

**Co-Chairs' Summary Report of
The Fifth ASEAN Regional Forum Inter-Sessional Meeting on
Non-Proliferation and Disarmament
Makati City, Philippines, 4-5 June 2013**

Introduction

1. Pursuant to the decision of the 19th Ministerial Meeting of the ASEAN Regional Forum held in Phnom Penh on 12 July 2012, the Fifth ASEAN Regional Forum Inter-Sessional Meeting on Non-Proliferation and Disarmament (ARF ISM on NPD) was held in Makati City, Philippines on 4-5 June 2013. The Meeting was co-chaired by Dr. Alumanda M. Dela Rosa, Director of the Philippine Nuclear Research Institute (PNRI), Dr. Robert Floyd, Director General of the Australian Safeguards & Non-Proliferation Office (ASNO), and Mr. Yukinari Hirose, Deputy Director-General of Disarmament, Non-Proliferation and Science Department of the Ministry of Foreign Affairs of Japan.

2. ARF participants from Australia, Bangladesh, Brunei Darussalam, Cambodia, Canada, the European Union, India, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, New Zealand, Pakistan, the Philippines, Republic of Korea, Russian Federation, Singapore, Sri Lanka, Thailand, Timor-Leste, the United States and Viet Nam attended the Meeting. Representatives of the International Atomic Energy Agency (IAEA), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) Preparatory Commission, Implementation and Assessment Group (IAG) of the Global Initiative to Combat Nuclear Terrorism (GICNT), Council for Security Cooperation in the Asia-Pacific (CSCAP), and the ASEAN Secretariat were also present. The List of Participants appears as **ANNEX 1**.

Opening Session

3. In his welcome remarks, Hon. Evan P. Garcia, Foreign Affairs Undersecretary for Policy and ARF Senior Officials' Meeting (SOM) Leader of the Philippines, emphasized the importance of peaceful uses of nuclear technology in energy generation and a variety of other areas, including food security, nutrition, human health and water resource management. He urged greater cooperation among ARF members on developing such technology and addressing nuclear security threats. At the same time, he noted the need for more progress in the fields of non-proliferation and disarmament, the other two pillars of nuclear matters, in particular in the lead-up to the 2015 Nuclear Non-Proliferation Treaty (NPT) Review Conference. As examples, he noted the urgency for ratification by ARF members of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), the on-going consultations with the Nuclear Weapon States to facilitate their signing of the Protocol to the SEANWFZ Treaty without reservations, and universal adherence to the Hague Code of Conduct Against Ballistic Missile Proliferation. Undersecretary Garcia's speech appears as **ANNEX 2**.

Agenda Item 1: Opening Remarks by Co-Chairs

4. In her remarks, Dr. Alumanda M. Dela Rosa, Director of the PNRI, noted that peaceful uses of nuclear technology, the third pillar of the global non-proliferation regime, areas important as non-proliferation and disarmament. She cited the work of the Regional Cooperative Agreement (RCA) Related to Research, Development, and Training in Nuclear Science and Technology in Asia Pacific, which brings together 17 IAEA Member States that are also ARF members, on using nuclear technology to study, among other concerns, the health of the environment. She likewise highlighted the need for a regime governing the sensitive subject of nuclear matters, as well as the mutually reinforcing nature of the three pillars of the global non-proliferation regime. The work of the 4th ARF ISM on NPD, which touched on peaceful uses of nuclear technology even as it discussed non-proliferation, received special mention, as did ARF activities outside the ISM mechanism on NPD. Dr. Dela Rosa's speech appears as **ANNEX 3**.

5. Dr. Robert Floyd, Director General of the Australian Safeguards & Non-Proliferation Office (ASNO), noted the timely discussion of peaceful uses of nuclear technology in view of the growing interest in nuclear energy especially in Asia. He pinpointed human health as an area where nuclear technology is particularly relevant, as applied in radiation therapy and nuclear medicine. Concurring with the view that the three pillars of nuclear non-proliferation are inseparable. Dr. Floyd welcomed various national actions by ASEAN Member States in support of a global safeguards system which, he observed, support the implementation of the Southeast Asia Nuclear Weapon-Free Zone (SEANWFZ) Treaty. He emphasized the importance of the security of nuclear materials, as well as technical cooperation against nuclear terrorism, specifically the work of the Global Initiative to Combat Nuclear Terrorism (GICNT). He concluded that nuclear safety is a prerequisite for the peaceful uses of nuclear energy. Dr. Floyd's speech appears as **ANNEX 4**.

6. Mr. Yukinari Hirose, Deputy Director-General of Disarmament, Non-Proliferation and Science Department of the Ministry of Foreign Affairs of Japan, noted that previous ISMs on NPD have produced multiple outcomes that served as further impetus for regional cooperation on NPD. He added that the ARF ISM on NPD can provide a platform to discuss matters on NPD during the review process of the NPT. Mr. Hirose observed that the demand for nuclear energy remains high in Asia, and thus nuclear security, nuclear safety and nuclear non-proliferation standards are more important than ever. Highlighting nuclear safety in particular, he shared updates on Japan's efforts to address the impacts of the Fukushima Daiichi accident, including the medium to long-term measures being taken to decommission the plants. He assured the meeting that Japan will continue to share knowledge and lessons learned from the Fukushima Daiichi accident, citing the Fukushima Ministerial Conference on Nuclear Safety in December 2012 as the most recent example. Mr. Hirose's speech appears as **ANNEX 5**.

Agenda Item 2: Adoption of the Agenda

7. The Meeting considered and adopted the updated Provisional Agenda, which appears as **ANNEX 6**.

Agenda Item 3: Business Arrangements

8. The Meeting was informed of the Business Arrangements, which appear as **ANNEX 7**.

Agenda Item 4: Perspectives on the Peaceful Uses of Nuclear Technology

9. Dr. Genxin Li, Director, Legal and External Relations Division of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) Preparatory Commission, delivered a presentation on the civil and scientific applications of CTBT verification technologies. Dr. Li explained that the CTBTO's unique system consists of three pillars: the International Monitoring System (IMS), International Data Centre, and On-Site Inspections. Spread across 377 sites worldwide, the IMS involves seismic, hydroacoustic, infrasound and radionuclide technology for detecting seismic activity, radiation releases, tsunamis, aviation hazards caused by volcanic eruptions, and meteorites. This capability was recently applied during the Fukushima nuclear accident in March 2011. Dr. Li also emphasized education and outreach in the peaceful uses of technologies and capacity building initiatives through live lecture courses, e-learning and partnerships with universities as an important component of the CTBTO's work. He expressed the need to advance the universality of the CTBT itself as well as the need to have all Annex 2 countries to ratify the CTBT so it can enter into force. He noted that while many in the scientific and diplomatic community see the benefit of universalization, some Annex 2 countries have security and political concerns regarding ratification. He reported that the new Executive Secretary has established an eminent persons group composed of former Foreign Ministers and other leaders to engage with Annex 2 countries to seek their ratification of the CTBT. Dr. Li's speech appears as **ANNEX 8**.

10. In response to Indonesia's question on how to realize the ratification by the Annex 2 countries, Dr. Li noted that mutual trust among states would assist in getting countries to ratify the CTBT. He also added that strong regional leadership, as Indonesia is showing, is important.

11. During the sharing of country perspectives by ARF members, Canada said it has a key interest in the peaceful uses nuclear energy, citing its record as a nuclear power country, producer of medical isotopes, and exporter of uranium. Canada said it views nuclear energy as a way to help countries meet growing energy needs, particular in the Asia Pacific region. However, nuclear programs must be developed within a robust international framework that addresses nuclear security, safety, non-proliferation, and waste management concerns. Canada cited substantial financial contributions to nuclear security initiatives in the context of the Nuclear Security Summit. It recognized the role of the ARF in providing a mechanism to enhance nuclear security and addresses WMD non-proliferation issues in the region and encouraged the Meeting to keep the political momentum moving in this regard. Canada is pleased with the outcomes of the ARF workshop on UN Security Council Resolution (UNSCR) 1540 in Bangkok in May 2013 and supported calls for ARF members to submit action plans and identify national focal points for UNSCR 1540 implementation. Canada suggested that ARF members could consider enhanced

engagement in the Proliferation Security Initiative as a means to support 1540 implementation.

12. Indonesia affirmed its positive view on the socio-economic applications of peaceful uses of nuclear technology such as in the areas of health, food, water resource management, and the environment. It shared that Indonesia had been applying nuclear isotopic techniques to increase crop productivity. Development, it emphasized, could not be achieved if the right of states to use nuclear technologies were not fully protected. Indonesia expressed its full support for the IAEA technical cooperation program, which it acknowledged to have already yielded tangible results in Member States. It shared that through the IAEA's Peaceful Uses Initiative, Indonesia supported projects in Cambodia, Myanmar, and Jordan. Indonesia called on ARF participants to exert more efforts in promoting cooperation based on principle of "safety first." Indonesia's country perspective appears as **ANNEX 9**.

13. Lao PDR reiterated its support for the peaceful use of nuclear energy and technology in aiding socio-economic development. It shared that after joining the IAEA in 2011, Lao PDR has maintained close cooperation with the IAEA and currently is in the process of drafting technical cooperation projects with the IAEA. Lao PDR informed the Meeting that in December 2012, it ratified two more conventions related to nuclear safety namely, the Convention on Early Notification on Nuclear Accidents and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. It added that Lao PDR is in the process of studying and considering ratification of the IAEA Additional Protocol. It also stated that it has not yet planned to build nuclear power plants since the country generates hydroelectric power through its vast river system.

14. In its country statement, New Zealand emphasized the many benefits that were derived from nuclear science, including in fields such as agriculture, human health and environmental management. New Zealand recognised the right of countries to use nuclear energy in conformity with the NPT, but underlined that it had no intention to use nuclear energy for electricity generation. It was important that the development and use of nuclear energy be accompanied at all stages with high standards of safety and security, non-proliferation safeguards, and waste management. New Zealand noted that the Fukushima accident had reinforced the importance of nuclear safety and security, standards for which should be updated as technology improves. Fukushima also demonstrated the vital need for effective and transparent communication. On nuclear terrorism, New Zealand stated that the consequences of nuclear terrorism were not confined to one particular state and that cooperative efforts must be made to combat nuclear terrorism, including through the Nuclear Security Summit process. New Zealand also expressed strong support for the various activities being led by the IAEA in the area of nuclear safety and security.

15. The Philippines reported the IAEA's recent declaration that the Philippines had no undeclared nuclear material testifies to the Philippines' faithful fulfilment of obligations under the global non-proliferation regime. It focused on Philippine efforts in promoting the peaceful applications of nuclear technology to address issues of climate change, human health and water resources assessment and management. It shared that the Philippines participated in the IAEA-funded Supporting Climate-Proofing Rice Production Systems (CRiPS) based on the Nuclear Applications

project. On human health, it shared the Philippines' undertaking of a research project using nuclear and non-nuclear body composition assessment techniques in formulating baby food to combat malnutrition and diseases. With technical assistance also from the IAEA, the Philippines also established a Technetium-99m generator facility to facilitate the local preparation of nuclear medicine. On water resources assessment and management, the Philippines was designated in 2010 as one of the pilot countries to undertake the IAEA Water Availability Enhancement Project (IWAVE) which aims to strengthen national capacity to conduct comprehensive water resources assessment.

16. ROK emphasized that in view of many Asian countries planning to build nuclear power plants, the Meeting could renew commitments to peaceful uses of nuclear technology. It cited Article 4 of the NPT, which ensured the right to use nuclear energy for peaceful uses, in compliance with NPT obligations. While citing that nuclear energy could play a crucial role in national development, ROK reminded the Meeting to ensure that nuclear safety and security is assured. It commended the IAEA's role in promoting the peaceful use of nuclear energy, especially the IAEA's technical cooperation program through its Peaceful Uses Initiative. It said that for its part, ROK supported the implementation of the IAEA Action Plan on Nuclear Safety and urged the implementation of the same by other countries. It hoped that international discussions on the nuclear fuel cycle would serve the objectives of the NPT in the peaceful uses of nuclear energy.

17. Russia stated that nuclear energy is one of the technologies used in addressing global warming. It expressed support for the development of nuclear energy all over the world, assuring that Russia was willing to assist all countries in the development of nuclear energy. It shared that nuclear energy accounted for a sizeable portion of electricity generation in Russia, and that all existing and planned nuclear power plants conformed with the standards of nuclear safety. It noted Russian investments in nuclear technology, in research on fusion energy in particular which, if successful, could provide humanity with a great source of energy. It enumerated various countries in Asia and Europe assisted by Russia in their development of reactors and enrichment capacities and stated that cooperation with the IAEA in promoting nuclear power through technical assistance was likewise important. Russia provided information on the upcoming International Conference on Nuclear Energy in the 21st Century to be held in St. Petersburg in June 2013.

Agenda Item 5: Report of the Council for Security Cooperation in the Asia Pacific (CSCAP) WMD Study Group

18. Mr. Ralph Cossa, President of the Pacific Forum Center for Strategic and International Studies (CSIS), briefed the Meeting on discussions during the Council for Security Cooperation in the Asia Pacific (CSCAP) WMD Study Group meeting held in Makati City on 2-3 June 2013. While the nuclear accident at Fukushima might cause delays in the implementation of nuclear technology programs, Mr. Cossa noted that the Study Group considered that the accident would not halt the development of such programs especially in Asia, which had shown the biggest growth in terms of nuclear energy programs. Mr. Cossa identified enrichment and reprocessing as two areas that raise additional concerns about safety and

proliferation. The Study Group encouraged individual countries pursuing nuclear ambitions to be transparent in laying out plans on these two areas to encourage confidence-building among neighbors. Another common concern identified was on spent fuel management. Mr. Cossa emphasized that these three concerns lend themselves to multilateral solutions and, as such, are areas where the ARF should be taking the lead in the Asia-Pacific region. In preparation for the Nuclear Security Summit in 2014, Mr. Cossa mentioned the possible highlighting of the ASEAN efforts on the ASEAN Network of Nuclear Regulatory Bodies or Relevant Authorities (ASEANTOM). Mr. Cossa encouraged ASEAN to share more information about the ASEANTOM and recommended it as an agenda item in the ARF. He also shared that CSCAP is preparing a memorandum on better implementation of UNSCR 1540, and suggested that the link between UNSCR 1540 and the Proliferation Security Initiative (PSI) be studied. On the situation in the Korean peninsula, Mr. Cossa reiterated that the Study Group expressed concern over the recent North Korean nuclear and missile tests and that the Study Group emphasized the urgent need for DPRK to abide by its international obligations including relevant UNSCR such as 2087 and 2094. He stressed that organizations such as the ARF, which include representatives from the Six Party Talks countries, could help keep the momentum of the dialogue. Mr. Cossa invited the co-chairs to present associated work plans at future CSCAP Study Group meetings to provide CSCAP participants with a better understanding of ARF efforts, as a means of promoting long-standing cooperation between the CSCAP Study Group and the ISM on NPD. Mr. Cossa's presentation appears as **ANNEX 10**.

19. The Philippines shared its observation that the United Nations (UN) is a hub of disarmament activities. The Philippines also recalled the recent celebration of PSI's 10th anniversary, where nuclear issues were highlighted. It noted the importance of a sense of convergence among efforts in the ARF and forums such as those it cited. As an example, it mentioned how the Philippines, Australia and the U.S. brought to the attention of the UN the ARF's series of workshops on biological security from 2009 to 2012. It added that more links with the European Union are possible, especially through the Chemical, Biological, Radiological and Nuclear (CBRN) Center of Excellence. These links will strengthen efforts aimed at peaceful applications of nuclear technology.

Agenda Item 6: Perspectives on the Peaceful Uses of Nuclear Technology (continued)

20. Ms. Nadia Levin, General Manager for Government, International and External Relations at the Australian Nuclear Science and Technology Organisation (ANSTO), provided a briefing of ANSTO's activities on nuclear matters, particularly in nuclear medicine. Its Opal Research Reactor, which uses low-enriched uranium fuel, serves as a production center for neutrons used in scientific research and the irradiation of nuclear medicine targets. Some of ANSTO's work in this field includes addressing obesity by analyzing food interactions at the atomic level and using gamma rays to detect conditions such as heart disease and cancer. Ms. Levin shared Australia's commitment to fund an export-scale nuclear medicine facility that will produce a significant amount of the world's supply of Molybdenum 99. In other applications of nuclear technology, ANSTO, through one of its business divisions,

ANSTO Synroc, pioneers safe nuclear waste disposal through specialized technology that reduces the volume of waste significantly compared to other existing technology. She also highlighted ANSTO's engagement with regional and international forums, specifically the ARF ISM on NPD, IAEA programs including RCA, the GICNT and the Nuclear Security Summit. Under the 20 active projects under the RCA in 2013, 15 are with Australian participation and five are led by Australia, three of which are in the field of radiomedicine. Ms. Levin's presentation appears as **ANNEX 11**.

21. During the sharing of country perspectives by ARF Members, Singapore agreed with views expressed earlier that the three pillars of nuclear matters are mutually reinforcing. It also supported the right to peaceful uses of nuclear technology, citing Singapore's contributions to technical cooperation initiatives under the IAEA. In ensuring that nuclear technology is not diverted to non-peaceful uses, Singapore urged the Meeting to conclude and implement IAEA comprehensive safeguards agreements as required by the NPT. It noted the importance of ensuring the highest standards of nuclear safety through international cooperation and sharing of best practices. Due to the cross-border effects of nuclear incidents, he also noted the importance of the IAEA Action Plan on Nuclear Safety as well as regional proposals such as the ASEANTOM. Singapore concluded by citing Article 6 of the NPT, which notes that Parties must pursue negotiations on disarmament in good faith, as the non-cooperation of the Nuclear Weapon States (NWS) threatens regional security.

22. Sri Lanka updated the Meeting about the activities of its Atomic Energy Authority (AEA), the country's center of excellence on activities related to peaceful uses of technology. The AEA is involved in regulating activities involving radiation, research and monitoring, radiation testing and inspections, and applications of gamma irradiation, among others. He shared two initiatives of the AEA to be conducted jointly with other government agencies in Sri Lanka on applications of nuclear technology: the establishment of a National Center for Nuclear Agriculture with the Department of Agriculture and a National Center for Marine Environmental Studies with the Marine Environment Protection Authority. Sri Lanka's country presentation appears as **ANNEX 12**.

23. Pakistan shared the view that the issue of nuclear energy should be approached in an equitable, non-discriminatory and criteria-based approach, and that non-proliferation and disarmament should also be non-discriminatory, as well as inclusive and cooperative. He added that as Pakistan is a fossil fuel-deficient country, nuclear energy is an integral part of the country's energy security action plan. It assured the Meeting that Pakistan's nuclear reactors operate under the auspices of IAEA safeguards. Pakistan's country perspective appears as **ANNEX 13**.

24. Thailand echoed views expressed by previous delegations on the right of NPT States Parties to develop peaceful uses of nuclear technology, the contributions of nuclear energy to socioeconomic development, and the role of the IAEA in fostering technical cooperation among member states. It also informed the Meeting of various national initiatives in nuclear technology that Thailand has been pursuing. In agriculture, Thailand is applying nuclear technology to develop new crop varieties and sterilize pests. In public health, Thailand has brought PET/CT technology to

areas outside of Bangkok to improve access to cancer treatment. In water resource management, Thailand has long been using isotope hydrology to identify water sources. To address risks posed by non-state actors acquiring these and other similar nuclear technology, Thailand supported the effective implementation of UNSCR 1540 enhanced by related capacity-building workshops and seminars. Other projects supported by Thailand in this vein were border controls in view of ASEAN economic integration, the ASEANTOM initiative, and an ARF workshop on nuclear forensics to be hosted with the U.S later in 2013. Thailand's country perspective appears as **ANNEX 14**.

25. Timor-Leste associated itself with comments on peaceful uses of nuclear technology as a tool for economic development, but noted that more work to convince countries to accede to international instruments and IAEA safeguards is needed. He noted that as a small country, Timor-Leste views venues such as the ARF as valuable in helping build Timor-Leste's capacity and knowledge on nuclear issues. He reiterated Timor-Leste's commitment to the rules and regulations associated with non-proliferation and disarmament. Timor-Leste's country perspective appears as **ANNEX 15**.

26. The United States expressed support for safe and secure expansion of nuclear programs for NPT States Parties in compliance with their NPT obligations, at the same time encouraging those that have programs to adhere to the highest standards of security, safety and safeguards. The U.S. reaffirmed its commitment to all pillars of the NPT and noted that the U.S. has contributed significant financial and technical support to strengthen the NPT. The U.S. explained that it works bilaterally with many partners in the ARF and internationally under the IAEA to enable countries to reach the highest standards of safety and security. These avenues include through the U.S. National Regulatory Commission's international regulatory partnership, funding for the Asian Nuclear Safety Network (ANSN) under the IAEA, the work of the Asia-Pacific Safeguards Network (APSN), and the IAEA's Technical Cooperation Fund and Peaceful Uses Initiative. The United States welcomed the active participation of ASEAN Member States at the 2nd Preparatory Commission for the 2015 NPT Review Conference in April 2013. In support of an international fuel bank and as another peaceful use of nuclear technology, the U.S. also maintains the American Assured Fuel Supply of low-enriched uranium downgraded from former military installations. The United States offered this as a concrete example of the reinforcing nature of the three pillars of NPT.

27. Viet Nam informed the Meeting of its latest ratifications of the IAEA Additional Protocol and the Convention on Physical Protection of Nuclear Material, as well as the presence of guiding national legislation on atomic energy in Viet Nam. It also called for the early adherence of the NWS to the Protocol to the SEANWFZ Treaty. Viet Nam thanked the IAEA for close cooperation on developing technical and legal frameworks on nuclear technology, in particular to realize two power plants in the pipeline and to respond to illicit trafficking of nuclear materials.

28. Myanmar shared that it is cooperating closely with the IAEA in facilitating nuclear energy development for peaceful purposes. It also expressed appreciation for the know-how passed on via technical cooperation programs of the IAEA in the areas of agriculture, food security, livestock production, healthcare and nutrition. It

affirmed support for international cooperation on nuclear science and technology and for international agreements that address the threat of weapons of mass destruction (WMD) and the negative consequences of putting up power plants. Myanmar stated that the country does not harbor any ambition to possess nuclear weapons and other WMDs.

29. India echoed sentiments that nuclear energy is essential for energy security and that international cooperation is an important component of pursuing nuclear energy. It cautioned that nuclear energy programs must abide by the highest standards in safety and security. On international cooperation, India shared that it has been actively participating in international forums, including under the UN, the Nuclear Security Summit process, and in relation to UNSCR 1540. It supported the central role of the IAEA in these processes, citing that India has contributed significantly to the IAEA's Nuclear Security Fund and has concluded numerous agreements on IAEA safeguards. On disarmament, India emphasized the need for universal, non-discriminatory, and verifiable elimination of nuclear weapons in a time-bound manner, a moratorium on nuclear testing, and commencement of negotiations on disarmament. It added that India is also expanding its development assistance in nuclear technology by providing cancer treatment machines, among others.

30. Bangladesh reaffirmed the rights of NPT members to peaceful uses of economic development for socioeconomic development, as the country has consciously opted for nuclear energy to fuel a growing economy. It shared that the country has been working closely with the IAEA to develop the necessary framework and put the necessary safeguards in place as accidents or disasters are unacceptable in population-dense Bangladesh. In this regard, it underscored the importance of venues for information and expertise sharing like the ARF, and implored the ARF to reach out and engage stakeholders in discussions on safeguards. Bangladesh stressed the need for complementarity of efforts among ARF countries and said enhanced interaction among national agencies in the region to share expertise. It broached the idea of regulatory agencies in South Asia interacting with the envisioned ASEANTOM on a single platform. In terms of areas for focus, Bangladesh identified food preservation and water resource management as two areas of relevance to Bangladesh where it could benefit from sharing of expertise available with other ARF members on nuclear technology research and application in these sectors.

Agenda Item 7: IAEA Standards on Nuclear Safety, Nuclear Security, and Nuclear Nonproliferation Safeguards

31. Mr. Paul Woodhouse, Head, Safety and Security Coordination Section, Department of Nuclear Safety and Security of the IAEA, briefed the Meeting on the origins and work of the IAEA on nuclear safety, security and safeguards. He shared that the IAEA's nuclear safety, security and safeguards are mandated by the IAEA Statute, particularly Article III, A.1, A.6. He emphasized that nuclear safety and nuclear security have the same ultimate goal of protecting people, society and environment. On nuclear security, he shared that the 11 September 2001 attacks in the United States brought about the establishment of the IAEA's Office of Nuclear

Security. The IAEA is guided by its Global Nuclear Safety and Security Framework, which includes international instruments, guidelines and on-the-ground regulations, enforcements of these guidelines, researches, education and training, and infrastructure on nuclear matters. IAEA Security Guidance Documents are developed in close consultation with Member States' experts. IAEA's role in preparedness and response is evident through the enforcement of safety of nuclear installations, transport and management of radioactive wastes. While nuclear security is a national responsibility, Mr. Woodhouse said the IAEA supports states in maintaining effective nuclear safety, which includes prevention, detection and response. IAEA safeguards aim to provide credible assurance about the exclusively peaceful use of nuclear material and facilities and verify the correctness and completeness of declaration made by States. Mr. Woodhouse's presentation appears as **ANNEX 16**.

32. Mr. Lubomir Frebort, Counsellor / Head of Political, Press & Information Section of the Delegation of the European Union to the Philippines, focused on nuclear safety, security and safeguards using the perspective of the European Union. International safeguards is a common task for different stakeholders such as IAEA, EU Member States, the European Commission, specifically the European Atomic Energy Community (Euratom), operators of nuclear installations/holder of nuclear materials and other EU institutions. He shared that all EU non-nuclear weapons states (NNWS) share one common safeguards agreement to implement Article III of the NPT, while a separate safeguard agreements for two nuclear weapon states of the EU, the United Kingdom and France, were entered into force in 1978 and 1981, respectively. Three elements of the Euratom Safeguard systems are to perform inspections, take urgent actions in case of infringements, and implement the highest international standards of nuclear safety. On reducing proliferation risks, the EU and its Member States have signed instruments promoting non-proliferation and participate in the Nuclear Security Summit process and in IAEA research and development activities. Recent developments in international safeguards are the EU's introduction of IAEA integrated safeguards in the NNWS and the consideration of border controls in the Schengen area. Mr. Frebort's presentation appears as **ANNEX 17**.

33. Dr. Robert Floyd, Director General of ASNO and Chair of the Asia-Pacific Safeguards Network (APSN), reported on the activities of the APSN, established to support regional cooperation for best-practice implementation of safeguards through collaborative and cooperative work to build national safeguards capability in the Asia-Pacific region. APSN's objective is to improve the quality, effectiveness and efficiency of safeguards implementation in Asia-Pacific. Dr. Floyd shared that APSN has working groups on safeguards implementation, capacity building, IT support, model safeguards and security legislation, and nuclear security. Its outputs include the "Fundamentals and Good Practices of Safeguards Regulatory Authorities" publication, surveys in safeguards training needs and providers, seminars and workshops. Dr. Floyd's presentation appears as **ANNEX 18**.

34. In reaction to the presentations, Indonesia stated that it upholds the principle of "safety first" as regards nuclear issues and that it continues to pursue policies that emphasize this principle at all levels. It also stated that Indonesia is now preparing for an IAEA review service mission in 2014 to conduct a full-scale assessment of its

regulatory infrastructure. Other efforts of Indonesia on nuclear safety include being signatories to international conventions, the installation of radiation portal monitors in its Belawan port, and cooperation under APSN. Indonesia shared that it has proposed the compilation of a national legislation implementation kit on nuclear safety to serve as a point of reference for countries seeking to develop nuclear technology.

Agenda Item 8: Preventing Nuclear Terrorism including, inter alia, through Cooperation within the Framework of the Global Initiative to Combat Nuclear Terrorism (GICNT)

35. Dr. Gyungsik Min, Coordinator of the Implementation and Assessment Group (IAG) of the GICNT and Vice President of the Korea Institute of Nuclear Non-Proliferation and Control, reported on the developments in the GICNT. Established in 2006, the GICNT, co-chaired by the United States and Russia, has grown into a partnership of 85 nations and four observers dedicated to taking cooperative actions against the shared threat of nuclear terrorism. GICNT's current focus through its three working groups includes the development of best practices in the specific focus areas of nuclear detection, nuclear forensics, and emergency response and mitigation. Dr. Min informed the Meeting that the recent 2013 GICNT Plenary Meeting in Mexico City was participated in by more than 250 registered delegates representing 62 countries. At the Plenary, partner nations were briefed on the outcomes of key exercises, workshops, and conferences hosted since 2011. Since the new terms of reference were implemented in 2010, the focus of the three working groups – nuclear detection, nuclear forensics, and response and mitigation – has been on producing practical and actionable best practices and guidance documents. At the 2013 Plenary, three of such guidance documents were endorsed as official GICNT products. A fourth document being developed by the Response and Mitigation Working Group (RMWG) is intended to be endorsed at the 2015 Plenary. Dr. Min also shared that based on survey results from previous meetings, GICNT partners expressed greater interest in practical activities such as workshops, training, and table-top exercises as a focus of GICNT, and less emphasis on developing guidance documents. Dr. Min's presentation appears as **ANNEX 19**.

36. Mr. Mikhail Kondratenkov, Counselor, Department of Security Issues & Disarmament of the Ministry of Foreign Affairs of the Russian Federation, wished Dr. Min success in his new role as coordinator. He acknowledged GICNT as an effective mechanism in combating nuclear or radiological terrorism and agreed with the survey results which noted the focus of GICNT on the task of developing guidance documents should shift. Mr. Kondratenkov stressed that greater emphasis should be placed on practical activities that build the capacities of participants in the field of combating terrorism and strengthening nuclear security.

37. Ms. Jenny Mitchell, GICNT, U.S. Department of State, stated the U.S. Co-Chair of the GICNT fully supports the future direction of Global Initiative as laid out by Dr. Gyungsik Min. After feedback showed partner nations would like to see greater coordination with other international organizations, and a shift in focus to seminars, exercises, and workshops with the intent of growing national capabilities, the Implementation and Assessment Group (IAG) Coordinator answered this call.

New smaller, topically- and regionally-focused groups have been proposed and will either fall under the umbrella of current working groups, will cross over two or more of those disciplines, or will pick up another key nuclear security objective from the Statement of Principles. Although some groups will be regionally-focused, partner nations have been encouraged to keep in mind the global nature of the Initiative and to foster participation and observation by all interested partners. These focus groups will enhance the work of the GICNT by allowing more flexibility and agility in creating practical, applicable solutions to issues in nuclear security; they will also allow opportunities for more partner nations to take on a leadership role in the GICNT; and they will have a practical output to be used by the GICNT partnership.

38. Mr. Ki-hwan Kweon, Counselor, ROK Embassy in Manila, reported that their country was elected to coordinate and lead the GICNT Implementation Assessment Group (IAG) for the period 2013 to 2015. He highlighted the need for international cooperation especially in light of increased threat of nuclear terrorism. He shared that two of 160 cases of illicit trafficking reported in the IAEA database involved trafficking of highly enriched uranium. Mr. Kweon affirmed the contribution of GICNT's three working groups on Nuclear Detection, Nuclear Forensic, and Response & Mitigation to capacity-building efforts in partner countries. However, Mr. Kweon also acknowledged the need to make the GICNT an even more efficient and action-oriented institution. He suggested the forging of a cooperation between the GICNT and ARF, citing the possibility of the GICNT and ARF's joint hosting of exercises, trainings, seminars and workshops to help build capacities on combating nuclear terrorism. Mr. Kweon also mentioned the Nuclear Security Summit as another venue for international cooperation against nuclear terrorism, citing as a success the removal of 530 kilograms of highly enriched uranium from eight countries, an amount enough to produce about 21 nuclear weapons. Mr. Kweon's remarks appear as **ANNEX 20**.

39. Ms. Muanpuli Saiiawi, Undersecretary of the Ministry of External Affairs of India, reported that since joining the GICNT in June 2008, India has been an active participant in addressing the threats of nuclear terrorism. Ms. Saiiawi expressed India's belief in the GICNT as a forum for building synergies and learning from the experiences of others, contributing to the building of a global architecture for combating terrorism. Ms. Saiiawi reiterated India's clear understanding that military nuclear programs of participating countries are excluded from the scope of the GICNT and that this international voluntary partnership operates, above all, on the principle of consensus. Ms. Saiiawi also announced India's contribution of a case study to one of the GICNT working groups.

40. Australia expressed its strong support to the GICNT and its role in building an international cooperation in combating nuclear and radiological terrorism. It welcomed the move towards stronger regional focus and stated that such move was reflective of the growing interest in nuclear energy in the region, citing the recent joining of Malaysia, the Philippines and Viet Nam in the GICNT.

41. New Zealand recalled its GICNT table-top exercise carried out in 2009, which aimed at testing out national capabilities in responding to a terrorist incident involving radiological materials. The 2009 exercise was subsequently converted into a model

table-top exercise (Model TTX) and loaded onto a CD, copies of which New Zealand had shared with Meeting participants.

Agenda Item 9: Necessary Steps to Improve Nuclear Safety Worldwide

42. Mr. Shawn Friele, Senior Policy Officer, Nuclear NACD Policy, Non-Proliferation and Disarmament Division (IDA) of the Department of Foreign Affairs and International Trade of Canada, noted that nuclear energy is sustainable if operated safely and in accordance with international standards and agreements. He added that the push for nuclear safety has to establish public confidence that nuclear energy facilities are being operated in a safe and reliable way. He also said that nuclear safety measures must continuously improve and international and regional cooperation must be present to ensure an effective nuclear safety framework. Mr. Friele cited three fronts on which Canada pursues cooperation: with the IAEA, through bilateral relationships, and through other international and regional organizations such as the G8 Safety and Security Working Group. He was encouraged to hear that other members use the ARF and other organizations similarly to further nuclear safety.

43. Mr. Yukinari Hirose, Deputy Director-General of Disarmament, Non-Proliferation and Science Department of the Ministry of Foreign Affairs of Japan, stated that Japan has relevant experiences to share on nuclear safety in light of the Fukushima Daiichi accident, which it shared recently at the Fukushima Ministerial Conference on Nuclear Safety in December 2012. He reiterated that the reactors at Fukushima Daiichi Nuclear Power Station have been stabilized, while Japan's regulatory authority has been made more independent following the accident. Mr. Hirose appreciated the central role of the IAEA in improving nuclear safety and stressed that the enhancement of emergency preparedness is also important. He expressed Japan's willingness to take a leading role in the field.

44. Mr. Jan Fladeboe, Office of Nuclear Energy, Safety and Security (NESS) of the United States, stated that the nuclear accident at Fukushima underscored the importance of nuclear liability in the international arena and that it had long been an important aspect of nuclear power plant operations. The need for nuclear liability is dictated by the potential magnitude of damage arising from a nuclear accident, the need to equitably and promptly compensate victims, and the need to assure or restore the public's confidence in the technology. Mr. Fladeboe stressed that establishment or improvement of a domestic liability regime that meets Convention requirements is vital for participation in the international liability regime. He explained that due to the inadequacies of a Vienna Convention on Civil Liability for Nuclear Damage, many improvements were incorporated in the Convention on Supplementary Compensation for Nuclear Damage (CSC). These include the enhancement in compensation, expansion of the definition of nuclear accident, and the explicit identification of the types of nuclear damage. Mr. Fladeboe assured the Meeting of the CSC's compatibility with both the Vienna and Paris Conventions, stating that nations that are not a party to any nuclear liability convention may join the CSC provided they would ensure that their national laws would comply with the provisions in the Annex to the CSC. Mr. Fladeboe's presentation appears as **ANNEX 21**.

Agenda Item 10: Updates on the Implementation of the ARF NPD Work Plan

45. New Zealand introduced a project proposal to convene an ARF workshop on radiological terrorism that would build awareness and promote information-sharing among ARF countries in responding to a terrorist incident involving radiological materials. Part of the workshop would be a table-top exercise involving a simulated radiological terrorist incident to which participants would be asked to develop a response. New Zealand sought the support of an ASEAN partner to co-host the proposed workshop, which, subject to Ministerial approval, would be carried out in the third quarter of 2014. Responding to a query from Bangladesh, New Zealand noted that the project was still in an early stage of development, but potentially the workshop exercise could draw on the material presented in the Model TTX. New Zealand further added that it would take into account the needs of the region in crafting the workshop exercise, and invited feedback from ARF participants on the project. The U.S. expressed support for the New Zealand proposal. New Zealand's proposal appears as **ANNEX 22**.

46. On UNSCR 1540 implementation, the U.S. reported that it co-chaired with Thailand the 2nd ARF Workshop on Confidence-Building Measures in the Implementation of UNSCR 1540 on 14-15 May 2013 in Bangkok. The Workshop discussed the best practices to guide the implementation of UNSCR 1540. The United States noted that the ARF is the appropriate venue for sharing best practices and identifying resources to help participants implement UNSCR 1540 and supported reference in the ARF NPD Work Plan to similar workshops. It also shared that it is planning to host a nuclear forensics workshop with Thailand. In response, Thailand expressed hope that the UNSCR 1540 Workshop will be a continuing initiative. It suggested that further discussions on UNSCR 1540 implementation also be made in the context of ASEAN Community by 2015 in relation to border control, connectivity, and the ASEAN Single Window project implementation. ROK announced that as Chair of UNSCR 1540 Committee chair for 2013-2014, it fully supports ARF efforts to support implementation of the Resolution. It shared ROK's plans to hold workshops on the universal implementation of UNSCR 1540. It also called on the Meeting to consider expanding the membership of PSI and strengthening cooperation under it.

47. Mr. Cossa of Pacific Forum CSIS / CSCAP WMD Study Group suggested interfaces between Track 1 and 2 individuals, including the participation of the Co-Chairs of the ARF ISM on NPD in CSCAP meetings. He mentioned that in addition to its memorandum on managing strategic trade, CSCAP has also issued others, on NPD and on the reduction of all nuclear weapons in particular.

48. The ARF NPD Work Plan, updated with events and project proposals based on the views and information shared during the Meeting, appears as **ANNEX 23**.

Agenda Item 11: Wrap-up Session

49. Japan announced that it will host the Sixth ARF ISM on NPD in 2014. The venue and schedule of the Meeting will be communicated to all ARF members in due course.

50. In her closing remarks, Dr. Alumanda M. Dela Rosa, Director of the PNRI, affirmed the interrelatedness and inseparability of the three pillars of the NPT. She reiterated the Meeting's position that countries could get maximum benefits from the peaceful applications of nuclear technology under an environment where fears of terrorist attacks, nuclear bomb detonation, and nuclear accident are minimized or at best eliminated. In order to address these risks, the Meeting's discussions reflected the ARF members' commitment to nuclear safety, security, and safeguards. Dr. Dela Rosa acknowledged the role of the IAEA not as a watchdog as portrayed by the international press, but as an important partner in translating the commitment to action in support of building a safer future. She emphasized that the ARF NPD Work Plan is a living document and, as such, could be populated with projects as deemed necessary by the ARF members. Dr. Dela Rosa's closing remarks appears as **ANNEX 24**.

51. The Meeting thanked the Philippines, Australia and Japan for their effective co-chairmanship. The Meeting also expressed gratitude to the Government of the Philippines for the hospitality and arrangements in hosting the 5th ARF ISM on NPD.