
 ANSN  
Asian Nuclear Safety Network

 NRA, Japan  
Nuclear Regulation Authority

---

## Overview of Asian Nuclear Safety Network

#27 RIC  
W19  
11 March, 2015

**Kazuhide TOMITA**  
Vice Chair of the ANSN and  
Director for Interantional Nuclear Safety Cooperation,  
Nuclear Regulation Authority (NRA) of Japan

---

---

---


---

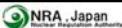
---

---

---

---

 ANSN  
Asian Nuclear Safety Network

 NRA, Japan  
Nuclear Regulation Authority

---

## Contents

1. History
2. Policy Paper
3. Implementing Structure
4. Topical Group Formation
5. Record of Activity
6. GNSSN Survey on ANSN
7. Summary

1

---

---

---


---

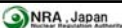
---

---

---

---

 ANSN  
Asian Nuclear Safety Network

 NRA, Japan  
Nuclear Regulation Authority

---

## History

- The Asian Nuclear Safety Network (ANSN) is a network, developed from the IAEA "EBP on the Safety of Nuclear Installations in the South East Asia, Pacific and Far East Countries (EBP-Asia)"
- EBP-Asia carried out 137 national activities and 18 regional activities from 1997 to 2003.
- After evaluation on the first five years, EBP-Asia decided to enhance regional cooperation through creation of a network.  
*to pool, analyse and share nuclear safety information, existing and new knowledge and practical experience among the countries.*
- ANSN was launched in 2002 and fully implemented in 2004, since then more than 458 activities have been conducted.
- ANSN consists of two different networks:
  - ✓ a human network led by topical groups to carry out activity of common needs to member states, and
  - ✓ a IT network for sharing information among member states

2

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA, Japan Nuclear Regulation Authority

## Policy Paper

- Vision: A strong **human and IT network** for achieving high level of nuclear safety in Asia
- 2 Missions: Nuclear safety **capacity building** and sustainable **regional cooperation**
- 4 Strategies : Self-initiative, strong human and IT network, practical knowledge and experience and **best use of existing resources**

The diagram illustrates the ANSN Policy Paper structure. It includes a Vision statement, two missions (capacity building and regional cooperation), and four strategies (self-initiative, human/IT network, practical knowledge/experience, and best use of resources). It also features a flowchart for 'Unlock Implementation Issues' and a 'Status of membership' table.

3

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA, Japan Nuclear Regulation Authority

## Implementing Structure

- Membership:
  - Participating Country ; PRC, Indonesia, Japan, ROK, Malaysia, Philippines, Thailand, Vietnam, Singapore, Bangladesh, Kazakhstan, Russia
  - Supporting Country and Org.; France, Germany, USA, Australia, EC
  - Associated Country ; Pakistan
- Implementing Bodies:
  1. Plenary; policy and strategy making
  2. Steering Committee; planning, approval and monitoring
  3. Coordination Group; self-assessment support and TG coordination
  4. Topical Group; implementation on specific themes
  5. IT Support Group; support for development of platform and module
- Financial Support:
  - Japan, USA, ROK(since 2009), EC(since 2010), Australia (in 2006)

4

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA, Japan Nuclear Regulation Authority

## Topical Group Formation

<p>&lt;Current&gt;</p> <ul style="list-style-type: none"> <li>Education &amp; Training</li> <li>Safety Analysis</li> <li>Operational Safety of NPP</li> <li>Emergency Preparedness &amp; Response</li> <li>Radioactive Waste Management</li> <li>Safety Management of Research Reactor</li> <li>Siting</li> <li>Communication</li> <li>Governmental &amp; Regulatory Infra.</li> <li>Leadership &amp; Management for Safety</li> <li>-----</li> </ul>	<p>&lt;Active since 2016&gt;</p> <ul style="list-style-type: none"> <li>ET</li> <li><b>Reactor Safety</b></li> <li>EPR</li> <li>RWM</li> <li>SMRR</li> <li>S</li> <li>C</li> <li><b>Regulatory Infrastructure</b></li> <li><b>Radiation &amp; Transport Safety</b></li> </ul>
---	---

5

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network      NRA, Japan Nuclear Regulation Authority

### Record of Activity

- Management : 81\*; Meeting  
Regional : 222\*; Meeting, Workshop, Training Course  
National : 155\*; Expert Mission, Workshop, Training Course
- Theme of Regional Activity (ex.);  
LLFuku, OEF, CoC, IRS, INES, GRI-DeCom, Saf-Cul, NKM, TNA, SARCoN, PSR, E-Dr, SA&V, DSA/PSA, ViSA/RELAP, SAMG/EOP, BE/UC, V&V, CNS/JC, WSP-PDM&SD, SAT, SC&SA-PDF, VST-HA
- Theme of National Activity (ex.);  
NPP, VVER, CANDU, PWR, HTGR, R/R, TRIGA, RSG-GAS, IRR1, IRR2, ETReS, INSARR, OSART, BPTC, OJT, TC-ISI/WC, TNA QMS, Saf-Cul, ISI, RCM, CBM, RPV, UHR/RCI, SG, ECT, DIC, SAR, V&V, PSA, RCA, HF, SG-ECT, LTO-Mgt, I&C-Mod, D-APM, SAT,

Abbreviations are explained in Appendix.  
\* : Total number since 2004 to 2013

6

---

---

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network      NRA, Japan Nuclear Regulation Authority

### GNSSN Survey on ANSN

- During August and September 2014 the Global Nuclear Safety and Security Network (GNSSN) survey was carried out among 516 senior staff from 75 Member States
- The purpose of the survey was to evaluate of the network's capability to enhance and strengthen governmental, organizational and individual competences and capacities, as well as to provide concrete recommendations and feedback.
- Over 40% of the replies were received from ANSN countries.
- The survey results will be used as a baseline before introducing the ANSN performance management framework.

7

---

---

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network      NRA, Japan Nuclear Regulation Authority

### GNSSN Survey on ANSN

213 senior officials in ANSN countries replied to the GNSSN survey in 2014.

<p><b>How well does the Network meet your needs? 70% positive</b></p> <ul style="list-style-type: none"> <li>■ Very well</li> <li>■ Adequate</li> <li>■ Don't know</li> <li>■ Needs improvement</li> </ul>	<p><b>Is the Network effective in serving its members? 77% positive</b></p> <ul style="list-style-type: none"> <li>■ Very effective</li> <li>■ Effective</li> <li>■ Don't know</li> <li>■ Not effective</li> </ul>
<p><b>How much has your participation in the Network activities influenced you or your organization's work? 63% significant impact</b></p> <ul style="list-style-type: none"> <li>■ Very significant impact</li> <li>■ Significant impact</li> <li>■ Little impact</li> <li>■ Not at all</li> <li>■ No positive impact</li> </ul>	<p><b>The Network is facilitating the sharing of operation experience feedback, lessons learnt and good practices - 94 % agree</b></p> <ul style="list-style-type: none"> <li>■ Strongly agree</li> <li>■ Agree</li> <li>■ Neutral</li> <li>■ Disagree</li> </ul>

8

---

---

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA Japan Nuclear Regulation Authority

### Summary

- ANSN has played an important role in building nuclear safety capacity through regional cooperation for more than ten years, which is confirmed through the GNSSN survey.
- ANSN is updating the self-assessment for MSs which request specific cooperation. Cooperation should be consistent with needs assessed by the recipient country.
- Japan has contributed to ANSN in all aspects and determines to continue supporting ANSN for the future.
- Japan will positively dispatch younger staff to accumulate experience through discussion with their neighbors and build human relationship for further deepening in mutual understanding in the future.
- ANSN will actively collaborate with other regional cooperation to share nuclear safety knowledge and experience .

9

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA Japan Nuclear Regulation Authority

### Thank you for your attention



10

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network NRA Japan Nuclear Regulation Authority

**Appendix : Abbreviations**

LLFuku	Lessons Learnt from Fukushima Dai-ichi Accident	RELAP	Reactor Excursion & Leak Analysis Program
OEF	Operational Experience Feedback	SAMG	Severe Accident Management Guideline
CoC	Code of Conduct	EOP	Emergency Operating Procedure
IRS	Incident Report Service	BE	Best Estimate
INES	International Nuclear Event Scale	UC	Uncertainty
GRI	Governmental & Regulatory Infrastructure	V&V	Verification & Validation
DeCom	De-commissioning	CNS	Convention on Nuclear Safety
Saf-Cul	Safety Culture	JC	Joint Convention
NKM	Nuclear Knowledge Management	WSP	Waste Safety Practice
TNA	Training Needs Assessment	PDM	Pre-Disposal Management
SARCoN	Systematic Assessment of Regulatory Competence Needs	SD	Surface Disposal
PSR	Periodic Safety Review	SAT	Systematic Approach to Training
E-Dr	Emergency Drill	SC&SA-PDF	Safety Case & Safety Assessment of Pre-Disposal Facility
SA&V	Safety Assessment & Validation	VST-HA	Volcanic, Seismic and Tsunami Hazard Analysis
DSA	Deterministic Safety Assessment	NPP	Nuclear Power Plant
PSA	Probabilistic Safety Assessment	VVER	(Russian Type Reactor)
VISA	Visual System Analyzer	CANDU	(Canadian Type Reactor)

11

---

---

---

---

---

---

---

---

---

---

ANSN Asian Nuclear Safety Network		Appendix : Abbreviations		NRA , Japan Nuclear Regulation Authority	
PWR	Pressurized Water Reactor	RCM	Reliability Centered Maintenance		
HTGR	High Temperature Gas Cooled Reactor	CBM	Condition Based Maintenance		
R/R	Research Reactor	RPV	Reactor Pressure Vessel		
TRIGA	Training, Research, Isotopes, General Atomic	UHR	Reactor Upper Head		
RSG-GSA	(Indonesian Type Multipurpose Reactor)	RCI	Reactor Core Internal		
IRRT	International Regulatory Review Team	SG	Steam Generator		
IRRS	International Regulatory Review Service	DIC	Digital Instrumentation & Control		
ETRes	Education & Training Review Service	SAR	Safety Analysis Report		
INSARR	Integrated Safety Assessment of Research Reactor	RCA	Root Cause Analysis		
OSART	Operational Safety Review Team	HF	Human Factor		
BPTC	Basic Professional Training Course	ECT	Eddy Current Testing		
OJT	On-the-Job Training	LTO-Mgt	Long Term Operation Management		
TC	Training Course	I&C-Mod	Instrumentation & Control Modernization		
ISI	In-Service Inspection	D-APM	Dynamic Alarm Priority Management		
WC	Water Chemistry	SAT	Site Acceptance Test		
TNA	Training Needs Assessment				
QMS	Quality Management System				

---



---



---



---



---



---



---