International survey of government decisions and recommendations following Fukushima

by H.B. Okyar*

A key issue in nuclear emergency management is the need to keep decision makers informed of the details of a situation which is evolving quickly. For example, decision makers need the latest information, and periodic updates, when making decisions regarding advice to citizens, policies on the import and export of food and goods, and industries that may be affected. During the 17 March 2011 meeting of the Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE), which was the first of a series of meetings following the Fukushima Daiichi nuclear accident, participants discussed the possibility of establishing a "database" of the decisions and recommendations made by various governments at an early stage of the Fukushima accident, as well as updating and modifying the database as long as it remained of use. The IACRNE agreed that this information would be very useful, and mandated the NEA to try to collect it.

A survey co-ordinated by the NEA (including GHSI member countries[1]) was conducted using the questions below.

1. What has your government recommended with regard to your citizens living in or visiting Japan?
2. What has your government recommended with respect to the monitoring of passengers returning by air from Japan?
3. What has your government recommended with respect to importing food or goods from Japan?
4. What are your policies or plans with respect to stable potassium-iodine (KI) distribution to nationals in Japan?
5. Have you established any recommendations regarding the screening of a) passengers and crew, b) baggage and cargo, c) cabins on airplanes or ships, and d) outer surfaces of airplanes or ships, arriving from Japan?

In addition, participants were asked to provide the technical basis for their answers as well as some information regarding the monitoring of radioactivity in the environment and the activation of a call centre for public information, if any.

In total, 34 countries (26 NEA members) participated in the survey. The survey results were consolidated into a single document indicating the country, the decision taken or recommendation made, the applicable date and the population concerned. Three updates were made (the last being on 21 April) and posted on the International Atomic Energy Agency (IAEA) Emergency Notification and Assistance Convention (ENAC) secure website[2] for official use only by participating regulatory authorities. During the survey period, a request to make the document public was forwarded to the participants, but this was not supported due to the importance of the information collected that needed to be analysed and evaluated in terms of emergency management by competent authorities.

In summary, 28 countries recommended to their citizens in Japan to follow Japanese government recommendations; however, 12 countries recommended that their citizens evacuate an 80-km zone surrounding the Fukushima Daiichi nuclear power plant. No restrictions on flights to Japan were recommended, although 25 countries issued travel warnings and 13 advised to eliminate non-essential travel to Japan, as well as to consider leaving Tokyo in the early days of the accident. Several countries (7) made airplanes available for flights from Japan to their home countries for their citizens wishing to leave Japan.

On a voluntary basis, medical and radiological controls were performed for thyroid uptake and total body counting (7 countries). Special instructions on screening were given to customs officials by 6 countries for the monitoring of passengers, baggage, cargo and airplanes coming from Japan. People arriving from the affected areas were recommended for screening at special facilities by 2 countries. Of the 34 countries surveyed, 19 initiated monitoring of foodstuffs from Japan based on EC recommendations (pre-defined EU levels were introduced for food imports to Europe, and later adjusted to match those in Japan). In addition, 2 countries required all goods from Japan to pass through assigned customs points equipped with radiation control devices (especially for toys, clothes and shoes).

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Residents of Kawauchi village, located in the 20-km evacuation zone, were allowed to return to their homes briefly to pick up their personal belongings on 10 May 2011.

Stable iodine tablets were sent by 13 countries to their embassies in Japan and distributed. The actual intake of the stable iodine tablets was recommended by 16 countries only should the request be made by the Japanese or local authorities.

Continuous routine monitoring programmes were initiated by 4 countries, including gamma dose rate monitoring and air sampling. Several countries (8) introduced reinforced monitoring programmes (for air and rainwater) by increasing the frequency of monitoring; special monitoring of the radioactivity in the air (7), rainwater (2), soils (2) and plants (3) were also introduced. Call centres for the public were activated (18) mostly by using electronic platforms; governments extended their working hours (6); and relevant information was made available on websites (including FAQs with Q&As) (15), and in some instances through social platforms such as Twitter and Facebook (2).

In conclusion, it is important to note that countries submitted differing amounts of information at different points in time during the accident's progression. The survey results indicate that an international overview is required to better understand how national governmental decision-making could be further co-ordinated. The NEA has undertaken some initiatives to analyse the types of decisions made, including the information available and necessary to support such decisions, and the implications for co-ordination needs and mechanisms.

Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE)

Pursuant to the obligations placed on it by the emergency conventions, the IAEA regularly convenes the IACRNE, whose purpose is to co-ordinate the arrangements of the relevant intergovernmental organisations for preparing for and responding to nuclear and radiological emergencies. Currently its members include representatives from the 14 organisations listed below:

- European Commission (EC),
- European Police Office (EUROPOL),
- Food and Agriculture Organisation (FAO),
- International Civil Aviation Organisation (ICAO),
- International Criminal Police Organisation (INTERPOL),
- International Maritime Organisation (IMO),
- OECD Nuclear Energy Agency (OECD/NEA),
- Pan-American Health Organisation (PAHO),
- United Nations Environment Programme (UNEP),
- United Nations Office for the Co-ordination of Humanitarian Affairs (OCHA),
- United Nations Office for Outer Space Affairs (OOSA),
- United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR),
- World Health Organisation (WHO),
- World Meteorological Organisation (WMO).

Notes

1. The Global Health Security Initiative (GHSI) is an informal network including Canada, France, Germany, Italy, Japan, Mexico, the United Kingdom, the United States and the European Commission to ensure the exchange and co-ordination of practices within the health sector in confronting new threats and risks to global health posed by terrorism.
2. The ENAC website and the Nuclear Event Web-based System (NEWS) were replaced in September 2011 by the Unified System for Information Exchange on Incidents and Emergencies (USIE), hosted by the IAEA, to unify and to simplify information exchange during nuclear or radiological emergencies.