Using EU financial instruments

European Commission
Innovative solutions to the financing of disaster prevention

1. Use of EU funding
2. Disaster Risk Insurance
3. Risk Transfer Solutions
1. Use of EU funding

- Study on EU financial instruments
- Analysis of uptake
- Possible Commission actions
Study on EU financing instruments

• Critical analysis of instruments
  - desk analysis, questionnaires, interviews
• Inventory of instruments
• Catalogue of measures
Prevention measures

- Risk identification and impact assessment
- Knowledge development
- Awareness raising
- Early warning
- Governance
<table>
<thead>
<tr>
<th>Type of prevention measures</th>
<th>Detailed measures (details in Annex)</th>
<th>Concerned EC fund</th>
<th>Comments (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk identification and impact assessment</td>
<td>Hazard determination and/or mapping</td>
<td>Structural funds IPA, ENPI EARDF</td>
<td>For regional development in the EU For regional development out of EU For rural development, forest fires</td>
</tr>
<tr>
<td></td>
<td>Vulnerability assessment</td>
<td>Structural funds IPA, ENPI EARDF</td>
<td>For protected areas</td>
</tr>
<tr>
<td></td>
<td>Impact and loss assessment</td>
<td>Structural funds IPA, ENPI EARDF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hazard monitoring</td>
<td>Structural funds IPA, ENPI EARDF</td>
<td></td>
</tr>
<tr>
<td>Knowledge development</td>
<td>Information on hazard and risk</td>
<td>Structural funds IPA, ENPI EARDF LIFE +</td>
<td>For forest fires mainly</td>
</tr>
<tr>
<td></td>
<td>Education and resilience building</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research on risk assessment and management</td>
<td>FP7</td>
<td>For research on all domains and for all types of disaster</td>
</tr>
<tr>
<td>Type of prevention measures</td>
<td>Detailed measures (details in Annex)</td>
<td>Concerned EC fund</td>
<td>Comments (*)</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Awareness raising</td>
<td>Preparedness</td>
<td>Structural funds IPA, ENPI CPFI</td>
<td>Only partly, since preparedness is limited to crisis management</td>
</tr>
<tr>
<td>Early warning</td>
<td>Monitoring</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forecasting</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td>Alarm and warning systems</td>
<td>Structural funds IPA, ENPI CPFI</td>
<td>For Forest fires For some hazards</td>
<td></td>
</tr>
<tr>
<td>Legal framework, institutional and organisational arrangements</td>
<td>Institutional framework and arrangements</td>
<td>IPA, ENPI Life +</td>
<td>- through support to NGOs</td>
</tr>
<tr>
<td></td>
<td>Policy development</td>
<td>IPA, ENPI Life +</td>
<td>- through support to NGOs</td>
</tr>
<tr>
<td></td>
<td>Legislation, norms and codes</td>
<td>IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organisational development</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International cooperation</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community-based action plans</td>
<td>Structural funds IPA, ENPI</td>
<td></td>
</tr>
</tbody>
</table>
### Overview per instrument

<table>
<thead>
<tr>
<th>EC Financial Instrument</th>
<th>Type of disaster</th>
<th>Domains or types of prevention measures</th>
<th>Detailed measures</th>
<th>Provisions</th>
<th>Types of applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural funds and cohesion fund</td>
<td>All</td>
<td>All</td>
<td>All measures apart from research and support for policy, institutional and legal issues</td>
<td>6 800 M€ for prevention for 2007-2013</td>
<td>Regions, EU Member States</td>
</tr>
<tr>
<td>IPA, ENPI</td>
<td>All</td>
<td>All</td>
<td>All measures apart from research</td>
<td>?</td>
<td>Beneficiary countries</td>
</tr>
<tr>
<td>EARDF</td>
<td>Avalanches, storm, forest fires, floods, landslides, soil erosion, drought</td>
<td>Risk assessment, knowledge development, applications of measures</td>
<td>Forest fire prevention, afforestation, adapted land use and agricultural practices</td>
<td>?</td>
<td>EU Member States</td>
</tr>
<tr>
<td>FP7</td>
<td>All</td>
<td>Research in all domains and for all types of prevention measures</td>
<td></td>
<td>30 M€ for 2007-2013</td>
<td>Research centers and expert groups</td>
</tr>
<tr>
<td>CPFI</td>
<td>All disasters involving civil protection</td>
<td>Awareness raising, early warning</td>
<td>Preparedness, crisis management and warning systems, prevention advocacy</td>
<td>33 M€ for preparedness in 2010</td>
<td>Local and regional authorities, Member States, NGOs, UN agencies, International Organisations</td>
</tr>
</tbody>
</table>
### Examples

<table>
<thead>
<tr>
<th>Type of prevention measures</th>
<th>Detailed measures</th>
<th>Examples of measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk identification and impact assessment</td>
<td>Hazard determination and/or mapping</td>
<td>Flood hazard mapping from hydraulic models, location of past forest fires...</td>
</tr>
<tr>
<td></td>
<td>Vulnerability assessment</td>
<td>Exposure assessment in dangerous zones, functions of induced damage depending on the intensity of the disaster (flood, earthquake...)</td>
</tr>
<tr>
<td></td>
<td>Impact and loss assessment</td>
<td>Probabilistic consequence assessment (costs and life losses) from exposure and vulnerability function in dangerous zones</td>
</tr>
<tr>
<td></td>
<td>Hazard monitoring</td>
<td>Hydro-meteorological gauges to elaborate databases on measured parameters (for probabilistic analysis and model calibration)</td>
</tr>
</tbody>
</table>
Welcome to the WISE-RTD web portal

Guided search
Available information
Free search

As policy implementer or manager
As researcher or consultant
Experience related information
As a stakeholder

This web portal forwards to websites with focus on information relevant for the implementation of the European Water Framework Directive (WFD).

Information is presented from all over Europe (and even beyond), at European, national and regional level as well as for river(sub-)basins.

© 2008 WISE-RTD | About WISE-RTD | Disclaimer
FLOODsite
Main financing instruments at EU level

• Cohesion Policy funding (ERDF, ESF, CF)
• Civil Protection (CPFI)
• Pre-Accession (IPA) and Neighbourhood Policy (ENPI)
• Rural Development (EARDF)
• Environment (Life+)
• Research & Development (FP7)
Preparedness – cooperation projects

- Civil Protection responders in Member States
- Enhance preparedness of the public in case of emergencies in the Member States
- Information sharing of project results

Prevention – cooperation projects

- Long-term prevention and mitigation by improving risk assessment and management
- Promote 'response-preparedness-prevention-remediation' chain

- 2007: 6 projects → €1.5 million
- 2009: 12 projects → €4 million
Preparedness – training courses

- Some 1,500 experts already trained
- Sub-contracted Training centres in various locations

Experts trained in EU civil protection can be deployed
Preparedness – Simulation exercises

What kind of exercises?
- 30 exercises financed since 2002 Large-scale pan-European simulation exercises
- 2009 ➔ €1.65 million

Aims
- Accelerate response decision-making procedures
- Enhance interoperability
- Identify further training needs
Addressing Natural Hazards:

European Framework Programmes:

- FP6 – Overall support (2002-2006): 58.2 Mio
- FP7- (2007): 13 Mio
- FP7- (2008): 14 Mio
- FP7- (2009): 13 Mio
- FP7- (2010): 11.5 Mio
- FP7- (2011): 18 Mio
Main core areas of « Natural Hazards »
in the Work programme

• Hazard assessment, triggering factors and forecasting

• Vulnerability assessment and societal impacts

• Risk assessment and management

• Multi-risk assessment and mitigation strategies
Sub Activity  Natural Hazards
Main areas covered by the work programme calls for proposals

Hazard assessment, triggering factors and forecasting:

• 2007 :   -European storm risk (MICORE)
• 2008 :   -Methodology and tools for earthquake hazards in Europe (SHARE)
• 2009 :   -Forest fires in the context of climate and social changes (FUME)
• 2010 :   -no call
• 2011 :   -Towards real-time earthquake risk reduction

Vulnerability assessment and Societal impacts

• 2007:     -Frame for better vulnerability assessment (MOVE; ENSURE)
            -Investigating Europe's risks from drought (XEROCHORE)
• 2008:     -Social perception, behaviour and response to risks (CapHazNet)
• 2009:     -Costs of natural hazards (ConHaz)
            -Vulnerability of buildings, lifelines related to earthquakes (Syner-G)
• 2010:     -Building a culture of risk prevention in Europe (in negotiation)
• 2011:     -Building societal resilience to disasters in Europe
            -Vulnerability and increased drought in Europe
Sub Activity - Natural Hazards
Main areas covered by the work programme calls for proposals

**Risks assessment and management**

- 2007: -Assessment and management of volcanic threat (MIAVITA)
  -Avalanche forecasting and risk mapping
- 2008: -Prediction of triggering and risk assessment for landslides (SAFELAND)
  -Risk management for flash floods and debris flow (IMPRINTS)
- 2009: -Risk prevention and management of urban floods (CORFU)
- 2010: -Early warning and drought risks in Africa *(in negotiation)*
- 2011: - Risk prevention and management before volcanic eruptions

**Multi risk evaluation and mitigation**

- 2007: -European multi-hazard database
- 2008: -Coordinated research strategy between European and national levels
- 2009: -no open call
- 2010: -New methods for multi-hazard and multi-risk assessments *(in negotiation)*
  -Social science, natural hazards and decision making process
- 2011: - Capacity building in natural hazards risks reduction
Cohesion Policy - Programming

• 2007-2013: planned co-financing of €6.5 billion on ‘risk prevention’
  – Focus on ‘prevention/preparedness’
  – Large scope of interventions eligible
  – Priority under territorial cooperation (Interreg)

• MS select & implement projects (principle of shared management)

• 20 MS planned use of Cohesion Policy funding on ‘risk prevention’
2007-13 allocation to risk prevention & uptake by end 2009

Decided allocation (m€)  % Project selected

HU  PL  ES  PT  GR  DE  CB  IT  RO  CZ  FR  SK  EE  SI  MT  BG  LV  FI  AT  NL  UK  EU27
Cohesion Policy - Uptake

- Uptake of Cohesion Policy funding for risk prevention by 09/2010 (‘Strategic report 2010’):
  - Currently rate of uptake at about 20%

- Large amounts of funds still available for investments in natural disaster prevention
Cohesion Policy - Issues

• Awareness among stakeholders / authorities of availability of Cohesion Policy for risk prevention

• Capacities of responsible authorities to design/deliver such projects

• Economic crises: access to national funding part
ELBE-LABE: adaptation to flood risk in the Elbe basin

- Interreg IV Project
- € 3.3 M ERDF of € 4.2 M
- 20 partners from 4 countries
- 09/2008 until 02/2012
- Continuation of 03-06 Interreg project ‘ELLA’:  
  - flood hazard maps + basic action plan for future flood mitigation
- Implementing actions to improve methods & instruments of flood risk management:
  - standardization of methods and instruments;
  - awareness-raising;
  - adaptation of land uses;
Further examples of implemented projects (co-)financed by EU funding

- **Floods**: elaboration of the national flood risk management strategy for ROMANIA and application to three river basins (PHARE project, finalised in 2009)
- **Forest fires**: the SPREAD project relates to forest fire prevention and mitigation, with application in Spain in particular (Joint Research Centre)
- **Earthquakes and tsunami**: NEAREST (Integrated Observation from Near Shore sources of Tsunami), TRANSFER (Tsunami Risk and Strategies for the European Region), SEAHELLARC (Seismic risk assessment and mitigation scenarios in western Hellenic Arc), SAFER (Seismic Early Warning for Europe)
- **Oil spills**: a three-year EU-funded POP&C project (Pollution Prevention and Control – safe transportation of hazardous goods by tankers) with three main objectives: to develop a methodology by which tanker owners can calculate the spill risk posed by their ships; to assess and provide advice on ways to reduce these risks; and to advise tanker crews on how to mitigate pollution damage once a spill has occurred.
- **Multi-risks**: the FLAGSHIP Initiative in countries eligible for ENPI funding
Flood prevention on the Tisza river (Hungary)

- Construction of 7 flood reservoirs along the river in 2007-2013 (Operational Programme ‘Environment’ of Hungary)
- Investment of € 290 M by Cohesion Policy out of € 400 M
- 1 flood plain already co-financed in 2000-2006
IPA Programme – Instrument for Pre-accession Assistance

**Beneficiaries:**
- Candidate Countries & Potential Candidate Countries CC/PCC: Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia, as well as Kosovo under UNSCR 1244/99, and Turkey.

**Overall objective:**
Reduce the vulnerability of IPA Beneficiaries to natural and man-made disasters at local, national, and regional levels

**Objectives:**
- Strengthening civil protection capacities of CC/PCC
- Preparing CC/PCC for participation in the CP Mechanism

**Budget:** €4 million
**Duration:** 2 years (01/2011 – 12/2012)
Lot 1

Training programme & exchanges of experts

Training Programme:
1) basic training (6 day-long) ~ CMI
2) operational management training (6 day-long) ~ OPM
3) advanced training (5 day-long) ~ HLC
   • 272 participants in total – 34 experts / beneficiary

Exchange of experts:
• civil protection experts of the beneficiaries to gain and pass knowledge from and to services of other beneficiaries or the Mechanism Participating States
• minimum 5 days to up to 2 weeks
• 80 experts in total – 10 experts / beneficiary
2 Regional exercises:

- 2 different scenarios
- at least 3 full days & 1 night duration
- at least 120 participants: min 5 intervention teams x 20 staff + equipment, observers, evaluators
- activation of the Mechanism
- deployment of Mechanism/MIC assessment and coordination expert team
- involvement of the National Civil Protection Authorities of beneficiary countries
Mechanism exercises:

- 1 team per beneficiary to play along in the Mechanism exercises in 2011 and 2012

<table>
<thead>
<tr>
<th>Lot 2</th>
<th>Regional exercises &amp; Mechanism exercises</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2011</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PCSE/DCN</td>
<td>4-5 April Region of Crete (Greece) Tsunami</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>EU RICHTER 2011</td>
<td>France Earthquake</td>
</tr>
<tr>
<td>EU CREMEX 2011</td>
<td>Estonia CBRN Estonia</td>
</tr>
</tbody>
</table>
12 Workshops on key issues:

1. Provision of assistance during disasters and host-nation support;
2. Early warning systems (EWS);
3. Development of '112' systems and centres;
4. Sharing the best practices in the field of civil protection and developing lessons-learned systems and culture;
5. Instrument of Pre-accession Assistance (IPA) and accessing national IPA programmes for civil protection projects; and
6. The Community Civil Protection Mechanism.

**Target group**: top-level managers, decision makers and senior staff in the field of civil protection, key national contact point staff
Active involvement of the beneficiary countries needed:

• **Steering Group** for each Lot:
  - to provide general directions on the Programme implementation
  - 1 representative from the national civil protection authorities of each beneficiary

• A network of beneficiaries' **National Correspondents**
  - the first contact point and permanent partners in the Programme
  - National Training Coordinators, who nominate the experts

• **Role in the exercises**
  - **National Civil Protection Authority** of each beneficiary will be deploying intervention teams and will **pay along** with the MIC
PPRD East Programme

• One of the 6 Flagship initiatives under the Eastern Partnership (Belarus, Armenia, Azerbaijan, Georgia, Moldova and Ukraine)
• Programme launched in December 2009 in Gothenburg
• Programme will start running early 2011
• Target groups: civil protection and disaster management authorities, research institutions, civil society, private sector and the general public
• Prevention, preparedness, mitigation, and response
• Results:
  – Improved knowledge base
  – Strengthened capacities at local, regional, and national level
  – Wider information and awareness
PPRD East Programme - Specific activities

• Electronic Regional Risk atlas as a tool facilitating cooperation
• Civil Protection Capacity Building Programme
• Awareness-raising campaign
• Coordination via the PPRD East Steering Committee
Disaster risk insurance

- Prevention incentives to many actors
- Pre-event financing versus ex post action
- Premiums based on actual risks
- Insurance involved in entire risk management cycle
• Through cooperation with policymakers and other stakeholders, insurance can:
  – Assist in enhanced land-use planning
  – Development/ enforcement of building codes
  – Risk assessment, modelling, mapping
  – Awareness raising and education
3. Risk Transfer Solutions

- Innovative financial products to raise capital on the world capital markets
- Objective: Lower costs of (re-)insurance
- Catastrophe bonds 2009 turnover € 7 bn.
- Possible due to improved prediction tools
- EU context: Possibly useful for industry, infrastructure, i.e. to foster primary market
Example: Mexico ILS 2009

• Insurance linked securities (ILS)
• By World Bank /IBRD
• Parametric insurance to Mexico’s Fund for Natural Disasters (FONDEN), for:
  – Earthquake risk
  – Pacific/ Atlantic hurricane risks
• Issuance US$ 290 million
Possible actions

• Publish Catalogue of Prevention Measures
• growth & regional policy highlighting risk prevention
• Additional tools that could be developed, e.g.:
  – More assistance in project definition and preparation
  – Clearer definition of the concept of “prevention”
  – Definition of success indicators
  – Specific funding expertise - prevention help desk
  – Targeted funding meetings
• More support for dissemination of results of projects
• Mainstreaming of prevention into EU instruments
• Prevention financing in international fora
• Foster collaboration and knowledge transfer among MS
  – good practice, technical assistance, seminars, workshops, …
  – Further work in the area of insurance and risk transfer solutions