

2021 ICTP-IAEA International School on Nuclear Security

Virtual Event

12 – 23 April 2021

Programme

Week 1- Monday, 12 April 2021

10:00 – 10:15	Opening Remarks <i>Ms Elena Buglova, Director NSNS, IAEA</i> <i>Mr Atish Dabholkar, Director, ICTP</i> <i>Mr Sergio Monti, Permanent Mission of Italy to the International Organizations in Vienna</i>
10:15 – 10:30	Overview of School Curriculum <i>Ms Oum Keltoum Hakam, Scientific Secretary of the School, IAEA</i>
10:30 – 10:45	Introduction to the IAEA <i>Ms Oum Keltoum Hakam, IAEA, NSNS</i>
10:45 – 11:15	Nuclear Applications <i>Mr Claudio Tuniz, Local Director, ICTP</i>
11:15 – 11:30	Break
11:30 – 12:00	Nuclear Security Overview: Key Concepts <i>Ms Oum Keltoum Hakam, IAEA, NSNS</i>
12:00 – 12:30	Legal Framework for Nuclear Security <i>Mr Jonathan Herbach, IAEA, OLA</i>
12:30 - 13:00	Developing legislation for nuclear security <i>Mr Jonathan Herbach, IAEA, OLA</i>

13:00 - 13:15	Break
13:15 - 13:45	Threat Assessment (TA) and Design Basis Threats (DBT) <i>Mr Hyungmin SEO, IAEA, NSNS</i>
13:45 – 14:15	Exercise on TA and DBT <i>Mr Hyungmin SEO, IAEA, NSNS</i>
14:15 – 14:30	Questions and Summary

Week 1 – Tuesday, 13 April 2021

10:00 – 10:45	Nuclear Security Regime: Objectives and Essential Elements <i>Ms Marina Labyntseva, IAEA, NSNS</i>
10:45 – 11:30	Physical Protection of Nuclear Material and Nuclear Facilities (NSS No.13 (INFCIRC/225/Rev. 5)), <i>Mr Garl Bultz, IAEA, NSNS</i> <i>Mr Riyaz Natha, Sandia National laboratory</i>
11:30 – 11:45	Exercise: Physical Protection of Nuclear Material and Nuclear Facilities (NSS No.13 (INFCIRC/225/Rev. 5)), <i>Mr Garl Bultz, IAEA, NSNS</i> <i>Mr Riyaz Natha, Sandia National laboratory</i>
11:45 – 12:15	Introduction to Physical Protection System, Design and Evaluation <i>Mr Garl Bultz, IAEA, NSNS</i> <i>Mr Riyaz Natha, Sandia National laboratory</i>
12:15 – 12:30	Break
12:30 – 13:00	Defining the Requirements for Physical Protection (Facility Characterization and Target Identification) <i>Mr Garl Bultz, IAEA, NSNS</i> <i>Mr Riyaz Natha, Sandia National laboratory</i>
13:00 – 13:15	Exercise: Defining the Requirements for Physical Protection/Hypo. Facility <i>Mr Garl Bultz, IAEA, NSNS</i> <i>Mr Riyaz Natha, Sandia National laboratory</i>
13:15 – 13:30	Break

- 13:30 – 14:00 **Physical Protection System Design (Detection, Delay and Response)**
Mr Garl Bultz, IAEA, NSNS
Mr Riyaz Natha, Sandia National laboratory
- 14:00 – 14:15 **Exercise: Physical Protection System (PPS) Design**
Mr Garl Bultz, IAEA, NSNS
Mr Riyaz Natha, Sandia National laboratory
- 14:15 – 14:30 Questions and summary

Week 1 – Wednesday, 14 April 2021

- 10:00 – 10:30 **Insider threat**
Mr Robert Larsen, IAEA, NSNS
- 10:30 – 11:00 **Introduction to Nuclear Material Accounting and Control (NMAC)**
Mr Robert Larsen, IAEA, NSNS
- 11:00 – 11:15 Questions and summary
- 11:15 – 11:30 Break
- 11:30 – 12:00 **Nuclear Material Accounting**
Mr Robert Larsen, IAEA, NSNS
- 12:00 – 12:15 Questions and summary
- 12:15 – 12:30 Break
- 12:30 – 13:15 **Nuclear Materials Control**
Mr Robert Larsen, IAEA, NSNS
- 13:15 – 13:30 Questions and summary

Week 1 – Thursday, 15 April 2021

- 10:00 – 10:45 **Security of Nuclear Sensitive Information**
Mr Trent Nelson, IAEA, NSNS
- 10:45 – 11:30 **Information and Computer Security**
Mr Trent Nelson, IAEA, NSNS

11:30 – 11:45	Break
11:45 – 12:15	Introduction to the Security of Radioactive Material <i>Mr Muhammad Waseem, IAEA, NSNS</i>
12:15 – 12:45	Nuclear Security Regime for Radioactive material and Associated Facilities <i>Mr Muhammad Waseem, IAEA, NSNS</i>
12:45 – 13:00	Break
13:00 – 13:30	Security Measures for Radioactive Material in Use and Storage <i>Mr Muhammad Waseem, IAEA, NSNS</i>
13:30 – 14:00	Exercise: Categorization of Radioactive Sources <i>Mr Muhammad Waseem, IAEA, NSNS</i>
14:00 – 14:15	Questions and summary

Week 1 – Friday, 16 April 2021

10:00 – 10:30	Transport Safety and Interface with Security <i>Mr Thomas Pissulla, IAEA, NSNS</i>
10:30 – 11:00	Transport Security of Nuclear and other Radioactive Materials <i>Mr Thomas Pissulla, IAEA, NSNS</i>
11:00 – 11:15	Break
11:15 – 12:15	Transport Exercise <i>Mr Thomas Pissulla, IAEA, NSNS</i>
12:15 – 12:30	Questions and summary

Week 2 – Monday, 19 April 2021

10:00 – 10:30	Nuclear Security Culture: Concept and Definition <i>Mr Yo Nakamura, IAEA, NSNS</i>
10:30 – 11:00	Nuclear Security Culture: Self-Assessment <i>Mr Yo Nakamura, IAEA, NSNS</i>

11:00 – 11:15	Break
11:15 – 11:45	Exercise: Selection of Culture Indicators for Assessment <i>Mr Yo Nakamura, IAEA, NSNS</i>
11:45 – 12:15	Nuclear Security Culture: Enhancement <i>Mr Yo Nakamura, IAEA, NSNS</i>
12:15 – 12:30	Break
12:30 – 13:00	Overview of Nuclear Security for Nuclear and other Radioactive Materials out of Regulatory Control (MORC) <i>Mr Thierry Pelletier, IAEA, NSNS</i>
13:00 – 13:30	Threat Assessment and Risk Informed Approach for Nuclear and other Radioactive Material out of Regulatory Control <i>Mr Thierry Pelletier, IAEA, NSNS</i>
13:30 – 13:45	Break
13:45 – 14:15	Nuclear Security Detection Architecture <i>Mr Thierry Pelletier, IAEA, NSNS</i>
14:15 – 14:30	Questions and summary

Week 2 – Tuesday, 20 April 2021

10:00 – 10:45	Overview of Detection Instrumentation <i>Mr Paolo Peerani, JRC/ISPRA</i>
10:45 – 11:15	Vehicle and people control at borders (Radiation Portal Monitors) <i>Mr Paolo Peerani, JRC/ISPRA</i>
11:15 – 11:30	Break
11:30 – 12:00	Front Line Officer Actions Following Detection <i>Mr Paolo Peerani, JRC/ISPRA</i>
12:00 – 12:45	Analysis of real cases <i>Mr Paolo Peerani, JRC/ISPRA</i>

12:45 – 13:00	Break
13:00 – 13:30	Case Study on Bulgarian case <i>Mr Paolo Peerani, JRC/ISPRA</i>
13:30 – 13:45	Profile game <i>Mr Paolo Peerani, JRC/ISPRA</i>
13:45 – 14:00	Questions and summary

Week 2 – Wednesday, 21 April 2021

10:00 – 10:30	The Incident and Trafficking Database (ITDB) Programme <i>Mr Jose Garcia Sainz, IAEA, NSNS</i>
10:30 – 11:00	ITDB Global Analysis <i>Ms Anna GREDINGER, IAEA, NSNS</i>
11:00 – 11:15	Break
11:15 – 12:00	Nuclear Security Systems and Measures for Major Public Events <i>Mr Nigel Tottie, IAEA, NSNS</i>
12:00 – 12:45	Developing a National Framework for Managing the Response to Nuclear Security Events <i>Mr Nigel Tottie, IAEA, NSNS</i>
12:45 – 13:00	Break
13:00 – 13:50	Response to Emergencies triggered by Nuclear Security Events <i>Ms Muzna Assi, IAEA, IEC</i>
13:50 – 14:50	Virtual Technical Visit <i>Mr Nevijo Lakoseljic & Mr Matjaž Andrijašič, Port of Koper- Republic of Slovenia</i> <i>Mr Janez Češarek, SNSA</i>
14:50 – 15:00	Questions & summary

Week 2 – Thursday, 22 April 2021

10:00 –11:00	Radiological Crime Scene Management <i>Mr Peter Burton, IAEA, NSNS</i>
11:00 – 12:00	Nuclear Forensics in support of Investigations <i>Ms Eva Szeles, IAEA, NSNS</i>
12:00 – 12:15	Break
12:15 – 13:15	Case Study: "An Investigation of Uranium Out of Regulatory Control" <i>Ms Eva Szeles, IAEA, NSNS</i>
13:15 – 13:30	Break
13:30 – 14:00	Continuation of Case Study <i>Ms Eva Szeles, IAEA, NSNS</i>
14:00 – 14:15	Questions and summary

Week 2 – Friday, 23 April 2021

10:00 –10:45	IAEA Programmes and Assistance for Human Resource Development in Nuclear Security <i>Ms Marina Labyntseva, IAEA, NSNS</i>
10:45 – 11:15	Feedback survey <i>Ms Oum Keltoum Hakam, IAEA, NSNS</i>
11:15– 11:30	Break
11:30– 12:00	Test <i>Ms Oum Keltoum Hakam, IAEA, NSNS</i>
12:00 – 12:15	Closing remarks <i>Ms Oum Keltoum Hakam & Mr ClaudioTuniz</i>

Acronyms:

IAEA	International Atomic Energy Agency
ICTP	International Centre for Theoretical Physics
NSNS	Division of Nuclear Security
OLA	Office of Legal Affairs
IEC	Incident and Emergency Centre
JRC	Joint Research Centre.
SNSA	Slovenian Nuclear Safety Administration