Governance of critical risks
GOVERNANCE OF CRITICAL RISKS

Draft principles developed through the OECD High Level Risk Forum

The work on the draft principles is still in progress at the OECD and their content may thus be subject to modifications, in particular to include the relevant comments received through the public consultation. Comments should be provided by 28 February 2014 and sent to (GOV.Risk@oecd.org).

1. Establish and promote a comprehensive, all-hazards and transboundary approach to country risk governance as the foundation for enhancing national resilience and responsiveness, taking responsibility to provide security and safety to citizens, and as a means of preserving sustainable economic growth, market integrity and the environment.

1.1 Develop a national strategy for governance of critical risks

1. A national strategy should identify and designate core capabilities in society. An important element of this strategy is to define priority areas, and develop standards, procedures and measures to ensure business continuity in public and private sector bodies responsible for critical infrastructure and services. The strategy should clarify roles and responsibilities for the full country portfolio of critical hazards and human induced threats, including steady-state challenges, sudden onset contingencies and gradual-onset risks with potential for damage across economic sectors and territorial borders.

2. An all-hazards approach that considers inter-dependencies between such critical systems will provide governments a better understanding of the risk landscape. The strategy should set clear goals and invest in each phase of the risk management cycle, and ensure that identified priorities related to the prevention, disruption, and deterrence (to the extent possible), mitigation, response and recovery, and rehabilitation from critical risks are integrated into the policies and programmes of departments and agencies to minimize damages from future events.

1.2 Assign national leadership for risk governance and management

3. The complexity of governing critical risks requires multidisciplinary, interagency approaches that foster the integration of public safety across ministries and levels of government, and the development of the capabilities needed to ensure resilience nationwide. Designating leadership for managing critical risks at the national level helps drive policy implementation, connect policy agendas and align competing priorities across ministries and between central and local government. National leaders also need to ensure cooperation between governmental and non-governmental organisations to identify inter-linkages that underlie critical risks, and to achieve desired levels of preparedness consistent with the national strategy.

1.3 Engage all actors within government at national and local levels and create partnerships with the private sector to achieve responsiveness and shared responsibilities aligned with the national strategy

4. Risk governance requires coordinating a range of stakeholders in processes that are open to public participation and involve several incremental phases. These are needed to support citizen engagement and to help achieve a shared vision of critical risks and the division of responsibilities for shouldering the management burden. The policy making process should be inclusive of communities, businesses, individuals and households, and governments should encourage and foster stakeholder efforts to take greater responsibility for their own safety, security and resilience. Private sector advisory groups
may foster public-private partnership solutions to disaster preparedness. A whole-of-society response will also help to clarify accountability and achieve better outcomes in terms of resilient communities.

2. **Build preparedness and identify critical hazards and threats, through foresight analysis, risk assessments and financing frameworks, to better anticipate complex and wide-ranging impacts.**

2.1. *Develop risk anticipation capacity linked directly to decision making*

5. Developing capacity for horizon scanning, risk assessment and early warning, and for ensuring that the results of these assessments feed directly into timely decision making, is key to the successful management of critical risks. Governments should identify critical hazards and threats, and assess them using the best available evidence, investing in new research and tools where required setting aside the necessary resources. Risks should be understood in terms of their potential likelihood / plausibility and consequences/ impacts, which may be physical, psychological, human, financial / economic, social or environmental. An all-hazards, whole-of-government, national risk assessment helps set national priorities, inform steady-state operations, build national preparedness and resilience, enhance disaster risk reduction and emergency management capabilities, and improve the design of financial protection strategies. New risks and opportunities may emerge and evolve over time. Risk assessment requires periodic revision in light of external events, shifting priorities, and new information.

6. This process is strengthened by analysing the drivers behind the exposures and the factors that render populations, assets, and activities vulnerable. Location-based inventories of exposed populations, assets and the infrastructures that reduce exposure and vulnerability should be developed. This process also helps identify inter-linkages between different types of critical risks, the possible sequencing of hazardous events and knock-on effects that require cross-sectoral and even international cooperation. Public private partnerships are of crucial importance to the development of trusted information sharing networks; for example, these networks can identify and assess the vulnerable hubs of international supply chains with potential to propagate disruptive impacts.

2.2. *Equip appropriate agencies with the capacity to anticipate and manage human induced threats*

7. Developing capacity to anticipate and manage human induced threats is key to ensure a comprehensive approach to civil security, to ensure citizens and businesses a safe environment for the normal functioning of society, and to safeguard economic and social life. It is important for countries to equip themselves with the capacity to assess and manage such threats appropriately, mapping the activities of actors in the illegal economy and enabling a fuller understanding of the connections between different forms of illicit activities. This will help underpin analysis of the public policies that can help increase economic and societal resilience to transnational criminal networks, and help direct and prioritize countermeasures to trafficking in illegal trades. Such mapping and other analysis also helps compare the level of national risk posed by these types of threats with that posed by naturally-occurring hazards and gradual onset conditions.

2.3. *Monitor and strengthen core risk management capabilities*

8. The national strategy for country risk governance should support the allocation of resources to develop and maintain at all levels of government the capacities that are needed throughout the risk management cycle. This includes assistance for the development and continued training for specialised services (e.g. to conduct risk assessments, hazard mapping and real-time monitoring, but also law enforcement, security and rescue services) and the provision of modern and interoperable equipment. An efficient inspection system, supplemented by the power to impose and implement sanctions, is needed to ensure that minimum standards are adhered to for civil protection services in local levels of government.
### 2.4 Plan for contingent liabilities within clear public finance frameworks by defining rules for the use of public resources in advance of emergencies to achieve cost effective compensation mechanisms

9. Critical risks may impact public finances and the fiscal position of a country. To ensure planning for critical risks supports long-term sustainable development, rules for compensating losses should be clearly spelled out at all levels in advance of adverse events to the extent that this is feasible. Governments need to consider the distribution of potential losses amongst households, businesses and insurers, and encourage policies whereby all actors take full responsibility within the context of their resources.

10. Governments should establish mechanisms for estimating, accounting and disclosing contingent liabilities associated with losses to critical sectors in the context of national budgets. They should also adopt broad frameworks for assessing risk-related expenditures, including for prevention and deterrence (where possible), mitigation, preparedness and responding to risks, as well as for the potential total damages and losses from critical risks. These frameworks should record, to the extent that this is feasible, the expenses at national and local level. In countries or areas that are known to be highly exposed or vulnerable to extreme events, cost-effective compensation should consider a mix of pre-funding mechanisms and clear and agreed public finance rules before a crisis occurs. This mix includes market-based mechanisms that enable households and businesses to transfer financial risks to insurance markets (cf. Recommendation of the Council on Good Practices for Mitigating and Financing Catastrophic Risks [C(2010)143/REV1]).

| 3. | Raise awareness of critical risks to mobilise households, businesses and international stakeholders and foster investment in risk prevention and mitigation. |
| 3.1. | Raise awareness about exposure to critical risks to encourage a whole-of-society response and facilitate transboundary co-operation |
| 11. | Governments can enhance the overall security of society by combining targeted communication and incentives for individuals and businesses to take responsibility for investment in self-protective and resilience building measures. Effective risk communication requires consistent, two-way communication between government and stakeholders, ensuring that information sources are accurate and trusted, and the information is made accessible in a manner appropriate to its audiences with consideration given to the different needs, interests and technologies appropriate to segmented populations within communities. The increasing incidence of transboundary risks calls for enhancing communication channels across sectors and professions and with international actors. |
| 12. | A national risk register and local risk registries put households on notice about different scales of hazards and human induced threats, and support informed debate on the need for prevention, mitigation and preparation measures. Providing information and timely warnings should be complemented by informing and educating the public in advance of a specific emergency about what measures to take when it occurs, and mobilising public education systems to pass information on to households through students. |
| 3.2. | Strengthen the mix of structural and non-structural measures to reduce critical risks |
| 13. | Measures to foster investment in prevention and mitigation of critical risks should be reinforced. Governments should make more use of non-structural measures to reduce the exposure of persons and core services to known hazards, and structural protections to reduce their vulnerability. Strategic planning contributes to safer and more sustainable communities, for example, by accounting for risk factors in the design of critical infrastructure networks – e.g. energy, transportation, schools (cf. Recommendation of the Council Concerning Guidelines on Earthquake Safety in Schools [C(2005)24]), telecommunications and information systems. This strategic planning needs to be coordinated with urban planning and territorial management policies to ensure mitigation measures can be adopted, such as reducing the concentration of people and assets in areas where known exposures have increased over time. Robust surveillance, |
monitoring and alert networks are needed to reduce critical risks associated with malicious attacks and threats to public health.

14. Maximising the cost-effectiveness of public and private investments in housing and commercial facilities should be a factor for reducing their exposure to critical risks. Governments should adopt an integrated approach, which requires incorporating risk management decisions and safety and security standards in national and local regulations for land use, building codes and licensing to operate critical infrastructure. Government and the private sector, both individually and working in partnership, can reinforce economic security by identifying where disruptions to critical infrastructure and supply chains could lead to knock-on effects across borders, and cascade effects across systems. This cooperation should devise countermeasures to systemic threats and consider fiscal and regulatory options to promote reserve capacity, diversification or back-up systems to reduce the risk of breakdowns and prolonged periods of disruption. They should align economic and financial incentives toward long term investments in secure infrastructure and other protective assets to ensure appropriate levels of risk mitigation.

3.3. **Encourage businesses to take steps to ensure business continuity, with a specific focus on critical infrastructure operators**

15. Governments can help strengthen business continuity management by developing standards and toolkits designed to manage risks to operations or the delivery of core services, ensuring that critical infrastructure, information systems and networks (cf: OECD Guidelines for the Security of Information Systems and Networks: Towards a Culture of Security [C(2002)131/FINAL], Recommendation of the Council on the Protection of Critical Information Infrastructures [C(2008)35]) still function in the aftermath of a shock, and can facilitate society’s rapid recovery afterwards. First responders should be required to maintain plans to ensure that they can continue to exercise their functions in the event of an emergency so far as is reasonably practicable.

4. **Develop adaptive capacity in crisis management by coordinating resources across government, its agencies and broader networks to support timely decision-making, communication and emergency responses.**

4.1. **Establish strategic crisis management capacities to prepare for unexpected and novel risks that provoke crises**

16. Governments need to prepare for unknown and unexpected critical risks that provoke crises. Crisis management capacity requires a solid foundation of standard operating procedures, pre-defined emergency plans, conventional training and drills on a regular basis to contend with known hazards and threats (cf. Recommendation of the Council concerning Chemical Accident Prevention, Preparedness and Response [C(2003)221]). These core capacities should be complemented by flexible resources that bolster resilience, enabling a government to react to unforeseen and complex events, which occur more frequently in modern society. Organisational arrangements are needed to share multi-disciplinary expertise to make sense of incomplete information before and during a crisis, as well as to prepare and respond to crises of an unexpected nature. Communication plans help mobilize actors as well as reassure and maintain or restore confidence.

4.2. **Strengthen crisis leadership, early detection and sense making capacity, and conduct exercises to support inter-agency and international co-operation**

17. Government leadership during crises is vital for driving cooperation across sectors and maintaining public trust. Governments should carry out simulation exercises to ensure “sense-making” translates into reliable and coordinated expert advice to national leaders to inform decisions. It means that Governments should be capable of rapid mobilisation to identify options for action and minimise uncertainties. Governments should continue to develop and fund early warning systems to monitor hazards and threats. This includes establishing frameworks for international cooperation and joint training with
international stakeholders/actors to support crisis management functions and capacities. These functions and capacities include global risk monitoring systems, shared risk radars or early warning systems, the interoperability of emergency forces, the mobilisation of specialised teams, tools and supplies at transnational levels, the coordination of strategic crisis management structures, and harmonised crisis communication processes.

4.3. Establish the competence and capacities to scale up emergency response capabilities

18. Governments should have the capacity to scale up civil protection capabilities to contend with crises that result from critical risks. This includes establishing government authority to draw on and coordinate relevant resources to enable them to manage civil contingencies, whether from government departments and agencies, the private sector, academia, the voluntary sector and other non-governmental organisations. To ensure that civil protection capabilities can take their appropriate dimension and form requires interoperable equipment, clear quality standards, regular training and multi-stakeholder drills.

19. Governments should also promote incentives for businesses and individuals to support local voluntary organisations that reinforce professional first responder capacities. On-going support for the recruitment, retention, training, equipping and maintenance of paid and unpaid personnel in all aspects of civil protection strengthens national capacity to respond to and recover from disasters and other contingencies.

4.4. Plan recovery and rehabilitation efforts to minimise damage and promptly return society to normalcy

20. Governments should build institutional capacity to design and oversee recovery and reconstruction plans in a way that seizes economic opportunities, reduces vulnerability to future events and strengthens long term resilience. It involves resolving policy trade-offs between short-term fixes and long term investments in sustainability. Governments should consider multi-stakeholder governance arrangements that facilitate agile implementation, efficient use of public funds and transparency of disbursements to protect undue influence and corruption.

5. Demonstrate transparency and accountability in risk-related decision making by incorporating good governance practices and continuously learning from experience and science.

5.1. Ensure risk-related decision making is subject to transparency and accountability and supported by clear evidence-based processes and communication

21. Transparency regarding the information used to make risk management decisions fosters stakeholder acceptance and facilitates policy implementation. Transparency entails honest and realistic dialogue between stakeholders about the nature and likelihood/plausibility of hazards and threats, as well as the potential impacts and the cost-effectiveness of various mitigation, response and recovery options. It implies public access to risk information and measures to validate the integrity of the decision process, openness about assumptions behind analyses and an opportunity to evaluate the drivers of uncertainty. This could contribute to limit reputational damage followed by disasters and other contingencies. These measures also support accountability, enabling stakeholders to provide critical feedback to decision makers. Although circumstances may require restricted access to sensitive or classified information, the processes and methodologies used for management of critical risks should be shared even if certain types of intelligence is not.
5.2. **Enhance the ability of national governments, in conjunction with governmental and non-governmental organisations, to make trade-off decisions informed by the full country portfolio of critical risks**

22. Governments need to make trade-off decisions across the full country portfolio of critical hazards and threats, collaborating closely with governmental and non-governmental organisations, and the private sector. These trade-off decisions enhance government capacity to make the most of resources dedicated to public safety, national security and national preparedness and resilience. To ensure risk management informs national decision-making, strong frameworks for implementation are needed that provide incentives to conduct risk analysis, ensure the results are made available to decision makers, and develop review mechanisms to monitor the extent to which policies are operationalised.

5.3. **Continuously share knowledge, including lessons learned from previous events and research, to promote innovation and best practice**

23. Post-event reviews are a key means of considering the effectiveness of prevention and preparedness activities, as well as response and recovery operations. Governments can broadly share findings from significant events and research and incorporate them into improved preparedness and resilience planning. Debriefing and identifying lessons learned are a first step in a process that includes adapting critical systems, recurrent monitoring of capability levels, evaluating the performance of response and recovery actions, and undertaking peer reviews to share insights across countries. In addition to assessing performance, these efforts should seek to identify and guard against unintended adverse impacts, such as the creation of additional risks or the failure to recognise changes in risk characteristics. Learning from experience and science and integrating lessons into policy reforms is an essential practice to improve risk management.