

GLOBAL BLUEPRINTS FOR CHANGE

First Edition--Prepared in conjunction with the International Workshop on Disaster Reduction convened on August 19-22, 2001

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.7: Improving Real Time and Near Real Time Communications

“Proposal for A Demonstration Project to Improve Real Time and Near Real Time Warnings”

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PROPOSAL FOR A DEMONSTRATION PROJECT TO IMPROVE REAL TIME AND NEAR REAL TIME COMMUNICATIONS

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Abstract: This Blueprint for Change will propose a strategy for improving real time and near real time communications at the multiple levels of operations during disaster: local, state/provincial, national and international. While the strategy must necessarily include all levels involved in disaster operations, it would focus first on the local level, currently the most vulnerable point in most cases.

Introduction

Policy Problem: The capacity for rapid response to a hazardous event depends upon the state of the information infrastructure available to responsible managers at local, state/provincial, national and international levels of operation. The burden of first response falls upon local emergency personnel, who often have the least resources and training for disaster operations. Repeatedly, communication in disaster fails at the local level, where limited technical infrastructure is suddenly disrupted. Personnel are unable to contact other jurisdictions for assistance, and the capacity to receive, organize and act upon incoming information from multiple sources is constrained by lack of equipment, personnel and training. Further, the link between local government and community is often weak in disaster operations, if clear procedures have not been established prior to an event.

Strategic Objectives:

A strategy is needed to improve real time and near real time communications at the multiple levels of operations during disaster: local, state/provincial, national and international. While the strategy must necessarily include all levels involved in disaster operations, it would focus first on the local level, currently the most vulnerable point in most cases.

Implementation

This strategy would include a comprehensive set of actions for communities exposed to known risk of earthquakes, hurricanes, floods, fire or other hazards. They are:

- Identify the existing information structure for communications during disaster operations at each level of operations: local, state/provincial, national and international.
- Identify the existing organizational practices for notifying responsible personnel of a hazardous event, in multijurisdictional disaster operations.

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- Develop a basic set of standards for an information infrastructure that would function effectively during disaster operations that could be adapted to communities of varying sizes, exposure to risk and economic resources.
- Select one community in each region of the world as a trial demonstration site for building an information infrastructure to support risk reduction for that community.
- Conduct a set of trial demonstration projects in the selected communities to determine the degree to which risk has been effectively reduced and communications enhanced through the use of advanced information technologies, effective database design, and organizational and technical training for emergency operations personnel.
- Compare the results achieved among the selected cities to determine the actual rate of risk reduction through improvement in the information infrastructure.
- Report the results to the World Congress on Disaster Reduction for wider dissemination and modeling to other communities exposed to risk.

Recommendations:

We recommend that the following actions be completed within the year following the International Workshop and the international meetings being considered and planned during 2002-2004 (including a “World Congress”). Completion by the time of a “World Congress” would ensure that the results have the greatest impact everywhere. The key actions include:

1. Identify a set of five cities in regions exposed to risk that would be willing participants in a trial demonstration project for improving their capacity for near and real time communication.
2. Within each city, identify a group of responsible leaders who would participate in a work group to design and implement an effective information structure for the city, adapted to its level of risk and resources.
3. At the international level, identify a group of experienced professionals, researchers and managers who have relevant knowledge for the specific risks and hazards that characterize each demonstration city.
4. Develop a strategy for funding the demonstration projects that would include a mix of local, state/provincial, national and international sources, and an estimated budget.
5. Develop a work plan with specification of tasks to be performed at each level, but with primary focus on the local level, to develop an information infrastructure for each city.
6. Present the set of five plans, with a design for interactive communication, information sharing and feedback among the five cities, at the World Congress in 2002.

The regions might include: East Asia, South Asia, Latin America, North America, Mediterranean or other regions exposed to significant risk. The type of risk could be a common risk for all five cities, such as seismic risk, or a range of risks that may characterize the vulnerability of each city. The primary goal would be to establish Working Groups in each city that match responsible actors at the local level with national and international experts to support the definition, design and implementation of the infrastructure. Adequate funding is vital to this strategy, and will require sustained support to the local cities from national and international sources.

This design assumes the capacity of local cities to make significant advances in their capacity to manage risk by improving their capacity for real and near real time communication, with assistance from a wider community of national and international actors.

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