

**TECHNICAL MEETING: ANNUAL MEETING OF THE INTERNATIONAL NETWORK FOR
NUCLEAR SECURITY TRAINING AND SUPPORT CENTRES (NSSC Network)**

Islamabad, Pakistan

14 – 18 March 2016

Chair's Report



**The Chair's Report on Outcomes of the Technical Meeting: Annual Meeting of the International
Network for Nuclear Security Training and Support Centres (NSSC Network)
Islamabad, Pakistan
14 – 18 March 2016**

A technical meeting on the *Nuclear Security Plan 2014-2017 – Implementation of the International Network for Nuclear Security Training and Support Centres (NSSC Network)* was held in Islamabad, Pakistan from 14 to 18 March 2016. There were 50 participants from 30 Member States, one participant from the World Institute for Nuclear Security, as well as four IAEA staff.

The objectives of the meeting were:

- To discuss implementation of a vision for IAEA Activities with NSSCs and the Network;
- To sharing experience and good practices for nuclear security training and support in Pakistan;
- To brief the members on the status of the Working Groups' Action Plans;
- To brief the members on progress made by the Task Force for Development of NSSC Network Information Management Tools;
- To receive presentations from new Network Members;
- To share NSSC experience and challenges in HR and training needs analysis, HRD planning, training and development of instructors, and in sustaining nuclear security equipment for technical and scientific support;
- To encourage and discuss NSSC cooperation with educational institutions; and
- To facilitate and encourage practical proposals for cooperation among NSSCs on a regional basis.

BACKGROUND

In September 2013, the Board of Governors approved a *Nuclear Security Plan* covering the period 2014–2017¹. The objective of the IAEA Nuclear Security Plan (the Plan) is to contribute to global efforts *to achieve effective security* wherever nuclear or other radioactive material is in use, storage and/or transport, and of associated facilities, by supporting States, upon request, in their efforts to meet their national responsibilities and international obligations, to reduce risks and to respond appropriately to threats.

Effective nuclear security requires the provision of capabilities to prevent, detect and respond to a criminal or an unauthorized act with nuclear security implications, involving nuclear or other radioactive material. If the established capabilities are to remain effective, they should be developed systematically and should be self-sustained over the long-term by a State and by the competent authorities². The Plan gives particular attention to supporting States in their efforts to establish national nuclear security support centres that aim at *building-up a cadre of highly qualified and well trained nuclear security personnel* and, at *providing specific technical support* required for effective use and maintenance of instruments and other nuclear security technical systems, as well as *providing scientific support* for the detection of and the response to nuclear security events in a country.

All three components are equally important and ultimately contribute to the improvement of global and national nuclear security through reducing the risk that nuclear or other radioactive material in use, storage and/or transport could be used in criminal or unauthorized acts with nuclear security implications. Ultimately, a national nuclear security support centre assists States to meet and implement their obligations under the international nuclear security relevant legal instruments.

¹ GOV/2013/42-GC(57)/19. d

² Competent authority: A governmental organization or institution that has been designated by a State to carry out one or more nuclear security functions. Example: Competent authorities include regulatory bodies, law enforcement, customs and border control, intelligence and security agencies, health agencies, etc. IAEA Nuclear Security Series No 15 Nuclear Security Recommendations on Nuclear and other Radioactive Material out of Regulatory Control, Vienna (2012).

The IAEA Secretariat has developed a concept to establish a national nuclear security support centre that can be applied by any State. This concept has been rolled out successfully in several States that are willing to share their lessons learned in establishing such centres with the international community. In addition to the efforts of the IAEA, other initiatives have fostered the establishment of other centres around the world typically in different focus areas related to nuclear security.

In order to coordinate current and future efforts in States or regions to establish and maintain such centres, the IAEA organized a meeting that took place from 31 January 2012 to 02 February 2012 at which it was agreed to establish a collaborative network. The aim of this meeting is to review the status of implementation of the *International Network for Nuclear Security Training and Support Centres (NSSC Network)*.

OPENING

The meeting was opened by Mr Juan Carlos Lentijo, Deputy Director General, Department of Nuclear Safety and Security, IAEA. Mr Lentijo welcomed the participants to the meeting and thanked Pakistan for its generosity in hosting the NSSC Network Annual Meeting, the first such meeting to be held outside of IAEA Headquarters in Vienna. He shared some thoughts with the participants on the IAEA's programmes and activities in nuclear security, surveyed some of the NSSC Network's key accomplishments to date, and highlighted a vision of the road ahead. Mr Lentijo noted several major milestones in nuclear security in 2016 in which the Agency will play a pivotal role, including the IAEA's "International Conference on Nuclear Security: Commitments and Actions," to be held in December 2016, and the anticipated entry into force of the Amendment to the CPPNM. Mr Lentijo summarized the history of the Network in becoming an established community of practice and noted some remaining challenges for the Network, including to identify best practices in key technical areas for NSSCs and to foster more meaningful and deeper cooperation among NSSCs. Lastly, Mr Lentijo encouraged all participants to actively contribute to meeting, and thanked Pakistan again for its diligent preparations in hosting the meeting.

Next, Brig. (R) Hamid Abdullah, Commandant of the Pakistan Centre of Excellence for Nuclear Security (PCENS), welcomed participants to Pakistan and provided an overview presentation on PCENS. Brig. Hamid Abdullah summarized Pakistan's efforts to establish NSSC facilities and highlighted Pakistan's commitment to establish a national Centre of Excellence, coordinating among all relevant stakeholders, at the 2014 Nuclear Security Summit in The Hague.

Ms Bonnie Jenkins from the U.S. Department of State, Chair of the Network, then greeted the participants, with a particular welcome to new Members, and presented the draft agenda of the meeting (see Attachment 1) for acceptance. She also provided observations on the history and growth of the Network, and outlined the points for discussion planned for the meeting on overall trends and priorities of the Network.

Ms Tasnim Aslam, Additional Secretary, Ministry of Foreign Affairs, Pakistan, provided a Keynote Address that focused on Pakistan's efforts at strengthening nuclear security overall and to cooperate with the IAEA and other international organizations on a wide range of projects and issues.

Lastly, Mr Muhammad Anwar Habib, Chairman, Pakistan Nuclear Regulatory Authority, provided the Chief Guest Address. Mr Habib emphasized Pakistan's efforts to achieve long-term effectiveness of nuclear security systems at national level by developing a systematic approach for the development of human resources and the provision of technical and scientific support to the stakeholders. He noted that Pakistan augmented its capacity building program in 2005 for the organizations entrusted with the responsibility to establish and sustain an effective nuclear security regime through a project titled Nuclear Security Action Plan, which is now part of the regulatory regime of Pakistan. Mr Habib explained that this was further augmented by a strong history of cooperation with the IAEA in the field

of nuclear security started with the signing of an arrangement in 2005 on “strengthening of physical protection and nuclear security regime with specific emphasis in capacity building of PNRA.” To conclude, Mr Habib offered to make Pakistan’s training facilities for capacity building in physical protection and nuclear security available to the international community.

DISCUSSIONS AND FINDINGS

Following the opening ceremonies and welcoming remarks from key meeting participants and guests, the participants took a technical visit to the PCENS Training Academy and the newly inaugurated Physical Protection Exterior Laboratory (PPEL), where a commemorative plaque dedicated to Pakistan’s cooperation with the IAEA on establishment of the PPEL was unveiled by IAEA DDG Mr Lentijo. During the last session of the first day of the meeting, PNRA provided a presentation for sharing experience and good practices for nuclear security support in Pakistan. The IAEA Division of Nuclear Security then offered an historical review of the IAEA’s activities related to NSSCs, noted achievements and areas for improvement in the NSSC Network, and then laid out activities and next steps underway by the IAEA Secretariat and the Network Members to enhance the Network as a stronger tool for the States and the Agency. To conclude the first day, chairs of Working Groups A, B and C briefed the members on the status of the implementation of the 2015- 16 Action Plans.

On the second day, the Task Force for Development of NSSC Network Information Management Tools briefed the members on progress made during the first Consultancy Meeting of the Task Force held in Vienna, 8 – 12 February 2016. The Task Force presented its plans and timelines for deliverables on three key tasks: development of a new NSSC database; development of an NSSC common training and events calendar, and; drafting of a new NSSC Network Newsletter. Presentations were then delivered by new Network members, Senegal and Bulgaria, outlining their experience and needs in nuclear security. In the next technical plenary session, participants presented and fostered a productive discussion on sharing NSSC experience and challenges in HR and training needs analysis and HRD planning. Representatives from Viet Nam, Morocco, Chile, and the IAEA presented on their efforts and experience in this area. Participants from the Russian Federation, the United States of America, and the IAEA then shared experience in training and development of nuclear security specialists, including instructors.

On day three, participants shared NSSC experience and challenges in sustaining nuclear security equipment for technical and scientific support. The IAEA presented on activities in nuclear security detection architecture and the role of NSSCs. Representatives of China, Pakistan, and Ukraine presented on the sustainability of nuclear security equipment at NSSC laboratories, and a representative of Japan offered experience in technology R&D carried out through its NSSC. In the afternoon, presenters shared views on NSSC activities in key technical areas of interest to the Network members, including: radioactive material security activities carried out by Indonesia; transport security activities carried out by Japan, and; perspectives and experiences in training needs assessment by Pakistan. To close the third day, participants conducted a technical site visit to PNRA laboratories at the National Institute of Safety and Security (NISAS) located in the PNRA headquarters facilities.

The fourth day of the meeting focused largely on cooperation between NSSCs and educational institutions. A representative from the Republic of Korea presented on its activities in that regard, with a specific focus on nuclear security culture. The IAEA presented the plenary with ideas for possible future involvement of NSSCs and academic and research institutes in Coordinated Research Projects in nuclear security. The participants then held Regional Breakout Discussions to discuss several key questions in this area, and then presented the results of these discussions in plenary session. Regional groups included East Asia,³ Asia and the Pacific, Africa, Latin and North America, and Europe. Summaries of these reports can be found in the NUSEC Portal ‘Annual Meeting 2016’ page. The day concluded with a technical visit to the Pakistan Institute of Engineering and Applied Sciences (PIEAS).

³ This subgroup is comprised of China, Japan, and Republic of Korea, which meet as the Asia Regional Network (ARN).

During the fifth and final day of the meeting, the IAEA facilitated a brief discussion with the participants on future activities in support of HRD and training. The participants discussed a new IAEA planned publication on good training practices in the field of nuclear security, and possible IAEA support in undertaking a self-assessment in training and a path toward training review services. Lastly, the Network Chair led a wrap-up session to get feedback from participants, to discuss a vision for and suggestions on future collaboration, and to offer some recommendations to the IAEA on future activities.

All presentations and related reference materials from this meeting are available for download on the *Nuclear Security Web Portal/User Group NSSC*.

CONCLUSION

The meeting successfully completed its outlined objectives, and new NSSC Network Chairs and Vice Chairs were presented to the Network members (see Attachment 2). Mr Yosuke Naoi from Japan, the incoming NSSC Network Chairman, then provided a summary of the meeting discussions and outcomes. Mr James Conner and Mr Alexey Kazennov, of the Division of Nuclear Security, IAEA, expressed sincere gratitude to the outgoing Network Bureau Members, with a special note of gratitude to Ambassador Bonnie Jenkins for her exceptional leadership over the past two years. The IAEA Secretariat observed that Ambassador Jenkins skilfully guided the Network into new areas of work that further strengthen nuclear security worldwide, and displayed a relentless commitment to building a more meaningful and vibrant professional community for all of the Network Members.

Providing a final Chief Guest Address, Mr Muhammad Naeem, Chairman, Pakistan Atomic Energy Commission (PAEC) offered remarks summarizing Pakistan's efforts to continuously strengthen nuclear security. He emphasized that physical protection of nuclear material and nuclear facilities has always been an important aspect of overall nuclear security arrangement of the PAEC. Mr Naeem also reviewed the ways that the three NSSC institutions in Pakistan are part of a national systemic approach to provide education and training to all nuclear security stakeholders in the country. In particular, he highlighted PIEAS' efforts as Pakistan's leading engineering university, providing education in nuclear engineering and other associated subjects for over fifty years, to introduce the specialized subject of nuclear security education since 2009.

Finally, the Secretariat thanked Pakistan again for its generosity and preparations in hosting the meeting, thanked the participants for their fruitful discussions and contributions, and closed the meeting.

The meeting was adjourned at 12:00 on Friday, 18 March 2016.

NSSC NETWORK ANNUAL MEETING
14 – 18 March 2016
Islamabad, Pakistan



Monday, 14 March 2016 (at PCENS)

- 08:30 **Board Transport to PCENS***
- 09:30 **Arrival at PCENS**
- 10:00 – 10:20 **Welcome and Opening Remarks**
Opening Remarks: Mr Juan Carlos Lentijo, Deputy Director General, Department of Nuclear Safety and Security, International Atomic Energy Agency (IAEA)
- 10:20 – 10:40 **Overview Presentation on Pakistan Centre of Excellence in Nuclear Security (PCENS)**
Brig. (R) Hamid Abdullah, Comdt (PCENS), Pakistan
- 10:40 – 10:50 **Presentation of Meeting Objectives, Adoption of the Agenda**
Ambassador Ms Bonnie Jenkins (DOS), USA, Network Chair
- 10:50 - 11:00 **Keynote Address**
Ms Tasnim Aslam, Additional Secretary, Ministry of Foreign Affairs, Pakistan
- 11:00 – 11:15 **Chief Guest Address**
Mr Muhammad Anwar Habib, Chairman, Pakistan Nuclear Regulatory Authority
- 11:15 – 11:30 **Group Photo**
- 11:30 – 12:00** **Refreshment**
- 12:00 – 14:00 **Technical Visit to PPEL Lab and PCENS Training Academy**
- 14:00 - 15:00** **Lunch Break**
- 15:00 – 15:50 **Sharing Experience and Good Practices for Nuclear Security Support in Pakistan**
Mr Abdul Shakoor, PNRA, Pakistan
- Question/answer and discussion session
- 15:50 - 16:20 **Vision for IAEA Activities with NSSCs and the Network**
Mr James Conner, Division of Nuclear Security, IAEA
- 16:20 - 16:50 **Status Updates from the Working Groups**
- 17:00** **Departure for Hotel**

Tuesday, 15 March 2016 (Marriot Hotel)

- 09:00 – 9:05 **Opening**
Network Chair

Attachment 1: Meeting Agenda

- 9:05 – 10:30 **Report from Task Force for Development of NSSC Network Information Management Tools**
Panelists: Mr Inamul Haq (PIEAS), Pakistan; Mr Aleksejus Livsic (NSCOE), Lithuania; Mr James Conner (IAEA); Mr Linwood Livingston (PNNL), USA
- 10:30 – 11:00 **Break**
- 11:00 – 12:00 **Presentations from New Network Members**
- *Mr Moustapha Sadibou Tall (ARSN), Senegal*
- *Mr Dimitar Dimitrov (UNWE), Bulgaria*
- 12:00 – 13:00 **Lunch Break**
- 13:00 – 15:00 **HRD and Training**
Facilitator: Ms Beth Kaboro (RPB), Kenya
- Challenges in needs analysis and HRD planning. *Ms Nu Hoai Vi Nguyen (VARANS), Viet Nam*
- Experience in HR and training needs analysis and HRD planning. *Mr Rachid Mellouki (CNESTEN), Morocco*
- Experience in HR and training needs analysis, and HRD planning. *Ms Loreto Villanueva (CCHEN), Chile*
- Proposed methodology for HR and training needs analysis in the area of nuclear security. *Mr Alexey Kazenkov, IAEA*
- Question/answer session, and discussion on HR and training needs analysis, and HRD planning.
- 15:00 – 15:30 **Break**
- 15:30 – 17:00 **Development of Nuclear Security Specialists and Instructors**
Facilitator: Mr Luiz Fernando Bloomfield Torres (CNEN), Brazil
- Experience in training and development of nuclear security specialists, including instructors. *Mr Andrei Kuskov (GNSSI), Russian Federation*
- Experience in training and development of instructors. *Mr Linwood Livingston (PNNL), USA*
- Qualification requirements for instructors involved in nuclear security training. Instructor training and development programme. *Mr Alexey Kazenkov, IAEA*
- Question/answer session, and discussion on the potential of NSSCs to support instructor training programmes.
- 19:00 **Dinner Reception**

Wednesday, 16 March 2016 (Marriot Hotel: PNRA Labs)

- 09:00 – 9:10 **Opening**
Network Chair
- 9:10 – 10:30 **Technical and Scientific Support**
Facilitator: Mr Edison Amanor (GAEC), Ghana
- IAEA activities in nuclear security detection architecture and the Role of NSSCs. *Mr Anayat Ullah, IAEA*
- Defining functional objectives, technical and operational requirements, and specifications for NSSC laboratory equipment. *Mr Chunhua Qui (SNSTC), China*
- Experience in sustaining nuclear security equipment through an NSSC laboratory. *Mr Rashid Mahmood (PNRA), Pakistan*

Attachment 1: Meeting Agenda

- 10:30 – 11:00** **Break**
- 11:00 – 12:00 **Technical and Scientific Support (cont'd)**
Facilitator: Mr Edison Amanor (GAEC), Ghana
- Performance evaluation of technical & scientific support capabilities. *Mr Yuri Sklianchuk (SBGS), Ukraine*
 - NSSC support for and involvement in technology R&D. *Mr Yosuke Naoi (ISCN), Japan*
- 12:00 – 13:00** **Lunch Break**
- 13:00 – 14:30 **NSSC Activities and Experience in Key Technical Areas**
- NSSC Activities in Radioactive Material Security. *Mr Lukman Hakim (BAPETEN), Indonesia*
 - NSSC Activities in Transport Security. *Mr Yo Nakamura (ISCN), Japan*
 - Training Needs Analysis. *Mr Muhammad Ayub (PNRA), Pakistan*
- 14:30 – 15:00** **Break**
- 15:00 –** **Departure for PNRA**
- 15:20 – 17:00 **Technical visit to PNRA Labs**
- 17:30 **Departure for Hotel**
(Optional Activity Organized by Host: Visit to Monuments and Museums)

Thursday, 17 March 2016 (Marriot Hotel: PIEAS)

- 09:00 – 9:05 **Opening**
Network Chair
- 9:05 – 10:00 **NSSC Cooperation with Educational Institutions**
- Security Culture. *Mr Hyunchul Kim (KINAC/INSA), Republic of Korea*
 - Coordinated Research Projects. *(IAEA)*
 - Review and Discussion of Previous NSSC – INSEN Joint Meeting Sessions. *Network Chair*
- 10:00 – 10:30** **Break**
- 10:30 – 12:00 **Regional Breakout Discussion Sessions**
- 12:00 – 13:00** **Lunch Break**
- 13:00 – 14:00 **Presentation and Discussion of Findings from Regional Breakout Sessions**
- 14:00** **Departure for PIEAS**
- 14:35 – 16:00 **Technical visit to PIEAS**
- 16:00 – 16:20** **Light Refreshment**
- 16:25 **Departure for Hotel**
(Optional Activity Organized by Host: Shopping)

Attachment 1: Meeting Agenda

Friday, 18 March 2016 (Marriot Hotel)

- 09:00 – 09:05 **Opening**
Network Chair
- 09:05 – 10:00 **Future Activities in Support of HRD and Training**
Facilitators: Mr Alexey Kazennov and Mr James Conner, IAEA
- A new IAEA planned publication on good training practices in the field of nuclear security. A request to NSSC Network to provide inputs.
 - A vision for the support in establishing training programmes: a project approach, ownership and IAEA assistance.
 - Support in undertaking a self-assessment in the training area and a path towards review services.
 - Question/answer session and discussion.
- 10:00 – 10:30 **Break**
- 10:30 – 11:15 **Wrap-up Session**
Network Chair
- Feedback from participants
 - Vision for and suggestions on future collaboration
 - Recommendations to the IAEA
 - Finalize Chair's Report
- 11:15 – 12:00 **Closing Ceremony and Final Remarks**
Presentation of new Network Chairs and Vice-Chairs
Summary of the Meeting: Network Chair
Closing: Mr James Conner and Mr Alexey Kazennov, IAEA
Chief Guest Address: Mr Muhammad Naeem, Chairman, Pakistan Atomic Energy Commission
- 12:00 **Lunch**

<u>NSSC Network Bureau for 2016 - 17</u>					
NSSC Network	Chair	Mr Yosuke Naoi	Japan	Japan Atomic Energy Agency	
	Vice Chair	Mr Aleksejus Livsic	Lithuania	Nuclear Security Centre of Excellence	
WG A	Chair	Ms Julietta Seguis	Philippines	Philippine Nuclear Research Institute	
	Vice Chair	Mr Nasiru Deen Bello	Nigeria	Nigerian Nuclear Regulatory Authority	
WG B	Chair	Ms Franca Padoani	Italy	Italian National Agency for New Technologies, Energy and Sustainable Economic Development	
	Vice Chair	Ms Beth Kaboro	Kenya	Radiation Protection Board	
WG C	Chair	Mr Inamul Haq	Pakistan	Pakistan Institute of Engineering & Applied Sciences	
	Vice Chair	Ms Loreto Villanueva	Chile	Chilean Nuclear Energy Commission	