Consideration on the Enhancement of Nuclear Crisis Communication based on the State-of-the-Art of Other Spheres of Public Concerns

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1. Introduction

Nuclear Regulatory Organizations (NROs) around the world are aware that the demand on information and transparency regarding nuclear activities is increasing day by day. No NRO feels immune to a crisis, and whichever is the nature of a crisis, the demand of information is extraordinary and NROs face the challenge of handling the situation professionally under high pressure and public scrutiny [1].

Crisis communication is defined as the design, planning and implementation of communicative actions in order to satisfy the obligations and demands regarding public information and transparency in a situation of media pressure and reputational risk for the NRO [1].

This study reviews and compares overall status of crisis and/or risk management activities in other spheres of technical society as well as nuclear sphere, which are currently implemented, by comprehensively identifying and surveying management framework, general communication system, status of responsible staffs, and manual preparation in each part.

2. Review on the Status of Crisis Management

Many experts in other spheres such as the environmental protection, public health, national economy, and administration safety, etc., have provided their actual crisis examples, and identified major categories of the crisis characteristics [2].

Their self-assessment on the responses against actual crises majorly represents as an “adequate” level. They explained lots of reflecting points to current governmental policies, such as an expansion of materials and equipment preparing a possible crisis, checking on framework of sharing information and coordination with other organizations, enhancing procedures providing information to the media and the public, and so on.

They also explained key workloads for crisis management with importance priority, which are preplanned preparation and prevention against a crisis, damage minimization efforts during a crisis, manual and procedure preparation, response to the media, and so on, respectively.

Fundamental deficiencies for crisis management with importance priority are identified, which are short supply of manpower, lack of information transfer, low priority recognition of corresponding managers to the crisis, lack of practical budget, insufficiency of education and training for staffs in charge, and so on.

3. Review on the Status of General Crisis Communication

It is noted that the level of crisis communication system of each sphere is not so good, even though self-assessed results by the experts on their level for crisis communication is “so-so.” It is unbelievable that the department of whole responsibility on the risk communication between the organization and the public (or media) before a crisis does not exist in any governmental sphere.

There is a common agreement among experts of other spheres that the considerable important stakeholders during a crisis are, in the order of priority, general public, media, relevant organizations, and citizen groups, and so on. Also, in most spheres, information about the event is provided to the media, the public and cooperating authorities.

Many experts express their concern about the substantial communication channels for each stakeholder when any crisis issue related to their activities. Informing the public by homepage, citizen groups by direct contact and e-mail, and cooperating authorities by hot lines are commonly recommended as the best communication channel.

Expectation effects with performing good risk communication are also identified as follows, in the order of priority:

(1) Prevention of a crisis expansion and diffusion,
(2) Recovery of credibility to the stakeholders,
(3) Enhancement of organization’s capability against a crisis,
(4) Recovery of organization’s image,
(5) Cost reduction for actual crisis mitigation,
(6) Enhancement of organization’s teamwork.

4. Review on the Status of Communication Manuals

The experts noted that most spheres, up to about 90%, undertake “crisis or emergency exercises” and respond an actual situation based on the manual which is prepared already, and over 60% of them clarified the manual was effective during the crisis, as shown in Fig. 1.

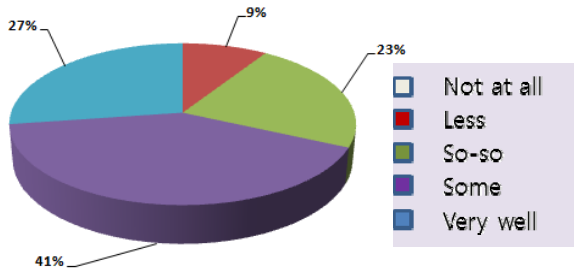

Fig. 1. Expert's opinion on the manual applicability to a crisis

Table 1 represents some remarkable good points of current manuals prepared by each sphere, including that of science and technology. Many considerable items with respect to in-advance preparation and/or upgrade for nuclear sphere are identified, such as case-by-case manuals, multistage manuals, reflecting key elements to a manual arisen from the recommendations by relevant international organizations, and cooperating-response manual between governments, etc.

Table 1: Remarkable good points of current manuals prepared by each sphere

Sphere	Good points	Remarks
Environment	· Specific guidelines exist in detail for each crisis case. · Separation of the task for event cases and stages is provided. · Manual is prepared with full discussion among cooperating parties.	
Public Health	· Specific guidelines exist in detail for practical application. · Step-by-step response actions of each party are provided in detail for crisis cases. · Responding task flowchart is provided in detail for each crisis case. · Key elements came from WHO recommendations are reflected.	Including sphere on food and medicines safety
National Economy	· Cooperation on nuclear events with relevant government's experts is provided.	Including sphere on science and technology
Administra-tion Safety	· Step-by-step response actions are systematically provided in detail for crisis cases. · Work flow from initial stage to final recovery of crisis is well outlined. · On-site response capability has been steadily enhanced by reflecting lessons learnt from the previous emergency drills.	
Territory and Marine Affairs	· Manual is prepared for the public with a simple and easy understanding. · Local areas' characteristics are reflected in the manual. · Diverse information is provided for helping actual crisis management.	

In preparing a crisis management framework, as well as a manual, for nuclear sphere, we have to keep in mind the insights and considerations from other spheres, as explained in this section and previous sections.

5. Conclusions

This study summarized the information provided in the expert's survey and compared their actual experiences. Considering both current crisis caused by the Fukushima Daiichi accident of Japan and state-of-the-art of the other spheres in Korea, we can point out the importance on information sharing, coordination with other organizations, protocols and procedures and the use of emerging media.

It is very essential that each organization's role in a crisis situation should be clearly defined and be well understood by the rest of competent organizations as a preliminary step to ensure the effectiveness of public communication.

ACKNOWLEDGMENT

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