

2022 Joint ICTP-IAEA International School on Nuclear Security

Trieste, Italy (virtual)

19 – 29 April 2022

Programme

Week 1, Tuesday, 19 April 2022		
Time (Vienna time)	Duration (minutes)	Topic & Speaker
12:00 – 12:10	10	Opening Remarks <i>Mr Atish Dabholkar, Director - ICTP</i> <i>Ms Marina Labyntseva, Head - ETDU, NSNS, IAEA</i>
12:10 – 12:20	10	Overview of the School Curriculum <i>Ms Oum Keltoum Hakam, Scientific Secretary of the School, IAEA</i>
12:20 – 12:22		Group Photo
12:22 – 12:30	8	Pre-test <i>Ms Oum Keltoum Hakam, NSNS, IAEA</i>
12:30 – 12:45	15	Introduction to IAEA <i>Ms Oum Keltoum Hakam, NSNS, IAEA</i>
12:45 – 13:30	45	Nuclear Applications <i>Mr Claudio Tuniz, Local Director, ICTP</i>
13:30 – 13:45	15	BREAK

13:45 – 14:15	30	Nuclear Security Overview: Key Concepts <i>Ms Oum Keltoum Hakam, NSNS, IAEA</i>
14:15 – 15:00	45	Legal Framework for Nuclear Security <i>Mr Jonathan Herbach, OLA, IAEA</i>
15:00 - 15:30	30	Developing legislation for nuclear security <i>Mr Jonathan Herbach, OLA, IAEA</i>
15:30 - 15:45	15	BREAK
15:45 - 16:30	45	Threat Assessment (TA) and Design Basis Threats (DBT) <i>Mr Robert Officer, NSNS, IAEA</i>
16:30 – 16:45	15	Exercise on TA and DBT <i>Mr Robert Officer, NSNS, IAEA</i>
16:45 – 17:00	15	Summary of the day
Week 1, Wednesday, 20 April 2022		
12:00 – 12:45	45	Nuclear Security Regime: Objectives and Essential Elements <i>Ms Marina Labyntseva, NSNS, IAEA</i>
12:45 – 13:30	45	Physical Protection of Nuclear Material and Nuclear Facilities (NSS No.13 (INFCIRC/225/Revision 5)) <i>Mr Abdul Shakoor, NSNS, IAEA</i>
13:30 – 13:45	15	Exercise: Physical Protection of Nuclear Material and Nuclear Facilities (NSS No.13 (INFCIRC/225/Revision 5)) <i>Mr Abdul Shakoor, NSNS, IAEA</i>
13:45 – 14:15	30	Introduction to Physical Protection System, Design and Evaluation <i>Mr Abdul Shakoor, NSNS, IAEA</i>
14:15 – 14:30	15	BREAK
14:30 – 15:00	30	Defining the Requirements for Physical Protection (Facility Characterization and Target Identification) <i>Mr Tariq Majeed, NSNS, IAEA</i>
15:00 – 15:15	15	Exercise: Defining the Requirements for Physical Protection/Hypothetical Facility <i>Mr Tariq Majeed, NSNS, IAEA</i>

15:15 – 15:30	15	BREAK
15:30 – 16:00	30	Physical Protection System Design (Detection, Delay and Response) <i>Mr Tariq Majeed, NSNS, IAEA</i>
16:00 – 16:15	15	Exercise: Physical Protection System (PPS) Design <i>Mr Tariq Majeed, NSNS, IAEA</i>
16:15 – 16:30	15	Summary of the day
Week 1, Thursday, 21 April 2022		
12:00 – 12:45	45	Nuclear Material Accounting and Control (NMAC) and the Threat posed by the Insider <i>Mr Robert Larsen, NSNS, IAEA</i>
12:45 – 13:30	45	Introduction to Nuclear Material Accounting and Control (NMAC) <i>Mr Robert Larsen, NSNS, IAEA</i>
13:30 – 13:45	15	Questions and answers <i>Mr Robert Larsen, NSNS, IAEA</i>
13:45 – 14:00	15	BREAK
14:00 – 14:45	45	Nuclear Material Accounting <i>Mr Robert Larsen, NSNS, IAEA</i>
14:45 – 15:00	15	Questions and answers <i>Mr Robert Larsen, NSNS, IAEA</i>
15:00 – 15:45	45	Nuclear Materials Control <i>Mr Robert Larsen, NSNS, IAEA</i>
15:45 – 16:00	15	Summary of the day
Week 1, Friday, 22 April 2022		
12:00 – 12:45	45	Security of Nuclear Sensitive Information <i>Mr Christophe Pilleux, NSNS, IAEA</i>
12:45 – 13:30	45	Information and Computer Security <i>Mr Christophe Pilleux, NSNS, IAEA</i>
13:30 – 13:45	15	BREAK

13:45 – 14:30	45	Exercise on Information and Computer Security <i>Mr Christophe Pilleux, NSNS, IAEA</i>
14:30 – 15:15	45	The Incident and Trafficking Database (ITDB) Programme <i>Mr Jose Garcia Sainz, NSNS, IAEA</i>
15:15 – 16:00	45	ITDB Global Analysis Ms Anna Gredinger, NSNS, IAEA
16:00 – 16:15	15	Summary of the day
Week 2, Monday, 25 April 2022		
12:00 – 12:30	30	Introduction to the Security of Radioactive Material <i>Mr Timothy Hayes, NSNS, IAEA</i>
12:30 – 13:15	45	Nuclear Security Regime for Radioactive Material and Associated Facilities <i>Mr Timothy Hayes, NSNS, IAEA</i>
13:15 – 13:30	15	BREAK
13:30 – 14:00	30	Security Measures for Radioactive Material in Use and Storage <i>Mr Timothy Hayes, NSNS, IAEA</i>
14:00 – 14:45	45	Exercise: Categorization of Radioactive Sources <i>Mr Timothy Hayes, NSNS, IAEA</i>
14:45 – 15:00	15	BREAK
15:00 – 15:30	30	Transport Safety and Interface with Security <i>Mr Ousseini Kabore, NSNS, IAEA</i>
15:30 – 16:00	30	Transport Security of Nuclear and other Radioactive Materials <i>Mr Ousseini Kabore, NSNS, IAEA</i>
16:00 – 16:15	15	BREAK
16:15 – 17:00	45	Transport Exercise <i>Mr Ousseini Kabore, NSNS, IAEA</i>
17:00 – 17:15	15	Summary of the day
Week 2, Tuesday, 26 April 2022		

12:00 – 12:45	45	Nuclear Security Culture: Concept and Definition <i>Mr Yo Nakamura, NSNS, IAEA</i>
12:45 – 13:15	30	Nuclear Security Culture: Self-Assessment <i>Mr Yo Nakamura, NSNS, IAEA</i>
13:15 – 13:30	15	BREAK
13:30 – 14:00	30	Exercise: Selection of Culture Indicators for Assessment <i>Mr Yo Nakamura, NSNS, IAEA</i>
14:00 – 14:30	30	Nuclear Security Culture: Enhancement <i>Mr Yo Nakamura, NSNS, IAEA</i>
14:30 – 14:45	15	BREAK
14:45 – 15:30	45	Overview of Nuclear Security for Nuclear and other Radioactive Material out of Regulatory Control (MORC) <i>Mr Thierry Pelletier, NSNS, IAEA</i>
15:30 – 16:00	30	Risk Informed Approach for Nuclear and other Radioactive Material out of Regulatory Control <i>Mr Thierry Pelletier, NSNS, IAEA</i>
16:00 – 16:15	15	BREAK
16:15 – 16:45	30	Nuclear Security Detection Architecture <i>Mr Thierry Pelletier, NSNS, IAEA</i>
16:45 – 17:00	15	Summary of the day
Week 2, Wednesday, 27 April 2022		
12:00 – 12:45	45	Overview of Detection Instrumentation <i>Mr Paolo Peerani, JRC/EC</i>
12:45 – 13:15	30	Vehicle and people control at borders (Radiation Portal Monitors) <i>Mr Giang Nguyen, NSNS, IAEA</i>
13:15 – 13:30	15	BREAK
13:30 – 14:00	30	Front Line Officer Actions Following Detection <i>Mr Paolo Peerani, JRC/EC</i>
14:00 – 14:45	45	Analysis of real cases

		<i>Mr Paolo Peerani, JRC/EC</i>
14:45 – 15:00	15	BREAK
15:00 – 15:30	30	Case Study on Bulgarian case <i>Mr Paolo Peerani, JRC/EC</i>
15:30 – 15:45	15	Profile game <i>Mr Paolo Peerani, JRC/EC</i>
15:45 – 16:00	15	Summary of the day
Week 2, Thursday, 28 April 2022		
12:00 – 12:45	45	Nuclear Security Systems and Measures for Major Public Events <i>Mr Nigel Tottie, NSNS, IAEA</i>
12:45 – 13:30	45	<i>A National Framework for Managing the Response to Criminal of Intentional Unauthorized Acts involving Nuclear and other Radioactive Material Out of Regulatory Control: An Overview</i> <i>Mr Nigel Tottie, NSNS, IAEA</i>
13:30 – 13:45	15	BREAK
13:45 – 14:30	45	Response to Emergencies triggered by Nuclear Security Events <i>Ms Muzna Assi, IEC, IAEA</i>
14:30 – 15:30	60	Virtual Technical Visit <ul style="list-style-type: none"> - <i>Mr Nevijo Lakoseljac & Matjaž Andrijašič, Port of Koper Republic of Slovenia</i> - <i>Mr Janez Češarek, SNSA, Republic of Slovenia</i>
15:30– 15:45	15	Summary of the day
Week 2, Friday, 29 April 2022		
12:00 –12:45	45	Radiological Crime Scene Management <i>Mr Kevin Kelly, NSNS, IAEA</i>
12:45 – 13:30	45	Nuclear Forensics in support of Investigations <i>Ms Eva Szeles, NSNS, IAEA</i>
13:30 – 13:45	15	BREAK

13:45 – 14:45	60	Case Study: "An Investigation of Uranium Out of Regulatory Control" <i>Mr Kevin Kelly, Mr Henrik Horne, Ms Chelsea Willett, Mr Gary Eppich and Ms Eva Szeles, NSNS, IAEA</i>
14:45 – 15:00	15	BREAK
15:00 –15:30	30	IAEA Programme in Human Resource Development for Nuclear Security <i>Ms Marina Labyntseva, NSNS, IAEA</i>
15:30 – 16:00	30	Feedback Survey & Final test <i>Ms Oum Keltoum Hakam, NSNS, IAEA</i>
16:00 – 16:15	15	Closing remarks <i>Mr Claudio Tuniz, Ms M. Labyntseva & Ms Oum Keltoum Hakam</i>

Acronyms

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