

CRISIS COMMUNICATION: FACING THE CHALLENGES

Communicating Fukushima: the IAEA experience

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IAEA

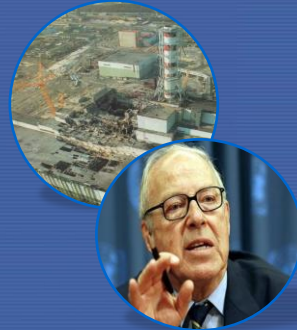
International Atomic Energy Agency



IAEA

Safety History: from Chernobyl to Fukushima

- Acceleration in development of safety standards, guidelines and services to assist countries affected
- Adoption of the Notification and Assistance Conventions (1986), and of the Convention on Nuclear Safety in 1994
- Department of Nuclear Safety was created a decade later
- 25 years later: Fukushima



“...Radioactivity does not respect national boundaries, or national sovereignties. Rules ensuring the safe use of large-scale nuclear activities should therefore be worked out internationally and accepted to apply everywhere....”

Hans Blix,
former IAEA Director General

Security History: 9/11

September 11, 2001 aftermath of terrorist attack:

- Security risks from outside groups or insider threats became of paramount concern surrounding nuclear power plant critical infrastructure
- Questionable whether reactors would withstand such attacks
 - 2003 Office of Security
 - Amendment of the CPPNM launched in 1998, adopted in 2005, in Force: 20??
- **Lessons from Fukushima?**



Convention on Early Notification of a Nuclear Accident

- Strengthens the international response for nuclear accidents by providing a mechanism for rapid information exchange in order to minimize radiological consequences
- Applies in the event of any accident involving specified facilities or activities of a State Party from which a release of radioactive material occurs or is likely to occur and which has resulted or may result in an international trans-boundary release that could be of radiological safety significance to another State.

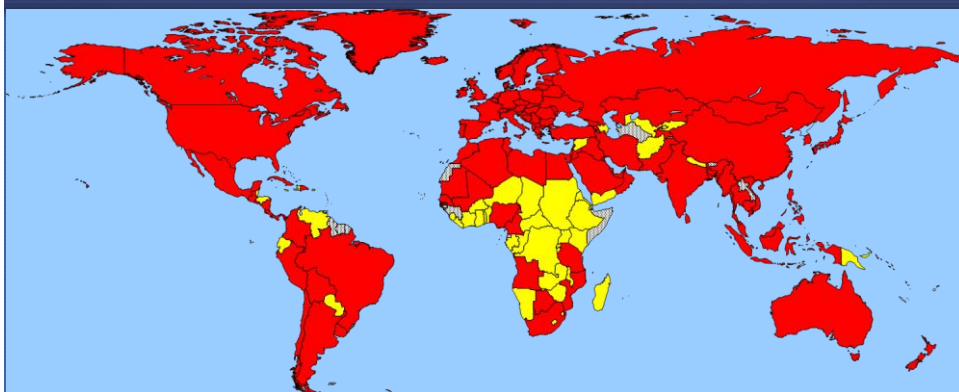


Convention
on Early Notification
of a Nuclear Accident
and
Convention on Assistance
in the Case
of a Nuclear Accident
or Radiological Emergency

INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, 1987

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Early Notification Convention



-  IAEA Member States, Parties to the Convention
-  IAEA Member States, not Parties to the Convention
-  States, not IAEA Members, not Parties to the Convention



151 Member States
114 Parties including
FAO, WMO, WHO & EURATOM
(April 2012)

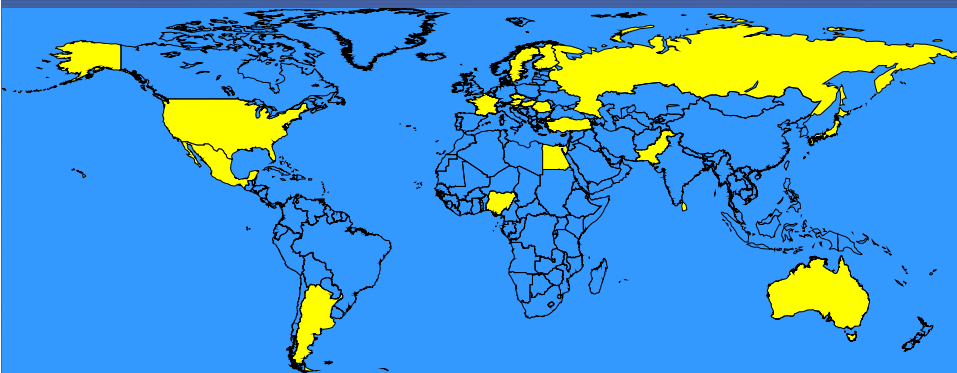
Notification Convention

Response Obligations

- Forthwith notify potentially affected States and relevant international organizations
- Promptly provide additional information
 - time, location and nature of event
 - facility or activity involved
 - assumed or established cause
 - general characteristics of radioactive release
 - meteorological conditions
 - monitoring data
 - protective actions, and
 - predicted behavior of radioactive release



Countries Registered in RANET



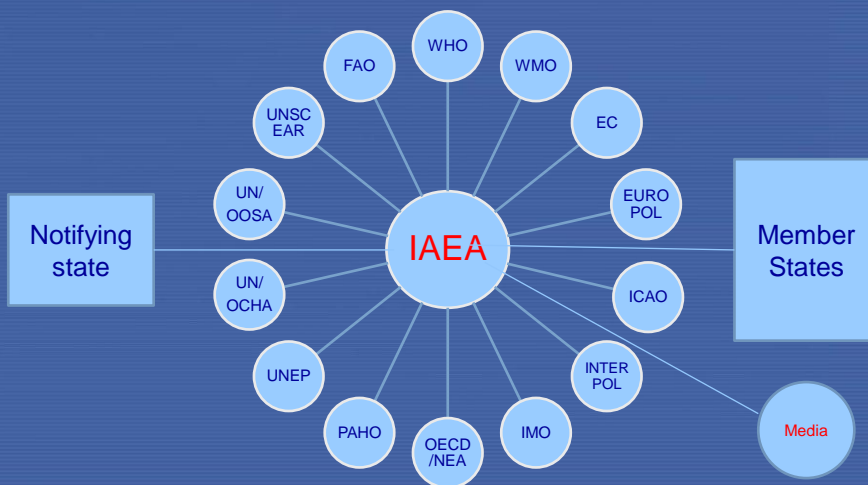
 Registered Member States



The Information Flow



The 'Joint Plan'



IAEA Incident and Emergency Centre



Fukushima Nuclear Accident: Update Log


IAEA.org International Atomic Energy Agency

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Fukushima Nuclear Accident

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Read and Review

Fukushima Nuclear Accident Update Log
The latest IAEA information on the radiological situation in Japan, updated as information becomes available and verified. [Read Story](#)

- Important Note on Updates
- Chronology of Daily Updates and Briefings
- International Fact-Finding Mission Updates
- Additional Report of Japanese Government to IAEA – Accident at TEPCO's Fukushima Nuclear Power Station, 15 September 2011 – Summary and Revisions, 12 September 2011
- IAEA Expert Mission to Japan, Mission Report, 16 June 2011
- Report of Japanese Government to IAEA Ministerial Conference on Nuclear Safety – Accident at TEPCO's Fukushima Nuclear Power Station, 9 June 2011

Watch and Listen

Introductory Statement to Board of Governors – Fukushima Nuclear Accident
12 September 2011 | IAEA Director General Yukiya Amano provided an update on the situation following the accident at Japan's Fukushima Daiichi Nuclear Power Plant. [More](#)



Audio

IAEA on Fukushima Nuclear Power Plant Accident, Interview with Graham Andrew, Special Adviser to IAEA Director General on Scientific

Other Recent Videos

IAEA Director General Visits Fukushima Dai-ichi Nuclear Power Plant, 25 July 2011

Ask and Learn

The IAEA assumes no responsibility for the content of external sites.

Emergency Information

- Emergency Preparedness
- Fukushima Nuclear Accident: Emergency Information Sheet
- Impact on Seaford of Nuclear Accident in Japan, WHO/FAO
- FAQs: Food Safety Dimension of Events in Japan
 - Food and Agricultural Organization of United Nations (FAO)
 - World Health Organization (WHO)
- Q&As: Nuclear Emergency Response for Food and Agriculture
 - Joint FAO/IAEA Programme

Online Resources

- Nuclear Shake Cast, BSC
- Incident and Emergency Centre (IEC), [IAEA Factsheet](#)
- Unified System for Information Exchange on Incidents and Emergencies (USIE), 21 September 2011
- International Nuclear Event Scale (INES), [IAEA Factsheet](#)
- International Nuclear Event Scale (INES) User's Manual, 2008 Edition
- Nuclear Event Web-based System (NEWS)



The Challenges...



Exploding Demand



The IAEA Response

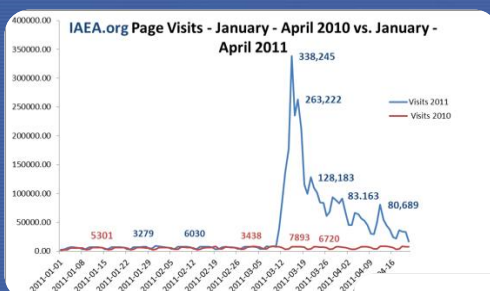
- 24/7 public info staffing, 11 March-22 April
- Thousands of phone calls (media/public)
- Thousands of e-mails (media/public)
- >120 update reports from IEC
- >260 updates to www.iaea.org
- Daily (later weekly) media briefings



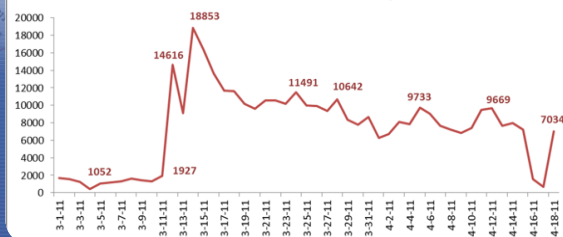
Prepare & Respond



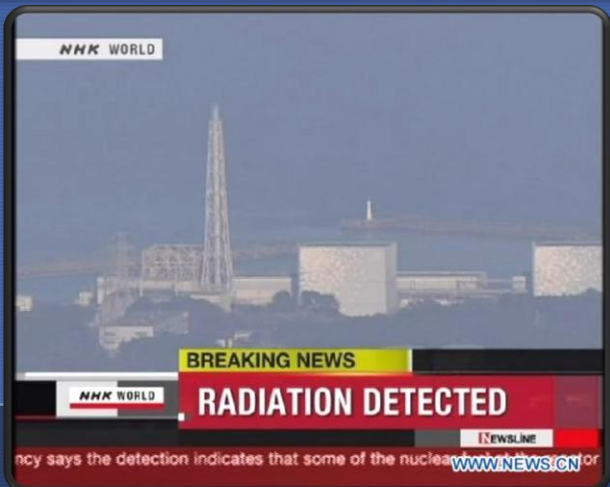
The IAEA as a Reference for the Public



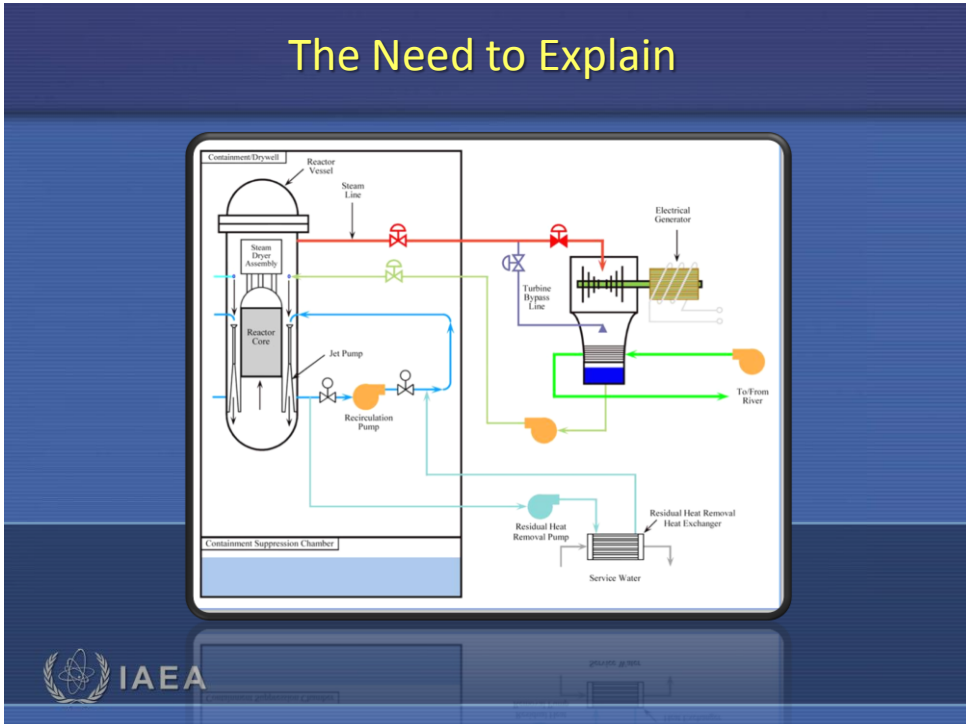
IAEA Facebook: Daily Active Users



The Information Race

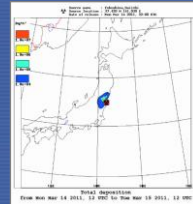


The screenshot shows a news broadcast from NHK World. The top left corner displays the NHK WORLD logo. The main image is a photograph of a nuclear power plant facility, featuring a tall, slender cooling tower and several large, rectangular buildings. A yellow banner with the text "BREAKING NEWS" is positioned across the middle of the screen. Below this, a large red banner with the text "RADIATION DETECTED" is prominently displayed. The NHK WORLD logo is also visible in the bottom left corner of the screen. In the bottom right corner, the text "www.news.cn" is visible. The overall scene suggests a major news event related to nuclear radiation.



MS/Press Briefings

- Daily/Weekly MS Briefings
 - Status of Fukushima Daiichi NPP
 - Radiological Status on site and off site
 - Marine monitoring
 - Food monitoring



Item	1	2	3	4
Source (IAEA/WHO)	400/1300	700/1300	700/1300	700/1300
Type of Reactor	BWR-3	BWR-4	BWR-4	BWR-4
Status at time of EQ	In service - auto shutdown	In service - auto shutdown	In service - auto shutdown	Damage
Core and fuel integrity	Intact	Intact	Intact	Not in the Reactor
RPV A B/C's integrity	RPV A integrity high but slightly decreasing	RPV A integrity stable	RPV A integrity stable	Not applicable due to damage after EQ
Containment integrity	No information	Damage suspected	Damage suspected	Not applicable due to damage after EQ
AC Power	All systems available, power supply normal, lighting in normal condition	All systems available, power supply normal, lighting in normal condition	All systems available, power supply normal, lighting in normal condition	Not applicable due to damage after EQ
Building	Minor damage	Minor damage	Minor damage	Minor damage
Water level of RPV	Stable	Stable	Stable	Not applicable due to damage after EQ
Pressure of RPV	Stable	Stable	Stable	Not applicable due to damage after EQ
Pressure of BWR	Stable	Stable	Stable	Not applicable due to damage after EQ
Water level in BWR	Stable	Stable	Stable	Not applicable due to damage after EQ
Water level in CV	Stable	Stable	Stable	Not applicable due to damage after EQ
Spent Fuel Pool Status	Stable	Stable	Stable	Not applicable due to damage after EQ



An Independent View...



Lessons Learned

IAEA Action Plan on Nuclear Safety

‘Enhance transparency and effectiveness of communication and improve dissemination of information’

“The IAEA Secretariat to provide Member States, international organizations and the general public with **timely, clear, factually correct, objective and easily understandable information** during a nuclear emergency on its **potential consequences, including analysis of available information and prognosis of possible scenarios** based on evidence, scientific knowledge and the capabilities of Member States.”



Communication and Dissemination of Information

Action Plan

- Strengthen the emergency notification system
- Enhance the transparency and effectiveness of communication among operators, regulators and various international organizations
- Review application of INES scale as a communication tool
- Organize international experts meetings (IEMs)

Key Achievements

- International Experts' Meetings IEMs
 - ✓ Reactor and Spent Fuel Safety March 2012
 - ✓ Transparency and Communication June 2012
 - ✓ Remediation and Decommissioning March 2013
 - ✓ Seismic and Tsunami Hazards Sept 2012

Ministerial Conference on Nuclear Safety December 2012
Effective Regulatory Systems Conference Canada April 2013



Communication and dissemination of information

- INES as a communication tool did not play its role: it should be reviewed and improved to make it more effective
- Action Plan: "...review of INES as a communication tool...":
 - ✓ hence no changes in number of levels and criteria
 - ✓ identified issues related to applying methodology for severe, complex and evolving event
- Secretariat with support of INES Advisory Committee and NEA as cosponsor, is developing additional guidance on use of INES in severe accidents



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Lessons Learned

- "Universal implementation of the IAEA Safety Standards on emergency preparedness and response at the national level would improve preparedness and response, **facilitate communication in an emergency** and contribute to harmonization of national criteria for protective and other actions." (Ministerial conference summary)
- The implementation of the Action Plan on Nuclear Safety already allows the Secretariat to widen its communication Mandate;
- Review of Early Notification & Assistance Conventions (including implementation mechanisms) are expected to strengthen information and communication capabilities.



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Thank you

