

**PUBLIC GOVERNANCE AND TERRITORIAL DEVELOPMENT DIRECTORATE
PUBLIC GOVERNANCE COMMITTEE**

High Level Risk Forum

Draft principles on the governance of critical risks

This document contains a draft of Principles on the Governance of Critical Risks. It integrates comments from a first round of consultation with members of the OECD High Level Risk Forum and various international organisations. It also includes an Introductory Note that provides background to the work and its relation to different OECD instruments.

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INTRODUCTORY NOTE

1. This document sets-out draft ‘OECD Principles on Governance of Critical Risks’ developed through the OECD High Level Risk Forum (HLRF) of the Public Governance Committee. The Principles are designed to assist governments, policy makers and senior officials charged with developing and maintaining robust risk management frameworks and their implementation. They benefit from the knowledge accumulated over a decade in the area of risk management policy, and build on the unique set of knowledge and best practice collected through the High Level Risk Forum. They also complement existing OECD instruments that may be related to various aspects of risk management.

2. The Principles promote an integrated approach to addressing diverse nationally important risks, and in particular those that compromise the systems essential to the functioning of society and the economy. This approach should reduce critical risk and promote the effective use of national capabilities to absorb or adapt to the impacts of residual risks. The principles cover the full risk management cycle, including assessment, prevention, preparation, response and recovery and emphasise a “whole-of-government” and “whole-of-society” perspective on risk management to complement public and private sector efforts to build resilience. This is the first time that the need for a whole-of-society approach to risk management is acknowledged. It recognises responsibilities across the public and private sectors for coordinating efforts to manage transboundary risks, where risk ownership traverses not only geographic boundaries, but different levels of government and different economic sectors. The Principles were also enriched by OECD work on good public governance and policy coherence. In time, this will deepen countries’ understanding of complex national risks, and lead to more proactive rather than reactive strategies. This should ultimately serve the goal of fostering economic and social resilience, and ensure that the hard-fought gains of economic development are not lost through the mismanagement of risks.

3. Effective risk management is not only a responsibility for governments and a foundation of citizen trust, it is also a means of maintaining or achieving national competitive advantage against a backdrop of numerous geopolitical, environmental, societal and economic uncertainties. It represents an opportunity to invest in the future, for safer and better lives. The expectation is that over time the changes proposed will improve the management of critical risks through clearer governance and accountabilities, better use of resources, and higher quality decision-making. In particular, bringing diverse important risks into an integrated management system should help ensure that critical risks are identified and reduced and national capabilities are used more effectively.

4. The Principles draw from wide-ranging analyses of the driving forces, economic trends and changes in society and technology that have given shape to emerging, novel and systemic risks. Disruptive shocks and disasters are increasing in number, scale, complexity, and economic and social consequences across countries. While governments have got better at routine emergency management, adverse events that are unusual in character or scale appear to be happening more often and are causing severe consequences. As society becomes more mobile and increasingly reliant on advanced technologies and just-in-time delivery systems, unforeseen or poorly understood risks have demonstrated potential to affect large numbers of people by cascading into critical sectors of society or infrastructure.

5. In 2003 the OECD published, ‘Emerging Risks in the 21st Century: An Agenda for Action’, which laid out the elements of a comprehensive risk management cycle including risk assessment, prevention/ mitigation, preparedness and response, recovery and reconstruction. The report formulated

policy options to guide countries in adapting their risk management systems to contend with emerging and systemic risks. Following these conclusions, the OECD International Futures Programme conducted peer reviews in a number of countries to identify and examine good practices in risk management for social, technological and natural risks.

6. The 2011 report 'Future Global Shocks' took this Agenda for Action a step further by focusing on the policy challenges to contend with unlikely or unforeseeable disruptive events of such high magnitude that their effects could propagate across continents through interconnected and interdependent critical systems. This contributed to raising policy awareness and identified the need for a community of risk managers.

7. The objectives of the High Level Risk Forum (HLRF) are to help countries share good practices across the above-mentioned risk management policy cycle. The HLRF has met annually since 2011 as a platform for government officials, private sector risk managers, think tanks and civil society to exchange policy and debate policies and practices. Thematic workshops have covered topics such as inter-agency crisis management, incentives to support investment in risk prevention and mitigation, and illicit trade. The goals of these meetings were to identify good practice in contending with critical risks. As a result, the Principles benefit from the deep underlying thematic research, country peer reviews and comparative analysis of risk management policies to consolidate the evidence base for policy recommendations. This includes the G20/ OECD Framework on Disaster Risk Assessment and Risk Financing, which was developed in collaboration with the OECD Insurance and Private Pensions Committee. The evidence base also includes analytical reports on National Risk Assessments, risk and crisis communication, strategic crisis management, and a report currently being finalised on governing effective prevention and mitigation of disruptive. The HLRF has conducted two peer reviews: Mexico's National Civil Protection System in 2011 and Flood Risk Prevention of the River Seine in 2012, which add to the previous reviews undertaken under the Futures Programme, including Japan, Italy, Sweden, Norway and France.

8. The draft Principles complement existing sectoral guidance related to risk management presented in the OECD Council Recommendation on the Protection of Critical Information Infrastructures [[C\(2008\)35](#)], the Recommendation concerning guidelines on earthquake safety in schools [[C\(2005\)24](#)], and the Recommendation of the Council concerning Chemical Accident Prevention, Preparedness and Response [C(88)85/Final]. The objectives of the 2008, 2005 and 1988 Recommendations are to enhance the protection of specific types of facilities (e.g. critical information infrastructures, schools and chemical plants), whereas the overall aim of the draft Principles is to foster more systematic national planning, including the use of comprehensive management practices, furthering countries' understanding of complex risks, and developing more proactive strategies (e.g. in the area of risk prevention to promote more specific damage reduction measures such as land use restrictions). The draft Principles promote the placement of all hazards and threats within a standardised framework through which priority capabilities to mitigate or withstand risks can be more easily identified. It promotes a broader scope of actions including the need to build generic crisis management capabilities, conduct business continuity planning that returns society to normal functioning quickly and build contingent capacity and improve national resilience.

9. The draft Principles also build on and complement the *Council Recommendation on Good Practices for Mitigating and Financing Catastrophic Risks* [[C\(2010\)143/REV1](#)], which point to the availability of disaster risk financing and risk transfer mechanisms as a means to mitigate the financial impacts of catastrophes. In particular, these draft Principles promote a comprehensive set of risk management practices, which includes risk communication and crisis management as core elements. Risk communication is an essential government practice to inform the public of risks and thereby empower individuals to undertake prevention and mitigation measures at the household level. Since not all critical risks can be prevented, flexible and adaptable crisis management capacity remains key to attenuate their adverse impacts.

10. The preparation of the Principles benefited from a Steering group of interested countries and private sector bodies which worked over the first half of 2013 to prepare a first draft on the basis of the above mentioned evidence base. The current version includes comments received through a first round of comments from members of the High Level Risk Forum. As a result, the current draft reflects the comments received from governments, think tanks, partners and international organisations such as the European Commission and the United Nations International Strategy for Disaster Reduction.

11. OECD committees and external organisations with responsibility in this area are invited to comment on this document. A revised draft will be prepared for consideration by Delegates to the High Level Risk Forum in December 2013. Once endorsed by its members, the HLRF will transmit the Recommendation to the Public Governance Committee for approval in 2014.

12. Delegates are invited to:

- COMMENT on the proposed Draft OECD Principles on the Governance of Critical Risks

THE CHALLENGE OF CRITICAL RISKS

13. Governments have fundamental responsibilities to provide security and safety to citizens and their property, defend the territorial integrity of the nation, and help sustain critical infrastructure and well-functioning markets. Citizens and businesses expect governments to be prepared for a wide range of possible crises and global shocks, and to handle them effectively should they arise. The successful governance of critical risks is a key strategic investment for countries, and is a means of preserving future competitiveness and consolidating sustainable economic growth.

14. Critical risks may arise from natural phenomena, pandemics, major industrial or technological accidents, and malicious actions that result in adverse impacts of national significance. Their consequences can disrupt infrastructure sectors vital to economic activities, degrade key environmental assets, negatively impact public finances, and erode public trust in government. Against a complex backdrop of demographic shifts, technological advances, globalisation and climate change, critical risks may develop quickly and through unforeseen pathways enabling transboundary impacts to spread across different communities, economic sectors and national borders.

15. Developing national resilience to critical risks requires investment in the full cycle of risk management capacities, from risk identification and assessment, through prevention and mitigation, preparedness and response, to social and financial recovery, reconstruction and policy reform. These OECD Principles are designed to provide strategic guidance to national leaders who recognize that the implementation of this cycle faces considerable governance challenges both at the national level and internationally. Risk management decisions need to address a range of possible adverse outcomes in a way that is consistent with fundamental societal values represented in clearly expressed levels of risk tolerance. However, in this day and age the resulting policies must also be implemented in a context of fiscal constraints and reduced control over critical national infrastructures. They face intense stakeholder scrutiny and often require cooperation with international partners.

16. These Principles seek to foster future cooperation between countries and with other key partners, including the private sector, building common ground and promoting continuous improvement regarding the governance and management of critical risks.

ACHIEVING BETTER RISK GOVERNANCE

17. The successful governance of critical risks delivers the benefits of timely decision-making through clear communication and the identification of responsibilities. It engenders public support for risk management policies that result in lower social, economic, and environmental costs. A comprehensive risk management system combines the full cycle of implementing actions. Critical risks must be identified and their potential impacts assessed, including the anticipation of second-order consequences. Prevention and mitigation measures need to be evaluated in an integrated manner, taking into consideration not only cost-effectiveness and impacts upon stakeholder interests, but preventable casualties, critical economic and financial activities, and the reduction of crime, unemployment and epidemics. Emergencies must be responded to effectively and evaluated after the fact to ensure that lessons learned can inform policy reform and continuous improvement. Ensuring that the benefits and burdens of risks are borne by risk takers supports a proper alignment of incentives and enables resources dedicated to public safety and societal security to achieve their greatest value.

18. Delivering a “whole-of-society” approach requires a strong institutional capacity, resources, training and continued commitment from leadership at the centre of government. It necessitates a clear mandate for government and stakeholders to develop strategies that avoid, reduce and transfer risks, while pursuing opportunities that improve living standards, enable economic activity and ensure fiscal sustainability. It should foster a new culture across government that embraces risk thinking as a key feature of effective planning and focused communications, supported by accountability mechanisms that strive for transparency, integrity and the cost-effective use of public resources. The overarching goal is to preserve societal values, balance stakeholder interests and maximize opportunities for individuals.

19. Governments need to build broad-based partnerships that leverage skills, knowledge, energy, and flexible capabilities from across society to meet the challenges posed by critical risks. They should foster collaborative networks with the private sector, academia, local governments and communities, as well as involve the voluntary sector and strengthen cooperation across countries. Creating a dynamic, well-coordinated network of participants within a clear governance framework will engender stronger responsibility in support of common goals.

DRAFT OECD PRINCIPLES ON THE GOVERNANCE OF CRITICAL RISKS

Countries are invited to:

1. Promote a comprehensive, all-hazards and transboundary approach to country risk governance as the foundation for enhancing national resilience, and as a means of safeguarding public safety, sustainable economic growth, and environment.
2. Strengthen national risk management through foresight analysis, risk assessments and financing frameworks, to better anticipate major threats and hazards with complex and wide-ranging impacts.
3. Mobilize households, businesses and international partners by raising awareness of critical risks and driving investment in risk prevention and mitigation.
4. Strengthen crisis management, coordinating resources across government, its agencies and broader networks to support timely decision-making, communication and emergency responses.
5. Demonstrate transparency and accountability in risk-related decision making by incorporating good governance practices and continuously learning from experience.

ANNEX

20. This Annex supports the OECD Principles on Governance of Critical Risks by identifying actionable policy practices and broad capabilities that foster effective governance and management of critical risks.

Principle 1. Promote a comprehensive, all-hazards and transboundary approach to country risk governance as the foundation for enhancing national resilience and responsiveness, and as a means of safeguarding public safety, sustainable economic growth, and the environment.

Develop a national strategy for governance of critical risks

21. *Commentary:* A national strategy should identify and designate core capabilities in society. This helps define priority areas, focus goals 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 threats, including steady-state risks, sudden and gradual onset risks with potential for damage across economic sectors and territorial borders.

22. 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 ensure that identified priorities related to the mitigation, response and recovery from critical risks are integrated into the policies and programmes of departments and agencies.

Assign national leadership for risk governance and management

23. *Commentary:* The complexity of governing critical risks requires multidisciplinary, interagency-approaches that foster integration of public safety across ministries and levels of government, and development of the capabilities needed to ensure resilience nationwide. Designating leadership 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 organizations to identify inter-linkages that underlie critical risks, and to achieve desired levels of preparedness consistent with the national strategy.

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

24. *Commentary:* Risk governance requires coordinating a range of stakeholders in multi-phase and continuous participatory processes. 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, inviting communities, businesses, individuals and households to take greater responsibility for their own safety. 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.

Principle 2. Strengthen national risk management through foresight analysis, risk assessments and financing frameworks, to better anticipate major threats and hazards with complex and wide-ranging impacts.

Develop risk anticipation capacity linked directly to decision making

25. *Commentary:* Developing capacity for horizon scanning, risk assessment and early warning, and ensuring their results 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. Risks should be understood in terms of their potential likelihood / plausibility and impacts, which may be physical or psychological, human, financial / economic, social, and environmental. A whole of government, all-hazards national risk assessment helps prioritize disaster risk reduction, emergency management capabilities and 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.

26. 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.

Monitor and strengthen core risk management capabilities

27. *Commentary:* The national strategy for country risk governance should support the allocation of resources to develop and maintain the capacities at all levels of government that are needed throughout the risk management cycle. This includes assistance for the development and continued training for specialized services (e.g. to conduct risk assessments, hazard mapping and real-time monitoring, but also rescue services) and the provision of modern and interoperable equipment. An efficient inspection system, supplemented by the power to implement sanctions, is needed to ensure that minimum standards are adhered to for civil protection services in local levels of government.

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

28. *Commentary:* 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 disaster 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.

29. 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 mitigation, preparedness and response to risks, as well as 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.¹

¹ See the OECD Council Recommendation on Good Practices for Mitigating and Financing Catastrophic Risks

Principle 3. Mobilize households, businesses and international partners by raising awareness of critical risks and foster investment in risk prevention and mitigation.

Raise awareness about exposure to critical risks to encourage a whole-of-society response and facilitate transboundary co-operation

30. *Commentary:* Governments can enhance the overall security of society by combining targeted communication and providing incentives for individuals and businesses to take self-protective 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 partners.

31. A national risk register and local risk registries put the public on notice about different scales of hazards and threats, and support informed debate on the need for prevention, mitigation and preparation measures. Providing information and timely warnings should be complemented by educating the public in advance of a specific emergency about what measures to take when it occurs.

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

32. *Commentary:* 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 networks² 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.

Strengthen the mix of structural and non-structural measures to reduce critical risks

33. *Commentary:* Strategies to prevent and mitigate 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 by accounting for risk factors in the design of critical infrastructure networks (e.g. energy, transportation, schools³, telecommunications, information systems). This needs to be coordinated with urban planning and territorial management policies to reduce 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.

34. Maximising the cost effectiveness of public and private investments in housing and commercial facilities should factor in reducing their exposure to critical risks. An integrated approach requires incorporating risk management decisions 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

2 See the OECD Council Recommendation on the Protection of Critical Information Infrastructures.

3 See the OECD Recommendation Concerning Guidelines on Earthquake Safety in Schools.

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.

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

Establish strategic crisis management capacities to contend with novel crises and black swan events

35. *Commentary:* 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.⁴ 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.

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

36. *Commentary:* 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. This capacity must be capable of rapid mobilization to identify options for action and to minimize 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 partners to support crisis management functions. These functions include global risk monitoring systems, shared risk radars or early warning systems, the interoperability of emergency forces, the mobilisation of specialized teams, tools and supplies at transnational levels, the coordination of strategic crisis management structures, and harmonized crisis communication processes.

Establish the competence and capabilities to scale up emergency response capacities

37. *Commentary:* Governments must 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 or the voluntary sector. 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.

38. 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.

⁴ See for example, the Recommendation of the Council concerning Chemical Accident Prevention, Preparedness and Response.

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

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

39. *Commentary:* 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, and 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. 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.

Enhance the ability of national governments, in conjunction with governmental and non-governmental organizations, to make trade-off decisions informed by the full country portfolio of critical risks

40. *Commentary:* 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 and national security. 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 operationalized.

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

41. *Commentary:* Post-disaster reviews are a key means of considering the effectiveness of prevention and preparedness activities, and response and recovery operations. Governments can broadly share findings from significant events and incorporate them into improved disaster 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 recognize changes in risk characteristics.