Aid

The EU action plan called for a reflection on a Voluntary Corps for humanitarian aid. This mirrors provisions foreseen in the Constitution regarding a Humanitarian Aid Voluntary Corps⁹.

The Commission has launched a study of the existing humanitarian volunteer schemes (eg UN Volunteers, Red Cross Volunteers). The study will help identify common features and best practices. It will make recommendations on possible EC support to the training of volunteers, and to the establishment of an EU roster of trained volunteers, available on stand-by to humanitarian agencies.

3.1.5. Improving coherence of the overall EU humanitarian response

Strengthened coordination between Community humanitarian aid and EU Member States’ bilateral aid in disaster and crisis response would be of mutual benefit to all. Key to decision-making in rapidly evolving situations is a standardised and real-time information flow. The Commission, therefore, proposes the following concrete measures, which could be rapidly implemented:

- develop a network of Member States’ humanitarian emergency focal points;

⁷ UN Disaster Assessment and Coordination teams.

⁸ Field Assessment and Coordination Teams.

⁹ Article III-321§5 of the Constitution.

- improve the existing system for EU humanitarian reporting (the so-called ‘14 point’ system), make it fully consistent with the financial tracking system of UNOCHA and improve the use of it by Member States;
- put its field-based humanitarian aid experts at the disposal of Member States to advise and assist the provision of bilateral humanitarian assistance, and to facilitate the coordination of Community and Member States’ assistance in this area.

3.2. The Civil Protection Mechanism

The Community Civil Protection Mechanism facilitates the mobilisation of specialised resources from Member States for disaster relief both inside and outside the EU. Interventions outside the EU may either be conducted on an autonomous basis or as a contribution to an intervention led by an international organisation¹⁰. Coordination of activities outside the EU will be ensured by the Commission and the EU Presidency, which operate in close consultation.

Measures to strengthen the Mechanism’s response capacity must take account of this dual role. These measures are set out in greater detail in the Commission’s Communication “Improving the Community Civil Protection Mechanism”¹¹. The development of the Mechanism’s work in third countries must, moreover, take proper account of the mandates of other international organisations and existing international mechanisms of coordination.

Immediate action will concentrate on improving the Mechanism and maximising the impact of its assistance within the existing legal framework. The Commission proposes to:

- ensure full implementation of the agreement with UN OCHA in order to maximise the use of available resources and ensure a coordinated response to disasters in third countries;
- enhance preparedness through further training and exercises. The scenario-based assessment of EU civil protection capabilities needs to be taken forward quickly, with the full participation of all Member States;
- develop a modular approach based on national, rapidly deployable civil protection modules; where such modules are intended to be deployed in third countries attention should be given to their complementarity with modules being developed in the framework of UNOCHA;
- reinforce the links between the Mechanism and early warning systems and strengthen the analytical and planning capacity of the Commission’s Monitoring and Information Centre (MIC). This will include strengthening links with the UNDAC alert and duty system and its virtual On Site Operational Coordination Centre (OSSOC);

¹⁰ Council Decision of 23 October 2001 establishing a Community Mechanism to facilitate reinforced co-operation in civil protection assistance interventions (2001/792/EC, Euratom).

¹¹ COM(2005) 137, 20.4.2005.

- strengthen the on-site assessment of specialised civil protection needs, and improve capacity for coordination of the deployment of EU civil protection assets, in full coordination with other actors;
- improve access to EU military assets for disaster relief through better use of the EU database of military assets, the development of specific planning scenarios with the Civil-Military cell and the establishment of operational procedures with the EU military staff;
- provide Community funding for transportation costs.

In the longer term more ambitious and structural reforms of the Mechanism can be envisaged, underpinned by the greater financial resources proposed by the Commission under the new Financial Perspectives¹². This will result in a more robust civil protection capability at EU level and will require:

- enhancing the civil protection capabilities available for assistance at EU level;
- mandating the Commission to inform third countries of the possibility of requesting assistance whenever there is a possible need for civil protection assistance;
- developing standby modules, based in the Member States, for immediate deployment upon a request for assistance;
- providing financing for the MIC to hire equipment that is necessary to ensure a rapid European response and which cannot be obtained from the Member States or other sources, while strengthening links with the UN Joint Logistics Centre;
- promoting international coordination of disaster response.

3.3. Rehabilitation, reconstruction and development aid

Just as with humanitarian aid and civil protection, the effectiveness of EU medium-term disaster, crisis and reconstruction assistance depends on having access to good quality assessment of needs at an early stage, and on having the necessary flexibility in implementation capacity to deliver in a timely way.

With this in mind the Commission will establish Assessment and Planning Teams. These will bring together desk officers and sectoral specialists from across the Commission and its 130 Delegations. The teams would be ready for mobilisation at short notice for missions of up to one month and would be able to draw upon external on-call experts. Member States' participation would be encouraged.

There would be a number of distinct roles for the assessment teams, depending on the nature of the crisis and the scale of the response envisaged by the Community, including:

¹² See the Commission's proposal for a Rapid Response and Preparedness instrument for major emergencies - COM(2005) 113, 6.4.2005 - and its proposal for a Stability instrument - COM(2004) 630, 29.9.2004.

- contributing to multi-lateral needs assessment conducted by the World Bank or UN;
- programming and detailed project identification for EC emergency crisis and reconstruction financing;
- integrating sustainable development objectives and strategies in the planning of emergency assistance, in order to ensure as seamless a transition as possible between emergency rehabilitation and reconstruction aid and the longer term development phase;
- contributing to CFSP fact finding missions organised by the Secretariat of the Council.

A number of practical steps will be taken to establish these teams:

- a roster of in-house expertise will be established;
- a common training course will be developed;
- measures will be taken to ensure that staff can be detached from their functions and mobilised rapidly.

When planning its disaster and crisis response the Commission would see great value in developing a common and authoritative analysis of the situation on the ground with Member States and the General Secretariat of the Council. This could then be used to make decisions as to the respective priorities for the Community, CFSP and bi-lateral assistance programmes. As a starting point it will seek opportunities for joint assessments with colleagues in the General Secretariat of the Council.

In addition measures will be taken to reinforce the implementation capacity of Delegations at short notice.

3.4. Strengthening the links between Community programmes and EU Civilian and military capabilities

The Civil-Military Planning Cell will have an important influence on the development of EU crisis response. Given the breadth of experience that the Commission has in managing relief and post-conflict stabilisation measures, and the depth and range of Community resources relevant to situations of crises, it is important that the Commission fully contributes to the work of the Cell.

For this reason, the Commission will appoint liaison officers to the Civil-Military Cell. Their primary functions will be to promote coherence between the planning assumptions of EC and CFSP measures, and to identify practical arrangements for the use of military assets in support of civilian Community programmes and ensure that the considerations outlined above relating to humanitarian operations and the preservation of the ‘humanitarian space’ can be properly taken into account. The liaison officers would bring expertise in humanitarian aid and disaster response and the management of reconstruction assistance. They would be fully integrated into the day-to-day work of the cell, while maintaining a line of reporting to Commission services.

3.5. Sound financial management

Proposals will be made in forthcoming reviews of the Financial Regulations on how best to reconcile the needs for flexible and swift crisis and disaster assistance with the requirements of sound financial management and public procurement. In addition the Commission will further develop its control and follow-up mechanisms in order to ensure sound and effective financial management of Community crisis and disaster assistance. Cooperation and exchange of information with other donors will be enhanced with this in mind.

4. MATCHING MEANS TO AMBITIONS - ESSENTIAL STRUCTURAL MEASURES

4.1. A platform for improved planning, coordination and coherence

The President of the Commission announced at the 31 January GAERC the establishment of a light but effective platform to improve real-time policy coordination within its services when facing crisis situations outside the territory of the Union. This would also strengthen and consolidate flows of information to decision-makers, seek to maximise the synergies and complementarities between the various Community instruments mobilised for crisis and disaster response, and support the work of geographical services. It would work to improve channels of communication with Member States and the Council Secretariat. The platform will also consolidate and strengthen the Commission's sectoral policy making expertise in disaster and crisis response as regards third countries¹³.

In addition the Commission will aim to strengthen co-ordination with the General Secretariat of the Council by:

- presenting proposals for improving the functioning of the crisis response coordination teams envisaged in the EU crisis management procedures endorsed by the Political and Security Committee in February 2003;
- improving exchange of information with the Council Joint Situation Centre and sharing of the relevant Commission capabilities.

In order to improve the circulation of information about Community and bilateral emergency assistance the Commission will:

- draw up proposals for the establishment of a permanent system of focal points in Member States' agencies for reconstruction assistance, building on the mandate already given to the Commission to establish clearing houses for Iraq and the post-Tsunami assistance.

¹³ See also paragraph 3.3 of the Commission's Communication 'Improving the Civil Protection Mechanism' - COM(2005) 137, 20.4.2005. This will be fully in line with the Commission's planned ARGUS system, linking all specialised rapid alert systems within the Commission

4.2. Logistics and procurement

The EU's ability to launch complex missions in response to disaster or crisis requires a strong capacity for logistics and telecommunications, security, procurement and administrative and financial support.

The need for this capacity is not, however, restricted to crisis situations. Important Community-funded programmes such as electoral observation (which fields 8-10 large-scale missions per year) have similar needs, and face similar challenges in meeting them.

Community programmes have found a variety of responses to these needs, of varying flexibility and effectiveness. In the case of missions under the EU Common Foreign and Security Policy (CFSP), all these tasks are delegated to the Head of Mission or the EU Special Representative, acting in his or her personal capacity. The Head of Mission is thus responsible for establishing a complete logistics, financial management and procurement operation, on top of his or her core political tasks. He or she is guided and supervised by the Commission who retains the overall financial responsibility.

The Commission believes that current arrangements are unsustainable in the long term and are not capable of supporting the planned growth in importance of complex EU missions. For this reason the President of the Commission announced that work would be taken forward on a common logistical and administrative support platform for external actions.

This platform will ensure provision of timely mission administration, logistics and procurement, building on the measures mentioned in paragraph 4.1 above. Given the significant staffing implications of such a structure, the Commission will examine the full range of options available to it under the new Financial Regulation, including the creation of a Commission Office, and the establishment of a Commission Executive Agency¹⁴. It will conduct a cost-benefit analysis comparing these options against the option of maintaining these functions within the existing Commission services. The Commission plans to making a proposal to the budgetary authority before the end of the year.

As part of this work the Commission will continue its discussions with the General Secretariat of the Council, and will put in place a number of agreed interim measures to accelerate the procurement for CFSP missions.

4.3. Building up implementation capacity and preparing for the Stability Instrument

The Commission's proposal for a Stability instrument¹⁵ seeks to streamline the Community response to disaster and crisis. It is based on a logic of consolidating financial resources within a single integrated instrument. Following the same logic, the Commission will progressively consolidate in-house expertise relevant to the objectives of the instrument and establish the necessary implementing capacity. At the same time, it will ensure a progressive strengthening of the staffing of the Rapid

¹⁴ Article 54 of the Financial Regulation.

¹⁵ COM(2004) 630, 29.9.2004.

Reaction Mechanism, in order to develop and test project identification and implementation methodologies relevant to the needs of the future instrument.

5. REINFORCING PREVENTIVE MEASURES, EARLY WARNING AND DISASTER PREPAREDNESS

5.1. Background

Rapid response capacities need to be accompanied by a strategy for disaster prevention, preparedness and alert. While the Indian Ocean tsunami disaster dramatically highlighted the need for effective early warning systems, it also demonstrated the political and technological complexity of the issue.

The Community has a broad range of policies and financing instruments which can contribute to the development of early warning and alert systems. It is currently contributing to alert systems in the Indian Ocean, the Atlantic and the Mediterranean through its humanitarian aid, development, regional aid and research programmes. It is also considering the establishment of an ACP-EC natural disaster facility (an overview of these initiatives can be found in Annex II). The challenge is to identify an appropriate policy framework within which these various initiatives can work coherently. With this in mind the Commission has established a standing working group bringing together relevant policy makers on these issues, and proposes the main elements for a strategy below.

Discussions in the Council also take place in a wide range of formats, and there is no one working group which brings together consideration of the political, developmental and technological aspects of early warning and disaster preparedness.

The Council could consider how best to stimulate a strategic discussion on these issues, and how better to align the policies of the Member States in this regard.

5.2. The international policy framework

The Commission played an important role in the preparation of the 2005 Kobe World Conference on Disaster Reduction, and sees the **Hyogo Declaration and Framework for Action 2005-2015** adopted at that conference as the starting point for its strategy. Reflecting this strategic framework, the Commission will put particular emphasis on:

- integrating disaster risk reduction into sustainable development policies and into programmes in countries that have been affected by disaster;
- strengthening of institutions, mechanisms and capacities at all levels that can build resilience to hazards and disaster preparedness both inside and outside the EU;
- development of people-centred early warning, better management and exchange of information on risks and protection, education and training;
- identifying, assessing and monitoring disaster risks, enhancing early warning;
- reducing the underlying risk factors.

The Commission will also step up preventive environmental work with a view to combating environmental and natural disasters.

5.3. EC support for disaster preparedness and early warning

In line with international consensus, the Community will foster a multi-hazard approach to early warning and alert, and will contribute at all stages in the chain from detection to response. As a general rule, the Commission will encourage regional and sub-regional organisations to take a role in the implementation of early warning and alert systems. It will assess requests for contributions to national systems alongside other national development priorities.

It will draw upon the following resources:

- humanitarian aid and development assistance focussed on local preparedness and national action, emergency communication and mitigation plans, including capacity building at national and regional level for disaster reduction;
- research and development funding from the Community’s ‘Global Change and Ecosystem’, ‘Space’ and ‘Information Society Technologies’ programmes. These contribute to development of methods and models, hazard assessment and forecasting, assessment of health, environmental, economic and social impacts, satellite and *in situ* earth observation in support of vulnerability analysis and damage assessment, and the development of risk management technologies;
- know-how transfer from the scientific capacity of the Joint Research Centre and provision of operational services within the framework of EC-European Space Agency collaboration in the Global Monitoring for Environment and Security initiative (GMES);
- the promotion of specific tools developed by the Commission’s Joint Research Centre (with ECHO funding) in co-operation with OCHA, such as the Global Disaster Alert System (GDAS), which is designed to convey real-time information about specific risks and disasters to decision makers and relief agencies;
- the work of the European Standardisation Organisations and their ability to develop harmonised technological standards, for instance relating to the use of ‘cell broadcast’ enabling public authorities to issue alerts over the GSM network.

Effective early warning depends on linking the science and technologies of detection, to alert and decision-making systems, both within national administrations and the international community. One of the lessons learned from the tsunami is that information systems, databases, satellites and ground measurements networks must be significantly improved. With regard to the science and technology aspects of this work, the Commission will develop its programmes in close co-operation with the international community through the following fora:

- the UN’s **International Strategy for Disaster Reduction**, which will have a key role in ensuring co-ordination between international technological collaboration and the broader elements of the Hyogo disaster reduction strategy;

- the **Group on Earth Observations (GEO)**, which brings together national and intergovernmental operators of earth observation systems including the European Commission, relevant UN agencies and the Intergovernmental Oceanographic Commission. GEO has recently endorsed a 10 year plan to implement the Global Earth Observation System of Systems (GEOSS). This is a coordinated system of worldwide in-situ and remote sensing observation systems. The observation component of GMES will constitute a major European contribution to GEOSS.

6. PROTECTION AND SUPPORT OF EU CITIZENS

The Tsunami has highlighted the importance of enhanced cooperation between the Member States in coming to the aid of European citizens affected by a major crisis. The Commission supports the work of the Consular Affairs Group on the strengthening of consular co-operation and of the Police Cooperation Working Group on the setting up of a co-ordinated EU mechanism for identifying disaster victims. The Commission will provide financial support to this work through its General Programme - Security and Safeguarding Liberties. The Community Civil Protection Mechanism may also have a contribution to make.

The preparatory work on the establishment of the European External Action Service foreseen in the Constitution will also provide an opportunity to consider more institutionalised forms of consular cooperation.

7. CONCLUSION

The Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions are invited to take note of the strength and depth of Community capacities for disaster and crisis response and preparedness. They are invited to endorse the measures outlined in this Communication to strengthen these capacities, and to work with the Commission on ensuring coherence at policy and operational level of EU external action in this field.

Annex I

Progress report on actions undertaken by the Commission in response to the tsunami of 26 December 2004

1. INTRODUCTION

- 1.1. The Council of 31 January 2005 adopted an EU Action Plan in response to the tsunami of 26 December 2004. The Council called for the GAERC of 25-26 April to take stock of progress. This Communication reports to the Council on the Commission's progress in implementing its contribution to the EU Action Plan, both through its humanitarian and reconstruction aid and through a series of flanking support measures.
- 1.2. The tsunami was one of the worst natural disasters in recorded history. Large tracts of the islands of Sri Lanka and the Maldives as well as coastal zones of Indonesia, India and Thailand were simply devastated. Three months on, the true scale of this tragedy is clear. Some 300 000 are dead and a further million people have been displaced.
- 1.3. However, the response to the tsunami has been extraordinary, showing humanity at its best. Local people came together with great courage to rescue neighbours and tourists alike. The international community, including the EU, came quickly to the countries' aid, with logistical, humanitarian and longer term reconstruction aid. Donors have pledged some € 5.4 billion. The EU was the largest donor with about € 1.5 billion. Private donations directly to NGO's have also been huge at around € 1.9 billion. On learning of the tsunami on 26 December 2004, the Commission was among the first organisations to act with the immediate activation of the Community Civil Protection Mechanism and the immediate approval of a funding decision for humanitarian assistance. A first request for assistance was sent out by the operational heart of the Community Civil Protection Mechanism – the Monitoring and Information Centre (MIC) - to all participating countries. The Member States responded generously to these requests. While all European Member States have contributed to the immediate relief efforts in some way, 16 Member States – plus Bulgaria and Romania – channelled their assistance through the Community Mechanism.
- 1.4. ECHO and its Red Cross, UN and NGO partners have helped avert even further tragedy with their rapid humanitarian response. However, it is still too early to have a comprehensive assessment of the Commission's response during the emergency phase. The large reconstruction package has now been programmed and, if approved by Member States, will start flowing from mid year.
- 1.5. But the challenge is only just beginning and some risks are already clear, notably poor co-ordination of the hundreds of organisations now on the ground, limited absorption capacity given the large level of aid pursuing projects and delivering aid in conflict areas of Aceh and of north and east Sri Lanka. The Commission is putting in place measures to ensure it can deliver efficiently and effectively on long term reconstruction in this challenging situation but the task ahead will be demanding and the Commission must stick in for the long term.

2. HUMANITARIAN AID

- 2.1. The Commission reacted on the same day the disaster struck by approving € 3 million in humanitarian aid under the primary emergency procedure. It was the first donor to respond. By mid February, €103 million had been committed for support to Indonesia, Sri Lanka, Maldives, India and Thailand, covering not only short term relief but also small-scale rehabilitation activities to restart basic livelihoods.
- 2.2. ECHO's emergency allocation to the IFRC allowed the immediate start of an emergency operation covering the urgent needs of 500 000 unassisted and displaced beneficiaries severely affected by the earthquake and the tsunami, including emergency shelter and other non-food items, family kits and emergency medical kits. With ECHO's support, WHO dispatched Health Action in Crises teams and WFP were helped to augment the logistics capacity for distribution of food and non-food supplies by increasing warehouses, overland and air transport and human resources. In total € 20.6 million has been allocated to regional projects.
 - (a) € 36 million has been allocated to Indonesia. Activities receiving support include the establishment of a disease early warning system by WHO; the provision of access to primary health services and psychosocial support for 90 000 people; the creation of 20 child centres to register, trace and reunify separated/unaccompanied children; access to safe water and sanitation and distribution of food to around 150 000 people; improving the living conditions of people living in camps and at the same time assisting those willing to return to their places of origin to rebuild their houses and restart their agriculture and fishing activities.
 - (b) € 28.27 million has been allocated to Sri Lanka. ECHO activities include: a WFP operation providing food for 748 000 people, with special care for pregnant women and children and food and cash for work schemes to rehabilitate basic infrastructure; support through NGOs to supply temporary shelter, food, safe water, household items and basic sanitation to over 150 000 people living in camps; assistance to 150 000 families to restore their livelihoods in the fishing and agriculture sectors; mobile health clinics; psychological support; and specific medical treatment for the disabled.
 - (c) € 2.73 million have been allocated to the Maldives. ECHO is supporting UNICEF and UNDP to install water tanks in damaged schools, repair small bore sewerage systems, restore cold rooms and freezers in damaged hospitals and help displaced families to repair their houses and restart activities in the fishing and agriculture sectors. €10 million has been allocated to India, where ECHO's partners are helping around 8 700 vulnerable fishing families through the reconstruction of small boats and provision of fishing gear as well as providing psychological support, access to safe water, tools, construction material and support to women and communities working in sectors related to the fishing industry. Finally € 0.5 million has been allocated to Thailand, where assistance is being provided to around 2 000 fishermen and women from the most vulnerable groups.
- 2.3. On co-ordination, the Commission, recognizing the potential problem that the multiplicity of humanitarian organisations involved in relief and rehabilitation efforts

might cause for the effective delivery of aid, has adopted several measures to reinforce the role of the UN as the mandated body for the co-ordination of international humanitarian aid efforts. First, the Commission has allocated more than 50% of its humanitarian aid in support of the UN's Consolidated Appeal Process; second, the Commission has allocated more than € 6 million to UN agencies directly responsible for co-ordination of humanitarian aid; third, ECHO has funded the setup of Humanitarian Information Centres put in place by OCHA (the United Nations Office for the Coordination of Humanitarian Affairs) and has actively participated (and has requested its partners to participate) in overall and sector field co-ordination meetings.

- 2.4. Following the tsunami, ECHO has immediately deployed its field experts based in Bangkok and India. It has since reinforced its field assessment and monitoring capabilities in South Asia. Two field offices in Banda Aceh and Colombo were opened in January, each of them staffed with two field experts. In addition existing offices in Jakarta, Bangkok and New Delhi were reinforced with four experts. Two more experts were mobilised from regional offices in Africa and Latin America during the first phase of the crisis. Overall about 20 experts have been mobilised in response to the tsunami.

3. LINK BETWEEN RELIEF REHABILITATION AND DEVELOPMENT

- 3.1. It is crucial that there is as seamless a link as possible between the initial humanitarian response and the rehabilitation and reconstruction phases. This “Linking Recovery, Rehabilitation and Development” (LRRD) is a cornerstone in the EU’s emergency response.
- 3.2. The LRRD approach was embedded into the ECHO funded operations as described above. Short term rehabilitation activities will last until the end of 2006, allowing the European Commission’s development aid to build on the achievements of the humanitarian aid phase.
- 3.3. Taking up this work by ECHO in the emergency and rehabilitation phases, substantial Commission reconstruction funds will go towards longer term community regeneration and livelihoods support. Specific projects in Sri Lanka and Maldives will be financed that directly facilitate this LRRD link. LRRD will be addressed through Trust Funds’ support for community level projects in which the Commission will participate. The long-term implications of the tsunami will be taken up in the next generation of Country Strategy Papers which are currently being prepared.
- 3.4. Lastly, the Commission’s representatives on the ground are engaging in a dialogue with NGO partners to ensure the LRRD link is established within longer term projects financed with their own resources.

4. REHABILITATION AND RECONSTRUCTION ASSISTANCE

- 4.1. The emergency phase has been successful – victims have received shelter and support and the fear of disease has been avoided. The challenge now is to reconstruct

the affected areas and let the communities restart their lives. In doing so, the sustainable development of these regions should be promoted.

- 4.2. The lessons learned from previous disaster responses, such as the Gujarat and Hanshin-Awaji earthquakes, have been incorporated into this response, especially the need for careful planning and maintaining knowledge of evolving situations (e.g. natural, climatological, political or other), emphasis on government lead and co-ordination, involvement of local communities and flexible implementation procedures.
- 4.3. At the Jakarta Donors' Conference in January 2005, the European Commission President pledged € 350 million for longer term reconstruction support. This has now been programmed and the proposal for the Tsunami Indicative Programme is with Member States for approval while the necessary amendments to the 2005 budget are under preparation. Projects have been identified and are progressively starting under the Rapid Reaction Mechanism.
- 4.4. The Commission's reconstruction support will focus on those countries most severely affected and most in need, namely Indonesia, Sri Lanka and the Maldives, with additional funds for regional actions such as in environment (coastal zones) and deployment of Early Warning systems. The other countries, including India, Thailand and Malaysia, intend to tackle the reconstruction themselves. However, India and Thailand have indeed benefited from some humanitarian aid and all of these countries can benefit from regional aid such as the € 15 million Pro Eco tsunami programme and will benefit from the various flanking measures.
- 4.5. The needs' assessments carried out with the World Bank and others have formed the basis for allocating aid between and inside countries to ensure allocations are fair and equitable, based on clear needs and absorption capacity. The allocations under the Community budget are provisionally Indonesia (€ 200 million), Sri Lanka (€ 95 million) and the Maldives (€ 16 million). The balance of the € 350 million is provisionally made up of the Pro Eco tsunami programme (€ 15 million), Rapid Reaction Mechanism projects (€ 12 million) and a regional and horizontal facility (€ 12 million).
- 4.6. Programmes and projects receiving Commission support are based on national reconstruction plans of the governments themselves. However, they are also designed to ensure that aid is equitably distributed amongst all parts of affected populations. Given the nature of the tsunami damage, the programmes focus on three areas: (i) reconstructing the damaged areas, including repair to housing and community infrastructure such as schools and clinics, so the affected communities can function again and support to the health and education systems; (ii) restarting livelihoods, so individuals and their families can get back to earning their own livings and leading their own lives; and (iii) repairing larger infrastructures – especially roads - so the coastal economies can function again properly. Environmental concerns will be duly taken into consideration.
- 4.7. The key beneficiaries under this reconstruction aid will be the local communities affected and the wider provinces in which these coastal communities sit. The target groups will include fishermen, local businesses and general population with emphasis on most disadvantaged/excluded, with a particular focus on women and

children. Tourism activities will be eligible as this sector was particularly damaged but will play a crucial role in regeneration of the coastal economies. Wider projects seeking to promote the restart of tourism (e.g. advertising and promotional campaigns) are being financed by national budgets and by other donors, including US and World Bank.

- 4.8. Never before has a region faced such a challenge of co-ordination because the numbers of donors (about 70) and NGOs (over 300) involved are so large and the amounts of money (some € 5.4 billion public and € 1.9 billion private donations) are so huge. Ensuring government, donors and NGOs efforts are co-ordinated will be the key in deciding the success or failure of the entire reconstruction effort.
- 4.9. The Commission is contributing to improve co-ordination on a number of fronts. First, it has chosen its actions with an eye always on facilitating co-ordination – all programmes are rooted in the governments’ own action plans and the Commission will route the bulk of its funds through Trust Funds which, by grouping donors funds, greatly help co-ordination efforts. Second, the Commission is participating actively in the national co-ordination mechanisms and in some cases helping improve consultation of the local communities on the reconstruction plans, as is the case in Aceh. Third, Commission representatives in-country are holding discussions with the large international NGOs who have substantial funds of their own in view of their participation in the co-ordination and trust fund mechanisms.
- 4.10. Fourth, responding to the Council request to co-ordinate reconstruction from the outset, the Commission is maximising EU level actions, seeking to make this a show case of EU co-ordination and to assure appropriate visibility of the Union. The Commission has established a virtual network to permit the public to monitor the Commission’s and Member States’ pledges and financing decisions on rehabilitation and reconstruction assistance to countries affected by the tsunami. A “European House” will be established in Aceh to co-ordinate and promote joint EU Member State and Commission actions. Given the preponderance of EU funding in the Trust Funds in both Indonesia and Sri Lanka, adequate representation of the European Commission/EU in their governing bodies is being requested.
- 4.11. The use of Trust Funds by the Commission is not only intended to facilitate co-ordination. It will also maximise the efficiency of the Commission’s interventions (one set of procedures for all participating donors) and, by grouping with other EU donors, give the EU greater strategic policy influence with governments on the reconstruction process. By creating communication channels between central government and authorities in conflict provinces, the Trust Funds could significantly build confidence and help in resolving these regions’ chronic conflicts.
- 4.12. The efficiency and co-ordination inherent in Trust Funds will also help meet the challenge of limited absorption capacity which will be a major problem as large amounts of aid descend on poorly developed local administrative structures. The Commission is also addressing the capacity problem by taking a longer time perspective (commitment over two years and longer disbursement period), strengthening administrations (so boosting capacity building) and avoiding areas focused on by other donors.

- 4.13. The tsunami affected areas in Indonesia and Sri Lanka have been and continue to be areas of conflict. There is a potential for increased tension if post-conflict needs are ignored. Although all solutions to these conflicts are the exclusive reserve of the countries themselves, the EU is seeking to help at the political level in both countries, such as through the EU Co-chairs' process in Sri Lanka. The Commission is also providing additional conflict-resolution aid under the Rapid Reaction Mechanism (which is financing the mediation efforts in Aceh) and under its other national programmes, outside of its tsunami response, such as for reconstruction in war affected areas in northeast Sri Lanka. Lastly, the Commission is ensuring its aid response is conflict sensitive – for example, the widest definition of “tsunami affected” regions will be used and the involvement of local communities and provinces in the trust funds will open communication channels and build confidence between the parties.
- 4.14. Accountability for use of aid funds is being assured at every level. ECHO demands accountability through its partnership agreements with NGOs. Frequent monitoring of humanitarian projects is ensured and the ECHO 2005 audit plan includes all the tsunami projects. Due diligence, monitoring and audit of trust funds (generally by World Bank) and of direct projects will assure sound and effective financial management of reconstruction funds.

5. PARTNERSHIPS

- 5.1. The EU Action Plan adopted by GAERC on 31 January paid particular attention to Member State initiatives to encourage the establishment of partnerships between regions, cities and public or private undertakings. The Commission supports such initiatives whenever possible, notably as concerns twinning of hospitals to assist the Governments to restore the essential services in general clinics, hospitals, laboratories and minor surgery units. This, in co-ordination with EU Presidency, would facilitate deployment of assistance following the assessment carried out by WHO. In the same spirit, the Asia Pro-Eco Tsunami programme, approved by the Commission on 17 March 2005, will support projects set up in partnership between non state actors, national, regional and local authorities from Member States and affected countries in areas such as coastal zone management, urban environmental planning, transport, water management and sanitation.
- 5.2. On 18th March 2005, ECHO had signed grant agreements with over 30 NGOs and international organisations to implement humanitarian aid to the tsunami affected populations. ECHO has taken full advantage of its long term relationship with its NGO partners to select the most experienced and effective to implement immediately the Commission's emergency response.

6. FLANKING MEASURES

- 6.1. Following the destruction wreaked by the tsunamis, the Commission and the EIB swiftly started exploring the possibility for the EIB to set up a long term lending facility to help finance reconstruction efforts, and undertook joint missions to the affected region. Taking into account the immense and unexpected amounts of funds provided by public and private international donors, most of the infrastructure

reconstruction needs of the countries concerned will be met from available grants and highly concessional loan financing. This was confirmed during the joint missions. The Commission is therefore of the opinion that the EIB should be encouraged to lend to projects in tsunami-affected countries from the remaining resources within its existing Asia and Latin America (ALA) mandate. The ALA mandate covers all the affected countries except the Maldives. In this context, the Commission intends to make a proposal to amend the current Council Decision with a view to adding the Maldives to the list of eligible countries. The Commission would provide grant support alongside EIB loans to the jointly identified projects, as and when necessary.

- 6.2. The Commission has begun enacting a number of trade-related measures aimed at improving access to the EU market for the countries concerned. Such actions could enable them to expand their exports on a non-discriminatory basis, compatible with WTO obligations. In particular, the Commission has worked closely with Member States and the European Parliament to accelerate the entry into force of the new EU Generalised System of Preferences (GSP) so that its benefits will be received at an earlier stage. Through tariff concessions, the new regime will open about € 3 billion worth of new trade flows for countries affected by the tsunami. The Commission has also signalled its readiness to review the cases of companies subject to EU trade defence measures where they have been directly affected by the tsunami.
- 6.3. As announced in the Action Plan, the Commission adopted on 16 March 2005 a communication proposing to simplify preferential rules of origin and to make them more development-friendly. Under the new rules to be adopted, developing countries, including those affected by the tsunami, would be better able to benefit from the tariff preferences the EU offers them. The Commission is also working on measures which may help in the short term the tsunami-hit countries to improve access of their products to the EU market.
- 6.4. The Commission has proposed two initiatives to assist the fisheries sector in affected countries. The first initiative has made available to donors a team of experts in the fisheries sector to assist the relevant authorities in affected countries. The second proposal, adopted by the Council on 16 March 2005, entails the relaxation of regulations governing the transfer to affected countries of decommissioned EU fishing vessels. The Commission is now undertaking survey work with the FAO and countries concerned to evaluate whether the vessels that can be supplied meet local requirements and conditions. The aim is to regenerate the fishing industry at a sustainable and responsible level.
- 6.5. On justice, freedom and security issues, work has been launched on measures to strengthen co-ordination concerning disaster victim identification and consular and diplomatic co-operation between EU Member States. Proposals submitted in the framework of the AENEAS programme are being evaluated and support for pilot projects in the area of trafficking in persons may be granted.
- 6.6. The Commission worked closely with the WHO, placing at the organisation's disposal a broad range of EU health expertise. Specialists on intervention epidemiology were sent to affected regions and the Commission has been actively involved in implementing response plans under the WHO's Global Outbreak and Response Network. Responding to the effects of the tsunami on the home front, the

Commission quickly activated the Early Warning and Response System of the Community Network on Epidemiological Surveillance and Control of Communicable Diseases. This system is designed to share information among Member State authorities and physicians on any heightened risk of communicable disease importation.

7. DISASTER PREPAREDNESS IN ASIA

- 7.1. The European Commission through ECHO is supporting the assessment, evaluation and strengthening of Early Warning Systems and disaster preparedness in countries affected by the Tsunami. As pledged during the World Conference on Disaster Reduction held in Kobe, a € 2 million contribution is envisaged to OCHA/UNISDR (International Strategy for Disaster Reduction) with a view to giving a clear leading role of co-ordination to UN initiatives in this field. Similarly, in the immediate days after the tsunami the Commission worked closely with OCHA and other partners (such as the European Space Agency) to set up an information system on the tsunami's impact. The Commission Joint Research Centre co-ordinated the setting up of such a system which provided satellite data, maps and assessments over the whole affected area to key actors in the relief operations.
- 7.2. Through its "Disaster Preparedness Programme", ECHO will also continue to support community-based disaster preparedness projects, including support to community-based "people-centred" Early Warning Systems, awareness raising, training and small-scale mitigation activities in Asia. The Global Disaster Alert System, part of this effort, will be further developed to deal with tsunami situations.
- 7.3. Disaster preparedness will be given particular attention in the policy dialogue between the EU and disaster-prone countries in Asia; as regards the establishment of an early warning system for the Indian Ocean, in addition to support provided by ECHO, the possibility to draw on reserve funds from the Tsunami Indicative Programme 2005-2006 for supporting regional approaches within the global UN context has been foreseen. Measures should also aim at capacity building of local communities as regards communications infrastructure and emergency communication planning. Risk reduction approaches should also be systematically integrated into the design and implementation of reconstruction programmes.
- 7.4. Any disaster preparedness initiative in the area cannot ignore the enormous risk posed by the unprecedented avian influenza outbreaks. In addition to post-tsunami reconstruction efforts, due attention should be given to avian influenza control. The Commission has undertaken a number of actions in relation to the extensive avian influenza outbreak on-going in South East Asia which has already caused huge economic damage, estimated at € 8-12 billion, and the death of about 50 people. At present, avian influenza seems to have become endemic in some countries in South East Asia (including Thailand and Indonesia). The Commission has already ensured some emergency technical and financial support to the concerned countries. Following an international conference in Vietnam in February 2005 and an appeal to donors by FAO and WHO, the possibility of granting further support is currently under study.

8. TRANSPARENCY AND SOUND FINANCIAL MANAGEMENT

- 8.1. The Commission is determined fully to deliver on its commitments in a highly effective and transparent manner.
- 8.2. The EU is the largest donor group to the tsunami reconstruction and should seek to ensure that aid mobilised is fully used for its intended purpose. First, the European Commission has established a virtual network to permit the public to monitor the Commission's and Member States' pledges and financing decisions for the tsunami which is on the Commission website <http://europa.eu.int/comm/world/tsunami/index.htm> (see also section 4 above). Although all focal points were identified by early March, communication of data by Member States on pledges and financing decisions needs to be accelerated. As far as humanitarian aid is concerned, the existing virtual network (14 points system) is being used.
- 8.3. Second, a "European House" will be established in Aceh to co-ordinate and promote joint EU Member State and Commission actions and the Commission counts on Member States' full co-operation to make it a success, to the benefit of local populations.
- 8.4. Third, proper supervision and monitoring of the use of funds should also be ensured through the adequate representation of the European Commission/EU in the governing bodies of the Trust Funds being established in both Indonesia and Sri Lanka. The control and audit mechanisms provided for in the framework agreement on trust funds and cofinancing concluded between the Commission and the World Bank offer strong guarantees of sound, efficient and transparent management of Community funds.
- 8.5. The Commission has in place rigorous systems to ensure sound financial management of Community aid. These include rigorous selection of implementing partners, systematic monitoring of ongoing projects by field experts, audit and external ex-post evaluation. These will be fully applied to the tsunami assistance.
- 8.6. The management of the proposed programme will entail significant demands on the European Commission's local Delegations in Sri Lanka and Indonesia. For this reason, the Sri Lanka Delegation is being upgraded to a fully-fledged Delegation. The Indonesia Delegation will establish an antenna in Aceh within the proposed "European House"

Annex II

Community programmes for early warning and disaster preparedness

1. THE INDIAN OCEAN

ECHO has contributed € 2 million to the work of the International Strategy for Disaster Reduction secretariat in evaluating and strengthening of early warning systems in the Indian Ocean. The Commission follows with interest the work of the IOC in building a tsunami early warning system in the Indian Ocean, in line with the mandate given it at the Kobe conference. It may consider a contribution to the funding of such a system, should feasible proposals emerge which enjoy consensus in the region.

ECHO will contribute some € 9.7 million over the next two years to community-based preparedness projects in South Asia.

2. AFRICA, CARIBBEAN, PACIFIC

The states of the Caribbean are particularly vulnerable to tropical storms, and have also been affected by tsunamis. The Community is contributing € 13.2 million to a regional radar-based early warning system under its development cooperation funds, and is working on a € 3 million project to strengthen the regional capacity in disaster management. It has a € 39 million programme to strengthen sea defences in Guyana. ECHO will continue and develop its long-standing work to support disaster preparedness at community level in the region.

In the Pacific, the Commission has earmarked all the available reserve funding (the 'B' envelopes) to disaster prevention and preparedness. It is looking in particular to work with regional organisations and other donors to address cyclone risks.

More widely, the Commission is currently discussing the ACP secretariat's initiative to establish a natural disaster facility under the Cotonou Agreement. This would focus on strengthening national capacities for managing early warning systems and ensuring proper communication of alerts to the population.

3. MEDITERRANEAN AND ATLANTIC

While alert systems for flood and earthquake are relatively well established, there is little in the way of early warning, disaster preparedness, and emergency plans for tsunamis in the countries bordering the Mediterranean. The Commission will extend its civil protection training programme to include exercises addressing the tsunami risk.

The € 2 million Euro Med Bridge Project aims at creating a system of mitigation, prevention and management of natural and man-made disasters on both sides of the Mediterranean.

4. RESEARCH AND DEVELOPMENT AND SCIENTIFIC CO-OPERATION

Expert consultative meetings will continue to be funded under the sixth and seventh research framework programmes (Global Change and Ecosystem research priority). Recent events have focused on identifying the state of play, gaps and research needs related to early warning systems. Community funded research will also contribute to improved tsunami science, including deep ocean monitoring, the socio-economic impact of tsunamis and their consequences in terms of health and land use.

The Community's Information Society Technologies programmes have set aside € 40 million for projects related to the integration of *in-situ* sensors for risk monitoring, and public safety communication including alert mechanisms to the authorities and citizens at risk, using all appropriate media. A specific call is being formulated with the aim of developing and demonstrating tsunami early warning and alert capabilities relevant to Europe and the Indian Ocean. This research activity will be in support of the future infrastructure developments mentioned above.

The Community's Research Infrastructure programme has established a high speed global telecommunications network to link international research organisations and other public bodies. The European Space Agency and the UN satellite office (UNOSAT) are already fully utilising these resources, including in response to the Indian Ocean Tsunami (equivalent yearly value some € 60 million). The Commission is ready to extend this resource to other organisations, in support, for instance of an early warning centre in the Indian Ocean.

Global Monitoring for Environment and Security (GMES), is an EC-European Space Agency initiative which provides satellite and ground-based information services. It will continue to be a major contributor to humanitarian and disaster relief programmes.

Additional support measures and R&D activities are foreseen to provide ICT support to European disaster reduction policy and research. These include:

- technology transfer between EU and tsunami-prone countries and regions bordering the Indian Ocean, for sharing best practice on the use of advanced information communication technology for early warning and alert systems, promoting standards and adapting these to local needs and conditions;
- collaboration with specialised institute in countries bordering the Mediterranean Sea with the aim of promoting a harmonised approach to tsunami early warning and alert for the Mediterranean basin;
- other relevant workshops and industry forums aimed at addressing the deficiencies of existing early warning and alert technologies, and promoting interoperability.