Crisis Management in a Governance and Public Administration Context: An International Perspective

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Abstract

This paper shares with a Canadian audience the work of the International Institute of Administrative Sciences (IIAS) Project Group on Security and Safety. The project group is conducting a comparative study of national public capacities for crisis and contingency management and related international coordination. The group is preparing a publication illustrating different facets of governance and public administration dimensions of crisis management faced by governments of both developed and developing countries and by the international system. Commentary and feedback are invited.

The paper, which in an evolved form will be part of an IIAS publication, argues that all national governments face both natural and human-induced disasters that exceed the routine capacity of the State and of society to respond. Often these extraordinary events extend beyond national jurisdictional boundaries, giving rise to international institutions and processes. In many countries major disasters contribute to, but sometimes result from, the breakdown of national institutions. They can also generate new institutions and processes. Extensive national and international emergency planning and response mechanisms have been put in place, but mainstream governance institutions are also called upon to function effectively under stress.

The project group is looking at these issues from four perspectives: cross-cutting thematic issues; international institutions and mechanisms; national governance and emergency response case studies; and case studies of individual crises from a governance perspective. While each country and international organization needs to draw its own conclusions and make its own arrangements, there are useful lessons to be drawn from international comparative experience that can benefit planning and response capabilities both within countries and internationally.

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Introduction

Natural disasters and man-made accidents or violence usually occur with little or no warning and limited scope for prevention. Nevertheless, in this increasingly visible area of public action, many countries especially in developing regions are ill prepared for contingencies, lack the necessary personnel and financial resources to respond, and are often more severely exposed than they need be.

The experiences across the World in the last half century in both developed and developing countries, from Three Mile Island and Chernobyl to the 2010 earthquake in Haiti and the 2011 earthquake, tsunami and nuclear disaster in Japan, have demonstrated repeatedly how inextricably linked are security and safety to there being adequate, clearly delimited and tested governance and public management structures and procedures. These involve governments politically, but the responsible public services inevitably face major challenges. In a field that cuts across all aspects of public management, key dimensions where there have often been failings cover an entire spectrum: high level capacity for crisis decision-making and management, leadership and the allocation of contingency responsibilities (including between different levels of government), local community responsibilities, role of the private sector and civil society organizations, informing and supporting the public, attention to technical considerations and expertise, international contacts and mobilization, coordinating foreign and domestic aid agencies and other forms of assistance, adequate record keeping, avoiding fraud and wastage, training and rehearsals, evaluation of past events, and policy development for future contingencies.

While there have been real improvements and extensive review of many of these issues, they have not had significant attention from a comparative public administration perspective. The International Institute of Administrative Sciences (IIAS) Project Group on Security and Safety has been asked to conduct a study under the general theme of “Providing for Security and Safety,” looking specifically at national public capacities for crisis and contingency management, as well as related international coordination. The study seeks to review the state of the art on a selective and comparative basis. The specific areas that it addresses have necessarily depended on the interests and expertise of participants, but the project has been asked to consider national and regional case studies and also the role of the international system. The study seeks to contribute to the pool of knowledge on recent crisis experiences and the governance and public management responses to them and through that to develop a broader awareness among practitioners, researchers and teachers. It is hoped that the study will encourage further exploration of these issues at the national level and among regional public administration networks.

This note discusses the context for the project group’s work and outlines issues that participants have been encouraged to address. A later version will serve as the introduction to an IIAS publication containing twenty chapters by authors from all regions of the World, representing a wide range of crisis experiences and institutional perspectives but reflecting a common desire to strengthen national and international capacities for crisis and contingency management. A universal theme is that this is an emerging field, a work in progress, leaving room for more to be learned and shared.
The project group has found that there are two starting points in approaching the governance and public administration dimensions of crisis and contingency management. The first is the types of natural and human-induced hazards that can turn into disasters; the second is the capacity to deal with disasters – the combination of institutions, processes and working relationships within and across jurisdictions, both in theory and in practice. The first section of this note is therefore a discussion of the types of hazards that can create crisis situations and the challenges that governments face in responding to them. It then looks at crisis and emergency management from the perspective of governance and public administration. This starts with a brief discussion of the emergence of crisis and contingency management as a field of public administration, followed by a more detailed consideration of the elements of a national crisis and emergency management capacity. An annex to the paper includes a survey of the academic literature in the field that was made at the beginning of the project, an objective being to develop a more complete list of sources and to encourage additional scholarship that is useful to both researchers and practitioners. This too is a work in progress.

An underlying project group concern has been terminology. This is challenging in an international comparative context, as the project has been being conducted in English, which is the first language of only some of the participants. In addition, there is no fixed meaning assigned to many key terms, although readers can usually be guided by plain language interpretations. The literature commonly uses five terms in particular: “hazards,” “contingencies,” “emergencies,” “crises” and “disasters.” At least some of these terms are frequently used interchangeably, especially to the extent that they all describe circumstances that are outside the normal focus of public policy. Pragmatically, they describe an escalating spectrum from identifiable risks to extreme events. Hazards can be understood as sources of risk and contingencies as measures taken in advance based on the risk of hazards becoming emergencies, the latter being events that are defined as “a sudden state of danger requiring immediate action.” The circumstances under which an emergency can be considered to have become a crisis – a time of “great difficulty” representing a decisive moment or turning point, derived from the Greek word for “decision” – have at least something to do with the adequacy of the State and public response. A disaster can be understood as a further escalation – “a great or sudden misfortune,” “a complete failure.” Disaster areas are places where governments have declared a state of emergency, eligible for special relief measures, places “characterized by extreme disorderliness or misfortune.”

Disasters, whether arising from natural or human-induced events, are a human construct. As argued by one commentator:

“While extreme events often act as a trigger, human decision-making can predetermine whether or not an emergency becomes a disaster. Disasters are the result of interaction between environmental hazards and human vulnerability.”
(Henstra 2002: 112)

It is this link to decision-making and its consequences, whether in setting the conditions for anticipating emergencies or in responding to them and to their aftermath, which provides the link to governance and public management.

22 The definitions in this paragraph are taken from the Oxford Canadian Dictionary.
The challenges of crisis and contingency management

The management of crises and disasters is challenging due both to the diversity of occurrences that can arise and to the complexity and open-ended nature of the possible management responses. A central characteristic is uncertainty and risk: these are events and phenomena that arise outside the ordinary government administrative cycle, and the only certainties are that every government will face crises, they will occur frequently (but rarely predictably), they will be both natural and man-made, and at least some carry the potential to become full-blown disasters. Typically, crises push the boundaries of daily life and they can overwhelm established institutions and routines. Generally speaking, the emergencies or crises in question are civilian, and the project group’s scope of enquiry does not include military conflicts or their direct effects. Collateral effects of military conflicts are within the scope of the project, however, as are the response and recovery dimensions of post-conflict situations. More generally, the relationship between civilian and military authorities is a major issue in emergency and crisis management.

This section begins by summarizing some of the important types of crises that are known to occur. It then discusses some common characteristics of the public sector response to crises – in particular by national governments – recognizing that one of the most daunting features of major crises is that it is difficult to generalize about them. This provides the context for the discussion in the second part of the paper of the governance and public management issues that governments face in preparing for contingencies and responding to crises.

A diversity of potential crises

Many crises are a consequence of geography, and every country has its own combination of natural hazards that have been known to occur in recorded history or can be predicted from its mix of topography and climate. To take one example, the Canadian government’s disaster database (Canada 2014) tracks twenty types of significant natural disasters that have occurred since 1900 in identifiable parts of the country and for which some kind of ongoing contingency planning is warranted. Categorized into three broad groupings – biological, meteorological/hydrological and geological – the identified hazards range from insect infestation to extreme weather, floods, geomagnetic storms, wildfire, earthquakes, tsunamis and volcanic eruptions. While this combination of natural hazards reflects Canada’s geographic location and physical characteristics, each country can identify its own list.

Natural disasters have been a significant reference point for the study group’s work. Several of the participants have conducted case studies of individual events or phenomena that have constituted disasters for the affected countries and have played a significant role in shaping their national crisis management system. These include specific events, such as the Great East Japan Earthquake and associated tsunami in 2011, which affected neighbouring countries as well as Japan, earthquakes in Haiti (2010) and Italy (2009), and a severe mudslide in Brazil (2011). Other countries studied by the project group have been affected by more general natural phenomena or a sequence of events including flooding in Central Europe and Ghana, typhoons in Taiwan, China and severe weather and associated flooding in India.
A second category of crises arises from human action, frequently made more acute by natural forces and often incurring significant environmental as well as human and financial costs. Two major sources of man-made crises are large-scale industrial and transportation accidents. The former are particularly serious when they involve hazardous chemicals or radioactive materials creating extensive and long-lasting environmental risks; each industry has its own characteristics and vulnerabilities, requiring particular kinds of interventions. Transportation accidents can involve dangers to passengers and goods as well as to people in surrounding areas, including situations requiring rescue efforts; again, each transportation sector presents its own characteristics. Accidents in space or involving objects from space present their own unique problems. Violent actions by criminal or terrorist actors can constitute emergencies in themselves and can also create industrial and transportation emergencies.

Transportation and industrial accidents are part of the context in most of the countries that the project group participants have looked at. Several have studied different aspects of the nuclear plant meltdown that in March 2011 pushed the Japanese earthquake and tsunami into the realm of a disaster that severely tested the Japanese government. One project participant studied the Sanlu tainted milk scandal, which became a public health crisis in China in 2008, while another compared three recent transportation accidents in Italy, each representing a different mode of travel but all presenting regulatory and administrative challenges to the Italian state.

A related area of vulnerability is critical infrastructure that is essential to the functioning of the state or of society more broadly. This includes electrical generation and transmission facilities, telecommunications, transportation and health facilities, food and energy production and distribution, fresh water and sanitation, and the financial system. All are subject to both accidents and natural disasters, but critical infrastructure is also a significant target for violent attack, especially in politically volatile regions. Another vulnerability with the potential to have widespread effects, often crossing borders, is from health hazards, which in addition to various forms of environmental contamination can include pestilence and epidemic disease.

While the hazards and risks of crises arising from human action are different in many respects from natural hazards, every government can identify them with at least some level of certainty based on the nature of national industrial, transportation and other forms of economic activity and patterns of demography and public health. At times the different types of events can interact, typically involving severe weather or geological events creating transportation or industrial crises. The 2011 Japanese triple disaster is a highly visible example, creating effects that were still being addressed several years later. Such complex events are particularly difficult to anticipate, as the combinations are unique, compounding their impact and complicating the response.

Many disasters, of whatever origins carry risks of injury and loss of life, which sometimes can be widespread. They can also result in major population displacement, raising basic issues of human shelter, nourishment and health, including the availability of drinking water and disease prevention. These situations, when they occur, became an urgent priority for governments and can become a major challenge to their legitimacy and public support.
All crisis-creating situations strain the capacities of the state and society, but some commentators identify “wicked problems” (Rittel and Webber 1973, Conklin 2006) that are too complex to permit a solution in light of current capacities or state of knowledge. The test of a wicked problem is to a certain degree contextual – some governments and societies are better placed to deal with complex crises than others – but it is a contingency that all governments face, and wicked problems are among those that are likely to extend across national boundaries. Climate change and rising sea levels can be described as slow-moving wicked problems; another (much rarer but with more immediate effects should it occur) on a potentially global scale would be a large asteroid hitting the Earth. In early 2011, the combined effects of earthquake, tsunami and nuclear disaster presented Japan with a wicked problem that severely tested government, business and civil society (Funabashi and Takenaka 2011), even though the country is widely considered to be one of the most advanced in anticipating and managing crisis situations. The Haitian earthquake – of a severity that occurs regularly in Japan – was a wicked problem for that nation as a whole, creating widespread displacement of people, destruction of infrastructure and incapacitating a government and public administration that were already fragile in the poorest country in the Americas.

The open-ended nature of crisis response

The possible responses to crises can be as complex and diverse as the crises themselves. This is an emerging field of public management and one that by its nature does not lend itself to a single public management model. There are a number of characteristics that are common to most, and sometimes all, crisis situations that should be noted, however. By definition, crises are not programmed or expected and they are not ordinarily included in the government planning cycle; however, categories and probabilities of possible crisis situations can be anticipated, even if their precise timing, location or magnitude cannot. Contingency planning, informed by risk analysis, risk management and learning from past crises, is thus a central feature of crisis management.

The public sector in all its dimensions plays an important role. Crises do not necessarily result from state action, but states and their agents can and sometimes do trigger or compound crises, as well being among their victims. When an organization or sector in society is unable to cope with a crisis the state is drawn into the response by virtue of the authorities uniquely available to it, the scale of its financial and logistical resources and the range of expertise that it can draw upon. While it is uniquely well placed in society to deal with a crisis, the public sector also has a special responsibility to guard against making the situation worse through inadequate or inappropriate action. This begins with understanding its own boundaries and limitations as well as its obligations and capacities.

Crises can seriously affect public facilities and services, but generally their greatest impact is on non-governmental social and economic institutions and on individual citizens and communities. Crises are no respecters of social or economic status or of other divisions in a society. In that sense, they are a basic test of citizenship and of a government’s concern for its citizens. Non-governmental and civil society groups are frequently victims of disasters but they also have a major role in responding to them. A central feature of all crisis response, therefore, is communication, consultation and coordination with groups outside government and with the public at large. In situations
involving population displacement, extraordinary measures are required to house, feed and ensure the health and safety of large numbers of people and to ensure their eventual return to stable and productive lives.

The aftermath of a crisis may endure a long while, turning into a crisis itself. Invariably crisis responses call on the resources of all levels of government – indeed the greatest response burden is often placed on local authorities – and consultation and coordination among levels of government is a critical requirement of any response effort. This requirement is particularly acute in federal systems because of their formal divisions of powers and responsibilities, creating additional capacity to respond but compounding risks both of bureaucratic conflict and duplication and also of inadequate and uncoordinated responses.

Each crisis is unique, requiring a unique response. There are also many commonalities. Response efforts can draw on core emergency response services such as police, fire, ambulance and emergency health services, as well as the military, but, as discussed in the next section, they also require a dedicated institutional capacity that is linked to the wider process of governance and public management. An important requirement of such a capacity is to mobilize specialized expertise and capabilities for dealing with specific types of emergencies and hazards. Such expertise is often found outside government, including in the private sector, the academic world and in professional and other non-governmental organizations. At times it is only available internationally.

Most crises play out in relatively limited geographic locations, imposing great stress on the response capacity and resources of local authorities and front-line offices of national governments as well as on those of central authorities. Crises can also rapidly assume an international dimension. This includes when they occur along or across national borders or in international waters. Natural disasters, such as a hurricane or earthquake, can often have an effect on several countries at the same time, calling for cooperative responses among the affected countries, including more structured regional arrangements.

The wider international community can become involved in a number of contexts. International intergovernmental organizations have specialized expertise that can be made available to national governments and many have logistical capabilities that can be deployed rapidly. This is also true of international non-governmental organizations, notably those that are focused on providing emergency responses and humanitarian assistance. Foreign governments have a consular interest in their nationals who are in a country when an emergency occurs, and individual citizens of foreign countries may become involved in emergency responses for a number of reasons and in a number of ways.

While crises and emergencies put all systems of governance and public management under stress, this is particularly true of developing countries, which as a rule are significantly less well placed to prepare for crisis contingencies or to respond when they occur. For these reasons, the international community is more likely to become involved in responding to crises in developing countries, placing enormous challenges of consultation and coordination on national governments that for both structural and
circumstantial reasons are not well placed to cope either with the crisis or the international response, however well intentioned. By the same token, recovery efforts can also involve measures to rebuild or strengthen national governance capacity generally as well as in the area of contingency planning and crisis response specifically.

The next section discusses some of the challenges to governance and public management that are posed by the diverse and open-ended nature of major crises.

**Crises, public administration and governance**

The management of crises and emergencies has received increasingly systematic attention in recent years as a public administration and public management concern. This section provides a brief account of the emergence of crisis and emergency management as a distinct field. It then considers some of the major elements of national and international crisis management capacity and response, with a particular focus on their governance and public administration dimensions.

**The emergence of public sector crisis and contingency management institutions**

In many respects crisis management is not a new field. With the advent of Total War, engaging civilian populations as well as military combatants, European governments in particular developed civil defence mechanisms during World War I and especially World War II, much of it to protect civilians from aerial bombing. This was expanded during the Cold War, as governments addressed the probable effects of airborne nuclear attack – which the bombings of Hiroshima and Nagasaki at the end of World War II had demonstrated would be widespread and indiscriminate – on their civilian population and infrastructure and on the operations of government itself. Most developed countries established dedicated emergency preparedness organizations during this period and prepared contingency plans that involved all levels of government and civil society. One of the enduring legacies of the Cold War period was the Internet, which at least in part grew out of planning for restoration of the United States telephone system after a nuclear attack (Rowland 2006).

From the beginning, emergency preparedness was also concerned with non-military hazards, and many societies have experience of dealing with natural and public health hazards and disasters that dates to ancient times. In practice most of the crises that actually required emergency responses, especially in developed countries, involved major accidents or natural disasters. The emphasis shifted even more in that direction with the end of the Cold War in the late 1980s and the reduced apprehension of nuclear conflict. At the same time, the approach to crisis management became more systematic in the wake of a series of well-publicized industrial accidents and natural events.

Another driver has been globalization of transportation and communications, which has accelerated the movement of people, with associated hazards such as easier spread of infectious diseases, but has also raised awareness of disasters in previously isolated parts of the World. In addition, it has enhanced both the pressure on the international community to become involved in crisis responses and its ability to do so. Global warming and associated climate change are also creating a new category of wicked problems and may be linked to an increase in severe weather disasters in some regions.
and severe drought in others. A slow-moving variant with potentially profound implications is rising sea levels, a global phenomenon. At the same time, in the past decade there has been a renewed concern with security-related crises, in particularly those involving terrorist attacks: i.e., the use of violent means by non-state actors in pursuit of political goals, generally directed at civilian targets.

The international community has assumed a major role in crisis response. A number of international organizations, notably agencies in the United Nations system and international non-governmental organizations (NGOs), were established to deal with the refugee and related crises that existed in the aftermath of World War II. (Some organizations, such as the International Committee of the Red Cross (ICRC), have much earlier origins.) These have continued to grow in number, range of functions, expertise and logistical capability, and such international organizations have assumed an important role in most major disaster situations. As discussed in one of the chapters in the project group’s book, the United Nations has created an Office for Disaster Risk Reduction (UNISDR), which co-ordinates the ten-year Hyogo Framework for Action, ending in 2015, which provides a common international framework for national disaster response efforts, including the development of a global and regional platforms for disaster risk reduction and fostering of resilience in the face of disasters. UNISDR and other international organizations have also given priority to developing global and national data about disasters and their effects.

International linkages are particularly important for developing countries, where national public management capacity is frequently weaker in general and more vulnerable to the effects of a crisis. As a result, the international community typically plays a significant part in supporting national crisis responses in developing countries, and at times it is called upon to take the place of national governments, notably in failed state situations. Bilateral aid donor organizations are also involved in providing humanitarian assistance and emergency relief as well as supporting longer-term reconstruction efforts. Coordinating and targeting these diverse efforts is one of the major challenges for crisis management in developing countries.

**National crisis and contingency management capacity**

An earlier section of this note discusses the complexity and open-ended characteristics of the environment in which a national crisis and emergency management capacity operates. This section considers some of the requirements that such a capacity should meet and some of the institutional and functional issues that need to be addressed, situating it in the larger context of governance and public administration. There is no single formula for designing such a capacity, although many governments (e.g., Canada 2011) organize their activities under five broad headings, which describe a crisis and contingency management cycle:

- preparedness;
- prevention and mitigation (eliminating or reducing risks);
- response;
- recovery; and
- evaluation and learning, providing a basis for planning and preparedness for the future as well as for measures to reduce future disaster risks.
Each stage calls for high-level government decision-making, engaging the institutions and processes of governance. However, a central focus of this paper is preparedness, as many of the most crucial decisions are taken in the advance deployment of resources and creation of processes – and a supporting culture – that are activated when a crisis occurs. These advance decisions can have a major influence on the effectiveness of decision-making under stress when a crisis occurs and can make the difference between crisis and disaster.

In each country, therefore, a national crisis and emergency management capacity must be integrated with the national system of governance and public administration while being in a position, when called upon, to move effectively into action – with varying degrees of autonomy, according to the circumstances. The details will vary between countries according to their historical experience, the nature of hazards they confront and the nature of the governance and administrative environment. With this general caveat, however, it is possible to identify a number of elements that accumulated experience suggests should be considered and related issues. These are discussed in this section of the note.

Given the relatively new state of the field and variations among national systems of governance, the project group has not attempted to identify a single governance or administrative model for dealing with crises and disasters, but the discussion that follows does reflect an implied – and very broad – underlying cycle of interlinked policy and implementation issues. These address four dimensions of crisis and contingency management, each important in itself but also dependent on the others to be fully effective: the institutional environment for crisis and contingency management; management of internal and external relationships and partnerships; administrative considerations; and a supporting organizational and political culture.

The institutional environment for crisis and contingency management

Institutions, whether rooted in the constitutional and legal framework or in social norms and behaviours, provide the context and the processes for governance and public administration; they also provide the linkages and common elements of these two closely related spheres. This is at least as much the case with respect to crisis and contingency management, which at different times can be both a specific sector – a sub-system – of public management and one that potentially engages the governance system as a whole. Institutional issues include both the design of organizations and their functioning; a critical element is decision-making: in advance of crises, under stress during a crisis, and in the aftermath. Institutions and processes need to be situated within the constitutional and political environment of a country but – recognizing that weaknesses and vulnerabilities are often strengths carried to excess – they also need to accelerate or at times even to short-circuit features of that environment to ensure that crises are managed, even more so in the face of disaster.

A number of linked functional elements can be identified that are relevant to this discussion. These include organization, planning and decision-making, but also legality and leadership. The need to embed a crisis and contingency management capacity in the national governance environment without being its hostage is a challenge for any system of government, but it is one that is particularly challenging for developing countries.
Organizing crisis and contingency management as a policy and management sector – In public policy terms, it is useful to think of crisis management as a horizontal policy sector, with a core of institutional actors and related communities and networks, a broad agenda, and a policy cycle involving problem definition and agenda-setting, an array of available policy instruments and decision-making with respect to their use, a variety of implementation mechanisms and an evaluation capacity. The sector is horizontal in the sense that it has a core set of institutions and processes that operate on behalf of the government as a whole – especially in the context of contingency planning, anticipatory deployment of resources and post-crisis evaluation and learning. During a crisis situation they must be able to mobilize the resources from and work in close collaboration with any part of the public sector as well as with a potentially wide range of actors from other levels of government, the private sector, civil society and the international community. A basic issue, then, is the extent to which the institutions and processes of crisis management are integrated with “normal” governance mechanisms, as opposed to representing a separate “dedicated” capacity.

Contingency planning and risk management – An important state function is to identify potential hazards and locations where crises and emergencies might occur, to anticipate their likely nature and occurrence, and to prepare plans for dealing with such contingencies. This involves making use of historical experience and evaluations of past crises and of risk management methodologies; it also calls for consultation and collaboration with those potentially affected and likely responders both inside and outside the public sector. A vitally important related function is to put in place adequate measures to prevent hazards and risks from materializing as crises and to mitigate their effects when they do occur.

High level capacity for decision-making and management under pressure – In any jurisdiction, a major challenge is the fit between crisis management planning and implementation and the broader governance environment. Major crises engage the government as a whole, and decisions relating to crises need to be legitimate and effective, carrying the full weight of the government without being held back by routine procedure. Decision-makers also need to be assured that their decisions are informed by timely and accurate information and that they are expeditiously conveyed to those who are affected by them, especially outside government channels. A fundamental question best settled in advance is whether crisis decision-making should be an accelerated version of standard procedures or whether it requires its own “fast track.”

Availability of necessary legal, regulatory and administrative resources – Notwithstanding the urgency of crises, basic tests of legality and constitutionality need to be met while responding to them. This points to the establishment of standing emergency powers legislation and regulatory instruments that can be invoked when required as well as monitoring mechanisms to ensure that they are lawfully applied. Similarly, there needs to be a contingency framework for authorizing the rapid release of financial resources and mobilization of necessary human, material and information resources. Effective accountability after the fact is a related requirement, especially with respect to the treatment of private citizens and public resources.

Leadership and the allocation of crisis and contingency responsibilities, including between different levels of government – The creation of dedicated crisis
management institutions and crisis-related government decision-making mechanisms should be complemented by identification and empowerment of political and administrative leadership with clearly-identified roles and responsibilities. It is also important to have a well-understood division of labour and effective working relationships among national, regional and local governments as well as within each level of government, especially in situations where organizations and individuals are not used to working together. This includes clearly agreed intergovernmental consultative and coordination mechanisms and identified interlocutors who are able to speak authoritatively for their jurisdictions and have ready access to their own government’s leadership and decision-making bodies. Particular attention needs to be paid to coordination issues in federal states, where “lower” levels of government have their own independent standing from the national government and there can be duplication of – or gaps among – resources; while a vulnerability, this redundancy can be also be an asset in crisis situations.

The special circumstances of developing countries – Countries at all stages of economic development are faced with a continuing need to review and reform their national governance and administrative institutions. This is particularly the case with developing countries, where their institutional governance capacity, including often a disproportionate reliance on the military, is both a reflection and a cause of their state of development. As already noted at several points, responding to disasters is a major challenge for many developing country governments, at times straining them to the breaking point. This also imposes additional demands on the international system, which can act to fill voids created by a disaster but which can also be called upon to play a role in restoring the national government itself.

Management of internal and external relationships and partnerships

Managing relationships and partnerships lies at the heart of governance and public administration. Such relationships can be within government and with other governments, as well as with the private sector and civil society, individual members of the public, and internationally. Often they bring together organizations and individuals who are not used to working together and are subject to different rules and organizational cultures. Managing such relationships and partnerships involve identifying those who are potentially affected in a crisis and those who can be part of the response, agreeing on division of labour, leadership roles and operating procedures, coordination and consultation, and collection and sharing of information. In a crisis situation, these relationships will be *ad hoc*, for the duration of the crisis and as long as needed in its aftermath; as with governance institutions, however, they involve a combination of temporary use of permanent arrangements, brought into service to meet the needs of the occasion, and temporary arrangements established to meet an immediate purpose.

Local community responsibilities – Crises and emergencies generally are played out in a defined area, and often they are confined to a single community. Local community governments and civil society institutions, including emergency response and medical services, typically are heavily involved, to the extent that frequently they are on the front line, especially where significant numbers of local residents are displaced or otherwise affected and property is damaged. They must deal with public health impacts, supply chain difficulties and the wider impacts on the local economy. They are a major
source of information for decision-making in higher levels of government and for other outside bodies, including the international community. They therefore need to have their own emergency response capacity and contingency plans, including a clearly understood division of labour with other levels of government and with non-governmental actors. While they are most knowledgeable about and sensitive to local circumstances they may not have the technical or other resources required to address a crisis situation, especially when their own capacities are severely challenged.

**Role of the private sector and civil society organizations** – Private businesses and civil society organizations, as well as individual residents, are usually among those affected by crises and should be aware of contingency plans that might affect them. They can also play a central role in responding to crises, with respect both to their own situations and to the community at large. They have a particularly important role in mobilizing and organizing volunteer responders and in obtaining financial and other contributions from private individuals and organizations in communities to supplement public resources.

**Informing and supporting the public** – One of the most vital functions of any emergency response is keeping the public fully informed. This requires ensuring that there are adequate communications channels as well as informed and authoritative spokespersons. A central goal of emergency response efforts is to enable members of the public to become as autonomous as possible as quickly as possible, and effective communications is an essential part of this effort. The communication needs to be two-way, ensuring that the circumstances and needs of individuals, families and the community in general, however defined, are known to decision-making public authorities and their perspectives and advice are drawn upon as fully as possible.

**International contacts and awareness** – Modern communications and social networking technologies mean that an emergency in any part of the World instantly becomes a global event. Managing media interest becomes a major challenge for crisis managers but it also represents an opportunity to mobilize international attention and support from governments, NGOs and the global public. To the extent that foreign tourists or other nationals are present in crisis zones, their governments have a consular interest that needs to be managed. Individuals and communities with personal and family ties with an affected country who live elsewhere are interested in determining the status of people and areas that they know and also in providing assistance. A different dimension occurs when the crisis is near or straddles international borders or when it creates transnational environmental risks, the most open-ended case being hazards to the atmospheric environment or international waters.

**Coordinating foreign and domestic aid agencies** – Major disasters in all countries generate responses from non-governmental, governmental and intergovernmental aid agencies. This creates coordination challenges that are significant but that can also be anticipated in national contingency planning – pointing to the desirability of involving potential international partners in the planning process. In the case of developing countries in receipt of official development assistance, it compounds the coordination challenge that is an endemic feature of their economic and governance situation. In crises that have attracted significant international attention this can impose severe strains on national governance and public management capabilities, and there is a high risk of
international agencies – and in the case of institutionally weak or failed states, the international community as a whole – circumventing national institutions, with potentially serious longer term implications.

Administrative considerations

The core of crisis preparedness and response lies in the deployment and operations of public administration organizations and resources. These provide services at the front line, backroom support, and vital linkages to decision-makers and to the wide and complex range of others involved. The full range of administrative processes and resources are engaged, requiring effective use of public management and development administration practices. At the same time, the circumstances of an emergency response, involving a massive infusion of people and resources in a short time into a situation that could not be precisely anticipated in advance, imposes enormous strains and risks on the administrative machinery.

Decisions and actions taken in advance – in the context of emergency preparedness and mitigation – can have a significant impact on the effectiveness of the response when a crisis occurs. Based on risk-based planning, this includes organizational decisions with respect to the balance between tailored emergency response mechanisms that are activated when required and making provisions for “mainstream” public sector resources to be diverted to dealing with an emergency when called upon to do so. In either event a further challenge is determining when the acute requirements of a crisis have been met and administrative machinery can return to the status quo ante or be replaced by more permanent recovery-oriented arrangements.

Attention to technical considerations and expertise – Responding to crises requires mobilization of extensive technical knowledge and logistical capabilities; specialized expertise needs to be brought quickly and effectively into the generalist political and policy-making environment, calling for close collaboration between groups who often are not used to working together. At the most basic level there are issues of vocabulary and intellectual paradigms that need to be reconciled. There are also major challenges in ensuring that political and public expectations are conditioned by technical reality, but also that technologists are sensitive to the demands of situations where there is an urgent pressure to satisfice rather than optimize. Local government and community institutions face particular issues in this regard as they generally do not have the range of required skills and knowledge immediately available to them and must rely to a considerable degree on senior levels of government and outside resources.

Adequate record-keeping and information management – Good documentation of decisions and their implementation is an essential feature of good governance under any circumstances, providing the basis for effective administration, for internal and external accountability, and as a basis for evaluation after the fact. Crisis situations put considerable pressure on record-keeping and information flows, especially to the extent that these move outside of normal channels. The risks are compounded by major increases in the numbers of actors and the complexity of relationships that are brought into play in a crisis as well as by a major inflow of public and private financial and material resources, many of them originating outside the country. Adequate documentation is essential to ensure that decisions are carried out (and how), that
resources are administered efficiently and transparently, and to provide a basis for accountability and evaluation when the emergency has abated.

Governments and companies also hold records containing personal information of citizens as well as business records. These include registrations of birth, nationality and residence, health and education records, tax records, driver’s licences, business incorporations, property registration and ownership, criminal and other legal records, banking and credit information and many other records the loss of which could be highly disruptive to the daily lives of citizens and residents as well as to business and government. Increasingly this information is held electronically, much of it in large-scale databases that in many ways can be regarded as critical infrastructure, which creates additional vulnerabilities although also providing opportunities for off-site back-up. Assessing information risks and establishing protection and recovery plans is an essential part of crisis management.

**Financial management and avoiding fraud and wastage** – With the short-circuiting of regular procedures and oversight mechanisms, the potential for corruption and wasteful implementation is compounded in crisis situations by an order of magnitude, especially (but not just) in countries where these issues already pose a systemic challenge. Again, this is an area that needs to be addressed in contingency planning, with a view to having appropriate and realistic emergency monitoring and oversight mechanisms in place. It is also important to ensure that emergency financial and procurement procedures are regularized as quickly as possible and to ensure after-the-fact audit and tracking of spending and resource use during the emergency. This is another area where the international community can play a constructive role in the planning process.

**People management** – Disasters frequently involve major population displacement, sometimes for extended periods, requiring housing, food, sanitation and attention to physical and psychological needs generally in ways that are not ordinarily a concern of public administration. This can also affect those involved in responding to an emergency and their families. In addition, relief workers, both public employees and those coming from other sectors and localities need to be provided shelter, food, protective clothing and equipment. These requirements go well beyond the ordinary human resources management functions of public administration.

**Training and rehearsals** – The likely nature of and response to many emergencies can be anticipated, at least their broad lines, especially those involving accidents or natural hazards. Risk analysis and advance contingency planning are a critical part of an effective response, when called for, but preparedness also requires advance communication of emergency procedures to the public in general and to those most likely to be affected by a crisis or to be involved in responding to it. In the latter case in particular, attention to training in emergency procedures is highly desirable, as well as test runs and rehearsals, especially of high level monitoring and decision-making mechanisms and other situations requiring coordination among groups who do not normally work together. Some jurisdictions also have emergency awareness and training sessions for the population in general and for both those at risk and designated responders.
**Role of the military** – Although the scope of this project does not relate to emergencies in war zones and those arising directly from armed conflict, military action can often result in civilian emergencies, including major displacement of civilian populations and creation of food, health and environmental crises, both in the conflict zone and in neighbouring areas. By the same token, the logistical capacity to deal with emergencies is often found in national military and security forces, so an important dimension of crisis management is the relationship between them and civilian authorities. A key working relationship is with civilian first responders, notably fire, police and ambulance services. Many countries have legal or even constitutional requirements for the military to assist civil authorities when called upon to do so. The terms of such assistance need to be clear, however, including financial arrangements. There are also issues about what role the military should play in recovery from a disaster and when it should return activities to civilian agencies and control.

**The special case of fragile states** – States with weak or limited public institutions are particularly vulnerable in crises, creating a lower threshold for the tipping point when a crisis turns into a disaster. In some cases that vulnerability is a contributory factor to the severity of a crisis. This can result in the temporary assumption of state administrative functions by non-state actors, including civil society organizations but also international organizations. These situations are particularly challenging for neighbouring countries and the international community, both during a crisis and in restoring national institutions and capacity afterward.

**Organizational and political culture**

A country’s ability to deal with crises and disasters over time involves a balancing act – a culture of continuous learning from experience, change, and growth but also a steady hand of continuity. All societies have a history of dealing with disaster and many have deeply entrenched cultural values of preparedness and community response. These are among the foundations of an effective crisis and contingency management capacity. There also needs to be a recognition that existing crisis management organizations and processes have past experiences and solutions embedded in them – whether or not they remain appropriate, it is important to understand them either to make them function as intended or to make changes.

**Evaluation of past events and policy development for future contingencies** – Political and policy attention to crisis management is at its greatest during a crisis and its immediate aftermath. At the same time, the ability to take stock of the response to a crisis once it has passed and in light of that experience to adjust organizational and coordination arrangements, contingency plans and legal and financial frameworks are a crucial part of preparation for future crises, which will inevitably occur, even if their nature and timing cannot be predicted. Again, the dilemma is how to reconcile the need for dedicated government machinery and resources with the open-ended and unpredictable nature of the requirement for contingency planning. In this respect crisis management is a microcosm of the universal challenge of keeping public sector management both stable and under continuous review.

**Conclusion – learning about crisis and contingency management**
Every crisis potentially offers insights for later learning and improvement by both the governments involved and by others who are affected or might be in the future. Comparative study can provide valuable insights but also presents methodological and terminological challenges. As a practical matter, as well, each national system has its unique features and problems and is asking different questions of international experience. The project group has therefore adopted the approach of sketching the territory and its topography rather than prescribing a single model. It has sought to provide a structured account of issues to consider and approaches to dealing with them. Their relevance and utility will depend on the reader and the national circumstances that they are working in.

In order to make international experience more accessible, the project group’s publication is divided into four main sections, each approaching crisis and contingency management from a different starting point. At the same time, authors have been encouraged to address as many of the issues in this paper as they consider relevant and possible, through whichever lens that they have adopted. All authors have been asked to conclude their papers with a summary of lessons for an international audience, and these provide the basis for the concluding chapter of the book.

The four perspectives into which the project group publication is divided are:

1. *Cross-cutting issues in crisis and contingency management* – These can be of a theoretical nature or grow out of the practical experience of national or international institutions and individual disaster cases. As a rule it is assumed that they are issues common to most, if not all, institutional actors and categories of disasters. Chapters have been submitted on records management in crisis and post-crisis situations; managing uncertainty in regions of seismic risk; and the role of crises in stimulating institutional and administrative change. Topics that have been suggested for follow-up study include: government learning from crises; risk and crisis management; community self-organization in time of crisis; and disaster communications.

2. *International collaboration and institutional capacity* – This is potentially a vast topic and in the longer run warrants attention on its own. International collaboration raises the same range of issues as at the national level but with the added layer of complexity that the international governance regime is less well developed and has considerably weaker authority than nation states and indeed is based on them to a considerable degree. Chapters in the publication discuss: the role of United Nations system in disaster management; use of space technologies in crisis management; a comparison of the international role in the Japanese triple disaster in 2011 and the Haitian earthquake of 2010; and the coordination of humanitarian assistance within donor countries, using the relationship between CIDA and the Canadian military in the response to the 2010 Haitian earthquake as a case study. One suggested area for further study is the development of regional coordination arrangements, especially in response to natural disasters.

3. *National institutional capacity for crisis response* – Each country has a structure of emergency planning and response institutions, legislation and processes, and every national system potentially has insights to offer an international audience. Authors have been asked to include a number of elements in their accounts of
institutional arrangements in a given country, including: the national disasters agenda and other formative influences on national institutional capacity; national public sector crisis management institutions; established processes for managing crises; role and interaction of key actors, including those outside government; relationship with and role of the international system; and public administration issues, including finances, accountability and countering corruption, skills and training, information management, and issues of development and administrative capacity-building. Every country is a potential subject for such a study, for both its own and comparative purposes. The project group’s publication includes chapters on national crisis management institutional arrangements in Poland, India, Taiwan China, Japan, Korea and Ghana.

4. Disaster case studies – Case studies provide concrete illustrations of what can happen in an emergency or disaster situation and the lessons learned can be particularly compelling, especially where there is loss of life. They complement and highlight the other starting points in the publication, but they also offer insights into the particular requirements of different types of disasters situations. The authors of chapters have been asked to provide a brief narrative account of the disaster in question and then to contextualize the response to it by describing and assessing the national institutional arrangements, followed by a discussion of the role and interaction of key domestic and international actors, and concluding with a presentation of administrative issues that arose, including when state institutions were affected by the disaster themselves.

Disaster case studies in the project publication include: a comparison of accidents in three different transportation sectors in Italy; the L’Aquila Earthquake in Italy in 2009; a massive mudslide in Rio state in Brazil; flooding in four neighbouring countries in central Europe; and three chapters discussing different aspects of the Japanese triple disaster in March 2011 – the need for a whole-of-government approach in planning and response, top-level central government group decision-making dynamics, and the challenges faced by local government.

A major conclusion of the project, however, is that there is more to be understood in an emerging and evolving field of public administration and its relationship to governance, both in general terms and in any given country. In that sense, the project group’s publication is just one step in a continuing exploration.
Annex – the academic study of crisis and contingency management

A Project Group goal has been to promote research and publication in this field, with a view to making the study of crisis management an integral part of national and international research in the field of public management and governance, drawing on the insights of both academics and practitioners. The IIAS is well placed to promote research and publish the findings through IIAS monographs and articles in the International Review of Administrative Sciences (IRAS). The Project Group on Security and Safety has also sought to contribute to other aspects of the work of the IIAS and its members, in particular the annual IIAS Congresses in 2011 (Lausanne), 2012 (Merida, Mexico) and 2013 (Manama, Bahrain). It will hold its final meeting in Ifrane, Morocco in June 2014.

This section provides a summary of literature that was identified as potentially useful in a survey of a number of journals in the field at the beginning of the project group’s work in 2011, both as a reference point for the Project Group and as an aid to further research by others. It makes no claim to be definitive, but it does present a range of sightings of crisis and emergency management from a number of perspectives. It is hoped that readers will help to expand and refine the list so that it can become a resource for governments and researchers alike. The books and articles are surveyed thematically in this section and are consolidated in a bibliography at the end of the paper, along with a list of journals. The note does not systematically reflect publications in the past two or three years and in that respect needs to be updated. It has not been decided whether a version of this bibliography will be included in the project group’s publication – alternatively it may be posted on the IIAS website. Suggestions for updating and possible uses are welcome.

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In the past quarter century there has been a growing literature on management of crises, emergencies and disasters. There are a number of general texts and books of readings (Fink, 1986, Comfort 1988, Quarantelli 1998, Schwab 1998, Haddow 2003, Canton 2007, Handmer and Dovers 2007). There have also been bibliographies (Leivesley 1982) and efforts to take a broad retrospective view (Coleman 2006, Comfort 2007) as well as to take a long look forward (Quarantelli 1996).

An important strand is commentaries on lessons learned from individual disasters. Some of the more recent include: 1984 Bhopal disaster (Jasanoff 1994); 1993 Sakhalin earthquake in Russia (Porfiriev 1996); 1998 ice storm in Canada (Scanlon 1999); 2003 French heat wave (Lagadec 2004); 2004 Madrid train bombing (Lopez Caressi 2008); 2004 Indian Ocean earthquake and tsunami (Telford and Cosgrave 2007); 2005 Hurricane Katrina (Eikenberry et al. 2007, Farazmand 2007); the 2009 flu pandemic (French and Raymond 2009); and the 2011 Japanese triple disaster (Funabashi and Takenaka 2011), the latter including a study of a crisis in governance (Funabashi 2011). Disasters have been studied comparatively (Katrina and the 2003 Columbia space disaster – Donahue and O’Keefe 2007) and historically (1755 Lisbon earthquake – Dynes 2003a), looking as far back as Noah’s flood (Dynes 2003b, Ryan and Pitman 2000).

Authors have also considered the common elements in categories of disasters, including
protection of tourists in coastal storms (Burby and Wagner 1996) and planning for hurricane relief (Horner and Downs 2010).

Several authors have written about the emergency planning and response situation in individual countries, both developed and developing. Many provide a general overview, while others comment on national particularities. A number may need to be updated and in principle there should be case studies for all countries. Countries covered include: Australia (Britton 1984), Britain (Handmer and Parker 1991), Canada (Toner and Legare 1990), the Greek Aegean Islands (Delladetsima et al. 2006), India (Srivastava 2009), Iran (Hosseini et al. 2009), Israel (Maor 2010), Korea (Kim and Lee 1998), Malaysia (Said et al. 2001 & 2009), Netherlands (Scholtens 2008), Northern Ireland (Birrell 1993), Philippines (Bankoff and Hilhorst 2009), Russia (Porfiriev and Svedin 2002), Turkey (Balamir 2002), and the United States (Tierney et al. 2001). A shorter list of regional studies includes: Canada and United States (Henstra 2003 – one of the few comparative studies), the European Union (Wendling 2010), and the Southwest Pacific (Oliver 1989).

There is a separate literature on experience with emergencies in developing countries, much of it focusing on international assistance in specific emergencies or types of emergency situations. A major concern is food aid (Search 1986), food security (Pingali et al. 2005) and nutrition (Gribble et al. 2011 – which also raises gender issues) in emergency situations, especially in sub-Saharan Africa (Green 1986, Wilhite 2000), including case studies of Malawi (Babu and Mthindi 1995), the Rwandan emergency (Shoham 1996) and famine in Zimbabwe (Munro 1996). Another concern is availability of medical supplies (Helde 1987) and ensuring proper sanitation – an issue in all crises (Harvey and Reed 2005). A related area of study is emergency response and humanitarian assistance in conflict zones in developing countries, including the relationship between humanitarian and military organizations in general (Gordenker and Weiss 1989) and in the specific context of Afghanistan (Rietjens et al. 2009), suicide bombings (Umer et al. 2009) and the aftermath of a terrorist attack (Abdallah et al. 2007). Related to conflict zones is the challenge of dealing with crises in a context of state failure (Debiel and Klein 2002, Brinkerhoff and Brinkerhoff 2002).

A broader context for developments in individual countries has been provided by the changing understanding of threats and hazards at a global level, notably in the context of the end of the Cold War and rise of international terrorist threats (Waugh 1990, Perry 2003, Henstra 2003), on the one hand, and of real and apprehended climate-related disasters on the other (a sub-text of the discussion of many of the weather-related disasters). There is also a significant literature arising from the experience of specialized technical communities in dealing with disasters, including the chemical industry (American Institute of Chemical Engineers 2004), biohazards (Bradford 1994) and oil spills (Cheremisinoff and Davletshin 2011).

There is a considerable literature on crisis or emergency management as a field of study. To a certain extent, this academic research and commentary has been on the margins of disciplines that are concerned with governance and public management, including public administration and public policy (but see Cigler 1988 for one earlier view on the linkages). There is for practical purposes, for example, no discussion of crisis and emergency management in the International Review of Administrative Sciences.
One notable exception is the US Public Administration Review, which has had a number of articles on emergency management and Special Issues on the topic in 1985 and 2007. A number of efforts have been made to generalize about crisis and emergency management, and in particular to address organizational issues. These include: the link to democracy and politics (Platt 1999), designing new emergency response institutions (Gopalakrishnan and Okada 2007), crisis management archetypes (Lalonde 2004), emergency measures and policy planning (Hermann and Dayton 2009), policymaking under pressure (Dror 1986, Pal 2006), effective emergency management (Neal and Phillips 1995) and related issues (Lewis 1988), organizational resilience (Crichton et al. 2009), emergency management field organization (Lalonde 2007) and leadership (Waugh and Streib 2006, Devitt and Borodzicz 2008). An over-arching issue is the challenge of managing resources efficiently and countering pressures for abuse and corruption (Schultz and Søreide 2008).

Complementing the institutional dimensions of crisis and emergency management is a literature on aspects of the emergency management process. Among other areas it looks at: training (Sargisson 1991), implementation of evacuation plans (Dymon and Winter 1993), reconstruction (Chang et al. 2011), and analysis and evaluation (Uhr et al. 2008, Abrahamsson et al. 2010). Related concerns include organizing crisis and emergency management at the local government and community level (Drabek and Hoetmer 1991, Kapucu 2008, Col 2007, Yanay et al. 2011 – a case study of Jerusalem) and the relationship between levels of government (Scanlon 1995, Caruson and MacManus 2006, Eisinger 2006). A number of authors have looked at the crucial area of crisis communications, including: managing public expectations (Dynes 1995), citizen response to crises (Helsloot and Ruitenberg 2004), managing the human psychology of citizen response (Manuell and Cukor 2011), and providing information about mass casualties (Scanlon et al. 2007, Adini et al. 2010). Underlying all good emergency management is effective use of information technology (Reddick 2011) and of information sharing (Schraagen et al. 2010).

References

**Articles and books**


Munro, Lauchlan T. 2006. “Zimbabwe's Drought Relief Programme in the 1990s: A Re-Assessment Using Nationwide Household Survey Data” in Journal of


Journals

Australasian Journal of Disaster and Trauma Studies (New Zealand electronic journal)
Australian Journal of Emergency Management (Government of Australia)
Disasters (Overseas Development Institute)
Disaster Prevention and Management, An International Journal
International Journal of Business Continuity and Risk Management
International Journal of Mass Emergencies and Disasters (International Sociological Association)
Journal of Contingencies and Crisis Management (European Crisis Management Academy)
Journal of Emergency Management (USA)
Journal of Homeland Security (US Government)
Journal of Homeland Security and Emergency Management (USA electronic journal)
Natural Hazards (International Society for the Prevention and Mitigation of Natural Hazards)
Risk Analysis: An International Journal (Society for Risk Analysis)
Risk Management: An International Journal