Country Risk Assessment and Management

An OECD approach

Stephane Jacobzone, Counsellor, OECD Public Governance and Territorial Development
The OECD High Level Risk Forum

✓ Cross country analysis and sharing of best practice

✓ Promoting an integrative risk management approach

✓ Addressing interconnectedness of risks

✓ Identify successful risk management practices and facilitate diffusion and peer learning

✓ Risk assessment:
  – G20 framework
  – Cross country analysis of national risk assessment
<table>
<thead>
<tr>
<th>Country</th>
<th>National Risk Assessment?</th>
<th>All hazards approach</th>
<th>Whole-of-gov. approach</th>
<th>Key purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia*</td>
<td>Yes at state level</td>
<td>Natural, biological, technological + other human phenomena</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Canada**</td>
<td>Yes</td>
<td>All: natural, technological accidents, manmade, health</td>
<td>Yes</td>
<td>The All Hazards Risk Assessment (AHRA) is primarily used for the emergency management planning functions for departments that “own” specific risks.</td>
</tr>
<tr>
<td>France</td>
<td>Under development</td>
<td>All: natural hazards, manmade, industrial accidents</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Germany*</td>
<td>Yes</td>
<td>All: Natural, manmade, industrial</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Mexico*</td>
<td>Yes</td>
<td>Natural hazards, industrial accidents</td>
<td>---</td>
<td>R-FONDEN helps to estimate potential material and human losses that may occur for earthquake, flood or tropical cyclone events.</td>
</tr>
<tr>
<td>Netherlands **</td>
<td>Yes</td>
<td>All: National, manmade, industrial accidents, and other potential risks to national security</td>
<td>Yes</td>
<td>Prevent societal disruption caused by emergencies and to identify generic capabilities that can provide an overall idea of where to invest and prioritize as well as develop planning assumptions.</td>
</tr>
<tr>
<td>New Zealand *</td>
<td>Yes</td>
<td>Natural, manmade</td>
<td>---</td>
<td>Provide an overall risk picture for high-level decision makers and politicians. The NRA is also used to inform regional and local level officials of potential risks and ensure capacity planning for future emergencies.</td>
</tr>
<tr>
<td>Norway **</td>
<td>Yes</td>
<td>All: Natural, manmade, industrial accidents, ICT, infrastructure</td>
<td>No, conducted at agency level</td>
<td></td>
</tr>
</tbody>
</table>
| Switzerland      | Yes                      | All: Natural, technical, societal                          | No                     | • Multi- (integrated) risk analysis to prioritise hazards (country risk analysis)  
• Integrate know-how to increase risk awareness (e.g. dependencies/cascades)  
• Elaborate foundations for further analyses, planning in interdisciplinary crisis response teams                                                                                                         |
| Sweden           | Will have one in 2013    | All: Natural, manmade, industrial                          | Yes                    |                                                                                                                                                                                                                                                                                                                                         |
| Turkey           | To be developed within next two years | All: Natural, manmade, industrial                          | ---                    |                                                                                                                                                                                                                                                                                                                                         |
| United Kingdom */** | Yes                      | All: Natural, manmade, industrial                          | Yes                    | The National Risk Register (NRR) is used for contingency planning and providing guidance to local and regional levels of a national risk picture which encourages authorities to examine and plan for risks.                                                                                                                                       |
| United States ** | Yes                      | All: Natural, manmade, industrial                          | Yes                    | The Strategic National-Level Risk Assessment (SNRA) aims to identify the relevant risk factors that guide where core capabilities are needed and develop a list of the capabilities and associated performance objectives for all hazards that will measure progress toward their achievement.                                                                  |
G20 Framework for Disaster Risk Assessment and Financing

Risk assessment

Pre-disaster
- Governance
- Hazards
- Exposure & vulnerability
- Risk
- Communication
- Monitoring

Post-disaster
- Post-disaster impact analysis

Prevention, mitigation and emergency preparedness

Risk financing
- Financial exposure & capacity
- Risk financing and transfer
- Institutional arrangements
G20 Framework for Disaster Risk Assessment and Financing

Governance

Scope, Objectives, methodology
Transparency and accountability
Multi Level Governance, Multi Actor Participation
<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>The All Hazards Risk Assessment (AHRA) is primarily used for the emergency management planning functions for line Ministries and departments that “own” specific risks.</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>To prevent societal disruptions caused by emergencies. The NRA is also used to identify generic capabilities that can provide an overall idea of where to invest and prioritize as well as develop planning assumptions.</td>
</tr>
<tr>
<td>Norway</td>
<td>To provide an overall risk picture for high-level decision makers and politicians. The NRA is also used to inform regional and local level officials of potential risks and ensure capacity planning for future emergencies.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The National Risk Assessment is used for contingency planning and providing guidance to local and regional levels of a national risk picture, which encourages authorities to examine and plan for risks.</td>
</tr>
<tr>
<td>The United States</td>
<td>The Strategic National-Level Risk Assessment (SNRA) aims to identify the relevant risk factors that guide where core capabilities are needed and develop a list of the capabilities and associated performance objectives for all hazards that will measure progress toward their achievement.</td>
</tr>
</tbody>
</table>
### Governance, cooperation and coordination

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td>Public Safety Canada (PS) is mandated through legislation to coordinate the AHRA. PS works in collaboration with a number of safety and security departments to develop and evaluate risk scenarios. An interdepartmental risk assessment working group, which includes members from all departments responsible for emergency management, provides governance for the process. PS reports the results to a committee of senior federal government officials responsible for emergency management.</td>
</tr>
<tr>
<td><strong>The Netherlands</strong></td>
<td>The Minister of Security and Justice has the coordination responsibility for security and crisis management and is thus the coordinating body for the NRA. The Netherlands government works closely with the private sector, academia, scientific and public organizations in the analysis of risks scenarios, under the leadership of a steering committee which identifies threats to be analyzed and uses a network of analysts to make proposals of scenarios.</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>The Ministry of Justice is the coordinating body for the NRA in collaboration with risk-owning agencies in a mostly informal fashion.</td>
</tr>
<tr>
<td><strong>The United Kingdom</strong></td>
<td>The NRR is based in legislation (Civil Contingencies Act 2004). The Civil Contingency Secretariat (CCS), housed within the Cabinet Office, is the lead coordination agency and is in a good position to coordinate multi-agency involvement. Risk scenarios are chosen by a cross-government group chaired by CCS that includes all departments that are responsible for specific risks. The scientific community is involved throughout the process and signs off on results to demonstrate that a level of scientific rigour has been accomplished.</td>
</tr>
<tr>
<td><strong>The United States of America</strong></td>
<td>The Department of Homeland Security has the lead coordination role in the SNRA’s multi-agency effort with a goal of integrating across the community (state, regional, local levels). The Presidential Policy Directive 8 on national preparedness is managed by the Federal Emergency Management Agency in conjunction with private partners and stresses the importance of a coordinated process for prioritizing risk to better allocate funding.</td>
</tr>
</tbody>
</table>
Risk Analysis

- Hazard identification and analysis
- Vulnerability and impact analysis
- Risk evaluation
- Risk monitoring and reevaluation
## ADDRESSING UNCERTAINTY

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td>Experts are asked to determine a level of confidence using a five point scale based on the amount of information available to qualify a given impact. A more documented risk would have a higher degree of confidence, while emerging risks would have a lower degree of confidence, as represented in a graphical heat map by ellipses that surround a central averaged point.</td>
</tr>
<tr>
<td><strong>The Netherlands</strong></td>
<td>The Netherlands works with margins where experts are asked to provide an estimate as well as a high and low estimate. When different expert opinions emerge, they are recorded if statements can be supported by facts, research or serious argument. Graphically, this is represented with a high and low point with the main dot being the consensus result.</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>Uncertainty has not yet been included systematically in the risk assessment process, but the responsible authorities are currently working on a revised methodology.</td>
</tr>
<tr>
<td><strong>The United Kingdom</strong></td>
<td>Uncertainty is managed through collective discussion and enabling debates which seek to obtain feedback from a diverse set stakeholders.</td>
</tr>
<tr>
<td><strong>The United States of America</strong></td>
<td>Uncertainty in frequency and consequences was explicitly included in the analysis by representing low and high bounds in addition to best estimates. Examples of sources of uncertainty include incomplete knowledge of adversary capabilities and intent, variability in possible event severity and location, and lack of historical precedence. Given the uncertainty inherent in assessing risks at a national level and the lack of information about some of the events included—many of which are likely to occur very infrequently—the assessment was designed to avoid false precision. Instead, the assessment identifies only those differences in risk that are still significant despite the associated uncertainties.</td>
</tr>
</tbody>
</table>
IMPACT AND LIKELIHOOD

MATRIX FOR A NATIONAL RISK ASSESSMENT

Relative Impact

(5)
(4)
(3)
(2)
(1)

Relative Likelihood

(1) (2) (3) (4) (5)

Key

VH
H
M
L
G20 Framework for Disaster Risk Assessment and Financing

Risk Communication and Awareness

- Internal and external communication
- Public awareness strategies
- Tools for interpreting risk analysis
G20 Framework for Disaster Risk Assessment and Financing

Post disaster impact, policy implications

Impact assessment
Quantification

Policy implications
Help in setting priorities
Strengthening capabilities
Guide prevention and mitigation measures
Strengthens financial management
Country practices and limitations

Publication practices vary

NL, Norway and UK active publication
Can, US classify, internal circulation
Public anxiety, malicious acts?
Accountability and trust

Understanding the limits

Useful to guide strategic thinking and coordination
Caveats, additional information,
Avoid false degree of precision
Confidence interval, uncertainty, qualitative
Conclusion

A vital priority for countries:
North America, EU, Korea

Need for a staged approach

Importance of the multi level dimension:
Systemic approaches
Coordination
Mix of bottom up and top down incentives

Contacts:  Stephane.jacobzone@oecd.org
Jack.radisch@oecd.org