



1st iNTeg-Risk Conference Stuttgart, Germany 2 June 2009

Recent OECD efforts to harmonize approaches to safety and risk indicators

Pierre-Alain Schieb
Head of Futures Projects
OECD International Futures Programme



OECD Member Countries





What is the OECD?

- A forum in which governments work together to address the economic, social and environmental challenges of interdependence and globalisation
- A provider of comparative data, analysis and forecasts to underpin multilateral co-operation
- A tool for government...



OECD's mission

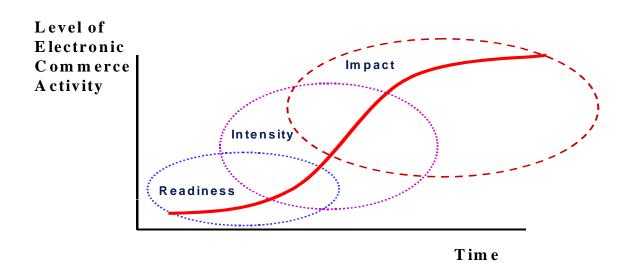
To promote policies designed:

- to achieve sustainable economic growth and employment and rising standards of living in Member countries while maintaining financial stability, so contributing to the development of the world economy
- to assist sound economic expansion in Member countries and other countries in the process of economic development
- to contribute to growth in world trade on a multilateral, non-discriminatory basis



OECD process on socioeconomic indicators at large 1/2

•Follows the lifecycle of sectors:



OECD process on socioeconomic indicators at large 2/2

- Common set of indicators (limited number to start with) agreed to by a pilot group of countries
- OECD Guidelines: an essential step
- (Frascati Manual, IT Guidelines, etc.)



I- Risk policies in OECD at large

- A long tradition
- Found throughout the OECD
- Linked to priorities of the Committees, *i.e.*, highly sectoral, examples:
 - Food safety in Trade and Agriculture Directorate
 - Schools (building codes) in Education Directorate
 - Chemicals in Environment Directorate
 - Nuclear safety in Nuclear Energy Agency
 - Etc.



2 examples (sectoral)

 Nuclear Safety Performance Indicators (OECD NEA)

 SPI related to Chemical Accident Prevention, Preparedness and Response (OECD Environment Directorate)



Safety Performance Indicators Experience from the OECD Nuclear Energy Agency

- SPIs have been used for some time in the nuclear industry, by both regulatory authorities and licensees
- SPIs are generally based on data and information supplied by the licensee, and are used to:
 - measure licensee safety performance
 - improve regulatory activities
 - communicate about safety with stakeholders
 - assess regulatory efficiency and effectiveness
 - compare safety performance with that of other facilities



Examples of Nuclear Safety Performance Indicators

Reactor Safety

- Events
- Mitigating systems
- Barrier integrity
- Material condition and aging

Radiation Safety

- Worker exposures
- Public exposures and environmental risks

Industrial Safety

- Fire safety
- Occupational safety

Safety Management / Safetyrelated Processes

- Human performance
- Compliance
- Operational preparedness
- Emergency preparedness
- Management of plant modifications
- Maintenance
- Self-assessment
- Operating experience feedback
- Backlog of safety issues



Status of NEA SPI

 Country specific due to different regulatory frameworks

 Part of regulatory overseeing

- Not yet a list of common indicators
- In co-operation with EU, IAEA, WANO

Guidance on developing SPI for Public Authorities and Communities/Public related to Chemical accident

- OECD Guiding principles were first published in 1992, updated in 2003
- Then in 1995 as part of an Inter-Organization Programme for the Sound Management of Chemicals with UN agencies.
- Status: to be used on a voluntary basis



Guidance on SPI Chemical Accidents for Industry

- Started in 1998 under the Working Group on Chemical Accidents
- Initial version in 2003 of the Guidance on Developing SPI
- 2003- 2008: test, pilot programme, enrichment with help of an expert group
- 2008: second edition, with extensive list of possible SPI



Future work on nanotechnologies

- Nanotechnologies covered by two OECD
 Directorates (Science, Technology and Industry; Environment)
- Environment is in charge of nano safety
- Ongoing test of 40 nanomaterials in commerce (15 countries, EC, China, BIAC)
- Test of existing chemical SPI: do they work for nanomaterials?
- Will be discussed inside the Working Group on Chemical Accidents



II- OECD International Futures Programme (IFP)

OECD's strategic foresight group since 1990

- Key mission: to alert the Secretary-General, the Organisation and its Member States to emerging policy issues
- By design:
 - Forward looking
 - Transversal, cross-sectoral, multi-disciplinary approaches
 - Pathfinder role within OECD
 - Open to cooperation with private sector, academia, NGOs



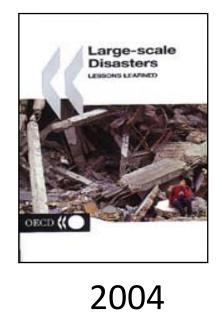
Background work on Risks in the IFP

- Emerging Risks in the 21st Century (1999-2003)
- Risk Management Policies (2005-ongoing)
- Innovation in Country Risk Management (2009)

Also:

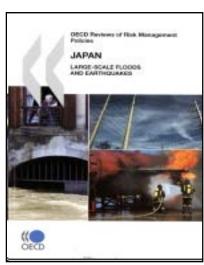
•Infrastructure 2030 (2 volumes, 2006 and 2007)





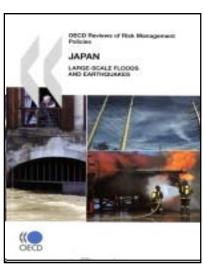


2003



2005





OECD Studies in Risk Management INNOVATION IN COUNTRY RISK MANAGEMENT OLIVER WYMAN

2007

2009 www.oecd.org/futures/risk

2009



Next steps:

Futures Project on Transcontinental Infrastructure 2030:

2 year project: 2009-2010

- the future of major global « hubs »
- linked to ports, airports, railway corridors
- with possible sub set on safety performance indicators (*Taking stock of infrastructure assets*)
- first meeting of Steering Group on November 19, 2009



Taking stock of infrastructure assets?

- A trend in the last 10 years in Australia, New Zealand, Canada, USA...to measure flows of investment, capital stocks, depreciation, maintenance, level of risks or resilience...
- A tool with many purposes: land value capture, PPP contracts, eco and env. impacts, informed risk management..
- Aim: a pilot group of countries to start building a common set of indicators



Next steps

Futures Project on

FUTURE GLOBAL SHOCKS

2009 2010

• Tipping points, thresholds, paradigm shifts might lead to indicators



Thank you.

pierre-alain.schieb@oecd.org

www.oecd.org/futures