

The first Coordinators Meeting of the Forum for Nuclear Cooperation in Asia (FNCA) held in Tokyo, Japan

The first Coordinators Meeting of the Forum for Nuclear Cooperation in Asia (FNCA) was held on March 7 and 8, 2000 in Tokyo, hosted by Science and Technology Agency.

This meeting was planned on the agreement of the tenth International Conference for Nuclear Cooperation in Asia (ICNCA) held in March, 1999 in Tokyo. At the ICNCA, nomination of a Coordinator and Project Leaders of seven projects in each country were agreed upon among the nine participating countries to operate cooperation activities more systematically. It led to set up a new scheme named "Forum for Nuclear Cooperation in Asia (FNCA)" in April, 1999. The summary of the press release is as follows.

1. Representatives participated in this meeting from Australia, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand, Vietnam, and a representative from the International Atomic Energy Agency (IAEA) attended as an observer.



The first Coordinators Meeting

- 2. Through two days discussion at the first Coordinators Meeting, the participants agreed that:
 - A) The cooperation activities of past ten years were extremely important for development of basic infrastructure of nuclear fields in participating countries, and it is worth stressing that these activities in

nuclear science and technology fields have provided socio-economic benefit to the FNCA countries.

- B) The goal of introduction of the new scheme is to promote the cooperation activities more effectively and efficiently among the nine participating countries taking over the heritage of the ICNCA, i.e., partnership in activities of mutual cooperation based upon mutual understanding.
- C) It was agreed that various ways and modes of cooperation activities should be studied in order to enjoy the best benefit from ongoing projects, and
- D) It is important to establish domestic supporting system to the FNCA activities, in each country.
- 3. At the first Coordinators Meeting, review of the progress situation and their three-year work plans of the seven cooperative projects was made and accepted by the participants.

At the next Coordinators Meeting more specific documentation will be provided on the purpose and objectives for each project. Venues of Workshop in FY2000 were also agreed as follows:

- Utilization of Research Reactor : Korea
- Application of Radioisotopes and Radiation for agriculture : Vietnam
- Application of Radioisotopes and Radiation for Medical Use : Indonesia
- Public Acceptance of Nuclear Energy : Korea
- Radioactive Waste Management : Australia
- Nuclear Safety Culture : China
- Human Resources Development : Japan
- 4. It was also agreed that:
 - Name of the FNCA indicates the total scheme of the cooperation and the forum that consists of the Ministerial Level Meeting (MM) and the Senior Official Level Meeting (SOM). A way to avoid duplication of function in these meetings should be studied.
 - Name of Regional Nuclear Cooperation Activities (RNCA) stands for cooperation activities that are carried out under the FNCA scheme.
- 5. The representative of Thailand confirmed to hold the first FNCA under co-sponsorship of the Ministry of Science, Technology and Environment (MOSTE) of Thailand and the Atomic Energy Commission (AEC) of Japan. The first Coordinators Meeting endorsed that the venues of the second FNCA should be in Japan, and the third in Korea.
- 6. Some participating countries expressed interests to consider nuclear power related activities under the FNCA cooperation.

- 7. Discussion was made on how to strengthen safety system to use radiation and radioisotope technology. Need to utilize existing systems for personnel exchange more effectively was discussed. These systems include the fellowship programs of the IAEA, the Science and Technology Agency (STA) of Japan, and other countries.
- 8. Appropriateness of naming for "Public Acceptance" was discussed.
- 9. A Thai delegate explained the recent accident of Co-60 spent source and proposal to make a report of this accident to the PA Workshop and Radioactive Waste Management Workshop in 2000 was accepted.
- 10. It was encouraged to promote a close link and to avoid duplication between activities of FNCA and RCA/IAEA in order to optimize the use of resources.
- 11. The first Coordinators Meeting endorsed the Vision Statement that reads as follows:
 "To enhance socio-economic development through effective regional partnership in the peaceful and safe utilization of nuclear technology"
- 12. The Office of the Coordinator of Japan expressed its willingness to be of use for the Coordinators of FNCA countries if they desire.

The Coordinator Office is also supported by the Fellows who are sent by each country to Asia Cooperation Center. Although only two fellows for six month in each year are received.

Provisional Program of the first Forum for Nuclear Cooperation in Asia to be held in November, Bangkok

At the first Coordinators Meeting, Dr. Manoon Aramrattana, Thai Coordinator, proposed a provisional program in connection with the first FNCA Meeting to be held in Thailand. Details will be discussed by Thailand and Japan with regard to its basic theme, technical visit and exhibition, and they will be later sent to all the member countries.

Date

November 10-15, 2000

Place

The Sukhothai Hotel, Bangkok

Sponsored by

- The Minisitry of Science, Technology and Science (MOSTE) of Thailand
- The Atomic Energy Commission (AEC) of Japan

In Cooperation with

- The Office of Atomic Energy for Peace (OAEP) of Thailand
- The Japan Atomic Industrial Forum, Inc. (JAIF)

Provisional Program

- Friday, November 10 Senior Official Level Meeting (SOM)-1
 - -Preparatory Meeting to Ministerial Level

Saturday, November 11 Spare day

Monday, November 13

[Opening Session] [Session1]-Formation of the FNCA Regime

[Session2]-Country Paper Presentation

- Basic Theme : Nuclear Safety Culture and Rad Waste Management
- Additional Topics :

-Nuclear Liability and/or -Role of Nuclear Power in Climate Change Issues and/or -Education for Nuclear Energy [Session3]-Round Table Discussion
The same as session 2
[Session4]-Adoption of the Press Release of the MM of the first FNCA

- Press Interview
- Exhibition (Optional)
- Reception

Tuesday, November 14

SOM-2 : Follow-up Meeting to MM [Session 1]-Discussion on What was Suggested in the MM [Session 2]-Adoption of Summary of the first FNCA (SOM-1, MM, SOM-2)

Wednesday, November 15 Technical Visit



The first Forum will be held at the Sukhothai Hotel

Co-60 Radiation Exposure Accident in Thailand

Dr. Manoon Aramrattana, Thai Coordinator, reported in the first Coordinators Meeting the Co-60 radiation exposure incident that occurred in Thailand in February as follows.

"The accident took place in Samut Prakarn Province, about 10 km south of Bangkok. There were nine persons (later became ten persons) admitted to two hospitals for treatments for radiation sickness. Two young men were in serious but stable conditions. They were unknowingly exposed to acute radiation from an unshielded Co-60 source with estimated 600-700 Ci. Three other persons in the vicinity were also exposed to acute radiation at a farther distance, and four (later became five) other persons were exposed to a high level of radiation while being in contact with the source container during transporting it to a scrap dealer."

It was later revealed, by subsequent reports of mass media, that the two serious victims and one of the other victims passed away on March 8, 17, and 24, 2000; repectively. The latter victim was the owner of the scrap shop.

It is desired that the matter be discussed at the first FNCA meeting in Bangkok and at the second Coordinators Meeting in Tokyo about how the FNCA could serve to prevent such accident in sharing the Thai experience with the other member countries.

For further information please contact:

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News from Member Countries

Status of Nuclear Power Development in Indonesia





Dr. Bakri Arbie Coordinator of Indonesia Deputy Chairman

National Nuclear Energy Agency (BATAN)

In the "Workshop on Indonesian Energy Vision and Mission" performed in Jakarta November 17, 1999, the Minister of Mine and Energy, Mr. Susilo Bambang Yudoyono stated about the policy and priority of energy utilization until 2020:

- 1. The first priority for development is clean energy for domestic use only (hydropower, geothermal, solar power and other new energy).
- 2. Second priority is set on clean energy for export and domestic use such as natural gas.
- 3. Third priority is set on the energy with great number of resources but has high potential for pollution such as coal energy development will be sustained for export and domestic use.
- 4. Fourth priority is set on the energy which reserves is depleting but is currently being exported as well as used domestically.
- 5. Fifth priority is set on other energy such as nuclear energy. Feasibility study had been completed. Financing problem and public acceptance remain as the key factors in the decision-making processes.

This statement was emphasized during the visit of Director General of IAEA, Mr.

Mohamed Elbaradei in Jakarta, December 27-28, 1999, when he met Mr. Abdurachman Wahid, President of The Republic, Mr. A.S. Hikam, Minister of Science and Technology and Mr. Susilo Bambang Yudoyono. In principle, Indonesia is open for the possibility of introduction of nuclear energy in the future and it will be equally treated as another sources of energy. It is agreed that in the near future, Indonesia supported by IAEA will perform a



Mr. Elbaradei, Director General of IAEA, visited to BATAN

study of comparative assessment of different energy sources for electricity generation in Indonesia.

According to latest national energy study, based on -13.7% Indonesian economic growth on 1998 and +0.2% on 1999, the result shows that economic crisis in Indonesia does not influence very much to electricity consumption, especially in Java-Bali region who consume about 80% of national consumption. Electricity demand for Java-Bali will comeback to normal demand before crisis after year 2000 (electricity growth rates more than 10%) and the possibility of NPP construction planning will be slightly postponed, after 2010s.

A Better Partnership for New Millennium

Public Acceptance is a Key to Lead Country's Nuclear Program to a Success The 10th PA Workshop in Seoul will be Highlight Visions and Missions





Mr. John K Chung Project Leader of PA

Project Manager Public Information & International Cooperation Korea Atomic Energy Research Institute (KAERI)

The nuclear community now encounters a new reality and also a new challenge as we entered into the 21st century. The reality is the need for sustainable development and the challenge is about the role of nuclear energy to meet the need. The new millennium will embrace both hope and frustration. It will be a century of hope for those who prepare for the future. On the contrary, it will be a century of frustration and despair for those who do not prepare for the future.

Energy is the power to maintain a country. Without sufficient energy, a nation's prospering economy and quality of life of the people can not be guaranteed. This is the reality.

In the new millennium, we will ultimately face 3 major global crisis; food, energy and the environment. Rapid population increase, particularly in our region, will be the main cause of the crisis. It is believed that the only practically available solution to the crisis will be the energy self-reliance through the expanded use of nuclear energy. Nuclear energy can contribute to avoid global climate change. Continued use of fossil fuels can destroy the world environment. Use of nuclear energy can help increase the food production. Therefore, it can be said that the use of nuclear energy is similar to catching three birds with one stone. This is a challenge. It is our task to create a better partnership between nuclear energy and everyday life of the people.

In this modern society, acceptance by the public is the key to implement a country's nuclear program. Without the support from the public, a nation's nuclear program can not be carried out successfully. With the support from the public, a nation's nuclear program can be implemented without any significant difficulty. This is also a challenge. The new millennium urges us to recognize the realities and also to undertake the challenges.

The public acceptance workshop of nuclear energy that will be held in Seoul in October 2000 will clearly indicate how to undertake the challenges and how to harmonize the realities. As done previously, the Japan Atomic Industrial Forum will play a leading role in organizing the seminar. Counterparts from Korean side will support necessary arrangements. Member States of the FNCA will celebrate the 10th PA workshop. The tentative topic will be 'Role of the media in improving the public perception on nuclear energy.' Invited speakers both from Japan and Korea are now being contacted.

The workshop will coincidentally be held with the 12th Pacific Basin Nuclear Conference (PBNC 2000). The 'PBNC 2000' will be held during October 29-November 2, 2000 at the Convention and Exhibition Center in Seoul. The theme of the 'PBNC 2000' is "Nuclear for the 21st Century: Vision and Mission." During the Conference, there will be a public information and outreach session. The session will mainly be focused on the public communications for confidence building. At this session, representatives from the Member States participating in the PA workshop will be invited as distinguished panelists and will have opportunities to explain how to effectively build public confidence with regard to a nation's nuclear program.

Activities related to Nuclear Power and PA in Vietnam, 2000



Left: **Dr. Vuong Huu Tan Coordinator of Vietnam** Vice Chairman, VAEC

Right :Dr. Le Chi Dung Project Leader of PA

Head of Training and Information Division, VAEC

Vietnam Atomic Energy Commission (VAEC) has carried out study on nuclear power in order to advise the Government on strategy and planning for nuclear power development in Vietnam. Last year, a report on nuclear power development in Vietnam, signed by the Minister of Science, Technology and Environment and the Minister of Industry, has been submitted to the Government. In the first quarter of the year 2000, the Government will consider the report.

In the framework of the cooperation between VAEC and JAIF, sub-committees on human resources development, R&D, regulatory, site selection and PA have been set up and their activities in the year of 2000 are being discussed.

In the field of PA, the VAEC plans to provide mass media with in-time news, comments on nuclear events in the world, getting confidence of the press as a reliable source by in-time and accurate information. The VAEC has a plan to issue popular booklets, newsletters and in cooperation with Vietnamese Television to make programs on nuclear energy application and development. A visiting room and exhibition is planned to be available for the public. The cooperation with Japan and other member countries in framework of FNCA plays a very important role. Speakers from Japan and other countries are most welcome to the planned symposiums for vietnamese policy makers, mass media and intellectual circles.

Besides, in the year of 2000, studies on reactor hydrodynamics and research reactor PSA as well as studies on CDM are being implemented by VAEC's staff. National Seminars on safety analysis of research reactors and inspection of research reactors will be held in the year. The VAEC and the IAEA will be jointholders of a seminar on Additional Protocol (AP) for government officials preparing for the AP signatory. Another important activity of the year is that the VAEC coordinates with the Ministry of Foreign Affairs in procedures for the CTBT ratification by the state.



Head quarter of VAEC

Interview with Mr. Tetsuya Endo, Commissioner, The Atomic Energy Commission of Japan

Ms.Kannika Kaewsrisang seconded from Office of Atomic Energy for Peace (OAEP) of Thailand to Asia Cooperation Center of JAIF last October, 1999, had an interview with Mr. Tetsuya Endo, Commissioner, the Atomic Energy Commission of Japan.

Q: What do you think about the trend of Nuclear Cooperation in Asia in the future?

A: There are so many countries in Asia that have different situations in the field of nuclear energy

technology. I think the trend of nuclear cooperation in Asia in the future should be as follows:

1. Our cooperation among Asian countries

should reflect such a variety of differences in each country. We should not carry out our cooperation in a single direction but it should be different in the most suitable way for each country.

- 2. There are some areas that are common to all the member countries of Asia, such as Research Reactor, Radiation Uses, PA, Nuclear Safety and the Non-proliferation program. Approaches to those areas depend upon the different situations of nuclear energy or nuclear development in each country.
- 3. The future cooperation should be more specific to reflect the interests and concerns of those countries and the FNCA will be one of the most important vehicle in carrying out the cooperation.
- 4. Regional Cooperation should be in coordination with international organizations such as IAEA in particular. Therefore, Bilateral / Regional / Multilateral Cooperation should be coordinated.

Q: The first Forum for Nuclear Cooperation in Asia will be held in Thailand in November. The Atomic Energy Commission of Japan is one of the sponsors. What do you expect from this meeting?

A: First of all, I would like to express my appreciation to the Thai government for cohosting this conference as the first member country to sponsor this meeting except for Japan.

This is the first overseas venture for the Atomic Energy Commission of Japan. We would like to make it successfully in cooperation between Thailand and Japan. Furthermore, this is the first gathering of the ministers in charge of nuclear energy in this area under the new regime. We would like to pave the way to the future cooperation. Under such a road map, we would like to develop various sub-areas that will be most suitable for our cooperation. It is not only to establish a general guideline but also to develop projects in specific areas.. In addition, it may be a good opportunity for bilateral gatherings to take place and discuss specific issues between the two countries.

Q: The utilization of nuclear energy will play an important role in Asia in the future.



Interview with Mr.Endo Commissioner, Atomic Energy Commission of Japan

Professional Career of Mr. Endo

1958 Joined the Ministry of Foreign Affairs (MOFA)
1986 Director-General for Science and Technological Affairs, MOFA
1989 Governor, Board of the Governors, IAEA
1993 Ambassador Extraordinary and Plenipotentiary in charge of Japan - North Korea Normalization Talks
1994 Ambassador in charge of KEDO
1996 Ambassador Extraordinary and Plenipotentiary to New Zealand

1998 Commissioner, Atomic Energy Commission of Japan

Certainly, a particular consideration should be given to nuclear safety and a full attention should be paid to the international nuclear non-proliferation regime so that international communities have full confidence in the nuclear development program. How does Japan promote nuclear safety and nuclear non-proliferation approaches in neighboring countries?

A: Safety and non-proliferation are the most important premises for any country to embark on the development of nuclear energy.

Safety is essential not only in power generation but also in the whole activities of nuclear fuel cycle including front-end and backend. We try to find the way to promote safety as well as how to respond to an accident or incident, how to compensate for damage or losses if an accident takes place unfortunately. Therefore, all the areas should be covered by safety, particularly in the case of Thailand this time.

For non-proliferation, we would like to appeal to everybody to abide by the safeguard system of NPT/ IAEA, and also in that connection we would like to appeal to all the member countries of this forum to accept additional protocols of safeguard. In addition, management of nuclear material is more important than before, so we would like to exchange opinions among the member countries and strengthen our cooperation in this particular area. All of these come under the umbrella of the non-proliferation project.

Follow-up Report on the JCO Criticality Accident

1. Investigation of the causes of the accident and measures

- The Criticality Accident Investigation Committee of the Nuclear Safety Commission of Japan held 11 meetings and conducted a field investigation and studies by the three teams (Technical Evaluation Team, Industrial Team and Social and Safety Team). The report was completed on December 24, 1999.

- The uranium solution was sent to the Tokai works of the Japan Nuclear Cycle Development Institute from JCO (the first dispatch was made on March 23.) and is to be processed at the recycling facilities through the prescribed procedures.

2. Follow-up report on people exposed to radiation

- Three operators were soriously exposed to radiation that can cause critical effects (One person died on December 21, 1999, the second person has been hospitalized in the Medical Research Laboratory of the Medical School of Tokyo University, and the third person has been discharged from the hospital.)

- No special medical examinations are planned for residents in the surrounding areas but health programs such as 1) individual health checkup program and 2) health consultation and mental care will be provided to those who desire such programs in order to respond to health anxieties.

3. The following laws have been revised and legislated to strengthen safety regulations and disaster measures:

- Legal framework has been strengthened for maintaining stringent controls by revising the law on the regulation of Nuclear Source Material, Nuclear Fuels Material and Reactors.

- New legal framework has been provided by the Special Law of Emergency Preparedness for Nuclear Disaster in view of the peculiarity of nuclear disasters.

4. Compensation for nuclear damages

- JCO paid a provisional compensation of about ¥5.4 billion indemnities in total for about 2,700 claims under the cooperation of Ibaraki Prefecture and Tokai Village authorities at the end of 1999. As of March 5 closing, about 5,150 claims, about 85.7% of the total 6,010 claims submitted have reached agreement (the agreed compensation is about ¥8.6 billion).

5. Administrative punishment

- The Science and Technology Agency of Japan repealed the grant of JCO manufacturing business on March 28. This is the severest possible disposal from the legal standpoint and is the first case in Japan.

6. Other

- Nuclear Safety Network (NS net) was established by 35 nuclear enterprises and research institutions in December 1999 to share safety culture.



Establishment of Nuclear Safety Network

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