

# OECD INTERNATIONAL FUTURES PROGRAMME

## OECD Futures Project on Risk Management Policies in Selected OECD Countries

OECD Centre, Tokyo, October 14th 2005



# OECD International Futures Programme (IFP)

- Created in 1990 to help governments address the challenges of the future
- Identify and explore new, emerging policy issues
- Reports directly to the Secretary-General of the OECD
- Multidisciplinary team
- Involvement of the private sector



# Futures Projects: The Process

- Extensive Consultation
- Preparation of a project proposal
- Organisation of a kick-off meeting
- Creation of a steering committee
- Preparation of background reports
- Drafting of final report and recommendations to Council



# OECD INTERNATIONAL FUTURES PROGRAMME

## EMERGING SYSTEMIC RISKS IN THE 21<sup>ST</sup> CENTURY



# Background

An ongoing shift in the nature of major risks and in society's capacity to manage them:

- Conventional risks look set to take on new dimensions (due to extreme weather conditions, concentrations of population and wealth, etc.).
- New hazards are emerging, many of which are characterised by extreme uncertainty and the possibility of extensive and maybe irreversible harm.



## Aim of the Project

- To provide an extensive picture of possible systemic risks and their associated costs
- To identify best practices for assessing and reducing risks, and for making crisis management more efficient at domestic and international levels
- To discuss the optimal allocation of responsibilities among different actors, particularly as regards the respective roles of the public and the private sectors.



# Participation

- Government
- Business
- International Organisations
- NGOs



# The Steering Group

- The Steering Group met five times during the course of the Project:

1st meeting: October 23, 2000

2nd meeting: May 28, 2001

3rd meeting: October 26, 2001

4th meeting: May 27, 2002

5th meeting: November 29, 2002

- Commented on interim drafts as well as on the final report and its recommendations,
- And advised the Secretariat team on Project development.



# Government Participation (including IGOs)

Prime Minister Justice/Interior Civil Protection	Economics Industry Technology	Health Social Affairs	Foreign Affairs
Norway Sweden Canada Quebec, (Canada)	Austria Denmark Finland France Germany Hungary Switzerland UK Japan (NIRA)	Netherlands Sweden United States	United States
		WHO	



# Private Sector Participation

- ANZ Bank (Australia)
- CEMEX (Mexico)
- Det Norske Veritas (Norway)
- ING Bank (Netherlands)
- Philip Morris Management Corp. (USA)
- PULSAR (Mexico)
- Zurich Financial Services (Switzerland)



# Risk Areas

- Natural disasters: earthquakes, floods, storms, solar flares...
- Technological accidents: nuclear power plants, dams, transportation of chemicals...
- Health-related risks: infectious diseases, food safety, impacts of pollution...
- Terrorism and cyber-crime.



# Natural Disasters

- Hazards which, in terms of frequency and strength, remain broadly uninfluenced by the increase in human activity over time (e.g. earthquakes)
- Disasters that may have increased in frequency or intensity, in particular through global climate change (e.g. floods, hurricanes, etc.)



# Technology-Related Risks

- Consequences of accidents/failures in large-scale units (e.g. nuclear power plants, supertankers)
- Major dysfunctioning of network technologies, with an emphasis on critical infrastructures (e.g. breakdown of communications systems)



# Health-Related Issues

- Emergence of new diseases (e.g. AIDS, SARS)
- Pandemic threats due to microbial resistance (e.g. TB), to changing environmental conditions (e.g. malaria), or to a shortcoming of existing defense systems (e.g. influenza)
- Food-borne diseases and food safety (e.g. BSE)



# Terrorism

- September 11th and other recent events signal a dramatic change in the nature of terrorism.
- Catastrophic terrorism might in the future include the use of chemical, biological, or, more arguably, nuclear weapons.
- Other malevolent actions such as cyber-crime can potentially disrupt major vital systems and entail considerable costs.



# Relevant Elements of the Risk Management Cycle

- Risk assessment.
- Risk prevention, risk reduction and ex-ante mitigation of the consequences.
- Emergency management.
- Recovery issues: liability and compensation issues; issues surrounding institutional and regulatory frameworks; experience feed-back into various elements of the risk management cycle.



# Methodology

- Co-operation with internal and external experts
- Driving forces
- Critical issues
- Consequences for risk management (4 analytical chapters)
- Policy recommendations



# Co-operation With Experts

- 1) In house from Directorates, Agencies such as:
  - Nuclear Energy Agency
  - Directorate for Financial, Fiscal and Enterprise Affairs
  - Directorate for Food, Agriculture and Fisheries
  - Directorate for Public Governance and Territorial Development
  - Environment Directorate
  - Department for Science, Technology and Industry
  
- 2) External experts: Michael G. Faure, Jens Rasmussen, Ortwin Renn, Paul Slovic, Geneviève Viney.



# Main Driving Forces

- Demography: population growth, ageing, urbanisation, migration.
- Environment: climate change and its impacts on natural disasters, on infectious diseases, etc.
- Technology: connectedness, speed and pervasiveness of change, new technologies entailing new risks.
- Economy and society: income discrepancies and poverty, the central role of information, increasing scale and concentration, shifts in regulation capacities.



# Main Driving Forces and Risks

- Demography
- Climate Change
- Technology
- Economic and social structure

Critical issues



# Critical Issues

- Complexity
- Mobility
- Shifting public/private responsibilities
- Safety in large-scale systems
- Precaution
- Social amplification of risks
- Diversity of stakeholders



## The Analysis

- For each part of the risk management cycle – assessment, prevention, emergency management, post-crisis issues -, and addressing all the domains of risk covered by the project:
  - Current situation
  - Challenges
  - Emerging responses
  - Cross-sectoral issues
- 5 case studies: Flooding, nuclear accidents, infectious diseases, terrorism and food safety.



# MAJOR RECOMMENDATIONS

The findings of the Report have led to a number of recommendations for action, which fall under five major headings:

- Adopt a new policy approach to risk management.
- Develop synergies between the public and the private sectors.
- Inform and involve stakeholders and the general public.
- Strengthen international co-operation.
- Make better use of technological potential and enhance research efforts.



# A NEW POLICY APPROACH

## FINDINGS:

- Risk assessment and management is too narrow in scope, and lacks consistency. This can be very costly in times of significant change in the risk landscape.

## RECOMMENDATIONS:

- Adopt a broader view on risk.
- Examine the consistency of policy across risk areas, and prioritise risks.
- Improve the coherence of risk management inside each particular risk area.
- Specific recommendation for further OECD work.



# PUBLIC/PRIVATE SYNERGIES

## FINDINGS:

- Regulatory reform, privatisation, and technological change are modifying the roles and responsibilities in risk management. At present, however, new roles and responsibilities are poorly defined, and complementarity between the public and the private sectors is overlooked.

## RECOMMENDATIONS:

- Get the incentives rights.
- Enhance the role of the private sector in risk management.
- Address the issue of increasing scale through co-operation and promotion of diversity.
- Specific recommendation for further OECD work.



# STAKEHOLDERS AND SOCIETY

## FINDINGS:

- Risk management often drifts towards two extremes, namely the “expert-based” and the “populist” approaches. Risk communication is often problematic. In some cases, the public’s trust has been eroded.

## RECOMMENDATIONS:

- Develop risk awareness and a safety culture.
- Articulate self-organisation and centralised risk management.
- Enhance dialogue and transparency, and build trust.
- Specific recommendation for further OECD work.



# INTERNATIONAL CO-OPERATION

## FINDINGS:

- Risks will increasingly be international. Currently, their management is national at best.

## RECOMMENDATIONS:

- Achieve better sharing of knowledge and technologies across countries.
- Enhance international systems of surveillance and monitoring.
- Create the frameworks for co-operation. (GDIN, ESA/CNES Charter, International Risk and Governance Council...)



# TECHNOLOGY AND RESEARCH

## FINDINGS:

- A number of technologies (satellite observation and imagery, sensing, mobile communications, high-performance computing) have an enormous potential for improving risk monitoring and surveillance, prevention, emergency preparedness and response.

## RECOMMENDATIONS:

- Achieve better sharing of knowledge and technologies across countries.
- Enhance international systems of surveillance and monitoring.
- Create the frameworks for co-operation.
- Specific recommendation for further OECD work.



# OECD Publications

- Emerging Risks in the 21st Century, OECD, 2003
- Japanese version, OECD/NIRA, 2004

also,

- Large-scale Disasters, Lessons Learned 2004



# OECD FUTURES PROJECT

## Risk Management Policies in Selected OECD Countries

2003-2007



# OECD Futures Project on Risk Management Policies in Selected OECD Countries

It is proposed that the OECD carry out a series of (voluntary) country reviews on risk management. The reviews could encompass the various elements involved (assessment, prevention, emergency management, recovery management) in the major risk areas considered in this report. It would focus on the consistency of related policies and on their ability to deal with the challenges, present and future, created by emerging systemic risks, and identify opportunities for improvement and best practices. Quantitative data, aimed at providing a comprehensive picture of risk issues and their management, would be collected. The reviews would start with a pilot study of a limited number of countries, again on a voluntary basis. Ultimately, most or all member countries could be covered, opening the possibility for an OECD Outlook on Risk Management.'



- Idea: put the recommendations of the Final Report into practice
- Aim: to assist OECD countries to self assess the effectiveness of their risk management systems
- Means: country review of risk management (country reviews are a trusted and well-tested OECD method)



- Basis: self-assessment by host country
- Key condition: voluntary
- Participation: small group of OECD countries
- Key ingredient: learning from exchange of experience with other countries in the group
- Key resource: OECD expertise in various specialised fields, experts from OECD countries



# Futures Project - Duration and Project Structure

- Duration: 3 years 2003-2007
- 3 phases:
  1. Preparations
  2. Reviews
  3. Synthesis report



## Stage I (September 2003 to -end 2005) Establishing the Fundamentals

- Creation of a Steering Group of participating countries.
- Achieve agreement on risk sectors, elements of the risk cycle, set of assessment criteria.
- Provide a tool kit (questionnaires, indicators..)



## Stage 2 (2004 to end-2006) Conducting the Reviews

- Visits by OECD team, together with appointed experts
- Collection and evaluation of data and other information
- Reports and recommendations



## Stage 3 (2007)

# The Synthesis Report

- Draw together lessons from individual country reports
- Focus on similarities and divergencies in risk management approaches
- Room for improvements
- Best practices in each of the countries reviewed, and potential for transfer of best practices
- Proposals for a “generic” policy tool kit
- Recommendations for international co-operation in strengthening risk management



# Summary of Project Management

- Project team based in the OECD International Futures Programme, which reports to the Secretary-General of the OECD
- Steering group, made up of representatives from volunteer review countries, will advise the OECD Project team
- OECD Project team and Steering Group will identify and appoint external OECD examiners to help perform reviews



# Summary of Timetable

- Stage 1: Preparatory Work for the Project – November 2003 to end-2005
- Stage 2: Country Review - 2004 to end-2006
- Stage 3: Synthesis Report and Recommendations - mid 2007



# Phase I : Preparations and Toolkit (November 2003 to end-2005)

## Key Objectives:

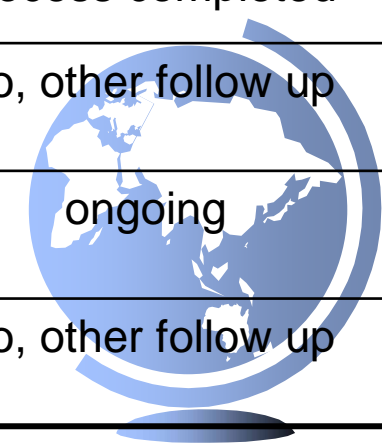
- Creation of a Steering Group of 3 to 8 countries and/or regions
- Identify 1 to 3 case studies
- Lay the groundwork for the review process:
  - Tasks for the Steering Group (with OECD Secretariat)
  - Tasks for individual participating countries/regions (with OECD Secretariat)
  - Tasks for the OECD Secretariat (with Steering Group)



# OECD Futures Project on Risk Management in Selected OECD Countries

Status as of May 28th 2004

Countries	Case-study topic	Phase	Status of phase 1 report	Status of country review
<b>Denmark</b>	Vulnerability assessment of CI	I	completed	No, other follow up
<b>France</b>	Flood management and compensation	I	ongoing	pending
<b>Italy</b>	Industrial accidents triggered by floods	I	completed	pending
<b>Japan</b>	1- Urban floods 2-Earthquakes and megacities	I	ongoing	pending
		1	ongoing	pending
<b>Norway</b>	ICT security policy	2	completed	process completed
<b>USA</b>	Needs of ethnic minorities	I	completed	No, other follow up
<b>Sweden</b>	Emerging risks among the elderly	2	completed	ongoing
<b>Switzerland</b>	National framework for risk management	I	completed	No, other follow up



# Sample of Case Studies

- Risk management in the case of floods involving industrial establishments (Italy)
- Large scale accidents in underground transport systems/subways (Norway)
- ICT Security Measures – National government preparedness (Norway)
- Information Needs of Native Americans (USA)



# Tasks for the Steering Group, Co-ordinated by OECD Secretariat

- Identify which risk areas each participant wishes to examine (1 to 3 risk areas per country/region)
- If possible, identify which risk areas could form a common cluster, shared participating countries/regions.



- Agree on which parts of the risk cycle – assessment, prevention, emergency management, post/crisis issues – should be addressed in the review (preferably all).
- Agree on the procedure for conducting the reviews.
- Decide on selection and composition of review teams.



## Tasks for Individual Participating Countries/Regions

- Start process of descriptive ‘stock-taking’ in each risk area (institutional set up, regulatory frameworks, methods used, systems- and procedures etc.)
- Draw up, in collaboration with OECD Secretariat, a list of risk experts (domestic and foreign) who might serve as examiners in the review process of other participating countries.



# Tasks for OECD Secretariat in Collaboration With the Steering Group

- Production of a roadmap for the interview process (questionnaire, sequence of interviews, procedures for data collection, timeframe etc.)
- Development of a set of relevant indicators to measure/assess the extent to which the Risk Report's 36 recommendations are being applied, e.g.:
  - How forward-looking are risk management policies?
  - How well is the private sector integrated?
  - How well are stakeholders involved in risk management process?
  - Is international co-operation working satisfactory?
  - How well are technology and research integrated into risk management?



## Phase 2: Review Process (2004-2006)

### Objective:

- Assist participating countries/regions in self- evaluating the effectiveness of their risk management systems in the light of large-scale risks of the future; providing opportunities for promoting best practices.
- Offer them guidance in making the requisite improvements.

### Method:

- Country-/region/specific review of risk management system  
- a well tested and proven OECD mechanism.



On the basis of the agreed evaluation tool (Phase 1) and the review country's own stock-taking report, the review team:

- Holds interviews with pre-identified contact persons responsible for risk management.
- Consults with industry and civil society, where appropriate.
- Collects relevant data and information.
- Compares observed methods and practices with those of other countries.
- Identifies best practices in the risk management system under review.



# Estimated duration of a typical review upon reception of the country's self-assessment

- Month 1: Preparations
- Month 2: Mission to review country
- Month 3-5: Preparation of draft report
- Month 5-7: Review country examines and comments on draft report
- Month 8: Report sent to Steering group for discussion and approval



## Contacts:

Pierre-Alain Schieb

[pierre-alain.schieb@oecd.org](mailto:pierre-alain.schieb@oecd.org)

Reza Lahidji

[reza.lahidji@oecd.org](mailto:reza.lahidji@oecd.org)

