



EMERGENCY PREPAREDNESS CAPACITY BUILDERS

# **EPCB Self Assessment Diagnostic Guideline**

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# EPCB Self Assessment Diagnostic

## Guideline

### Introduction

A stadium fire. A shaped charge breaching a dam wall. A toxic release at a vulnerable congregation hub. Explosions at an iconic site. A ferry sinking because of poor design; improper work practices or just by being overcrowded. A leak from a factory into adjacent dwellings. Floods and landslides which wash away shanty towns. Fires at the urban-forest interface. Crowd crush incidents. Earthquakes which destroy poorly built homes and disrupt vulnerable lifelines. Why and how do these disasters occur? How can we do better to do something about them?

Disasters do not “just happen”. They are neither natural nor inevitable. Many are characterized by symptoms of inadequate management such as:

- a) relying on routine capabilities to provide a sufficient response in an extraordinary context;
- b) inadequate problem definition;
- c) working in isolation;
- d) relying on approaches from the past;
- e) a hasty and narrow pursuit of economic development;
- f) focusing resources on the hazard event and not the prevention opportunities; and
- g) focusing resources on the hazard event and not the impact implications.

These symptoms indicate failures of the key performance tests for good emergency planning - about **your state of knowledge and its application**: considerations around what you ought to know (or be reasonably expected to find out) about risks and their treatment.

This guideline is about what characterizes good emergency planning and how it might be assessed. We emphasize as a first principle the importance of the planning process over the 'plan as a document' approach. While this is not to suggest documentation is unimportant, it is to suggest its proper place is as a supporting record of arrangements and enabling processes. Of itself it does not constitute sufficient evidence of performance. This emphasis on process is fundamental. Planning is an active verb. Plans should be dynamic products - supportive outputs. The outcome is preparedness - a state (of being).

This distinction between plans and planning is well reinforced by Enrico Quarantelli, a doyen of disaster preparedness who defines (disaster) planning as “a process ... which involves all of those activities, practices, interactions, relationships, and so forth, which over the short term or long run are intended to improve the response pattern at times of (disaster) impact”. (Quarantelli, 1987:15) If an initial question is 'should I place significance on a plan?' we suggest the answer is **'yes...but'** only if the plan is derived from a dynamic, ongoing, iterative process.

Knowledge of disasters has been heavily influenced by reference to three key fields of information - time location and hazard agent (e.g. The Great 1906 San Francisco Earthquake). This tradition is significant in several ways. In the case of 'industrial' disasters, until recently, it has not identified the company involved; and in the case of 'natural' disasters focus is on the hazard agent. A perception develops of disaster caused by the fire, the flood, the cyclone, the “wall of energy” - the specific and particular 'externality'.

The dominant model (paradigm) still has disasters being caused by hazards. There is recognition of impact but this recognition is generally couched as being due to 'man or his works' being in the way of the hazard agent. The scientific study of hazards has largely driven the way we view and manage risk. This orthodox paradigm continues to be advanced in leading forums. These orthodox interpretations of disasters are characterized by the “sense of causality or the direction of explanation ... from the physical environment to its social impacts” (Hewitt, 1983:5). Additionally, the attractiveness of the 'God as cause' thesis has not been lost on those who can see in it a reasonable basis for either liability reduction or the promulgation of ignorance.

Many current emergency management processes are historical legacies of narrow approaches. Some are reactions to events. The "my turf" sensitivity of organizations with historically derived responsibility for safety defined in relation to particular hazard agents (such as fire) has reinforced a focus on hazard agents and a set of general and widespread assumptions around the belief across communities at risk that “they will rescue me”. These assumptions should be challenged - to believe them increases vulnerability. We can not reasonably expect to do today's job with yesterday's methods and be in business tomorrow. In response to pressures for change, approaches to emergency management need to better meet people’s needs. Some of the key shifts needed are summarized below:

<b>FROM only</b>		<b>TO including</b>
Reactive capability	⇒	Proactive approaches
Hazard response	⇒	Risk management
Science driven	⇒	Multi - disciplinary approach
Vulnerability assessment	⇒	Resilience building
Instruction to	⇒	Empowerment of
Dependence on	⇒	Self-Reliance
Planning for people	⇒	Planning with people
Communicating to people	⇒	Communicating with people

**Table 1: Required shifts in emergency management thinking**

These shifts involve a performance migration beyond ‘responding to events’ to embrace the broader set of issues associated with ‘risk and its management’. This issue set involves a focus on vulnerability, not just hazard – seizing on vulnerability as both an indicator of risk and a “window of opportunity”. The purpose of vulnerability assessments is to focus on capacity building opportunities. These shifts are fundamental in nature, involving paradigm shifts which will impact the culture of organizations and the safety of people.

**Towards emergency risk management**

At a general level, risk management is sound (systematic and thorough) problem solving. A sound problem solving approach to incorporating stages of scoping the boundaries of the opportunity or problem; finding out about the issues within those boundaries; and making decisions about what to do about seizing the opportunity or solving the problem. Similarly, a risk management approach to emergency management uses a broad, systematic and rigorous approach.

Management	Emergency Risk Management
Problem Definition	Identify Issues & Establish Management Framework
Research	Identify & Characterize Hazards and Vulnerabilities
	Develop Evaluation Criteria
Analysis	Profile Risks
Decision Making	Evaluate Risks
Implementation	Identify, evaluate and implement Capacity Building strategies

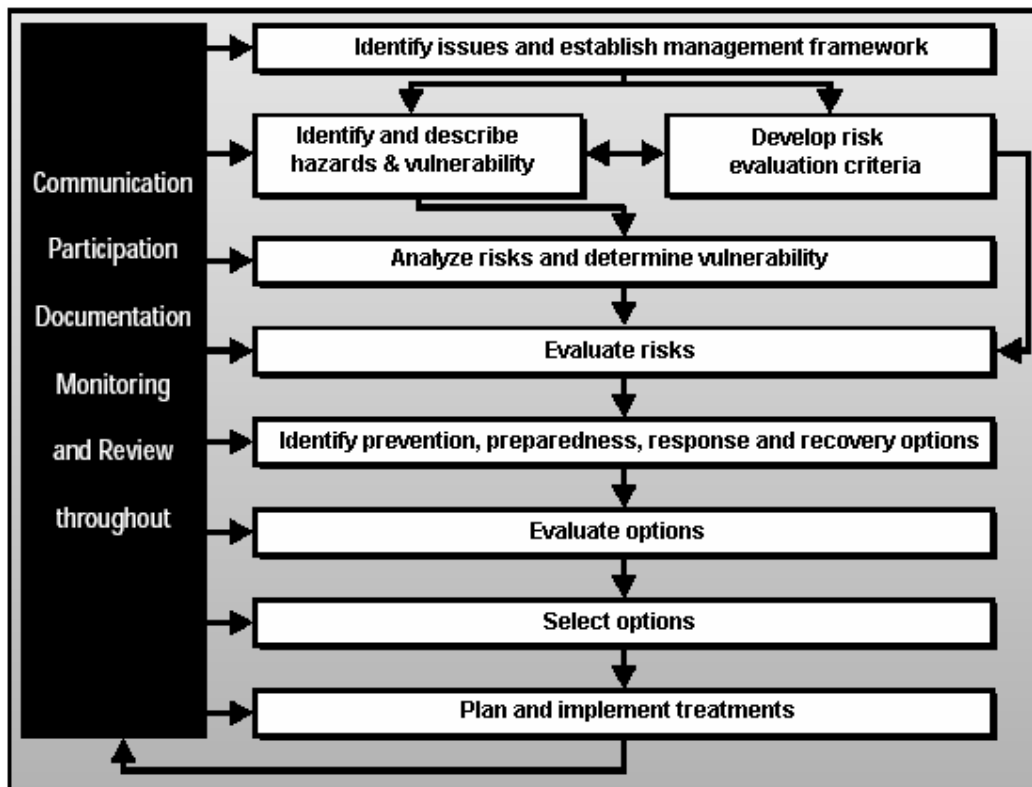
**Table 2: The Alignment of Problem Solving and Risk Management**

In emergency management we are switching from an emphasis on response and recovery activities for specific events to an emphasis **on a range of measures to manage risks**. The approach requires clear recognition of distinctions between hazard and risk:

- Hazard, as “something” with the potential to produce harm.
- Risk, as a concept used to give meaning to “things, forces or circumstances” that pose a danger.

Descriptions of risk are typically stated in terms of likelihood of loss (from a hazard).

Emergency Risk management is not merely a tool for analysis / assessment. It is **a framework for the systematic application of procedures and practices to the tasks of identifying, analyzing, evaluating, treating and monitoring risk**.



**Figure 1 Emergency Risk Management Framework** (Source <http://emergencyriskmanagement.com> )

Successful problem structuring is a crucial first step in developing successful solutions. The management priority is how best to reduce major risks. Yes, considerations related to hazard exposure are necessary elements of emergency management; however they are not sufficient. A comprehensive and integrated taxonomy of emergency management strategies is necessary.

We have adopted, the implications of the construct that **R f H & V** (where R = Risk; H = Hazard; and V = Vulnerability). Crucial to this more comprehensive and integrated process is a focus on vulnerability. Vulnerability is about:

- **exposure (primarily proximity to hazard agents)**
  - this is relatively easily “mapped” in geographic space.
- **sensitivity**
  - this is not as easily “mapped” in geographic space, as it occurs in social space.

The development of **V f (S & E) /C** (where V = Vulnerability; S = Sensitivity; E = Exposure; and C = Capacity) productively informs resilience building approaches. Indeed, the only reason to analyze hazards and assess vulnerability is to enhance capabilities.

“Community” is usefully defined as any group with a “shared association”. They may be a geographical area or groups with common interests (including business entities and service providers). In terms of “community”, a group may be identified by:

- a) Geographically-based groupings of people such as: households, neighborhood, suburbs, towns, local government areas, cities, regions, states and the nation.
- b) Shared-experience groupings of people such as: particular-interest groups, ethnic groups, professional groups, language groups, age groupings, those exposed to a particular hazard.
- c) Sector-based groupings such as: agricultural, manufacturing, commercial, mining, education sectors. It may be necessary to consider groups within these sectors (e.g., the food processing group within the manufacturing sector).
- d) Functionally-based groupings such as: service providers responsible for systems or networks which provide for the movement of people, goods, services and information on which health, safety, comfort and economic activity depends (lifelines).

The concept of “communities” provides a valuable model for emergency management as it lends itself to collective action. The philosophy behind our approach is one of empowerment. Capacity is about things of “use value” (resources) – considerations include issues such as access to information, cultural knowledge, and social networks. Empowered “communities” (households, organizations or businesses) become increasingly able to deal with more and complex issues. Indeed, the “community” that has established capabilities for building relationships, organizing intervention, and achieving results has taken the valuable first steps to becoming more resilient.

Roger Kaufman (2000:190) employs a framework with a “Focus on the Chain of Results” called MEGA PLANNING. The terminology is a “brand” which requires some interpretation – but it is very useful:

- a) Mega is the first and basic level of planning in which we select our contribution to society, including our clients' well being (above and beyond the goods and services we supply to them).
- b) Only when this Outcome is agreed do we move to the Macro level at which the organization plans to be successful in producing its Output.
- c) At the Micro level, successful groups in the organization integrate to contribute the Products required for Macro success (Output), and Mega success (Outcome).

Kaufman’s approach is fundamentally about desired futures – focusing on ends. What do we want the future to look like – what is the gap – (or as Kaufman would say, the need). How do we bridge it? A systems approach – such as Emergency Risk Management, provides an excellent context and framework within which to pursue improvement opportunities – both in process and outcome terms. A fundamental requirement is to have a clear focus on the key capabilities underpinning this Emergency Risk Management framework – hence our seven point self assessment framework.

# Self Assessment Framework

Seven key elements of emergency risk management make up the achievement areas in the Self Assessment Toolkit:

1. Establish Context
2. Profile Vulnerability
3. Profile Hazards
4. Analyze & Prioritize Risks
5. Develop Intervention Programs
6. Communication and Warning
7. Train, Exercise and Evaluate

## Undertaking the Self-Assessment

Uses a straightforward Excel spreadsheet. Each of the seven sections has five questions. Each question has four possible answers: 'N', 'P', 'L', 'F' (“Drop Down” options in the answer column), as shown:

Possible answer	Definition
N	Not generally applied or only applied in isolated situations for example in less than 20% of cases
P	Partially applied, not usually documented or applied in less than 50% of cases
L	Largely applied, formally documented and largely repeatable or applied in up to 85% of cases.
F	Fully applied, formally documented and fully repeatable or applied in more than 85% of cases.

The assessment has been designed to allow you to input your own targets for achievement and provides space for the assessor(s) to record evidence to support the answer to each question. If you consider that a question is not applicable, use the default value of "N" in the Scoring Box and in the Target drop down. Support your reasons by completing the Evidence Box.

Where appropriate, comments have been embedded throughout the questionnaire to provide the assessor with further explanation about the questions should it be required. The comments are denoted by a red flag in the top right hand corner of a cell. Comments can be read by holding the cursor over the cell.

### 1. Establish Context.

This element of the framework is about the strategic, organizational and risk management context in which the rest of the process will take place is established.

#### Criterion 1.1 Top level endorsement is achieved.

Evidence: Top level commitment and sign off endorsing the (emergency risk management) approach is achieved from the entity. This commitment should be maintained by providing feedback as appropriate.

**Criterion 1.2 Structure is mapped.**

Evidence: The structure (functions and processes) of the entity are mapped and understood.

Mapping is a function of context. In the Business Continuity context, mapping can be usefully aligned with an accepted best practice framework such as the Universal Process Classification Framework for the private sector developed by the American Productivity and Quality Centre in conjunction with Arthur Andersen, IBM, DEC and Xerox. This framework provides a sound generic basis for the identification of critical functions for consideration in Business Continuity Planning.

Mapping should be to an appropriate level of detail depending on context entity. It should define the relationship between the organization and its environment - it may identify the organization's strengths, weaknesses, opportunities and threats.

**Criterion 1.3 Critical functions are identified.**

Evidence: Critical functions and processes (for business continuity) are identified.

There should be a ranked hierarchy of functions grouped and filtered on the basis of those needed first, if not immediately, through to those which are discretionary.

**Criterion 1.4 Key stakeholders are identified and differentiated.**

Evidence: Groups are defined as "those which have a number of things in common" - they include any shared association relevant to the risk management context. These include the people in the area of impact, employees and their families, suppliers, vendors, and other parties with a stake in the entity and continuity of its operations, providers of social protection (such as planning authorities and emergency service organizations). Differentiation should be conducted in a discrete and respectful way with a view to identifying those with different responsibilities, rights and needs. Consideration may be given to those with whom close, confidential work needs to be done; those who have needs to be supported and informed; and those who (only) need to be made aware in the planning process.

**Criterion 1.5 Risk Assessment Criteria are established.**

Evidence: To what extent are risk assessment criteria established early in any given process. In a systematic risk management approach, it is important that risk evaluation criteria are established early. To what extent are decisions concerning prioritization made based on a consideration of a range of technical, financial, legal, social, humanitarian or other criteria? Impact considerations may concentrate on one area only or on several possible areas of impact. It is important to focus on criteria important to the entity – this will define and bound the way information is analyzed and decisions are made. Criteria appropriate to the entity's context may incorporate any of following: People; Costs both direct and indirect – such as loss of production capability; social issues reflecting high level of community concern (sensitivity such as imposed risk, dread, equity, and involvement of culturally cherished assets). Legal criteria related to “serious” category under Environment Protection Acts / Disaster Declarations Legislation met; Loss Containment where release (of energy or toxins) off-site may have detrimental effect; Ecosystems and other proximal sensitive receiving environments; Asset and resource base of the organization, including personnel; Revenue and entitlements; Performance; Timing and schedule of activities; Intangibles such as reputation, goodwill; or organizational behavior. To what extent are approaches to establishing likelihood or probability thresholds considered and resolved? The issues of uncertainty associated with complex, rare, extreme events make the establishment of an agreed approach problematic given probability is derived from the mathematics of closed sets. The criteria should be corporately endorsed. To what extent are they developed through an agreed, corporately endorsed process; and then signed off on.

## **2. Profile Vulnerability.**

Vulnerability is analyzed and an entity vulnerability profile is developed.

### **Criterion 2.1 Existing information collected and reviewed.**

Evidence: Existing information about the vulnerability of the entity at risk is collected and reviewed. Review criteria should include currency, reliability, and accuracy.

### **Criterion 2.2 A broad and comprehensive information set gathered.**

Evidence: The “environmental” information is broad and comprehensive. The information should cover and provide input to considerations related to the risk assessment criteria. It should include but is not limited to systems or networks which provide for the movement of people, goods, services, and information upon which the health, safety, comfort and economic activity of the community depend; elements from the natural environment such as topographical features, water bodies, and ecosystems; and the nature of the community, incorporating characteristics of elements such as politics, economics, and culture.

### **Criterion 2.3 Measures of social protection are described and assessed.**

Evidence: A range of best practice performance criteria should be used to assess the level of social protection provided by responsible authorities such as planning authorities, emergency service providers and those responsible for warning.

### **Criterion 2.4 Measures of self protection are described and assessed.**

Evidence: Self protection should be assessed in relation to current exposure / location; mitigation and preparedness activities of the entity; knowledge of and attitude to potential risks.

### **Criterion 2.5 Information gaps are met.**

Evidence: Any gaps in the required information need to be identified and met. Gaps may be functions of information insufficiency (quantity) or information inadequacy (quality).

## **3. Profile Hazards.**

Hazards are identified, analyzed and profiled.

### **Criterion 3.1 Stakeholders are consulted.**

Evidence: Stakeholders are consulted to identify what can happen and how and why it can happen. This involves the identification of all perceived sources of risks, using techniques such as Delphi, brainstorming, polling, and research.

### **Criterion 3.2 Sources of risk are researched.**

Evidence: Each identified source of risk is researched. This involves collecting and documenting relevant information such as research results, maps, Geographic Information System outputs, expert opinion, case studies and technical reports.

### **Criterion 3.3 Hazard characteristics are established.**

Evidence: Key characteristics of each hazard are established.

These include characteristics such as scope, spatial and temporal scale and perceptions. Specific key characteristics will be derived from context – they should focus on supporting decisions using the decided assessment criteria.

Key aspects of the hazards to which the entity is likely to be subject are detailed including Perceived dread; Frequency of occurrence; Magnitude and potential intensity; Likely strike location; Probable spatial extent; Duration; Seasonality; and Speed of onset.

**Criterion 3.4 Risk analysis basis is identified.**

Evidence: What, why and how things can arise is identified as the basis for risk analysis. Particular focus should be given to those things which can inform scenario analysis.

**Criterion 3.5 Information gaps are met.**

Evidence: Any gaps in the required information need to be met. Gaps may be functions of information insufficiency (quantity) or information inadequacy (quality).

**4. Analyze & Prioritize Risks.**

Causes and effects of the hazard/vulnerability interaction are analyzed.

**Criterion 4.1 A range of methods is used.**

Evidence: A range of analysis methods and tools should be used. These include, but are not limited to: What-if, Check list, What-if check list, Hazard and operability studies, Failure modes and effect analysis, Fault trees, Failure-logic diagrams, event tree analysis. Specific tools are often suited to particular hazards.

**Criterion 4.2 Scenarios are created & applied.**

Evidence: In the complex emergency management context, scenario analysis is recommended as a core, general methodology. **Risk is usefully explored as a function of Hazard x Vulnerability** (where the key elements of Vulnerability are exposure and sensitivity as compounding variables, and capacity or capability as an ameliorating variable).

A focus of considerations should be Business Impact Analysis from the perspective of the entity.

Interactive risk characterization should be undertaken. The analysis is a process incorporating considerations of hazard, consequences and vulnerability, within the context of existing control measures, to characterize risk. This form of risk characterization is an iterative, analytic-deliberative process. The risk characterization processes should incorporate a synthesis and summary of information about a hazard that addresses the needs and interests of decision makers and affected parties. The objective of the process is to provide information to assist in the evaluation of risks. The information produced will also assist the process of developing options for the treatment of risk. Any gaps in the required information need to be met. Gaps may be functions of information insufficiency (quantity) or information inadequacy (quality). There should be a focus on techniques which reduce uncertainty. This analysis uses judgments and assumptions which may be based on incomplete information. Therefore best available information sources and techniques should be used when characterizing hazard, consequences and vulnerability. Sensitivity analysis should also be applied to explore uncertainty. Scenarios are varied to examine how the results of a consideration or model vary as individual assumptions are changed. Wherever possible the confidence placed on estimates of levels of risk should be included. Risks descriptions are sufficient and adequate to enable evaluation. The descriptor should cover all of the agreed risk assessment criteria.

**Criterion 4.3 Risks are ranked**

Evidence: All risks analyzed are ranked using the developed likelihood and consequence criteria.

A matrix with sufficient detail to advise management priority should be used.

**Criterion 4.4 Evaluation informs intervention.**

Evidence: The evaluation informs a broad range of risk treatment considerations. Evaluation should not only contain information appropriate to response. Prevention, preparedness, response and recovery needs and opportunities should be addressed. There is a particular focus on the identification of capacity building opportunities under the responsibility, control or influence of the entity.

#### **Criterion 4.5 Best practice benchmarking & case studies.**

Evidence: Benchmarking and table top studies exhibit the characteristics of exemplary case studies.

- Significance i.e. individual case/cases are unusual or of significant interest, the underlying issues are important to the entity in some way or both of the above.
- Completeness i.e. within constraints of time or funding, distinction between the phenomenon under study and the context, exhaustive collection of relevant evidence.
- Consideration of Alternative Perspectives i.e. rival propositions and analysis of evidence from different perspectives.
- Display of Sufficient Evidence i.e. neutral, selective data collection to judiciously and effectively present the most compelling evidence.
- Composed in an Engaging Manner i.e. clear writing style - engagement, enticement and seduction.

## **5. Develop Intervention Programs.**

#### **Criterion 5.1 A comprehensive range of options is identified.**

Evidence: A comprehensive range of options for treating risk should be identified. This needs to demonstrate evidence of applying an open and innovative approach designed to generate a broad range of risk treatment options. The risk evaluation information for each risk should serve as a suitable input to this process. Frameworks for comprehensive and integrated approaches include Prevention, Preparedness, Response and Recovery; The Hierarchy of Control from safety management disciplines; Standard risk management options of avoiding risk, reducing the likelihood of occurrence, reducing the consequences of occurrence, transferring the risk, or retaining the risk.

#### **Criterion 5.2 Identified options are evaluated.**

Evidence: Identified options for treating risk are evaluated against determined criteria. While sensitive to entity context, the criteria used in evaluating the viability of any given option may include considerations of risk reduction potential, cost effectiveness, continuity or sustainability of effects, risk creation potential, leverage leading to further risk reducing actions by others, return on investment payback, compatibility and integration with other actions that may be adopted, and equity.

#### **Criterion 5.3 Risk treatment plans are prepared.**

Evidence: Plans should document how the chosen options shall be implemented.

The treatment plan should identify responsibilities, schedules, the expected outcome of treatments, budgeting, performance measures and the review process to be set in place

#### **Criterion 5.4 Risk treatment plans are implemented.**

Evidence: Implementation should be assessed to achieve milestones on time and against budget.

### **5.5 Decision making is sound.**

Evidence: Research, information management and decision making demonstrate rigor.

“Crucial Decisions” (after Janis) style approaches are used – including the use of rigor, best available information sources and validation techniques.

## **6. Communication and Warning.**

This aspect of the risk management processes applies across all elements of the framework.

### **Criterion 6.1 Risk communication principles are applied.**

Evidence: Best practice risk communication principles should be applied.

These include a focus on the primacy of purpose - working for resilience outcomes; devoting effort and resources to building bridges with other organizations; establishing long term relationships of trust; not make assumptions about what people know, think, or want done – rather, find out; identify stakeholders; involve all parties that have a stake; involve them early; lean toward sharing more information, not less; be sensitive to norms; speech and dress; use simple, non-technical language; use vivid, concrete images that communicate on a personal level; use examples; acknowledge and respond to emotions; anxiety, fear, anger, outrage, and helplessness.

### **Criterion 6.2 Risk message construction is a focus.**

Evidence: Risk messages should be well structured and easily understood.

This invokes criteria around the necessary and sufficient elements to be included in messages and the need for the use of sound communication techniques.

### **Criterion 6.3 Stakeholder needs are addressed.**

Evidence: Communication processes should be inclusive and meet the varying needs of stakeholders.

Planning processes interactively involve the exchange of information and opinion about risk and its management among individuals, groups, and institutions.

### **Criterion 6.4 Communications capability is developed and maintained.**

Evidence: Development and maintenance of a reliable communications capability to alert and warn stakeholders and effectively manage response to an actual or impending emergency.

To what extent is warning treated as a complete system. The system should integrate the detection of an extreme event with effective communication to those at risk - from observation of indicators of an impending extreme event to informing those at risk of impact implications and appropriate protective behaviour.

### **Criterion 6.5 Warning elicits appropriate protective behavior.**

Evidence: Warning should elicit appropriate protective behavior.

This evidence is difficult to simulate as it occurs in different and complex contexts under extreme stress - it may need to rely on prior performance analysis and case studies.

## 7. Train, Exercise and Evaluate.

Activities which train, exercise or evaluate any elements of business continuity planning may be conducted to promote awareness, develop and demonstrate capability, confirm preparedness or to test plans.

### Criterion 7.1 Activity range is broad.

Evidence: To what extent is a broad range of activities which train, exercise or evaluate elements of business continuity planning conducted to promote awareness, develop and demonstrate capability, confirm preparedness or to test plans.

### Criterion 7.2 Activity aims are determined.

Evidence: The aim and objectives of each activity (training, exercise or evaluation) are determined. By identifying the need for the activity; consulting with stakeholders; determining activity aim; and determining activity objectives.

### Criterion 7.3 Activity is planned.

Evidence: The activity (training, exercise or evaluation) is planned. By consulting with stakeholders; identifying appropriate type of activity to meet need; apply planning processes effectively; and identifying resource requirements.

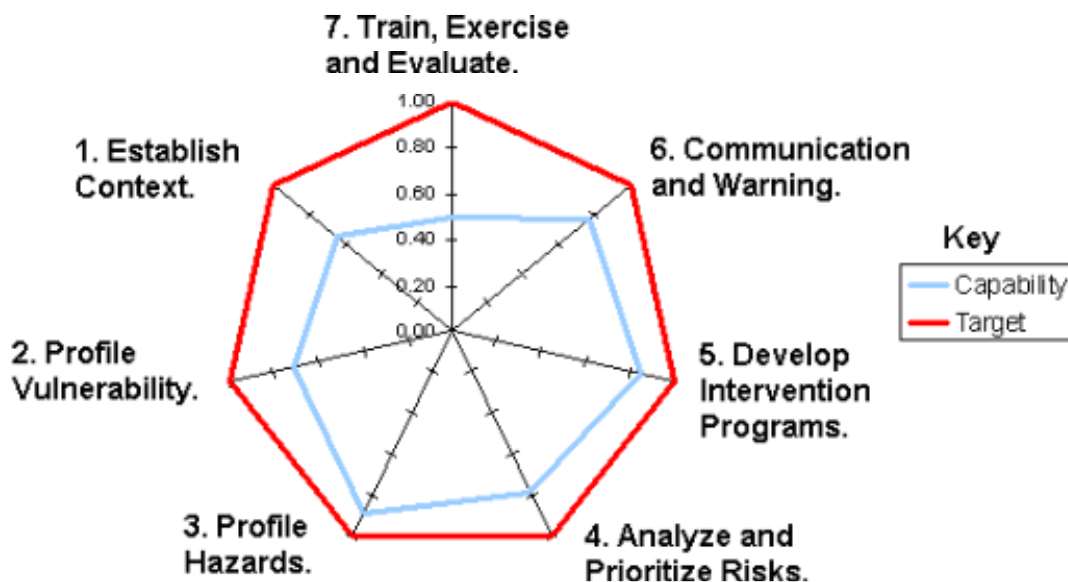
### Criterion 7.4 Activity is conducted.

Evidence: The activity (training, exercise or evaluation) is conducted. By initiating the activity; facilitating the direction of the activity; Monitoring the progress of the activity; and terminating the activity.

### Criterion 7.5 Monitor and Review performance.

Evidence: Monitor and review the performance of the risk management system and changes which might affect it. Sources of risk are monitored by environmental scanning. Activities (training, exercises or evaluations) are analyzed and evaluated. By conducting a debrief of the activity; reviewing activity outcomes against objectives; and reporting to stakeholders.

## Results



Results can be printed out as a report supported by graphs.

## Principles for Planning Initiatives

☞ Emergency planning initiatives must identify and characterize the problem and evaluate the effectiveness of capacity building options. How we establish appropriate structures and processes will be fundamental in determining the success or failure of our efforts. The specific structure depends on the particular situation, but five objectives have been identified by the National Academy of Sciences:

- Getting the right participation
- Getting the participation right
- Getting the right science
- Getting the science right
- Developing an accurate, balanced, and informative synthesis.

This structure has proven to be practical and effective in process and outcome terms.

Key underpinning process principles of such initiatives include:

- Mobilize “community” members creatively
- Listen - let “community” members define what they believe are the important problems
- Raise awareness to the importance of managing risk, and
- Develop support for the feasible capacity building options.

Similarly, these process principles have passed the tests of practicality and effectiveness in facilitating processes and achieving outcomes.

## Conclusions

The identified lessons are always only a limited set. As such, the set will restrain good judgment as much as it advises it. Therefore, be advised by well founded premising - but anticipate ambush anyway.

The relevant matters to take into account in considering the quality of management exercised center around key performance tests about your state of knowledge and its application. They focus on considerations around what you ought to know (or be reasonably expected to find out) about (a) risks and (b) their fixes.

In particular, these tests are about:

**(a) Assessing risk severity:**

- i) To what extent can and ought you reasonably be able to foresee the extent of harm likely to be caused.
- ii) How do you ensure that you exercise “sound” judgment around probability & consequence?

**(b) Maximizing intervention opportunities:**

- i) To what extent can and ought you have control over the things which are likely to give rise to the harm likely to be caused.
- ii) How do you consider the practical measures which can be taken to prevent, control, abate or mitigate the harm; how do you ensure that you exercise “sound” judgment around “cost effective” available capacity building options?

Planning should be about building capability - especially with regard to **Problem Solving and Opportunity Identification**. Approaches based on emergency risk management provide a flexible and holistic framework to better advise emergency preparedness. Analyses focused on vulnerability will be identifying processes that bring about risk, highlight management options which address key underpinning features, structures and processes. In summary, emergency risk management approaches will better enable the identification and implementation of capacity building options which meet your needs.

If we can help you in strengthening your approach, contact us at [epcb@emergencyriskmanagement.com](mailto:epcb@emergencyriskmanagement.com)

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