

## **GLOBAL BLUEPRINTS FOR CHANGE**

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The Global Blueprints for Change contain guidance for working together to improve the capability to identify indicators of physical, social, enterprise, and environmental vulnerabilities throughout the world and to select and implement realistic solutions to reduce them towards acceptable levels.

### **Theme A: LIVING WITH NATURAL AND TECHNOLOGICAL HAZARDS**

#### **Topic A.6: Improving Emergency Management**

**“Improving Disaster Training and Preparation Strategy in Transitional Societies:  
The Case of Creeping Environmental Crises and/or Disasters”**

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# IMPROVING DISASTER TRAINING AND PREPARATION STRATEGY IN TRANSITIONAL SOCIETIES: THE CASE OF CREEPING ENVIRONMENTAL CRISES AND/OR DISASTERS

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## Background

The existing environmental policies in many countries tend to focus primarily on instant environmental crises and/or disasters associated with accidental releases of hazardous materials, oil spills and so forth. Meanwhile, the experience of transitional polities like contemporary Russia shows that the impact of creeping disasters on socio-economic development and environment is no less substantial to say the least. Moreover, the very process of transition adds to existing environmental and other creeping crises. These, in turn, quite often overlap with instant crises, thus blurring the distinction between these and making them both more lasting and expanding. Eventually, a complex mix of multiple emergencies and disasters create compound (systemic) crises.

These developments carry considerable complications for disaster policies and emergency management and call for both researchers and practitioners to develop approaches and policies capable to cope effectively with this most sophisticated kind of crises. It is especially important in prospective terms, given that compound disasters and emergencies are most likely to become more abundant and may eventually come to dominate the national development and national security fields.

## Recommendations for Disaster/Emergency Training and Preparation

1. The existing paradigms of both the environmental crisis concept and environmental disaster policy need rethinking for two reasons. First, because of inefficiency of the existing environmental policy precipitated to a substantial extent by the underlying normative approach and ALAPA principle focused on formal environmental quality rather than environmental and human health issues. Second, given that the existing models of environmental crisis management focus on instant or fast-burning emergencies rather than creeping or slow-burning crises ('t Hart and Boin, 2001).

2. Many simulations, field exercises and contingency planning revolve around different scenarios of development of *expected* events and suggest a set of *in-advance* measures to either prevent or mitigate *the future* disaster. Intended as an answer to “what if?” questions, such models comply with the classical anticipation concept of disaster management and are naturally always *proactive* in their essence. Of course, there is good reason for a proactive attitude given that prevention tends to be more efficient than response measures. However, creeping or slow-burning crises, such as a national environmental crisis in Russia should be viewed as an *actual or ongoing process*, which failed to be forecasted or prepared for beforehand.

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3. This implies that the anticipation model is not valid anymore and one must switch to a perpetual crisis concept and the accompanying resilience model of disaster management, which, in turn, involves another type of decision making for handling “standing-in-the-middle-of-the-road” situations with the relevant measures lacking in existing emergency plans. The abovementioned does not automatically mean that a set of disaster management measures and contingency plans used to prepare for and handle instant emergencies are no longer valid for preparation for creeping crises. The point is that practitioners should consider the reality of both slow-burning and fast burning situations or their combination as a compound crisis (Porfiriev, 2001).

4. Consequently, a planning and management strategy for a creeping and/or slow-burning crisis (and compound crisis as well) should be *both proactive and aimed at coping*. They should consider pre-, trans-disaster events and coming disasters thus marrying in-advance preparedness and emergency response, typical for instant/fast-burning crises, with alleviation and mitigation measures needed to cope with creeping and/or slow-burning crises.

5. More specifically, an integrated approach, which combines risk assessment and ALARA principle as an advanced technique with traditional normative policy based on maximum permissible limits (MPL) characteristics, might serve as an efficient tool for decision support in transitional societies. This can help decision-makers set environmental policy priorities and developing a fitting disaster and/or emergency management strategy (see Porfiriev, 1999).

6. While applying the integrated approach to disaster management, a decision-maker should piece together the so-called explicit and implicit risk assessments. The former focuses on measurements of and judgements on the level of pollution and severity of its impact on human health impact carried out by specialists (environmental health, occupational and safety health experts and so forth) while the latter reveals public perceptions of risk (both by different social groups and communities as a whole).

7. Such a combination of these two kinds of assessments provides for one more dimension of the integrated approach: it helps to construct a more informed opinion about the hierarchy of environmental risks to human health and the respective priorities of disaster prevention and/or coping strategies through risk communication policy. This is worth stressing given the objective limits and uncertainty of explicit or “professional” risk assessment, which often involves uncertainty precipitated by a limited or even minimal scientific knowledge about new, poorly understood subjects which are difficult to comprehend (see Lagadec, 1997).

8. In addition, given complexity and costliness of collecting and processing of the ‘dose-response’ data a decision maker quite rarely can obtain quantitative risk assessment ready for use in advance, which makes efficient disaster preparation more problematic. This is an overwhelming issue for managing creeping and/or slow-burning disasters as well as compound or systemic crises, in particular those in the area of environment and public health. At the same time, one should not overlook that using explicit risk assessment in relative terms, for comparing rather than weighing of risks, really facilitates more advanced and substantiated setting of crisis policy priorities.

## REFERENCES

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