

Summary of Country Reports

—Current Status of
12 FNCA Member States—

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Nuclear Energy Development after the Fukushima Daiichi Nuclear Power Plant Accident

- ◆ Twelve countries continuously support the development of nuclear energy

Nuclear Power Plant Development Plan

- In Operation: China, Japan, ROK
- Concrete Plan: Bangladesh, Vietnam
- Preparing Concrete Plan: Indonesia, Malaysia, Thailand*
*Thailand decided to delay its original development plan for three years considering the Fukushima Daiichi accident.
- No Specific Plans: Australia
- Others: Kazakhstan, Mongolia, Philippine

Safeguards:

Implementation of International Treaties and Agreements

- Member of **NPT** (Nuclear Nonproliferation Treaty): 12/12 states
- **CSA** (Comprehensive Safeguards Agreement) in Force: 12/12 states
- **AP** (Additional Protocol) in Force: 10/12 states
- **IS** (Integrated Safeguards): 5/12 states

	NPT Member	CSA in Force	AP in Force
Australia	○	○	12 Dec. 1997
Bangladesh	○	○	30 Mar. 2001
China	○	N/A	28 Mar. 2002
Indonesia	○	○	29 Sep. 1999
Japan	○	○	16 Dec. 1999
Kazakhstan	○	○	9 May 2007
Malaysia	○	○	(Signed: 22 Nov. 2005)
Mongolia	○	○	12 May 2003
Philippines	○	○	26 Feb. 2010
ROK	○	○	19 Feb. 2004
Thailand	○	○	(Signed: 22 Sep. 2005)
Vietnam	○	○	17 Sep. 2012

- ◆ Broader Conclusion is implemented in these 12 countries(Vietnam dose not have broader conclusion yet).

Nuclear Security

Implementation of International Treaties and Conventions

- **CPPNM** (Convention on the Physical Protection of Nuclear Material): 10/12 states
- **CPPNM Amendment***: 5/12 states
- **Nuclear Terrorism Convention** (International Convention for the Suppression of Acts of Nuclear Terrorism): (10/12 states committed)

Ratification: 3 states, Accession: 1 state, Acceptance: 1 state, Signature: 5 states

	CPPNM	CPPNM Amendment	Nuclear Terrorism Convention
Australia	21 Jan 1989 in force	ratification 17 Jul 2008	ratification 14 Sep 05
Bangladesh	10 Jun 2005 in force		accession 07 Jun 07
China	09 Feb 1989 in force	ratification 14 Sep. 2009	ratification 8 Nov 2010
Indonesia	08 Feb 1987 in force	ratification 27 May 2010	*Understands the Convention's importance and may start ratification process
Japan	27 Nov 1988 in force		acceptance 02 Oct 07
Kazakhstan	02 Oct 2005 in force	ratification 26 Apr 2011	ratification 31 Jul 08
Korea	08 Feb 1987 in force		signature 16 Sep 2005
Malaysia			signature 16 Sep 05
Mongolia	08 Feb 1987 in force		ratification 06 Oct 06
Philippines	08 Feb 1987 in force		signature 15 Sep 05
Thailand			signature 14 Sep 05
Vietnam	03 Nov 2012 in force	ratification 03 Nov 2012	*Understands the Convention's importance and may start internal procedure for ratification

Current Status

Independence of Regulatory Agencies

- ◆ **Independent:** Australia (ASNO), Indonesia (BAPETEN), Japan (NRA), ROK (NSSC)
- ◆ **Semi-Independent*:** Kazakhstan (KAEA), Malaysia (AELB), Mongolia (NRA/NRRA), Thailand (AEC/OAP), Vietnam (VARANS)
*The regulatory agency is under a governmental body or ministry to which a nuclear promotion agency belongs
- ◆ **Others:** Bangladesh (BAEC), Philippines (PNRI)

Recent Movement

Bangladesh: established Bangladesh Atomic Energy Regulatory Authority on 19 June 2012

Japan: established the Nuclear Regulation Authority (NRA) on 19 Sep.2012

Kazakhstan: Agency of Atomic Energy (KAEA) was formed in May 2012

Malaysia, Thailand, Vietnam: Developing process to establish independent regulatory bodies

Major Developments (1/3)

- ◆ **Australia:** International Convention for the Suppression of Acts of Nuclear Terrorism entry into force 2012; Strong promoting activities in peaceful use of nuclear especially in the field of mining; Host an International IPPAS workshop and invite IPPAS mission
- ◆ **Bangladesh:** “Bangladesh Atomic Energy Regulatory Act-2012” was passed in the National Parliament on 19 June 2012; For nuclear safeguards and nuclear security activities, close cooperation with IAEA and US DOE is in progress
- ◆ **China:** Active participation to Nuclear Security Summit; Human resource development, more than 20 training courses and workshops per year; 18 nuclear power units in operation and another 26 under construction
- ◆ **Indonesia:** Government Regulation(No.54) 2012 on Safety and Security of Nuclear Installation; Hold workshops with IAEA and US-DOE

Major Developments (2/3)

- ◆ **Japan:** Established the Nuclear Regulation Authority on 19 Sep 2012 as a new independent regulatory organization; Continuing to share with the international community the information on the progress of decommissioning and decontamination of Fukushima; Resumption of safeguards activities in Fukushima
- ◆ **Kazakhstan:** Agency of Atomic Energy(KAEA), Integrated State body in the field of atomic energy was formed in May 2012; International Fuel Bank project is under the development
- ◆ **Malaysia:** Began to develop and establish a national detection and response system to control all activities using nuclear and radioactive materials; Enhancing technical capabilities to secure Malaysian international borders – installing portal monitors;
- ◆ **Mongolia:** Establishing infrastructures necessary for nuclear activities and building capacity for future development of nuclear power program; Upgrading boarder control and physical protection is under way with the cooperation of US DOE

Major Developments (3/3)

- ◆ **Philippines:** Continue implementing the IAEA's recommendations for security of radioactive material and associated facilities. Developed regulation on transport security. Working on for broader conclusion in safeguards. Establish strategy for human resource development through train – the – trainer program
- ◆ **ROK:** 23 nuclear reactors in operation, 5 reactors under construction and foreign contract with UAE and Turkey; Hosted Nuclear Security Summit in March, 2012; International Nuclear Security Academy (INSA) will be open internationally in 2014
- ◆ **Thailand:** The Office of Atoms for Peace – the nation's regulating authority has been working to ensure the peaceful uses of nuclear technology; International cooperation with IAEA, ASNO, US DOE and JAEA
- ◆ **Vietnam:** Cooperated with Russia and Japan to construct two NPPs: Ninh Thuan 1 & 2; Entered AP, CPNM in force on 17 Sep & 3 Nov; CPNM amendment was ratified on 3 Nov; Discussed with Japan on the ODA project for capacity building of Nuclear Regulatory Body of Vietnam

International and Regional Cooperation

- ◆ Regional cooperation: **APSN, FNCA**
- ◆ **Seoul NSS** was held
- ◆ **NGSI** was held in Hanoi, July 3-5, 2012
- ◆ **3S Discussion** at IAEA was made
- ◆ 2013, July **IAEA NSC** meeting will be held
- ◆ **Megaports Initiative** lead by USA and deployment of nuclear detection tools
- ◆ IAEA Integrated Nuclear Security Support Plan (**INSSP**) and development of country specific nuclear security plans
- ◆ Integrated Regulatory Infrastructure Support Service (**IRISS**) offered by ROK's KINS
- ◆ **PP system** upgrades in cooperation with IAEA and/or supporting countries in such states as Kazakhstan and Philippines

International and Regional Cooperation

- ◆ **Border control** upgrades in cooperation with USA
- ◆ **Training courses** in cooperation with IAEA, Australia, China, Japan and ROK
- ◆ **Further Regional Cooperation:** Training courses offered by Japan's Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (**ISCN**) established in December 2010 and ROK's International Nuclear Security Academy (**INSA**) to be established in 2014 and China's State Nuclear Security Technology Center established November 2011