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# "Establishing and Strengthening Regional Emergency Preparedness and Response Mechanisms"

in the light of the Accident at TEPCO's Fukushima Nuclear Power Stations

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The nuclear accidents may have transboundary effects and raise the concerns of the public about the safety of nuclear energy and the radiological effects on people and the environment; and emphasize the importance of adequate responses based on scientific knowledge and full transparency, should a nuclear accident occur



- •The Fukushima Daiichi accident is one of the most serious and complex disasters which human beings have ever had to deal with.
- •It has had an enormous impact on Japan and on the world.



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### **Emergency Preparedness and Response**

Focus on the effort in "Establishing and Strengthening Regional Emergency Preparedness and Response Mechanisms in the light of the Accident at TEPCO's Fukushima Nuclear Power Stations", by taking on references to several documents, which are:

- 1. Mission Report IAEA International FFE Mission, 2 June 2011
- 2. Introductory Statement, Dir .Gen, IAEA Ministerial Conference on NS, 20 June 2011
- 3. Declaration by Ministerial Conference on NS, INFCIRC 821, 20 June 2011
- 4. Preparedness and Response for a Nuclear or Radiological Emergency, GS-R-2, 2002
- 5. Arrangements for Preparedness for a Nuclear or Radiological Emergency, GS-G-2.1, 2007



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#### REQUIREMENTS

- 1. Infrastructure Requirements:
  - a. authority,
  - b. organization,
  - c. coordination of emergency response,
  - d. plans and procedures,
  - e. logistical support and facilities and training, drills and exercise.
- 2. Functional Requirements

These elements need to be functioned precisely and accurately to ensure that arrangements are in place for a timely, managed, controlled, co-ordinated and effective response at the scene, and at the local, regional, national and international level, to any nuclear emergency.



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# **LESSON LEARN**

- 1. Clearly defined and estabilshed:
  - a. Emergency zone: PAZ and UPZ
  - b. Co-ordination of emergency response
  - c. Operational Intervention Levels (OIL) in advance, as part of the preparedness process
- Established regional table top exercise, regional field exercise as well as international exercise



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#### REGIONAL EXERCISE

The regional exercise can be begun with:

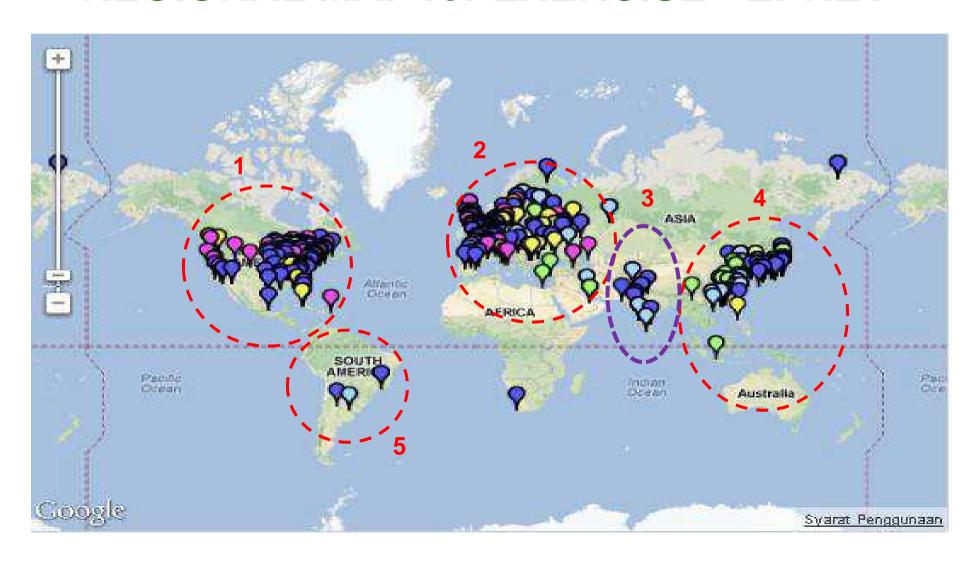
- Joint planning and determining of emergency preparedness zone and regional emergency response as the expansion of PAZ, UPZ concept from countries in one region.
- Agreeing and determining on OIL values that can be referred uniformly to be implemented in exercise and used in regional emergency response.
- Exercising communication on Regional Table Top Exercise routinely to test the effectiveness of information sharing and regional emergency response coordination, of which can be expanded into Regional Field Exercise.
- Conducting IAEA EPREV Mission for countries that have not conducted it.
- Carrying out regional EPREV Mission in order to review emergency preparedness and ability of nuclear emergency response on regional level.



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## **REGIONAL MAP for EXERCISE - EPREV**





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#### CONCLUSIONS

Nuclear emergency preparedness and mechanism for responding to and managing a nuclear incident need to be strengthened and enhanced both within countries and at the regional and international levels:

- Maximize IAEA EPREV mission to all NPP countries.
- Conduct IAEA EPREV mission in order to review and mapping the ability of regional emergency preparedness and response.
- Carry out routine regional table top exercise to test the speed and accuracy of coordination and communication to guarantee accurate and appropriate information openness.
- Routinely conduct regional field exercise to assure the speed and accuracy of emergency response.
- Prepare for severe accidents with simple, effective contingency measures at all levels, national regional and international.
- Strengthening the central role of the IAEA in promoting international cooperation and in coordinating international efforts to strengthen the Regional Emergency Preparedness and Response Mechanisms.



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# CONCLUSIONS

We believes that strengthening nuclear emergency and response capabilities cannot be a one time effort; it should instead be a continuous and evolving effort, reinvegorated from time to time by incorporating new lessons, experiences, needs and innovations. Nuclear Emergency and Preparedness should always be considered a work in progress.



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# THANK YOU