International Conference on

NUCLEAR SECURITY:

Commitments and Actions

5–9 December 2016 Vienna, Austria

Ministerial Segment 5-6 December 2016



Organized by the



60 Years

IAEA

Atoms for Peace and Development

CN-244

Organized by the



In cooperation with the

European Police Office (Europol)

European Union (EU)

Global Initiative to Combat Nuclear Terrorism (GICNT)

Institute for Nuclear Material Management (INMM)

International Criminal Police Organization - INTERPOL

International Electrotechnical Commission (IEC)

International Telecommunication Union (ITU)

Nuclear Forensics International Technical Working Group (ITWG)

Nuclear Threat Initiative (NTI)

Organization for Security and Cooperation in Europe (OSCE)

Police Community of the Americas (AMERIPOL)

United Nations Office of Disarmament Affairs (UNODA)

United Nations Office on Drugs and Crime (UNODC)

UNSCR1540 Committee

World Customs Organization (WCO)

World Institute of Nuclear Security (WINS)

World Nuclear Association (WNA)

World Nuclear Transport Institute (WNTI)

Introduction

Following the first International Conference on Nuclear Security: Enhancing Global Efforts in July 2013, the second conference is an opportunity to discuss the national and international community's experiences and achievements to date in strengthening nuclear security; to enhance understanding of current approaches to nuclear security worldwide; to identify trends; and to provide an inclusive forum at which ministers, policymakers, senior officials and nuclear security experts can formulate and exchange views on future directions and priorities for nuclear security and how these may evolve.

Registration

Please register your attendance at the Registration Desk at the entrance of the M Building.

The Registration Desk and the Conference Secretariat in MOE67 will be staffed throughout the conference and our colleagues there will be happy to assist you.

Conference App

The IAEA Conferences and Meetings App provides a one-stop access to information on the Conference Programme, the exhibition, and scheduled side events. The app also allows users to put together their own personalized schedule of events. Via this app participants will also be able to view the abstract associated with each presentation, the latest conference programme, message other participants, and view PowerPoint presentations released after the event. Participants will receive an email inviting them to register for the app approximately one week before the conference.

Conference Website & NUSEC Portal

In addition to the Conference App, most conference information will be available either on the Conference Website or the IAEA's Nuclear Security Information Portal (NUSEC). The conference schedule, National Statements, registration procedures and more general information can be found on the conference website at https://www.iaea.org/events/nuclear-security-conference

NUSEC is a secure, centralized and interactive online platform designed to help strengthen the Nuclear Security community worldwide by facilitating the exchange of up-to-date Nuclear Security information between the IAEA, its Member States and its international partners. After the conference, full papers and presentations will be posted on NUSEC. Please visit https://nusec.iaea.org for access and new member registration.

Conference Overview

Monday 5 December and the morning of Tuesday 6 December comprise the Ministerial Segment of the conference, during which ministers and heads of delegation will have an opportunity to make national statements related to nuclear security. In addition, a Ministerial Declaration is expected to be adopted in the plenary session in the afternoon of Monday 5 December 2016.

Participants in the Scientific and Technical Programme are welcome to follow the proceedings of the Ministerial Segment in the following overflow areas: Board Room A and Conference Room M2.

The Scientific and Technical programme commences immediately following the conclusion of the Ministerial Segment and will continue through the rest of the week, concluding with the President's Report on Friday afternoon. This programme consists of six high-level technical sessions and 28 technical sessions that cover a wide array of topics relevant to nuclear security. The high-level sessions will take place in Board Room B/M1, while the parallel technical sessions will take place in Board Room A, Room M2, Room M3, Room M4, Room M5, and in the Press Room.

Interactive Content Presentations

This conference features digital poster presentations called Interactive Content Presentations (ICPs). After briefly introducing the poster presentations in the Conference Room, the Chairperson will direct the session audience to the ICP stations on the ground floor of the M Building where the presentations will be held.

All ICP presenters are kindly requested to attend the ICP briefing to receive final logistical instructions. These briefings will occur at 08:30 every day at the ICP Station (M Building, Ground Floor, outside the Press Room) on the assigned day of their presentation.

Further, ICP presenters are suggested to make use of the preview centre on the ground floor (M0E68) for a final check of their presentations and to familiarize themselves with the touch-screen displays at least one day in advance of their respective presentations.

Poster Presentations

Poster presentations will be held at the M02 Poster Exhibition Space (2nd Floor of M Building) outside Board Room A. Each poster presenter has been assigned to a session that will last one full day of the conference. Poster presenters are kindly requested to bring a hard-copy of the poster to the Poster Exhibition Space after 18:00 on the day prior, or before 09:00 on the day of, their assigned presentation day. Poster presenters will affix their hard-copy posters on the board bearing the related paper number. Posters should be removed at the end of their presentation day (18:00) to allow mounting of the posters for the next day.

Discussions

All sessions are being recorded. Anyone who wishes to take the floor, e.g. during question periods should, after having been recognized by the Chairperson, use one of the microphones available in the meeting room and begin their question or comment by stating their name, country and organization and be as concise as possible.

The Media

The media will have access to all sessions except for the Technical Sessions of the conference.

Interactive Session

During the lunch break on Monday afternoon, a group of interested Member States has organized an optional interactive session to highlight the importance of the Convention on the Physical Protection of Nuclear Material (CPPNM) and the Amendment to the CPPNM that entered into force on 8 May 2016. The interactive session is closed to the public and the media, but any interested Member States should contact the Conference Secretariat for more information. The Interactive Session will take place in Board Room C.

Side Events

A number of side events are scheduled throughout the Conference Programme, organized by interested Member States and Organizations and related to a number of topics relevant to Nuclear Security. All side events are open to all conference participants. A full schedule of side events can be found at the end of the Programme.

Refreshments during the Technical Programme

Coffee and refreshments will be available during the morning and afternoon breaks courtesy of voluntary contributions provided by a number of organizations and companies, as acknowledged in the programme insert. Additionally, we are very pleased to host a number of companies and organizations exhibiting their products and services at this conference.

All hosted coffee breaks will be held on the ground and first floor of the M Building, as well as the Rotunda (C Building). Please take the time to visit and talk with the exhibitors.

Internet Access

Wireless access to the Internet is available throughout the M Building, no password is needed.

Two Internet corners are located on the ground floor.

Bank and Post Office

Banking Services and a post office are located on the first floor of the C building.

Conference:

President: H.E. Mr Yun Byung-se

Minister of Foreign Affairs

Republic of Korea

IAEA Secretariat:

Scientific Secretaries: Raja Abdul Aziz Raja Adnan

Rhonda Evans

Scientific and In Young Suh
Administrative Thomas Gray
Support: Nicole Herndlbauer

Javlon Dusimatov Richard Gordon

Conference Martina Neuhold Organizers: Elfriede Bosch

Iris Kridtner

Location of the Conference:

International Atomic Energy Agency Vienna International Centre (VIC)

"M" Building

Wagramer Straße 5 1400 Vienna, Austria

Working Language:

English. However simultaneous interpretation in Arabic; Chinese; English; French; Russian; and Spanish will be provided for the Ministerial Segment of the conference. For the high-level sessions English and Russian interpretation will be provided. Technical sessions and all side events will be held in English only.

Resolutions:

No resolutions may be submitted for consideration on any subject; no votes will be taken.

Programme Committee

Chair

L. Vinhas Brazil

Members

G. Terigi Argentina

S. Bayer Australia

K. Smith Australia

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T. Languin

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i . Languin

France

G. Dandrieux

France

S. Sattler

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T. Pissulla

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Germany

D. Ojha

India

S. Ajaz Khan

India

R. Alamsyah

Indonesia

S. Syahril

Indonesia

muonesia

H. Yokota

Japan

T. Ameva

Japan

Y. Nakamura

Japan

J. Horibe

Japan

F Gatebe

Kenya

L. Galcot

-

B. Jun

Korea, Republic of

H. Yoo Korea, Republic of

K. Mrabit Morocco
M. Haddaoui Morocco
B. Dal Netherlands
K. Nederlof Netherlands
P. Schroor Netherlands
J. Vrilland Netherlands

A. Bulychev Russian Federation
M. Kondratenkov Russian Federation

A. Perez Baez Spain
C. Torres Vidal Spain
L. Fernandez Abad Spain
E. Dalgic Turkey
E. Turesin Turkey
F. Alim Turkey
T. Akbas Turkey

H. Alkaabi United Arab Emirates

A. Bacon United Kingdom
D. Shepherd United Kingdom
L. Bailey United Kingdom
R. Hardiman United Kingdom
L. Young United Kingdom

F. Wong USA
M. Curry USA
S. Roecker USA
C. Deering USA
L. Holgate USA

D. Lenoir European UnionV. Holubetz European UnionM. Dmowska EUROPOL

R. Wainwright EUROPOL

L. Satkowiak Institute for Nuclear Material

Management

P. Maloor International

Telecommunications Union

S. Pitts-Kiefer Nuclear Threat Initiative (NTI)

E. Abela-Hampel Organization for Security and Cooperation in Europe (OSCE)

T. Wuchte Organization for Security and Cooperation in Europe (OSCE)

A. Volenikoca Organization for Security and

Cooperation in Europe
United Nations

P. Gasparini United Nations
H. Faraq United Nations

M. Lorenzo Sobrado UN Office for Drugs and Crime

M. Rosenthal UNSCR 1540 Committee

P. Heine World Customs Organization
S. Aniszewski World Customs Organization

R. Howsley World Institute for Nuclear

Security (WINS)

TIMETABLE		14:00 – 15:40	Technical Session 2C-A	Detection Technology
Sunday, 04 December 2016			(Board Room A)	
15:00 – 19:00 Registration	Gate 1		(Board Room 71)	
17:00 – 19:00 Welcome Receptic (Rotunda – C Build		14:00 – 15:40	Technical Session 2C-1	Threat and Risk Assessment and its Broad Application to Nuclear Security
Monday, 05 December 2016			(Press Room)	,
08:00 Registration	Gate 1	14:00 – 15:40	Technical Session 2C-2	Public Engagement on Nuclear Security
10:00 – 12:30 Ministerial Session (Conference Room B/M1)	Opening Remarks and Plenary Statements		(Conference Room M2)	Nuclear Occurry
12:30 – 15:00 Lunch Break		14:00 – 15:40	Technical Session 2C-3	Radioactive Material: Regulatory and Operator
12:30 – 13:30 Buffet Lunch for M Delegations spons (Outside Board Ro	ored by the Republic of Korea		(Conference Room M3)	Perspectives
13:30 – 15:00 Interactive Session Member States (Board Room C)	organized by interested	15:40 – 16:20	Coffee/Tea Break	Interactive Content Presentations
15:00 – 17:00 Ministerial Session (Conference Room B/M1)	•	16:20 – 18:00	High-Level Session #1 (Conference Room B/M1)	International legal instruments for nuclear security: Universalization and implementation of binding
17:00 – 17:30 Adoption of the Mir (Conference Room			D.W.T.)	international legal instruments
17:30 – 21:00 Ministerial Session (Conference Room B/M1)	•	16:20 – 18:00	Technical Session 2D-A (Board Room A)	Detection Technology
,		16:20 – 18:00	Technical Session	Design Basis Threat (DBT)
Tuesday, 06 December 2016 09:00 – 12:00 Ministerial Session	Planary Statements		2D-1	and Threat Assessment for
(Conference Room	· ·		(Press Room)	Nuclear Material and Facilities
B/M1)	Occasion Planara	16:20 – 18:00	Technical Session 2D-2	The Application of Threat and Risk Assessment for Informing
12:00 – 13:00 Scientific and Technical Programme (Conference Room B/M1)	Opening Plenary		(Conference Room M2)	the Design and Implementation of Nuclear Security Systems and Measures for MORC
13:00 – 14:00 Lunch Break and S	ide Events	16:20 – 18:00	Technical Session 2D3	Radioactive Material: Regulatory and Operator
14:00 – 15:40 High-Level Sessior #1	instruments for nuclear		(Conference Room M3)	
(Conference Room B/M1)	security: Universalization and implementation of binding international legal instruments	18:00 – 20:00	Reception (M Building, Ground	Floor)

Wednesday, 0	7 December 2016		11:10 – 12:30	Technical Session	
	High-Level Session #2 (Conference Room B/M1)	International bodies and initiatives for nuclear security: Role of the IAEA in coordinating international efforts		3B-1 (Press Room)	implementing obligations under International Instruments for Nuclear Security
	Technical Session 3A-A (Board Room A)	Radioactive Material: Identifying Gaps and Strategies for Addressing these Gaps	11:10 – 12:30	Technical Session 3B-2 (Conference Room M2)	Nuclear Forensics: Building Confidence in Nuclear Forensic Conclusions
	Technical Session 3A-1 (Press Room)	Perspectives on implementing obligations under International Instruments for Nuclear Security	11:10 – 12:30	3B-3	Systems and Measures for the Detection of MORC: Design and Implementation.
	Technical Session 3A-2 (Conference Room M2)	Nuclear Forensics: Building Confidence in Nuclear Forensic Conclusions	11:10 – 12:30	Technical Session 3B-4 (Conference Room M4)	Panel: Processes, Tools and Challenges in Information Management
			12:30 – 14:00	Lunch Break and Si	de Events
	Technical Session 3A-3 (Conference Room M3)	Systems and Measures for the Detection of MORC: Design and Implementation.	12:40 – 13:40		Ceremony for the Essay Future of Nuclear Security ovided
	3A-4 (Conference Room	Panel: Processes, Tools and Challenges in Information Management	12:30 – 13:45	Side Event: IAEA A Nuclear or Radiolog (Conference Room	
	M4)		14:00 – 15:40	#3	Nuclear Material and Nuclear Facilities: National
	3A-5	Nuclear Material Accounting and Control		(Conference Room B/M1)	approaches, emerging trends and areas to be addressed
	(Conference Room M5)		14:00 – 15:40	Technical Session 3C-A	National Nuclear Security Regimes
10:30 – 11:10	Coffee/Tea Break	Interactive Content Presentations		(Board Room A)	
	High-Level Session #2 (Conference Room	International bodies and initiatives for nuclear security: Role of the IAEA in	14:00 – 15:40	Technical Session 3C-1 (Press Room)	Human Resource Development: Nuclear Security Education
	B/M1)	coordinating international efforts	14:00 – 15:40	3C-2	Nuclear Forensics: The Science and Interpretation of
	Technical Session 3B-A (Board Room A)	Radioactive Material: Identifying Gaps and Strategies for Addressing these Gaps		(Conference Room M2)	Nuclear Forensic Signatures

14:00 – 15:40 Technical Session 3C-3 (Conference Roon M3)	Industrial Control Systems in		December 2016 High-Level Session #4 (Conference Room B/M1)	Radioactive Materials and Associated Facilities, including radioactive sources: National approaches, emerging trends and areas to
14:00 – 15:40 Technical Session 3C-4 (Conference Roon	Panel: Systems and Measures for the Detection of MORC: Design and Implementation	09:00 – 10:30	Technical Session	be addressed Major Public Events
M4)			4A-A (Board Room A)	,
14:00 – 15:40 Technical Session 3C-5 (Conference Roon M5)	Panel: Perspectives on implementing obligations under International Instruments for Nuclear Security	09:00 – 10:30	Technical Session 4A-1 (Press Room)	Human Resources Development: Training
15:40 – 16:20 Coffee/Tea Break	Interactive Content Presentations	09:00 – 10:30	4A-2	Physical Protection: through the Nuclear Fuel Cycle
16:20 – 18:00 High-Level Sessio #3	Facilities: National		(Conference Room M2)	
(Conference Roon B/M1)	approaches, emerging trends and areas to be addressed	09:00 – 10:30	Technical Session 4A-3	Nuclear Forensics: Nuclear Forensics Serving a Nuclear
16:20 – 18:00 Technical Session 3D-A	National Nuclear Security Regimes		(Conference Room M3)	Security Infrastructure
(Board Room A)		09:00 – 10:30	Technical Session 4A-4	Panel: Preventive and Protective Measures against
16:20 – 18:00 Technical Session 3D-1 (Press Room)	Human Resource Development: Nuclear Security Education		(Conference Room M4)	Insider Threats
16:20 – 18:00 Technical Session 3D-2	Science and Interpretation of	10:30 – 11:10	Coffee Break	Interactive Content Presentations
(Conference Roon M2)	Nuclear Forensic Signatures	11:10 – 12:30	High-Level Session #4	Radioactive Materials and Associated Facilities,
16:20 – 18:00 Technical Session 3D-3 (Conference Room	Industrial Control Systems in		(Conference Room B/M1)	including radioactive sources: National approaches, emerging trends and areas to be addressed
M3) 16:20 – 18:00 Technical Session	Panel: Systems and Measures	11:10 – 12:30	Technical Session 4B-A	Unmanned Aerial Vehicles: Good Drone or Bad?
3D-4 (Conference Roon	for the Detection of MORC: Design and Implementation		(Board Room A)	
M4) 16:20 – 18:00 Technical Session	Panel: Parancetivas en	11:10 – 12:30	Technical Session 4B-1	Human Resources Development: Training
16:20 – 18:00 Technical Session 3D-5 (Conference Roon M5)	implementing obligations		(Press Room)	

11:10 – 12:30	Technical Session 4B-2	Physical Protection: through the Nuclear Fuel Cycle	14:00 – 15:40	Technical Session 4C-4	Panel: Human Resources Development: Training
	(Conference Room M2)	·		(Conference Room M4)	
11:10 – 12:30	Technical Session	Nuclear Forensics: Nuclear	14:00 – 15:40	4C-5	Panel: Exchanging experience, knowledge and
	4B-3 (Conference Room M3)	Forensics Serving a Nuclear Security Infrastructure		(Conference Room M5)	good practices on the use and security of high activity radioactive sources and the exploration of nuclear and
11:10 – 12:30	Technical Session 4B-4	Panel: Preventive and Protective Measures against	15:40 16:20	Coffoo/Too Brook	radioactive alternative technologies.
	(Conference Room M4)	Insider Threats	15:40 – 16:20	Coffee/Tea Break	Interactive Content Presentations
12:30 – 14:00	Lunch Break and Si	ide Events	16:20 – 18:00	High-Level Session #5	Radioactive Material Out of
12:40 – 13:40	Advisory Service (IF	tional Physical Protection PPAS) – Twenty Years of		(Conference Room B/M1)	Regulatory Control: Existing approaches, emerging trends and areas to be addressed
	Achievement (Board Room A) Light lunch to be pro	ovided	16:20 – 18:00	4D-A	Nuclear Security Culture
12:35 – 13:50	Side Event: Scaling	up Worldwide Capacity to		(Board Room A)	
		ealed Radioactive Sources	16:20 – 18:00	Technical Session 4D-1	Security of Nuclear and Other Radioactive Material in
14:00 – 15:40	High-Level Session #5	Radioactive Material Out of		(Press Room)	Transport
	(Conference Room B/M1)	Regulatory Control: Existing approaches, emerging trends and areas to be addressed	16:20 – 18:00	Technical Session 4D-2	Physical Protection: Approaches and Evaluation
14:00 – 15:40		Nuclear Security Culture		(Conference Room M2)	Tools
	4C-A (Board Room A)		16:20 – 18:00	Technical Session 4D-3	Computer Security: Regulation and Policies in Nuclear
14:00 – 15:40	Technical Session 4C-1	Security of Nuclear and Other Radioactive Material in		(Conference Room M3)	
	(Press Room)	Transport	16:20 – 18:00	Technical Session 4D-4	Panel: Human Resources
14:00 – 15:40	Technical Session 4C-2	Physical Protection: Approaches and Evaluation		(Conference Room M4)	Development: Training
	(Conference Room M2)	10013	16:20 – 18:00	Technical Session 4D-5	Nuclear Material Minimization
14:00 – 15:40	4C-3	Computer Security: Regulation and Policies in Nuclear		(Conference Room M5)	
	(Conference Room M3)	Security Regimes			

Friday, 09 Dec 09:00 – 10:30		National Nuclear Security Regime, including nuclear security culture: Existing approaches, emerging trends and areas to be addressed
09:00 – 10:30	Technical Session 5A-A (Board Room A)	Computer Security for Industrial Control Systems in Nuclear Facilities
09:00 – 10:30	Technical Session 5A-1 (Press Room)	Human Resource Development: Nuclear Security Support Centres and Sustainability
09:00 – 10:30	Technical Session 5A-2 (Conference Room M2)	Physical Protection: Regulatory Aspects
09:00 – 10:30	Technical Session 5A-3 (Conference Room M3)	National approaches and challenges in preparedness for and response to nuclear security events
10:30 – 11:10	Coffee/Tea Break	Interactive Content Presentations
11:10 – 12:30	High-Level Session #6 (Conference Room B/M1)	National Nuclear Security Regime, including nuclear security culture: Existing approaches, emerging trends and areas to be addressed
11:10 – 12:30	Technical Session 5B-A (Board Room A)	Computer Security for Industrial Control Systems in Nuclear Facilities
11:10 – 12:30	Technical Session 5B-1 (Press Room)	Human Resource Development: Nuclear Security Support Centres and Sustainability
11:10 – 12:30	Technical Session 5B-2 (Conference Room M2)	Physical Protection: Regulatory Aspects
11:10 – 12:30	Technical Session 5B-3	National approaches and challenges in preparedness for and response to puclear

(Conference Room for and response to nuclear security events

M3)

12:30 – 14:00 Lunch Break and Side Events

14:00 – 15:00 Technical Session Closing Plenary (Conference Room B/M1)

Commercial exhibits will be located in the common area on the first and second floors of the M building, as well as in the Rotunda (C-Building) from Monday to Friday, 05-09 December 2016.

Sunday, 4 December 2016

15:00 – 19:00 Registration and Distribution of Conference

Materials (Gate 1)

Welcome Reception hosted by the IAEA

17:00 – 19:00 Division of Nuclear Security

(Rotunda – C-Building)

Monday, 5 December 2016

08:00 ongoing Registration and Distribution of Conference

Materials (Continued)

10:00 - 12:30 Ministerial Session

(Conference Room B/M1)

Chairperson: Yun Byung-se, Republic of Korea

Yukiya Amano, IAEA Opening Statement

Opening Remarks

Director General

Yun Byung-se, Republic of Korea

Conference President Minister of Foreign Affairs

Republic of Korea

National Statements

12:30 - 15:00 Lunch Break

A luncheon for Ministers and other Heads of Delegations will be sponsored by the Minister of Foreign Affairs of the Republic of

Korea outside Board Room C

15:00 – 17:00 Ministerial Session (Continued)

National Statements

17:00 – 17:30 Adoption of the Ministerial Declaration

17:30 – 21:00 Ministerial Session (Continued)

National Statements

09:00 - 12:00 Ministerial Session (Continued)

(Conference Room B/M1)

National Statements

Scientific and Technical Programme

12:00 - 13:00 Opening Plenary

(Conference Room B/M1)

Yukiya Amano Opening Remarks

Director General

IAEA

Kim Won-Soo Opening Statement

Under-Secretary-General and High Representative for Disarmament Affairs

United Nations

Jacek Bylica Opening Statement

Special Envoy for Disarmament and Nonproliferation, European External Action Service

Abel Adelakun Ayoko Opening Statement

Co-Chair for Open-Ended Consultations on Ministerial Declaration

Nigeria

Laercio Vinhas Opening Statement

Chair of Programme Committee for the Scientific and Technical Programme

Brazil

13:00 - 14:00 Lunch Break

14:00 – 18:00 High Level Session 1:

International Legal Instruments for Nuclear Security: Universalization and Implementation of Binding International

Legal Instruments

(Conference Room B/M1)

Chairpersons: C. Dominguez, Argentina

K. Nederlof, Netherlands

INVITED SPEAKERS

Time	Name of Speaker	
14:00 – 14:20	M. Ulyanov, Russian Federation Department for Non-Proliferation and Arms Control, Ministry of Foreign Affairs	
14:20 – 14:40	T. Countryman, USA Arms Control and International Security Department of State	
14:40 – 15:00	B Jun, Republic of Korea	
	Korean National Diplomatic Academy	
15:00 – 15:20	M. Miedico, UN Office of Drugs and Crime Terrorism Prevention Branch	
15:20 – 15:40	R. Oyarzun Marchesi,UNSCR 1540 Committee	
	UNSCR1540 Committee	
15:40 – 16:20	Coffee/Tea Break	Interactive Content Presentations (M0E outside Press Room)
16:20 – 16:40	A. Madigele, Botswana	
	Ministry of Tertiary Education, Research Science and Technology	
16:40 – 17:00	J. Herbach, The Netherlands	
	Security Policy Department, Ministry of Foreign Affairs	
17:00 – 18:00	Panel Discussion	Achieving universalisation and implementation of international legal instruments for nuclear security. (to be joined by Director of Office of Legal Affairs, Ms Peri Johnson)
18:00 – 20:00	Welcome Reception	
	(Ground Floor of M Building)	

14:00 – 18:00 Technical Session: 2C-A/2D-A

Detection Technology

(Board Room A)

Chairpersons: E. Melamed, USA,

V. Okoye, Nigeria

E. Monales, South Africa

Rapporteur: V. Porter, United Kingdom

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	474	B. Pedersen	European Union	Low-energy Neutron induced Fission Signatures for SNM Detection in Cargo Containers
14:20 – 14:40	486	L. Thompson	United Kingdom	The use of muon tomography in nuclear threat reduction
14:40 – 15:00	432	M. Owen	United Kingdom	Development of RN Detection Technologies
15:00 – 15:20	149	M. Seya	Japan	Necessity of Secure Detection Systems of Nuclear Materials and Detailed interior Checking Systems of Detected / Suspicious Objects in Non-destructive Manner for Safe Dismantling
15:20 – 15:40	401	A. Osovizky	Israel	Improving radiation detection level and operational data of pre and post event monitoring systems
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E outside Press Room)
16:20 – 16:40	170	J. Bagi	European Union	Technical Challenges in Nuclear Detection (Shielding and Nuclear Interferences)
16:40 – 17:00	60	M. D. Mohamed Ahmed	Egypt	Utilization of a Portable tomographic Gamma Scanning System for nuclear security purposes
17:00 – 17:20	121	K. Boudergui	France	New R/N passive detection techniques and methods
17:20 – 17:40	548	N. Kravchenko	Russian Federation	Suggestions to improve and use widely technology and hardware for objective monitoring of legal shipments of nuclear and radioactive materials

14:00 – 18:00 Technical Session: 2C-A/2D-A

Detection Technology

(Board Room A)

Chairpersons: E. Melamed, USA,

V. Okoye, Nigeria

E. Monales, South Africa

Rapporteur: V. Porter, United Kingdom

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
17:40 – 18:00	117	F. Carrel	France	The H2020 C-BORD project: advanced non-destructive techniques to improve control of cargo containers
18:00 – 20:00	Welcome Recepti Technical Program (Ground Floor of I			

14:00 - 15:40 Technical Session: 2C-1

Threat and Risk Assessment and its Broad Application to Nuclear Security

(Press Room)

Chairpersons: M. Moreira, Brazil

T. Otukile, Botswana

Rapporteur: K. Shahbaz, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	177	S. Streetman	USA	Nuclear Security Risk Assessment Pitfalls and How to Avoid them
14:20 – 14:40	554	R. Downes	United Kingdom	Nuclear terrorism as virtual risk: Implications for prediction and the utility of models
14:40 – 15:00	338	J. Pelletier	USA	Vulnerability Assessment Approach for Radiological Materials
15:00 – 15:20	255	W. Bruecher	Germany	German Basic Principles for the Analysis of Unacceptable Radiological Consequences from a Sabotage of Nuclear Facilities
15:20 – 15:40	485	A. Hossain	Bangladesh	An Intelligent Approach for Nuclear Security Measures on Nuclear Materials: Demands and Needs
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E outside Press Room)

16:20 - 18:00 Technical Session: 2D-1

Design Basis Threat and Threat Assessment for Nuclear Material and

Facilities

(Press Room)

Chairpersons: R. Kumar, India

N Fragoyannis, USA

Rapporteur: J. Kim, Republic of Korea

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
16:20 – 16:40	120	G. Rédey	Hungary	Multidimensional qualitative ranking in DBT analysis
16:40 – 17:00	155	A. Mastauskas	Lithuania	An Approach to Develop DBT-like Threat Statement using Open-Source Adversary Data
17:00 – 17:20	560	C. Nickerson	USA	Integrating Threat Analyses for Cyber & Physical Security
17:20 – 17:40	274	T. Kempa	Germany	Threat Modelling Of Industrial Control Systems At Nuclear Facilities
18:00 – 20:00	Welcome Reception Technical Program (Ground Floor of N			

14:00 - 18:00 Technical Session: 2C-2

Panel Discussion: Public Engagement on

Nuclear Security

(Conference Room M2)

Facilitator: G. Moonsamy, South Africa

Rapporteur: L. Shaw, USA

A. Mohamed, Sudan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 15:40	Panel Discussion			nd importance of communication tegies when engaging with the public on
	993	R. Dresselaers	Belgium	Nuclear Security and Contemporary Communication Challenges
	994	A. Nilsson	Sweden	Safety/Security interface when Communicating on Nuclear Security incidents
	995	R. Floyd	Australia	Transparency and Nuclear Security
	266	M. Stewart Smith	Global initiative for Combatting Nuclear Terrorism (GICNT)	Public Messaging and International Coordination
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E outside Press Room)

16:20 - 18:00 Technical Session: 2D-2

The Application of Threat and Risk Assessment for Informing the Design and Implementation of Nuclear Security Systems and Measures for MORC

(Conference Room M2)

Co-Chairs: D. Makharadze, Georgia

J. Facetti, Paraguay

Rapporteur: H. W. Sentamu, Uganda

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
16:20 – 16:40	352	R. Chatelus	European Union	Combining "hard" nuclear detection technologies and "soft" detection techniques for a better efficacy
16:40 – 17:00	217	M. Mohamed	Malaysia	Detection by information alert: utilising risk management as the essential approach for customs authority to enhance detection capabilities
17:00 – 18:00	Question period			
18:00 – 20:00	Welcome Recepti Technical Prograr	on for the Scientific and mme		
	(Ground Floor of I	M Building)		

14:00 - 18:00 Technical Session: 2C-3/2D-3

Radioactive Material: Regulatory and

Operator Perspectives

(Conference Room M3)

Chairpersons: J. Lachaume, France

R. Severa, Zimbabwe

Rapporteur: K. Thomson, United Kingdom

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	140	G. Belot	France	How to develop a control system and regulations regarding security in the radioactive sources world?
14:20 – 14:40	84	A. Roza de Lima	Brazil	A New Brazilian Regulation for Security of Radioactive Sources
14:40 – 15:00	183	M. Ivanov	Russian Federation	Evolution of the State regulation of physical protection of radioactive material and associated facilities in the Russian Federation
15:00 – 15:20	416	N. Luwalira	Uganda	Radiation sources registry for implementation of an Integrated Nuclear Security Support Plan (INSSP) for Uganda
15:20 – 15:40	271	M. Dapas	USA	An Evaluation of the U.S. Nuclear Regulatory Commission's Radioactive Source Regulations
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
16:20 – 18:00	Panel Discussion (Panel participants listed below)		of requirements fro compliance and op security and must r resources and com revolve around the operators work toge	will provide a perspective on implementation m regulators responsible for ensuring erators who have the prime responsibility for manage added responsibilities within current peting priorities. The discussion should central question: How can regulators and ether to ensure security system effectiveness en on operators' daily operations?
	46	W. Lorenzen	USA	Radioactive source security – balancing security and use in a public facility
	142	D. Ek	USA	Vulnerability Assessment Approach for Radiological Materials

14:00 - 18:00 Technical Session: 2C-3/2D-3

Radioactive Material: Regulatory and

Operator Perspectives

(Conference Room M3)

Chairpersons: J. Lachaume, France

R. Severa, Zimbabwe

Rapporteur: K. Thomson, United Kingdom

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
	354	E. Yuliati	Indonesia	Implementation of Chairman Regulation on Security of Radioactive Sources on the Inspection Activities in Indonesia
	516	S. Ali	Pakistan	Physical Protection Upgrades at Nuclear Medicine and Oncology Centers (NMCs) in Pakistan
18:00 – 20:00	Welcome Reception Technical Program (Ground Floor of M			

15:40 – 16:20 Interactive Content Presentations

(Ground Floor of M Building – Outside of Press Room)

INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
15:40 – 16:00	Interactive Conte	ent Presentations		
1	318	J. Watson	United Kingdom	Electromagnetic Detection Methods for Nuclear Security
2	938	M. Foster	European Union	Characterisation of Coincidence Counters for Portable Fissile Material Detection and ID and for Lab-Based Assay
3	278	D. McIntyre	USA	Public Messaging About Nuclear Security
4	476	K. Abbas	European Union	Example of EC-IAEA Joint Efforts to Support Security of Radioactive and Nuclear Materials
5	44	K. Demachi	Japan	Development of Malicious Behaviors Detection Method By Movie Analysis
6	425	C. Miller	USA	Maintaining Situational Awareness in a Data intensive Environment
16:00 - 16:20	Interactive Conte	ent Presentations		
1	378	A. Kocsonya	Hungary	Capabilities, Limitations and Challenges o Scintillation Spectrometers
2	66	P. Rickwood	Atomic Reporters	Atomic Reporters Synopsis
3	321	L. Bajusz	USA	The U.S. Approach to Public Messaging On Nuclear Forensics
4	519	S. Qureshi	India	Potential Security Threat from Low Level High Risk Radiation Sources - Indian Scenario
5	1001	S. Streetman	USA	ICP: Natural Language Processing to Support Insider Threat Detection
6	319	D. Ek	USA	Pilot Approach to Develop DBT-like Threa Statement Using Open Source Data
7	479	D. Septikasari	Indonesia	Nuclear Security Challenges for the internet of Things

12:00 - 18:00 Poster Session - 2P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	29	L. Setianingsih	Indonesia	Strengthening Nuclear Energy Regulatory System in Decreasing the Risk Level of Attacks in Major Urban Centres Utilizing Radioactive Materials; A Proposed Implementation of Risk informed Approach in Nuclear Security
2	49	E. Mursa	Republic of Moldova	Ensuring the National Security of Radioactive Materials and Associated Facilities Related to the International Obligations Arising from the Treaties and Conventions in the Field
3	74	R. Paci	Albania	Security of Radioactive Sources in Albania
4	86	A. Kohli	India	Portable Radiography Exposure Device- A Security Nightmare
5	95	M. Kalinina-Pohl	Center for Nonproliferation Studies (CNS)	Legacy Radioactive Sources in Nigeria and their Security Implications for Sub-Saharan Africa
6	144	R. Hajima	Japan	Secure Detection of Nuclear Material in a Heavy Shielding and Reliable Investigation of Inner Structure of the Shielding using Mono-energetic High Energy / High Intensity Gamma-rays
7	145	M. Kureta	Japan	Detailed (Property) Checking of Suspicious Objects with Active Neutron Non- destructive Methods using a D-T Pulsed Neutron Source
8	174	S. Sawiyah	Indonesia	The major changes in the new security of radioactive sources regulation in Indonesia
9	224	M. D. Mohamed Ahmed	Egypt	NMAC: A tool for Nuclear Safeguards and Nuclear Security purposes
10	226	S. Suharyanta	Indonesia	Vital Area Identification Experience for Research Reactor and in relation with DBT Development.
11	233	C. Shenton-Taylor	United Kingdom	Future Technology for Nuclear Security

12:00 - 18:00 Poster Session - 2P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
12	240	M. Singh	India	Security Scenario of Radiation Facilities in India
13	242	R. Dockree	United Kingdom	TIGRESS: Timing Incorporated, Gamma Resolved, Evaluation of Shielded SNM
14	280	V. Okoye	Nigeria	Detection Systems And Measures for Nuclear And Other Radioactive Material Out of Regulatory Control
15	288	M. Dran	France	Global Security Approach: A Solution for A Secure Protection of Radioactive Sources (Nuc-Track Project)
16	307	H. Idris	Malaysia	Mobile In-Situ Detection System for Radiological Rapid Assessment During Nuclear Security Events
17	324	E. Lyman	USA	Material Attractiveness: In the Eye of the Beholder?
19	346	T. T. A. Bui	Viet Nam	Progress of Viet Nam in Security Management of Category 1 Radioactive Sources
20	356	M. Gupta	USA	Industry Use of Cadmium Zinc Telluride to Detect Radioisotope Source Location
21	390	V.T. Phi	Viet Nam	On-Line Track of Radioactive Sources in industrial Radiography in Viet Nam
22	396	P. Muthuvelu	Malaysia	Medical Experience with the international Physical Protection Advisory Service Mission
23	411	P. Sellin	United Kingdom	Neutron Detection with SiPM-based Plastic Scintillators
24	427	A. Burjan	United Kingdom	Nuclear Arms Control Verification Techniques
25	454	A. Jraut	Morocco	Use of Safety Analysis as a Tool for the Identification of Vital Areas at the Moroccal TRIGA Mark II Research Reactor

12:00 - 18:00 Poster Session - 2P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
26	463	N. Ishak	Malaysia	Nuclear Threat Assessment with Malaysian Characteristics
27	471	G. Randall	United Kingdom	Gamma-imaging Using Semiconductor Detectors
28	477	K. Holt	USA	Cesium-137 Security: Partnering to Prevent Dirty Bombs
29	481	K. Hirsch	USA	Physical Protection of Mobile Radioactive Sources Commonly Used in the Well- Logging and Industrial Radiography Industries
30	491	S. Kreek	USA	High-Fidelity Nuclear Detection Training in the Field without Radioactive Sources
31	515	H. Tagziria	European Union	Results of the SCINTILLA (EC- FP7) Project for the Development, Evaluation And Benchmarking of Detection Technologies for Difficult to Detect Nuclear And Other Radioactive Materials
32	536	C. Herath	Sri Lanka	Introduction of Physical Protection for High Activity Radioactive Sources Used in Sri Lanka
33	547	N. Kravchenko	Russian Federation	Implementation of the fundamental Principles of the Convention on Nuclear Facilities Construction
34	549	V. Porter	United Kingdom	Searching Wide Areas for Radiological Material – Usability Trials
35	939	H. Tagziria	European Union	Results of the Illicit Trafficking Radiation Assessment Program (ITRAP+10) for Detection Equipment in Nuclear Security

09:00 - 12:30 High Level Session 2:

International Bodies and Initiatives for Nuclear Security: Role of the IAEA in Coordinating International Efforts

(Conference Room B/M1)

Chairpersons: K. Heppell-Masys, Canada

N. Akiyama, Japan

INVITED SPEAKERS

Time	Name of Speaker	
09:00 – 09:15	L. Holgate, USA Permanent Mission of the USA to the IAEA	
09:15 – 09:30	V Smirnov, Russian Federation Department for Non-Proliferation and Arms Control Ministry of Foreign Affairs	
09:30 – 09:45	M. Betti, European Union Joint Research Centre- Directorate G for Nuclear Safety and Security	
09:45 – 10:00	R. Floyd, Australia Australian Safeguards and Non-Proliferation Office	
10:00 – 10:15	A. Singh Gill, India Ministry of External Affairs	
10:30 – 11:10	Coffee/Tea Break	Interactive Content Presentations (M0E outside Press Room)
11:10 – 11:25	E. Gatebe, Kenya Radiation Protection Board	
11:25 – 11:40	L. Vinhas, Brazil Permanent Mission of Brazil to the IAEA	
11:40 – 12:30	Panel Discussion	Strengthening the role of the IAEA in nuclear security post 2016 (to be joined by Director NSNS, Mr Raja Raja Adnan)
12:30 – 14:00	Lunch Break and Side Events	For full list of side events, see the Schedule of Side Events at the end of the Programme

09:00 - 12:30 Technical Session: 3A-A/3B-A

Radioactive Material: Identifying Gaps and Strategies for Addressing these

Gaps

(Board Room A)

Chairpersons: T. Otukile, Botswana

K. Hirsch, USA

Rapporteur: N. A. Z. Binte Abdul Aziz, Singapore

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
09:00 – 09:15	493	F. Morris	USA	Legislative and Regulatory Frameworks for the Security of Radioactive Material: Progress, Gaps, Issues and Challenges
09:15 – 09:30	461	N. Bello	Nigeria	Management of Disused Sources in Nigeria, Current Actions and Future Plans
09:30 - 09:45	505	D. Donnelly	USA	Achieving Sustainability: A Partnership for Developing Radioactive Source Security Training in Peru
09:45 – 10:00	37	A. Bieniawski	Nuclear Threat Initiative	Strengthening the Security of Radiological Sources
10:00 – 10:15	104	J. Zafimanjato	Madagascar	Security of Radioactive Sources in Madagascar: Achievements and new Challenges
10:15 – 10:30	284	R. Duguay	Canada	Canadian Approach to High Risk Radioactive Sources Security: Lessons Learned from IPPAS and implementing new Security Requirements
10:30 – 11:10	Coffee/Tea Break	(Interactive Content Presentations (M0E Outside Press Room	
11:10 – 11:25	497	A. Nilsson	Sweden	Radiological security in the public sector; challenges and alternative approaches
11:25 – 12:30	Panel Discussion (panel comprises Session presenters)			eatest challenges facing all stakeholders in pactive material and associated facilities?
12:30 – 14:00	Lunch Break and	Side Events	For full list of side the end of the Pro	e events, see the Schedule of Side Events at ogramme

09:00 - 12:30 Technical Session: 3A-1/3B-1

Perspectives on Implementing Obligations under International Instruments for Nuclear Security

(Press Room)

Chairpersons: A. Wetherall, Singapore

J. Herbach, Netherlands

Rapporteur: N. Gmucova, Slovakia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper	
09:00 – 09:20	56	S. Pitts-Kiefer	Nuclear Threat Initiative	Strengthening the CPPNM Regime: A Path Forward	
09:20 - 09:40	38	C. Stoiber	USA	The Review Conference Process as a Means for Strengthening Nuclear Security	
09:40 – 10:00	182	K. Rauhut R. Howsley	World Institute for Nuclear Security	Industry's Potential Role in Implementing the CPPNM Amendment and Improving Nuclear Security	
10:00 – 10:30	Question Period				
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Interactive Content Presentations (M0E Outside Press Room)	
11:10 – 11:30	107	M. Rosenthal	UN 1540 Committee	The Role of United Nations Security Council Resolution 1540 in Supporting Effective Nuclear Security Measures World-Wide	
11:30 – 11:50	45	T. Findlay	Australia	Managing the Global Nuclear Security Architecture after the Summits	
11:50 – 12:10	574	M. Bunn	USA	Key Steps for Continuing Nuclear Security Progress	
12:10 – 12:30	Question Period				
12:30 – 14:00	Lunch Break and Side Events		For full list of side of the Prog	events, see the Schedule of Side Events at gramme	

09:00 - 12:30 Technical Session: 3A-2/3B-2

Nuclear Forensics: Building Confidence

in Nuclear Forensic Conclusions

(Conference Room M2)

Chairpersons: H. A. Kalambuka, Kenya

R. Kips, USA

Rapporteur: A Pidduck, United Kingdom

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper	
09:00 – 09:15	143	G. Graham	United Kingdom	From the Crime Scene to the Laboratory: Forensic Science Support for a Nuclear Security Event	
09:15 – 09:30	193	J. Schwantes	USA	Advancing the State of Practice and Art of Nuclear Forensic Science: Past and Present Nuclear Forensics International Technical Working Group Collaborative Materials Exercises	
09:30 - 09:45	168	M. Wallenius	European Union	Joint Analysis Exercise on Uranium Pellets	
09:45 – 10:00	448	J. Zappey	Germany	Attracting the next generation of nuclear forensic scientists – "Experience from a dedicated workshop at the International Youth Nuclear Congress 2016"	
10:00 – 10:30	Question Period				
10:30 – 11:10	Coffee/Tea Break		Interactive Content Presentations (M0E Outside Press Room)		
11:10 – 11:25	445	M. Zuidberg	Netherlands	Generic Integrated Forensic Toolbox (GIFT): An European initiative to develop a forensic response to CBRN incidents	
11:25 – 11:40	473	J. Borgardt	USA	Results From Galaxy Serpent Version 2; A Web-Based Table-Top Exercise For National Nuclear Forensics Libraries	
11:40 – 11:55	317	E. De Shane	USA	Training Laboratory Scientists in Presenting Nuclear Forensic Data and Expert Witness Testimony	
11:55 – 12:30	Question Period				
12:30 – 14:00	Lunch Break and Side Events		For full list of side the end of the Pro	events, see the Schedule of Side Events at ogramme	

09:00 - 12:30 Technical Session: 3A-3/3B-3

Systems and Measures for the Detection of MORC: Design and Implementation

(Conference Room M3)

Chairpersons: J. Mc Colm, World Customs Organization

T. Toleubayev, INTERPOL

Rapporteur: K. Shahbaz, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
09:00 – 09:20	563	H. Davies	United Kingdom	Role of Science in the UK's Regime for Material Out of Regulatory Control
09:20 - 09:40	382	D. Masse	France	The French initiative on RN security of critical infrastructures: the REDAR project
09:40 – 10:00	439	P. Sotomayor	Chile	Achievements, Progress and Challenges in the Chilean Nuclear Security Detection Architecture
10:00 – 10:20	384	V. K. Aerattukkara	India	Development and Usage of Indian Environmental Radiation Monitoring Network (IERMON) and Mobile Radiation Detection System (MRDS) for Enhancing Nuclear Security in India
10:20 – 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
11:10 – 11:30	201	R. Maurer	USA	Multi-Phased Approach for Detection Systems and Measures for Nuclear and Other Radioactive Material Out of Regulatory Control
11:30 – 11:50	347	N. H. V. Nguyen	Viet Nam	Developing National Detection Capability
11:50 – 12:10	363	E. Carlous	Indonesia	Reinforcing the Role of the Front Line Officer within a Nuclear Security Detection Architecture: Establishment of an International Network for Front Line Organizations
12:10 – 12:30	469	M. Wittrock	USA	Good Practices and Challenges in Developing and Sustaining a Nuclear Security Detection Architecture

09:00 - 12:30 Technical Session: 3A-4

Panel: Processes, Challenges, and Tools

in Information Management

(Conference Room M4)

Facilitator: P. Karhu, Finland

Rapporteur: M. Roumie, Lebanon

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
09:00 – 10:30	Panel Discussion:		The first panel will focus on the information collection and reporting processes by States to the Agency. This will include actual information collection and reporting mechanisms, as well as desired or prospective mechanisms.	
	96	P. Karhu	Finland	Information Exchange on Incidents: Why and How?
	245	D. Ledingham	INTERPOL	Interpol Synopsis
	9	R. Samba	Cameroon	National Experiences and Challenges in Implementing Nuclear Security information Management System (NUSIMS).
	154	A. Gücüyener	Turkey	Developing A Cyber Information Exchange Ecosystem in the Context of Nuclear Power Plants
	361	H. Kroeger	Germany	Reporting Criteria for the incident and Trafficking Database and Issues Arising within a Federal System
	496	J. Satterfield	USA	International Information-Sharing on Nuclear and Other Radioactive Materials Outside of Regulatory Control (MORC)
	1002	J. Cesarek	Slovenia	Perspective of an ITDB POC in using ITDB and Information Tools
10:30 – 11:10	Coffee/Tea Break		Interactive Conter	nt Presentations (M0E Outside Press Room)

09:00 - 12:30 Technical Session: 3B-4

Panel: Processes, Challenges, and Tools in Information Management (Continued)

(Conference Room M4)

Facilitator: P. Karhu, Finland

Rapporteur: M. Roumie, Lebanon

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper	
11:10 – 12:30	Panel Discussion:		could do with infor use and under dev	The second panel will focus on what the Agency does and could do with information it collects/receives, including tools inuse and under development with the ITDB, and also how they can benefit States, particularly the ITDB Points of Contact.	
	96	P. Karhu	Finland	Information Exchange On incidents: Why and How?	
	1004	D. Dimitrovski	Austria	Existing and new information tools used in ITDB analysis and information sharing	
	1005	D. Calle	IAEA	The use of advanced information tools for exploiting information.	
	1006	C. MacMillan	European Union	The use of information tools for exploiting open source information	
	245	D. Ledingham	INTERPOL	Interpol Synopsis	
	496	J. Satterfield	USA	International Information-Sharing on Nuclear and Other Radioactive Materials Outside of Regulatory Control (MORC)	
10:30 – 11:10	Coffee/Tea Break		Interactive Conten	Interactive Content Presentations (M0E Outside Press Room)	

09:00 - 12:30 Technical Session: 3A-5/3B-5

Nuclear Material Accounting and Control at Facilities for the purpose of Nuclear

Security

(Conference Room M5)

Chairpersons: D. Bokov, Russian Federation

M. Darweesh Ahmad, Egypt

Rapporteur: J. Leeke, Canada

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper	
09:00 – 09:20	1	D. Tri Jatmiko	Indonesia	Preliminary Design Implementation for Nuclear Material Accounting and Control (NMAC) System At the GA Siwabessy Multipurpose Reactor BATAN	
09:20 – 09:40	119	F. Lanave	France	The French Centralized Accountancy for Nuclear Materials: A Strong Contributor for Nuclear Security	
09:40 – 10:00	276	W. Mohamed	Egypt	State Level Approach for Strengthening Nuclear Security Using Nuclear Material Accounting for and Control (NMAC): Egyptian Case	
10:00 – 10:20	13	B. Cipiti	USA	Integration of Materials Accountancy and Process Monitoring Data with Physical Protection	
10:20 – 10:30	Question Period				
10:30 – 11:10	Coffee/Tea Break		Interactive Content Presentations (M0E Outside Press Room)		
11:10 – 11:30	325	T. Edmunds	USA	Statistical and Simulation Methods for Fuel Assembly Auditing	
11:30 – 12:30	Panel Discussion		for nuclear secur contrasting IAEA two systems. The	The panel will discuss elements of a domestic NMAC system for nuclear security at the facility level at times comparing and contrasting IAEA Safeguards to alleviate confusion between the two systems. The session will open with a panel discussion having member's form nuclear security, operators, regulators and Safeguards.	
12:30 – 14:00	Lunch Break and Side Events			For full list of side events, see the Schedule of Side Events at the end of the Programme	

10:30 – 11:10 Interactive Content Presentations

(Ground Floor of M Building – Outside Press Room)

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INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	113	W. Potter	USA	Utilizing Targeted Social Media to Locate Orphaned Radiological Sources: Results of A Pilot Study in Moldova
2	128	A. Baxter	United Kingdom	Decontamination of Radionuclides from Cellular Material for Forensic STR Analysis
3	460	F. Wong	USA	Novel Designs and Conduct for Scenario- Based Policy Discussions for Nuclear Security
4	494	R. Steiner	USA	Uranium Radiochronometry intercomparison Study for Nuclear Forensics Applications
5	153	L. Fongaro	European Union	Image Texture Analysis Applications for Nuclear Forensic investigation
6	302	M. Wilkerson	USA	Morphology and Chemical Speciation for Forensic Science of Nuclear Materials
7	178	H. Kalambuka	Kenya	Microphotonic Forensic Approaches for Research Development in Nuclear Security

14:00 - 18:00 High Level Session 3:

Nuclear Material and Nuclear Facilities: National Approaches, Emerging Trends

and Areas to be Addressed

(Conference Room B/M1)

Chairpersons: M. Žiaková, Slovakia

A. Habib, Pakistan

INVITED SPEAKERS

Time	Name of Speaker	
14:00 – 14:20	W. Cloosters, Germany Nuclear Safety and Radiation Protection Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)	
14:20 – 14:40	J. Hruby, USA Sandia National Laboratories Sandia Corporation	
14:40 - 15:00	C. Quintin, France	
	Defence and Security Ministry of Environment, Energy and the Sea	
15:00 – 15:20	Baek Min, Republic of Korea	
	Nuclear Safety and Security Commission	
15:20 – 15:40	H.A. Alkaabi, United Arab Emirates	
	Permanent Mission of the United Arab Emirates to the IAEA	
15:40 – 16:20	Coffee/Tea Break	Interactive Content Presentations (M0E Outside Press Room)
16:20 – 16:40	L. Shen, China	
	China Atomic Energy Agency	
16:40 – 17:00	K. Denisov, Russian Federation	
	State Atomic Energy Corporation "Rosatom"	
17:00 – 18:00	Panel Discussion	Achieving high levels of nuclear security for nuclear material and nuclear facilities during each stage of the life of a facility – siting to post-decommissioning including legacy issues
-		

14:00 - 18:00 Technical Session: 3C-A/3D-A

National Nuclear Security Regimes

(Board Room A)

Chairpersons: B. Kaboro, Kenya

M. Assi, Lebanon

Rapporteur: A. Shakoor, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper	
14:00 – 14:20	270	D. Tsutskiridze	Georgia	Synergies in Risk Reduction Strategies: Combining Efforts from IAEA and CBRN COE National Plan Approaches in Georgia	
14:20 – 14:40	41	I. Soufi	Morocco	Nuclear Security: Sustaining Engagement, Actions and Results	
14:40 – 15:00	53	B. Bianco	Argentina	Nuclear Security: An International Concern On National Actions	
15:00 – 15:20	171	M. Tall	Senegal	Improving Nuclear Security in a Non- Nuclear Country: the case of Senegal	
15:20 – 15:40	345	D. Taufiq	Indonesia	Nuclear Security Programmes in Border Areas of Indonesia: The Challenge as an Archipelagic Country	
15:40 – 16:20	Coffee/Tea Break		Interactive Conte	Interactive Content Presentations (M0E Outside Press Room)	
16:20 – 16:40	176	A. Sidorencu	Republic of Moldova	International Cooperation for Strengthen of the Moldovan Nuclear Security infrastructure. Case Study: Cooperation Between Sweden and the Republic of Moldova	
16:40 – 17:00	79	F. Petruceli Coelho Lima	Brazil	Brazilian Nuclear Security Framework	
17:00 – 17:20	413	C. Qiu	China	Status and Prospect of China's Nuclear Security Legislative Framework	
17:20 – 17:40	234	S. Bayer	Australia	Review of Australia's Nuclear Security Regime	
17:40 – 18:00	197	F. Morris	USA	The Legislative and Regulatory Framework for the Security of Nuclear and Other Radioactive Material out of Regulatory Control: A Virtual Implementing Guide	

14:00 - 18:00 Technical Session: 3C-1/3D-1

Human Resource Development: Nuclear

Security Education

(Press Room)

Chairpersons: A. Alharbi, Saudi Arabia

J. Larkin, South Africa

Rapporteur: E. Waller, Canada

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
14:00 – 14:20	14	O. Hakam	Morocco	The International Nuclear Security Education Network (INSEN): Achievements and Perspectives
14:20 – 14:40	89	F. Holl	Germany	Master's Degree Program in Nuclear Security – A Project Overview
14:40 – 15:00	85	W. Mohamed	Egypt	Role of Universities in Supporting Human Resource Development (HRD) for Nuclear Security
15:00 – 15:20	190	D. Dimitrov	Bulgaria	Establishing Master Programme in Nuclear Security – Bulgarian Experience
15:20 – 15:40	125	J. Harris	USA	Educational Initiatives to Integrate Nuclear Security and Radiation Protection
15:40 – 16:20	Coffee/Tea Break		Interactive Conten	t Presentations (M0E Outside Press Room)
16:20 – 16:40	289	R. Alves Tavares	Brazil	Challenges in the Definition and Implementation of a Nuclear Security Education Program by a Possible Cooperation Project between University and Regulator: The Brazilian Context
16:40 – 17:00	295	I. Abdul Rahman	Malaysia	Development of the MSc in Nuclear Safety, Security and Safeguards by Malaysia: Process and Lessons Learnt for Beginner States
17:00 – 17:20	87	A. Kuye	Nigeria	Graded Approach to Nuclear Security Education and Training in Nigeria – The University of Port Harcourt Experience
17:20 – 17:40	556	L. Lentini	United Kingdom	Nuclear Security Train-the-Trainer Professional Development Courses: Lessons Learned
17:40 – 18:00	Question Period			

14:00 - 18:00 Technical Session: 3C-2/3D-2

Nuclear Forensics: The Science and Interpretation of Nuclear Forensic

. Signatures

(Conference Room M2)

Chairpersons: V. Fedchenko, SIPRI

G. Kochev, Russian Federation

Rapporteur: J. Borgardt, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:15	161	K. Mayer	European Union	Nuclear Forensic Science - The Way Ahead
14:15 – 14:30	123	A. Kumar	India	Non-Destructive Assay of Low Enriched Uranium for Nuclear Forensic Applications
14:30 – 14:45	166	M. Wallenius	European Union	Propagation of Impurities at the Front-End of Fuel Cycle
14:45 – 15:00	451	S. Lamont	USA	Alpha Spectrometry Techniques for Nuclear Forensics
15:00 – 15:15	282	A. Pidduck	United Kingdom	High-Mass-Resolution SIMS Capability for Nuclear Forensics Analysis
15:15 – 15:30	Question Period			
15:40 – 16:20				
13.40 - 10.20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
16:20 – 16:35	Coffee/Tea Break 561	V. Stebelkov	Interactive Content Russian Federation	Presentations (M0E Outside Press Room) Necessity of the Development of National Nuclear Forensics Experts Training
		V. Stebelkov D. Schnaars	Russian	Necessity of the Development of National
16:20 – 16:35	561		Russian Federation	Necessity of the Development of National Nuclear Forensics Experts Training Internationalizing National Nuclear Forensics Libraries: Response to a Query, USA of America – Canada Joint

14:00 - 18:00 Technical Session: 3C-2/3D-2

Nuclear Forensics: The Science and Interpretation of Nuclear Forensic

. Signatures

(Conference Room M2)

Chairpersons: V. Fedchenko, SIPRI

G. Kochev, Russian Federation

Rapporteur: J. Borgardt, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
17:20 – 17:35	34	Z. Hassan Akl	Egypt	A Proposed Approach for Developing a Nuclear Forensics Library in Egypt
17:35 – 18:00	Question Period			
18:00	Adjourn		·	

14:00 - 18:00 Technical Session: 3C-3/3D-3

Computer Security for Industrial Control Systems in Nuclear Facilities: Design and Testing of Computer Security Controls

(Conference Room M3)

Chairpersons: (Before Coffee Break) C Macleod, United Kingdom

H. I. Ibrahim, Egypt

Chairpersons: (After Coffee Break) M. Fabro, Canada J. Trolle, France

Rapporteurs: V. Vuillard, France

A. Buzdugan, Republic of Moldova

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	47	R. Busquim e Silva	Brazil	Use of State Estimation Methods for Instrumentation and Control Cyber Security Assessment in Nuclear Facilities
14:20 – 14:40	510	J. Li	China	Intrusion-tolerant Control for the I&C systems of NPPs
14:40 – 15:00	328	W. West	USA	Performance Testing of Security Controls in Industrial Control Systems and Supervisory Control and Data Acquisition Systems
15:00 – 15:20	362	U. Vaidya	India	Safety and Security perspectives in designing Programmable Logic controllers for C&I System of Critical Nuclear Facilities
15:20 – 15:40	550	E. Quinn	International Electrotechnical Commission (IEC)	The IEC Standard Series on Cybersecurity for Nuclear Power Plants
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
16:20 – 16:40	436	K. Waedt	Germany	Cybersecurity Modelling for Nuclear Facilities: Interactions between System Specifications and Security Controls
16:40 – 17:00	69	A. Bhattacharjee	India	Securing Computing Servers for Nuclear Facilities

14:00 - 18:00 Technical Session: 3C-3/3D-3

Computer Security for Industrial Control Systems in Nuclear Facilities: Design and Testing of Computer Security Controls

(Conference Room M3)

Chairpersons: (Before Coffee Break) C Macleod, United Kingdom

H. I. Ibrahim, Egypt

Chairpersons: (After Coffee Break) M. Fabro, Canada J. Trolle, France

Rapporteurs: V. Vuillard, France

A. Buzdugan, Republic of Moldova

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
17:00 – 17:20	220	R. Valkama	Finland	Rethinking Classification of Digital Assets
17:20 – 17:40	557	K. Kwon	Republic of Korea	Research on Methodology to Prioritize Critical Digital Assets based on Nuclear Risk Assessment
17:40 – 18:00	392	Z. Ma	Austria	Building IT Security into OT Environments: Challenges & Strategies from a Lifecycle Perspective
18:00	Adjourn			

14:00 - 15:40 Technical Session: 3C-4

Panel Discussion: Systems and Measures for the Detection of MORC:

Design and Implementation

(Conference Room M4)

Facilitator: K. Perajarvi, GICNT

Rapporteur: K. Shahbaz, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:15	430	A. Al Madfaei	United Arab Emirates	FALCON – the first inter-Arab Nuclear Detection and Response exercise
14:15 – 14:30	351	W. Janssens	European Union	European Union Simulation Exercise to Test and Improve Nuclear Security Practices: COSINUS 2016 : Cooperation Simulation of Nuclear Security
14:30 – 14:45	223	A. Oprea	Republic of Moldova	Blind Exercise for Combatting Illicit Trafficking. Lessons Learnt
14:45 – 15:40	Panel Discussion (Panellists to include Oral Presenters above and the following invited participants below)		What role do exer detection archited	cises have in evaluating and sustaining tures?
	N/A	V. Evans	United Kingdom	
	N/A	I. Mazlina	Malaysia	
	N/A	R. Dos Santos	Brazil	
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)

14:00 - 18:00 Technical Session: 3C-5/3D-5

Panel Discussion: Perspectives on Implementing Obligations under International Instruments for Nuclear

Security

(Conference Room M5)

Facilitator: A. Wetherall, Singapore
Rapporteur: N. Gmucova, Slovakia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 15:40	Panel Discussion		The challenges of commitments, nat	f implementing international tionally
	275	R. Mohd Tahar	Malaysia	Handling Nuclear Security Offences – Experience by Malaysia
	488	N. Klos	Ukraine	Ratification of Amendment to the CPPNM in Ukraine: Lessons Learned and Future Perspective
	246	P. Gizowska	Poland	Entry into Force of CPPNM/A: Strengthening Nuclear Security Cooperation Through International Law
	457	G. Jonkmans	Canada	Enhancing Nuclear Security Through Collaborative Investments in Science and Technology
	499	B. Sur	Canada	Technological Developments in Nuclear Security: Canada's Contributions from R&D to Application
	514	O. Heinonen	Finland	Nuclear Safety, Safeguards and Security – Strengthening the Global Nuclear Order
15:40 – 16:20	Coffee/Tea Break	(Interactive Content	Presentations (M0E Outside Press Room)
16:20 – 18:00	Panel Discussion			al organisations and bilateral upporting national implementation of gations.
	253	S. Noor	VCDNP	Combating Illicit Trafficking of Nuclear and Other Radioactive Materials: A Regional Response to a Global Threat

14:00 - 18:00 Technical Session: 3C-5/3D-5

Panel Discussion: Perspectives on Implementing Obligations under International Instruments for Nuclear

Security

(Conference Room M5)

Facilitator: A. Wetherall, Singapore
Rapporteur: N. Gmucova, Slovakia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244	Name of Presenter	Designating Member State/Organization	Title of Paper
	500	J. Satterfield	USA	Outcomes of the EC-US 2016 Counter Nuclear Smuggling Workshop
	172	M. Goulart	European Union	EU Contribution to Global CBRN Security
	173	S. Abousahl	European Union	EU activities in Support to Nuclear Security
	543	H. Rehman	Pakistan	Evolving Nuclear Security Cooperation: Challenges and Opportunities
18:00	Adjourn			

15:40 - 16:20 **Interactive Content Presentations**

(Ground Floor of M Building - Outside

Press Room)

INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
15:40 – 16:00	Interactive Conte	ent Presentations		
1	80	K. Unlu	USA	Nuclear Security Graduate Education Program: Global Nuclear Security Policies instruction at Penn State
2	429	P. Pengvanich	Thailand	Research and Development in Nuclear Security at Chulalongkorn University
3	417	W. Chen	China	Information Security Evaluation Method for Digital Control System at Nuclear Power Plant
4	506	D. H. Nugroho	Indonesia	AHP (Analytic Hierarchy Process)-based Cause and Consequence to Evaluate the Cyber Security Risk for Research Reactor Instrumentation and Control
5	521	E. Quinn	International Electrotechnical Commission (IEC)	A New International Standard on Cybersecurity for Nuclear Power Plants: IEC 62645-Requirements for Security Programmes for Computer-Based Systems
6	386	H. Hall	USA	Building the Next Generation of Nuclear Security Practitioners – the University of Tennessee Experience
7	381	S. Chandragiri	India	Integrated Cyber Security Appliance (ICSA) for I&C systems
16:00 – 16:20	Interactive Conte	ent Presentations		
5	258	R. Bloomfield	United Kingdom	Security-Informed Safety: a practical approach for I&C systems

09:00 - 18:00 Poster Session - 3P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
1	7	G. Nikolaou	Greece	Identification of Unknown Spent Nuclear Fuel Through its Plutonium Composition
2	27	J. Al-behadili	Iraq	National Nuclear Security Regime (Iraqi's Experience)
4	40	R. Menya	Uganda	Security of Radioactive Materials and Associated Facilities in Uganda
5	48	A. Otim	Uganda	Cyber-crime and Cyber Security in Ugand
6	52	F. Alim	Turkey	Overview of Nuclear Security System in Turkey
7	82	Y. López Forteza	Cuba	Experiences and Achievements in Cuba o Strengthening Nuclear Security: IAEA Support
8	88	K. Bodor	Hungary	Capabilities of the New Mobile Laboratory of Centre for Energy Research in Hungary
9	90	H. Yoo	Republic of Korea	Strengthening of Nuclear Security Regime in the ROK after the Nuclear Security Summit
10	92	T. Bull	Australia	Research Supporting Operational Capabilities in Nuclear Forensics: The Example of DNA Analysis in Australia
11	97	M. Assi	Lebanon	A New Trend to Establish Nuclear Securit infrastructure - Lebanese Approach
12	100	B. Kaboro	Kenya	An Assessment of Kenya's Nuclear Security Preparedness in the Developmen of Nuclear Energy Programme
13	105	E. Chesire	Kenya	The Role of Advanced Nuclear Power Countries in Establishing a Sustainable Nuclear Security Regime for the New- Comer Countries.
14	131	V. Da Silva Simões	Brazil	State Governance Over Sensitive Nuclear Information in Accordance with the Provisions of the IAEA NSS No. 23-G: an Institutional Approach on the case of Braz

09:00 - 18:00 Poster Session - 3P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
15	169	S. Bozhko	Ukraine	Status of the Ukrainian State Physical Protection System
16	179	B. Bhatt	Kenya	Utility of Laser Raman Spectromicroscopy in Rapid Nuclear Forensic Microanalysis
17	181	K. Mayer	European Union	Results of a Collaborative Exercise on Uranium Radiochronometry in the Frame of Nuclear Forensic Investigations
18	200	G. Angelovski	The Former Yugoslav Republic of Macedonia	Physical Protection Regime in the Republi of Macedonia
19	208	D. Schnaars	USA	The U.S. Procedure for Accepting International Queries to the U.S. National Nuclear Forensics Library
20	231	H. Mohd Ali	Malaysia	Institutionalising National Nuclear Security Capabilities Experience in Malaysia
21	248	J. Bannon	Austria	Geoprivacy Methodologies to Permit the Safe Use of Nuclear Security Event Data in a GIS Application
22	260	N. Zainal Abidin	Malaysia	Outweighing Benefits and Challenges of international Cooperation in Developing Nuclear Security Capabilities in Malaysia
23	281	M. Dragusin	Romania	Nuclear Security at IFIN-HH: Commitment and Actions
24	315	L. Agyeman	Ghana	National Legislative and Regulatory Framework for Nuclear Security
25	344	I. Gunawan	Indonesia	Developing Nuclear Security Act Through National Coordination
26	355	H. Vuong	Viet Nam	Viet Nam's Nuclear Security Infrastructure. Current Status and Prospective
27	359	M. Roumie	Lebanon	Overview of Legal and Technical Implementation of a Nuclear Security Regime in Lebanon

09:00 - 18:00 Poster Session - 3P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
28	360	W. Mohamed	Egypt	The Proposed Drafting Process for Nuclea Security Regulations: Egyptian Case Study
29	365	C. Diah	Indonesia	The BAPETEN Budgeting Planning to Support the National Nuclear Security Program in Indonesia
30	366	J. Kamande	Kenya	Kenya's Approach to Nuclear Security
31	371	A. Krasnoborodko	Russian Federation	Modernization of Physical Protection Educational Laboratories in the National Research Nuclear University MEPhI
32	375	M. Stapleton	United Kingdom	Handling Missing Data in Nuclear Forensics Analysis
33	380	M. Ridwan	Indonesia	Strengthening National Nuclear Security Post-NSS Commitment: Approaches, Trends and Issues to Be Addressed
34	389	M. Nugraheni	Indonesia	Legal Framework for Nuclear Security in Indonesia
35	399	O. Ofodile	Nigeria	Nuclear Security for A New Comer Country – Nigeria's Approach
36	402	J. Abran	Indonesia	Strengthening the National Nuclear Security Coordination in Indonesia Through the interagency Cooperation
37	419	K. Changkrueng	Thailand	Thailand Nuclear Security: 5 years Achievement
38	424	B. Kokwane	South Africa	South Africa Results and Experience from the Galaxy Serpent Table top Exercise Concept for Building Nuclear Forensics Libraries.
39	441	D. Guo	China	Application of Laser Ionization Mass Spectrometry in Uranium Forensics
40	450	E. Finschi	Chile	National Experience in the use of the ITDB IAEA
41	456	J. Fiel	Brazil	Nuclear Security in the Brazilian Reality

09:00 - 18:00 Poster Session - 3P0

(Poster Area – Outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
43	466	A. Simo	Cameroon	Impacts of Integrated Nuclear Security Support Plan on Establishing National Nuclear Security Regime
44	475	R. Kips	USA	Synthetic Datasets for National Nuclear Forensics Library Development
45	478	R. Kips	USA	International Nuclear Forensics Capacity Building through the Joint Sample Analysis of a Uranium Ore Concentrate
46	482	M. Schoonen	USA	Non-destructive Synchrotron-based Chemical Analysis of Swipe Samples for Uranium Particles
47	502	V. Janjić	Serbia	Enhancing Nuclear Security in Republic of Serbia
48	517	D. Childs	United Kingdom	Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) for Nuclear Forensics Applications
49	526	J. Alcock	United Kingdom	Determining the Origins of Uranium Ore Concentrates using Principle Component Analysis Models of Characterisation Data
50	544	G. Vagin	Ukraine	Improvement in Operational Safety of Nuclear Facilities by Providing of the Synergy between Nuclear Safety and Nuclear Security
51	580	A. Miranda Cuadros	Plurinational State of Bolivia	Nuclear Security System – Bolivia
52	940	J. Facetti	Paraguay	Design and Implementation of an Integrated National Security Plan in a Developing Country as Paraguay

09:00 - 12:30 High Level Session 4:

Radioactive Materials and Associated Facilities, including Radioactive Sources: National approaches, Emerging Trends

and Areas to be Addressed

(Conference Room B/M1)

Chairpersons: A. Harrington, USA

J. E. Istiyanto, Indonesia

INVITED SPEAKERS

Time	Name of Speaker	
09:00 – 09:15	V. Kuzin, Russian Federation Federal Environmental, Industrial and Nuclear Supervision Service (Rostechnadzor)	
09:15 – 09:30	Z. Gross, France Disarmament and Non Proliferation Ministry of Foreign Affairs	
09:30 – 09:45	S. Lillie, New Zealand Office of Radiation Safety Ministry of Health	
09:45 – 10:00	R. Czarwinski, Germany Federal Office for Radiation Protection	
10:00 – 10:15	N. Semblat, Canada Nuclear and Radiological Security, Global Partnership Programme	
10:30 – 11:10	Coffee/Tea Break	Interactive Content Presentations (M0E Outside Press Room)
11:10 – 11:25	B. Nyarko, Ghana Ghana Atomic Energy Commission	
11:25 – 11:40	R. Corcho Gomez, Cuba Directorate of International Relations and Collaboration, Ministry of Interior	
11:25 – 12:30	Panel Discussion	Ensuring the security of radioactive material throughout its lifecycle
12:30 – 14:00	Lunch Break and Side Events	For full list of side events, see the Schedule of Side Events at the end of the Programme

09:00 - 10:30 Technical Session: 4A-A

Major Public Events

(Board Room A)

Chairpersons: T. Matikas, Greece

Z. Xu, China

Rapporteur: R. Maurer, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
09:00 – 09:20	283	S. Buntman	USA	Security Measures that Address the Nuclear/Radiological Threat at Major Public Events
09:20 – 09:40	353	X. Tao	Viet Nam	Preparedness and Implementation of Nuclear Security Plan for Hung Temple Festival, Vietnam in 2016
09:40 – 10:00	377	D. Masse	France	French Organization and Technical Developments Related to the RN Security of Major Public Events
10:00 – 10:20	480	R. Dos Santos	Brazil	Nuclear Security Measures at the XXXI Summer Olympic Games Rio 2016
10:20 – 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Presentations (M0E outside Press Room)

11:10 - 12:30 Technical Session: 4B-A

Unmanned Aerial Vehicles: Good Drone

or Bad?

(Board Room A)

Chairpersons: J. Edwards, United Kingdom

Rapporteur: C. Brown, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
11:10 – 11:30	376	P. Chaudhury	India	Aerial Radiation Monitoring Systems, Methodology and Exercises to Demonstrate Capability for Search of Orphan Sources and Assessment of Large Area Radioactive Contamination
11:30 – 11:50	42	M. Ahmed	Bangladesh	Civilian Unmanned Aerial Vehicle a Threat to Nuclear Facilities - A Case Study
11:50 – 12:10	472	K. Araujo	USA	The Role of Unmanned Vehicles in Nuclear Technology and Radiation Protection: The Cases of the United States and France
12:10 – 12:30	531	J. Scott	United Kingdom	UAV's in the Nuclear Sector: A Technology Roadmap
12:30 – 14:00	Lunch Break and	Side Events	For full list of side e the end of the Prog	events, see the Schedule of Side Events at ramme

09:00 - 12:30 Technical Session: 4A-1/4B-1

Human Resources Development:

Training

(Press Room)

Chairpersons: M. Labyntseva, Russian Federation

N. Peterson, USA

Rapporteur: R. M. Tahar, Malaysia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State	Title of Paper
09:00 – 09:10	N/A	M. Labyntseva <i>N. Peterson</i>	Russian Federation and USA	Overview of the Session
09:10 - 09:30	470	D. Pappas	Border Monitoring Working Group	Approaches to Sustained Operations, Maintenance and Management of Radiation Detection Systems (BMWG)
09:30 - 09:50	61	C. Tertrais	France	A Strengthened Security Through High Training and Exercises requirements
09:50 – 10:10	537	S. Chuvaev	Russian Federation	Role of Training Courses for the End User's Staff in Increase of Efficiency and Extension of Lifetime of Radiation Detection Systems for Nuclear Security
10:10 – 10:30	16	J. Lolich	Argentina	Hypothetical Nuclear Research Institute To Assist In Establishing A Nuclear Security System
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
11:10 – 11:30	358	P. Legoux	World Institute for Nuclear Security	WINS Contribution to the Strengthening of Radiological Security Worldwide
11:30 – 11:50	299	Z. Hassan Akl	Egypt	ENRRA's Practices in Human Resources Development in the Field of Nuclear Security
11:50 – 12:10	164	J. Galy	European Union	EUSECTRA: Half a Decade of Operation in Strengthening Nuclear Security Through Continuous Professional Development and Training
12:10 – 12:30	Question Period			Continuation of the question session is during the Discussion Session: 4C-4/4D-4 on 8 December 2016 14:00-18:00

09:00 - 12:30 Technical Session: 4A-2/4B-2

Physical Protection: Through the Nuclear

Fuel Cycle

(Conference Room M2)

Chairpersons: S. Bayer, Australia

E. Monales, South Africa

Rapporteur: M. L. Kostor, Malaysia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper	
09:00 – 09:20	12	C. Vestergaard	Denmark	Front-End Security: Prudent Approaches to Securing Uranium in Mining, Milling and Conversion	
09:20 - 09:40	459	B. McGinnis	INSOLVES	The Development and Implementation of Guidance and Training for Nuclear Security in the Uranium Extraction Industry	
09:40 - 10:00	986	E. Nikhanov	Kazakhstan	Securing Natural Uranium in Kazakhstan	
10:00 – 10:30	Question Period				
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Interactive Content Presentations (M0E Outside Press Room)	
11:10 – 11:30	17	R. Rosano	USA	The Future of Nuclear Security	
11:30 – 12:30	Panel Discussion		Addressing the challenges of Nuclear Security spanning the entire nuclear fuel cycle		
	230	S. Suharyanta	Indonesia	Indonesia's Experience and Challenges of Implementation of Physical Protection in Facilities	
	55	M. Abdelaal	Egypt	Robustness of the Synergy between Safety and Security for Nuclear Facilities	
	538	N. Rudin	Russian	Physical Protection expansion: from Metal	
	330		Federation	Detectors and Radiation Monitors to X-Ray / MUON Imaging Systems and Explosives Detectors.	

09:00 - 12:30 Technical Session: 4A-3/4B-3

Nuclear Forensics: Nuclear Forensics Serving a Nuclear Security Infrastructure

(Conference Room M3)

Chairpersons: M. Wallenius, European Union

M. Zaryah, Morocco

Rapporteur: J. Zappey, Germany

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
09:00 – 09:15	91	T. Bull	Australia	Commitments and Actions from the GICNT Nuclear Forensics Working Group
09:15 – 09:30	455	K. Mayer	Nuclear Forensics International Technical Working Group	The Nuclear Forensics International Technical Working Group (ITWG): Being Different and Making a Difference
09:30 - 09:45	551	G. Kochev	Russian Federation	Legal Basis for Forensic Examination of Nuclear and Radioactive Materials
09:45 – 10:00	10	E. Kovacs-Szeles	Hungary	A Model for Regional Cooperation in Nuclear Forensics
10:00 - 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break	(Interactive Content	Presentations (M0E Outside Press Room)
11:10 – 11:25	434	A. El-Jaby	Canada	Development of a Coordinated Canadian Nuclear Forensics Capability
11:25 – 11:40	385	J. Han	Republic of Korea	Strategies for Building Nuclear Forensic Capability in the Republic of Korea
11:40 – 11:55	383	S. Mishra	India	Development of Nuclear Forensics for Prevention and Response to Nuclear and Radiological Threats
11:55 – 12:10	350	E. Elish	Israel	A Review of Nuclear Forensics Activities in Israel
12:10 – 12:30	Question Period			
12:30 – 14:00	Lunch Break and	Side Events	For full list of side e the end of the Prog	events, see the Schedule of Side Events at ramme

09:00 - 12:30 Technical Session: 4A-4

Panel: Preventive and Protective Measures against Insider Threats

(Conference Room M4)

Facilitator: J. Leeke, Canada

Rapporteur: N. Gmucova, Slovakia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organizatio	Title of Paper n
09:00 – 10:30	9:00 – 10:30 Panel Discussion		protective measur	nhancements of existing preventive and res against insiders to reduce the risk of theft all and sabotage at nuclear facilities?
			(including cost-eff	es remain when implementing effective fective) measures against insiders? What are sist in our understanding of insider threat and
	196	D. Stanford	USA	Insider Considerations for Sabotage Analysis
	175	S. Streetman	USA	Natural Language Processing to Support Insider Threat Detection
	136	A. Stapp	USA	Accommodating Cultural Context within Trustworthiness Programs
	428	V. Lucic	Serbia	Information Security and Insider Threats - Challenges and Risk Management
10:30 – 11:10	Coffee/Tea Break		Interactive Conter	nt Presentations (M0E Outside Press Room)

10:30 – 11:10 Interactive Content Presentations

(Ground Floor of M Building – Outside Press Room)

INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	94	B. Briyatmoko	Australia and Indonesia	A Bilateral Exchange of Nuclear Forensics Knowledge to Enhance Nuclear Security in the Asia-Pacific Region
2	203	E. Magalhaes de Souza	Brazil	Radiation Detectors for use in Major Public Events: Classification, Requirements, Main Features, Tests and Lessons Learned.
3	294	R. Gonzales	USA	The Mirasol System Pathogen Reduction Technology a Safe and Efficacious Alternative to Gamma Irradiation in Preventing Transfusion-associated Graft versus Host Disease
4	398	D. Nabayaogo	Burkina Faso	Challenges in Implementing Nuclear Security Measures at Major Public Events – Burkina Faso Experience from Past Events
5	438	E. Thomas	USA	Supplanting Old with the New: Risks and Waning Benefits Associated with Medical use of Cobalt-60 in the Era of Modern Linear Accelerators
6	70	J. Kamen	USA	Investigation Of Using X-Ray Irradiator To Replace Gamma Irradiator To Reduce The Risk Of Malicious Use Of Radioactive Materials
7	98	P. Dethier	Belgium	X-Ray: The Emerging Alternative Technology to Gamma Industrial Irradiation. Benefits, Challenges and Ways Forward

14:00 - 18:00 High Level Session 5:

Nuclear and Other Radioactive Material Out of Regulatory Control: Existing Approaches, Emerging Trends and Areas

to be Addressed

(Conference Room B/M1)

Chairpersons: G. de Salazar Serantes, Spain

J. E. Santos, Brazil

INVITED SPEAKERS

Time	Name of Speaker	
14:00 – 14:20	L. Villanueva, Chile Comision Chilena de Energia Nuclear	
14:20 – 14:40	I. Soufi, Morocco Chair, GICNT Working Group on Response and Mitigation	
14:40 – 15:00	K. Peräjärvi, Finland GICNT Working Group on Detection	
15:00 – 15:20	S. Abousahl, European Union Joint Research Centre-HQ Nuclear Safety and Security	
15:20 – 15:40	I. Mazlina Mat Isa, Malaysia Malaysia, National Security Council	
15:40 – 16:20	Coffee/Tea Break	Interactive Content Presentations (M0E Outside Press Room)
16:20 – 16:40	V. Evans, United Kingdom Border Force, Border Systems	
16:40 – 17:00	W. Brasure, USA Director, Domestic Nuclear Detection Office Department of Homeland Security	
17:00 – 18:00	Panel Discussion	Regaining control of nuclear and other radioactive material out of regulatory control
18:00	Adjourn	

14:00 – 18:00 Technical Session: 4C-A/4D-A

Nuclear Security Culture

(Board Room A)

Chairpersons: G. Emi-Reynolds, Ghana

A. R. Antariksawan, Indonesia

Rapporteur: R. Matsuzawa, Japan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	147	N. Noro	Japan	Development of the Group Discussion Method for Nuclear Security Culture Promotion: Good Practice of Japan
14:20 – 14:40	552	C. Hobbs	United Kingdom	The United Kingdom's Experience in Developing a Nuclear Security Culture Programme
14:40 – 15:00	393	P. Muthuvelu	Malaysia	Venture into the Arena of Medical Security Culture – Challenges and Apprehensions
15:00 – 15:20	458	S. Brissette	Canada	Practical Considerations of Undertaking an Integrated Nuclear Safety and Security Culture Assessment
15:20 – 15:40	65	A. Wendland	Germany	Negotiating Nuclear Security under Social Stress: On-site Participant Observations on Human and Organizational Factors in Nuclear Facilities of the Global North
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
16:20 – 16:40	129	F. De Lemos	Brazil	A systemic approach for the nuclear security culture enhancement
16:40 – 17:00	309	A. Williams	USA	Capturing Human, Social & Organizational Influences on Nuclear Security: System-Theoretic Assumption Guided Evaluation (STAGE)

14:00 – 18:00 Technical Session: 4C-A/4D-A

Nuclear Security Culture

(Board Room A)

Chairpersons: G. Emi-Reynolds, Ghana

A. R. Antariksawan, Indonesia

Rapporteur: R. Matsuzawa, Japan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organiza	Title of Paper ation
17:00 – 18:00	Panel Discussion	n	of a strong se	he challenges and achieving a sustainability ecurity culture o be discussed will be:
				ective regulatory oversight for nuclear security ure, and
			culti	ways to advance global effort for nuclear security ure including international cooperation and rdination as an instrumental mechanism for lear security culture promotion.
	192	C. Speicher	Germany	The Regulator's Tools to Support the Evaluation and Optimization of the Operator's Nuclear Security Culture
	541	Y. Taly	India	The Role of Regulatory Control in Sustaining Nuclear Security Culture in India
	1008	A. Atkins	USA	Invited Panellist
	513	Khairul	Indonesia	A Multi-Stakeholders Approach toward Development of Sustainable Nuclear Security Culture: Indonesia's Experience
	184	I. Khripunov	USA	A Road Map for Nuclear Security Culture
18:00	Adjorn			

14:00 - 18:00 Technical Session: 4C-1/4D-1

Security of Nuclear and Other Radioactive Material in Transport

(Press Room)

Chairpersons: H. Neau, World Nuclear Transport

Institute;

J. Seguis, Philippines

Rapporteur: P. Funk, France

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
14:00 – 14:20	310	A. Williams	USA	A New Look at Transportation Security: A Complex Risk Mitigation Framework for the Security of International Spent Nuclear Fuel Transportation
14:20 – 14:40	62	C. Tertrais	France	Enhancing unpredictability on Nuclear Transports
14:40 – 15:00	67	S. Skelton A. Cameron	United Kingdom	Planning an International Category I Nuclear Material Transport
15:00 – 15:20	137	M. Doehler	Germany	The Estimation of Potential Consequences from the Sabotage of Nuclear Material Transports
15:20 – 15:40	421	T. Nielsen	Sweden	How to Arrange a Big Nuclear Security Exercise
15:40 – 16:20	Coffee/Tea Break		Interactive Conten	t Presentations (M0E Outside Press Room)
16:20 – 16:40	186	Y. Liu K. Sanders	USA	Advances in Tracking and Monitoring Transport and Storage of Nuclear Materials
16:40 – 17:00	83	F. Augusto da Silva	Brazil	An Overview of Security of Radioactive Sources on Industrial Radiography and a Case of Responding to Security Incident Involving Radioactive Sources
17:00 – 17:20	247	M. Saini	India	Transport of Radioactive Material from Security Perspective in India
17:20 – 17:40	373	P. Kanchana	Thailand	Building Regulatory Competence for Transport Security in Thailand

14:00 - 18:00 Technical Session: 4C-1/4D-1

Security of Nuclear and Other Radioactive Material in Transport

(Press Room)

Chairpersons: H. Neau, World Nuclear Transport

Institute;

J. Seguis, Philippines

Rapporteur: P. Funk, France

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
17:40 – 18:00	431	D. Nabayaogo	Burkina Faso	Security of other Radioactive Material during their transport in Burkina Faso: gaps and challenges

14:00 - 18:00 Technical Session: 4C-2/4D-2

Physical Protection: Approaches and

Evaluation Tools

(Conference Room M2)

Chairpersons: R. Sabas, Lithuania

J. Rivers, USA

Rapporteur: I. Haq, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	539	A. Izmaylov	Russian Federation	Methodology and Tools of Effectiveness Evaluation and Conceptual Designing of Nuclear Materials and Facilities Physical Protection Systems
14:20 – 14:40	250	A. Freer	United Kingdom	Nuclear Security Exercises for Contingency Response to Nuclear Security Events
14:40 – 15:00	73	M. Koh	Republic of Korea	Performance Evaluation of Contingency Response Exercise at Nuclear Power Plants
15:00 – 15:20	108	R. Alves Tavares	Brazil	A Performance-Based Approach to Design and Evaluation of Nuclear Security Systems for Brazilian Nuclear Facilities
15:20 – 15:40	Question Period			
15:40 – 16:20	Coffee/Tea Break		Interactive Content	t Presentations (M0E Outside Press Room)
16:20 – 16:40	139	E. Waller	Canada	The Role of Modelling and Simulation in Nuclear Security Optimization
16:40 – 17:00	160	A. Nilsson	Sweden, France, Denmark	Building Confidence of Effective Nuclear Security – The Role of IPPAS Missions
17:00 – 17:20	410	Y. Han	China	The Establishment of Performance Test and Authentication System for Nuclear Security Equipment
17:20 – 17:40	487	L. Cheng	USA	Markov Approach to Evaluate Physical Protection of Nuclear Energy Systems
17:40 – 18:00	331	J. Lautier	France	Protecting Sensitive Nuclear Sites
18:00	Adjorn			

14:00 - 15:40 Technical Session: 4C-3

Computer Security: Regulation and Policies in Nuclear Security Regimes

(Conference Room M3)

Chairpersons: K. Sekgaphane, South Africa

A. Sidorencu, Republic of Moldova

Rapporteurs: S. Hilts, Canada

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 14:20	412	B. Zong	China	Cyber Security at Nuclear Facilities in China
14:20 – 14:40	273	M. Brown	USA	Lessons Learned in Developing Guidance for Cybersecurity Programs at Civilian Nuclear Power Plants
14:40 – 15:00	102	J. Trolle	France	EDF Computer Security Approach: An IAEA and IEC Based Approach
15:00 – 15:20	420	A. Kim	Republic of Korea	Lesson Learned from ROK's Regulatory Activities on Nuclear Facility's Cyber Incident Response
15:20 – 15:40	221	M. Imase	Japan	Effort to enhance the computer security regulation including field exercise on coordinated cyber-physical attacks in Japan
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)

16:20 - 18:00 Technical Session: 4D-3

Computer Security: Regulation and Policies in Nuclear Security Regimes

(Conference Room M3)

Chairpersons: M. Johnson, USA

C. Engelhardt, Germany

Rapporteurs: R. Valkama, Finland

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
16:20 – 16:40	343	C. Stevens	Australia	Adapting Computer Security Frameworks for a Nuclear Security Focus
16:40 – 17:00	944	A. Keizer	Netherlands	Nuclear Industry Summit 2016: Process, Challenges and Results
17:00 – 17:20	156	M. Hossain	Bangladesh	An Analysis of Regulatory Frameworks for Adopting Cyber DBT at Nuclear Facilities: Bangladesh Perspectives
17:20 – 17:40	545	R. Hoffman	USA	Nuclear Computer Security Self- Assessment Processes to Ensure Program Effectiveness and Interoperability with SS29, 2014 IPPAS Guidelines.
17:40 – 18:00	64	A. Van Dine	Nuclear Threat Initiative	Transformative Guiding Principles for Implementing Cybersecurity at Nuclear Facilities
18:00	Adjourn			

14:00 - 18:00 Technical Session: 4C-4/4D-4

Panel Discussion: Human Resource

Development: Training
(Conference Room M4)

Facilitator: J. Lolich, Argentina

Rapporteur: R. M. Tahar, Malaysia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper	
14:00 – 14:10	N/A	J. Lolich	Argentina	Overview of Panel Discussion	
14:10 – 14:35	528	K. Ragusa	USA	Preparing the Next Generation of Nuclear Security Professionals—The Technology/Policy Nexus	
14:35 – 15:00	523	M. Labyntseva	Russian Federation	Education and Training of Representatives of Nuclear Newcomer States in the Area of Nuclear Security	
14:40 – 15:40	Panel Discussio Technical Session	n (Panellists from n 4A-1/4B-1 and 4C-4)	Training in nuclea the peaceful use o	nr security area for States embarking on of nuclear energy	
	470	D. Pappas	Border Monitoring Working Group		
	61	C. Tertrais	France		
	537	S. Chuvaev	Russian Federation	1	
	358	P. Legoux	World Institute for Nuclear Security		
	164	J. Galy	European Union		
	299	Z. Hassan Akl	Egypt		
	N/A	N. Peterson	USA		
	528	K. Ragusa	USA		
	523	M. Labyntseva	Russian Federation	1	
15:40 – 16:20	Coffee/Tea Break		Interactive Content	Interactive Content Presentations (M0E Outside Press Room)	
16:20 – 17:10	Panel Discussion (Same Panellists as before the Coffee Break)			mprehensive planning of human resources able nuclear security regimes: The proposed	

14:00 - 18:00 Technical Session: 4C-4/4D-4

Panel Discussion: Human Resource

Development: Training
(Conference Room M4)

Facilitator: J. Lolich, Argentina

Rapporteur: R. M. Tahar, Malaysia

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/ Name of Presenter	Designating Member Title of Paper State/Organization
17:10 – 18:00	Panel Discussion (Same Panellists as before the Coffee Break)	Key prerequisites for establishing quality, effective and sustainable training in nuclear security: Lessons Learned and Path forward
18:00	Adjourn	

14:00 - 15:40 Technical Session: 4C-5

Panel Discussion: Exchanging Experience, Knowledge and Good

Practices on the Use and Security of High Activity Radioactive Sources and the Exploration of Nuclear and Radioactive

Alternative Technologies

(Conference Room M5)

Facilitator: M. Samiei, Austria
Rapporteur: M. Taalbi, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
14:00 – 15:40	Panel Discussion			pectives and trends related to enhancing gh-activity radioactive sources
	336	C. Potter	USA	Alternative Technologies: The Need for Source Replacement and Progress in the US
	372	H. Foy	Ghana	Radiological Security: Alternatives for Improved Cancer Treatment in Africa
	158	G. Belot	France	First Achievements of the Ad Hoc Working Group of Stakeholders States Involved with Technological Alternatives to High- Activity Radioactive Sources
	965	P. Gray	ISSPA	Invited Contribution: The Perspective of the International Source Supplier and Producer Association (ISSPA)
	227	S. Øvergaard	Norway	Alternative Technologies
	966	G. Ganesh	India	Invited Contribution: Safety and Security of Radioactive Sources Throughout their Life-Cycle: Commitment by BRIT
15:40 – 16:20	Coffee/Tea Break		Interactive Conten	t Presentations (M0E Outside Press Room)

16:20 - 18:00 Technical Session: 4D-5

Nuclear Material Minimization

(Conference Room M5)

Co-Chairs: C. Grant, Jamaica

S. Van den berghe, Belgium

Rapporteurs: A. Brown, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
16:20 – 16:40	219	M. Suzuki	Japan	Successful Removal of all Highly-Enriched Uranium and Separated Plutonium Fuels from FCA in JAEA
16:40 – 17:00	518	S. Birikorang	Ghana	The Nuclear Security Arrangement for Conversion of Ghana Research Reactor-1 from HEU to LEU
17:00 – 17:20	303	J. Vacarro	Argentina	Argentina's Efforts to Complete Down- Blending of Highly Enriched Uranium
17:20 – 17:40	422	N. Maksumov	Uzbekistan	Research Reactors HEU Fuel Minimization Activities in Uzbekistan
17:40 – 18:00	322	E. Wilson	USA	HEU to LEU Fuel Conversion of U.S. High Performance Research Reactors: An Overview of the Fuel Development Effort
18:00	Adjourn			

Interactive Content Presentations 15:40 - 16:00

(Ground Floor of M Building – outside

Press Room)

INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
15:40 – 16:00	Interactive Conte	ent Presentations		
1	132	V. Promyslov	Russian Federation	Cybersecurity Simulation For NPP I&C
3	199	C. Glantz	USA	Computer Security eLearning for Nuclear Facility Decision Makers and Staff
4	312	R. Natha	USA	The Global Transportation Security Threat
5	292	T. Hanlon	USA	Nuclear Material Minimization: NNSA's Support for the Conversion of Mo-99 Production Facilities World-Wide
6	433	S. Hilts	Canada	The Physical Protection/Computer Security Interface – Lessons Learned
7	527	J. Scott	United Kingdom	Nuclear Security Assessment Methodologies (NUSAM): A Comparative Study of 4 Assessment Methods Applied to a Hypothetical Medical Irradiator Facility
16:00 – 16:20	Interactive Conte	ent Presentations		
1	39	L. Olmedo	France	Nuclear security: Facing radiological/nuclear and cyber risks, from technological research to systemic integration
2	508	H. Yu	INTERPOL	The Case Analysis of the Cyber Terror Against Korean Nuclear Power Plant and the Analysis of Recent Vulnerabilities in the Nuclear Power Plant System

09:00 - 18:00 Poster Session - 4P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	5	V. Kovtunov	Austria	A Graded Approach for Nuclear Security Management of Low Power Research Reactors.
2	11	J. Lee	Republic of Korea	Experience of Enhancing Nuclear Security Culture in Korea
3	43	H. Yücel	Turkey	Detection and Measurement Capacity for Nuclear Material Characterization in Nuclear Security Regime of Turkey
4	50	M. Solymosi	Hungary	Combine Nuclear Security and Safety Culture Self-Assessment, Fewer or More?
5	54	L. Dawson	USA	A Culture and Science of Trust for Securing Nuclear Facilities
6	59	S. Drapey	Ukraine	Training as an Instrument of Critical Infrastructure Security Against Cyber-Threat
7	71	H. El Eissawi	Egypt	Protection of High Ceiling Nuclear Facilities Using Photoelectric sensors and Infrared Fire Detectors
8	93	H. Lee	Republic of Korea	Experience on Nuclear Security National Compulsory Training Course in Korea
9	99	M. Islam	Bangladesh	Assessment of Nuclear Security Culture Using the IAEA Self-Assessment Tool at a Medical Facility of Bangladesh
10	103	A. Okubo	Japan	Development of Nuclear Forensics Capabilities in Japan: Recent Progress in Analytical Technique
11	115	H. Shames	Libya	Enhancing Nuclear Security Culture in Libya
12	163	M. Wiśniewska	Poland	Case Study of Self-Assessment of Nuclea Security Culture in Medical Institution in Poland

09:00 - 18:00

Poster Session - 4P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
13	165	J. Vaclav	Slovakia	The System for Determining the Probability of Timely Detection and Elimination of an Intruder to Nuclear Facility
14	167	F. Pointurier	France	Advances at CEA on the Development of Analytical Methods for the Identification of the Use and Origin of Nuclear Materials
15	189	A. Cavina	Germany	A Comparative Study of the Cybersecurity Regulatory Infrastructure in Nuclear
16	191	A. Fellouh	Algeria	Experience Gained in the Development Process of a National Nuclear Security Regime and Partnership Support, a Graded Approach to Establishing a National Nuclear Security Regime.
17	206	K. Araujo	USA	Cyber-Nuclear Shifts in Technology and Regulatory Oversight in the US, Canada, and India
18	210	H. Elsayed	Egypt	Nuclear Security Culture And Exercise For Workers In Nuclear Facility
19	212	W. Daeng Beta	Indonesia	Strategy for Strengthening Nuclear Forensics in Indonesia
20	214	M. Suzuki	Japan	Comprehensive Approach for Sabotage Protection as Safety and Security Interface
21	216	Y. Li	China	Fiber Optic Vibration Sensor Perimeter Alarm System for Physical Protection
22	228	T. Sekse	Norway	IPPAS Mission in Norway – Experiences and Follow-up
23	235	S. Pradhan	India	Importance of QA, Training and Surveillance of PPS
24	243	M. Mladenović	Serbia	Strengthening Nuclear Security Culture in Public Company Nuclear Facilities of Serbia

Thursday, 8 December 2016

09:00 - 18:00 Poster Session - 4P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
25	259	M. Cervera	USA	U.S. Nuclear Regulatory Commission's Activities Pertaining to Transportation Security for Category 1 and Category 2 Quantities of Radioactive Material
26	279	O. Agbenorku	Ghana	The Role of Nuclear Forensics to Support International Cooperation for Nuclear Security
27	297	S. Jovanovic	Montenegro	Education and Training in Nuclear Security – Opportunities, Challenges, Pitfalls
28	314	R. Natha	USA	Security of Small Modular Reactors
29	323	K. Hirsch	USA	Solutions for Reducing the Threat of Sealed Radiological Sources during Packaging and Transportation
30	327	M. Petruzzi	USA	Navigating Compliance Standards: Why Meeting the IT Security Requirements is Not Enough
31	339	K. Hirsch	USA	Security by Facility Design
32	368	A. Ruean Ngoen	Thailand	Development of Nuclear Forensics Capabilities in Thailand
33	391	A. Kumar	India	Multi-Biometric Approach to Personnel Identification
34	395	F. Badrul hisyam	Malaysia	Security Culture Assessment: Malaysia's Experience as the Pioneer Country in Promoting Security Culture in Medical Facilities
36	403	T. Malachova	Czech Republic	Nuclear Security Assessment Methodologies – The Achievements of the IAEA's Coordinated Research Project
37	404	A. Sfetsos	Greece	How R&D Can Contribute to the Protection of a Research Reactor: The ARGOS approach

Thursday, 8 December 2016

09:00 - 18:00 Poster Session - 4P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
38	440	C. Dams	Belgium	The Story of Implementing the Nuclear Security Management Guidance for Research Reactors and Related Facilities at SCK•CEN
40	462	P. Lindahl	Sweden	Report on Safety/Security Integration at the OKG Nuclear Power Plant in Sweden
41	489	A. Riitsaar	IAEA	Past and Future Nuclear Security Training Activities: Role of the IAEA In Coordinating International Efforts
42	509	D. Shull	USA	Revision of the Handbook on the Physical Protection of Nuclear Material and Facilities – (IAEA-TECDOC-1276)
43	511	M. Mertins	Germany	Aspects of Improvement of the Synergy Between Nuclear Safety and Security Referring to Backfitting of Older NPPs
44	512	B. Munaki	Zimbabwe	Need for a National Cybersecurity Strategy to Improve Nuclear Security in Zimbabwe
45	522	J. Choi	USA	Cyber Security of Nuclear Facilities in a New Nuclear Security Regime
46	529	R. Rodger	United Kingdom	Triple S: Safety, Security and Safeguards
47	530	J. Davison	United Kingdom	Nuclear Security Culture: An Organisational Approach to Security Leadership and Management
49	534	I. Markov	Russian Federation	Optimization of Different Approaches to Nuclear Safety and Nuclear Security
50	540	R. Perc	Slovenia	Force-on-Force Exercises Strengthen Security and Response Efficiency
51	562	C. Lee	Republic of Korea	Current Status of Technical Development for Nuclear Forensics in the KAERI
52	567	M. Smith	United Kingdom	Cultural Factors in Embedding Sustainable Compliance and Best Practice

Thursday, 8 December 2016

09:00 - 18:00

Poster Session – 4P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
53	568	A. Alves Vaz	Brazil	The Evaluation Results of Physical Protection System
54	570	J. Bastidas	Ecuador	Strengthening Physical Security During Storage and Transport of Radioactive Sources and Underutilized Sources

09:00 - 12:30 High Level Session 6:

National Nuclear Security Regime, including Nuclear Security Culture: Existing approaches, Emerging Trends

and Areas to be Addressed

(Conference Room B/M1)

Chairpersons: F. Rayment, United Kingdom

F. E. Osaisai, Nigeria

INVITED SPEAKERS

Time	Name of Speaker	
09:00 – 09:15	S. Tanaka, Japan Nuclear Regulation Authority	
09:15 – 09:30	B. Dal, Netherlands IAEA Nuclear Security Guidance Committee	
09:30 - 09:45	D. Wisnubroto, Indonesia National Nuclear Energy Agency (BATAN)	
09:45 – 10:00	S. Burns, USA Nuclear Regulatory Commission	
10:00 – 10:15	M. Ezz El-Din, Egypt Egyptian Nuclear & Radiological Regulatory Authority	
10:30 – 11:10	Coffee/Tea Break	Interactive Content Presentations (M0E Outside Press Room)
11:10 – 11:30	K. Mrabit, Morocco Agence Marocaine de la Sûreté et la Sécurité Nucléaires et Radiologiques	
11:30 – 11:50	J. Gardano, Argentina Ministerio de Energía y Minería, Subsecretaría de Energía Nuclear Argentina	
11:50 – 12:30	Panel Discussion	Sustaining a national nuclear security regime
12:30 – 14:00	Lunch Break and Side Events	For full list of side events, see the Schedule of Side Events at the end of the Programme

09:00 - 10:30 Technical Session: 5A-A/5B-A

Computer Security for Industrial Control

Systems in Nuclear Facilities: Engineering for Computer Security

(Board Room A)

Chairpersons: I. Shin, Republic of Korea

R. Busquim e Silva, Brazil

Rapporteur: M. Zahid, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
09:00 - 09:20	520	R. Anderson	USA	Cyber-Informed Engineering Defined
09:20 – 09:40	63	R. Clausing	Germany	Proposal for a Public Reference Architecture for Vulnerability Testing in Nuclear Power Plants
09:40 – 10:00	264	H. Sallam	Egypt	Designing Security Plan for Digital Instrumentation and Control Systems Based on Graded Approach and Defence- in-Depth
10:00 – 10:20	118	M. Adamczyk	Poland	Testing of PLCs used in Nuclear Installations by Bug Fuzzing Search for Cyber Vulnerabilities
10:20 - 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Presentations (M0E Outside Press Room)
11:10 – 11:30	Interactive Conten (M Building Ground			
1	504	M. Zafar	Pakistan	Vulnerabilities Mapping for ICS
2	57	F. McCrory	USA	Cyber Related Digital Control and Sensing Research Needs
3	426	C. Crawford	USA	Integrated Cyber/Physical Security Risk Assessments: Current State, Ongoing Efforts, and Future Needs
4	28	N. Agbemava	Ghana	Computer Security Analysis for Research Reactor Protection System

09:00 - 10:30 Technical Session: 5A-A/5B-A

Computer Security for Industrial Control

Systems in Nuclear Facilities: Engineering for Computer Security

(Board Room A)

Chairpersons: I. Shin, Republic of Korea

R. Busquim e Silva, Brazil

Rapporteur: M. Zahid, Pakistan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
5	30	J. Weiss	USA	Implications of the 2015 Ukrainian Cyber Attack to Nuclear Power Plants
11:30 – 11:50	Interactive Conter	t Presentations		
11.30 – 11.50	(M Building Groun	d Floor)		
1	564	A. Chetaine	Morocco	The Protection of Information of A Facility As Important Step of Defense Against Cyber Attacks.
2	58	M. Abdulrahman	Sudan	Information Security in Sudan: A study of Security status for Sudanese Governmental Websites
3	452	R. Maneechayangkoon	Thailand	Information Security Management System for Nuclear Regulatory Body in Thailand
5	571	C. Perez	France	Countering the Cyber Threat: From Behavioral Analysis to Dedicated Security Operating Center for Industrial Systems
6	374	A. Buzdugan	Republic of Moldova	Advances in security requirements for high risk objects, including nuclear and radiological ones
12:30 – 14:00	Lunch Break and Side Events		For full list of side events, see the Schedule of Side Events the end of the Programme	

09:00 - 12:30 Technical Session: 5A-1/5B-1

Human Resource Development: Nuclear

Security Support Centres and

Sustainability

(Press Room)

Chairpersons: F. Padoani, Italy

B. Kaboro, Kenya

Rapporteur: M. Kozak, Ukraine

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State	Title of Paper
09:00 – 09:20	162	Y. Naoi	Japan	NSSC Network Achievements and Planned Activities
09:20 – 09:40	257	M. Kostor	Malaysia	Establishment of Indigenous Technical Capabilities in Sustaining Nuclear Security Capabilities – Role of Malaysian Nuclear Security Support Centre
09:40 – 10:00	101	A. Livsic	Lithuania	Case Study: Establishment, operations and development of the Nuclear Security Centre of Excellence in the Republic of Lithuania
10:00 – 10:20	407	L. Villanueva	Chile	Experience, lessons learned and the way ahead in the development of the NSSC project in Chile
10:20 - 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break		Interactive Conte	ent Presentations (M0E Outside Press Room)
11:10 – 11:30	388	I. Haq	Pakistan	Collaboration of University with Nuclear Security Support Centre (NSSC)
11:30 – 11:50	106	A. Roza de Lima	Brazil	An Overview of the Brazilian Nuclear Security Training and Support Centre: Historical and Challenges
11:50 – 12:10	150	R. Matsuzawa	Japan	Good Practice of NSSC: Experience of ISCN/JAEA
12:10 – 12:30	572	A. Kuskov	Russian	International Training and Methodology
			Federation	Center in Nuclear Security Area
12:30 – 14:00	Lunch Break and	Side Events		

09:00 - 12:30 Technical Session: 5A-2/5B-2

Physical Protection: Regulatory Aspects

(Conference Room M2)

Chairpersons: A. Freer, United Kingdom

M. Beaudette, Canada

Rapporteur: J. Horibe, Japan

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper	
09:00 – 09:15	72	O. Elhefnawy	Egypt	Physical Protection System of the Nuclear Facilities: Nuclear Power Plant general layout and Regulatory requirement	
09:15 – 09:30	237	A. Kumar	India	Regulatory Review of the Nuclear Security aspects of Nuclear Facilities	
09:30 - 09:45	409	C. Zimmerman	USA	Establishing and Measuring the Impact of a Nuclear Security Enforcement Program	
09:45 – 10:00	524	A. Pérez Báez	Spain	Spanish Nuclear Security Oversight Process (SISC)	
10:00 – 10:15	135	T. Languin	France	Toward A Global Performance Based Approach, Method, Challenges and Benefits	
10:15 – 10:30	267	J. Rivers	USA	NRC Efforts to Risk-inform Security Regulations	
10:30 – 11:10	Coffee/Tea Break		Interactive Content	Interactive Content Presentations (M0E Outside Press Room)	
11:10 – 11:25	202	G. Dandrieux	France	ENSRA – Regional Study On Implementation of Nuclear Security	
11:25 – 11:40	546	S. Tokmachev	Russian Federation	Implementation of the fundamental Principles of the Convention on Nuclear Facilities Construction	
11:40 – 12:30	Panel Discussion	n	Challenges in the respect to Nuclea	Licensing of Nuclear Facilities with r Security	
12:30 – 14:00	Lunch Break and	Side Events	For full list of side e the end of the Prog	events, see the Schedule of Side Events at aramme	

09:00 - 12:30 Technical Session: 5A-3/5B-3

National Approaches and Challenges in Preparedness for and Response to

Nuclear Security Events

(Conference Room M3)

Chairpersons: A. Pavlenishvili, Georgia

H. Looney, USA

Rapporteur: B. Reed, USA

CONTRIBUTED PRESENTATIONS

Time	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State	Title of Paper
09:00 – 09:15	484	T. Williams	USA	Office of Radiological Security Alarm Response Training
09:15 – 09:30	148	N. Kobayashi	Japan	Strengthening Response Capabilities: Development of TTX Training for Nuclear Facilities in Japan
09:30 - 09:45	81	M. Roston	Argentina	Radiological Emergency Management Exercise (REMEX) 2014: Lessons Learned
09:45 – 10:00	229	C. Torres Vidal M.K. Mouhssine	Spain and Moroco	co "Gate to Africa" Exercises: An Example of A Solid Cooperation and Partnership to Enhance the Radioactive Materials Transport Security within and Between Two Neighbouring Countries
10:00 – 10:30	Question Period			
10:30 – 11:10	Coffee/Tea Break		Interactive Conten	nt Presentations (M0E Outside Press Room)
11:10 – 11:30	141	A. Vincze	Hungary	Similarities and Differences of Safety and Security Related Response
11:30 – 11:50	77	M. Sperrin	United Kingdom	Problems in Managing Radioactive Evidence: The Medical Viewpoint.
11:50 – 12:10	357	E. Kroeger	Germany	Scientific Measurement Teams in the Field for the Response to Nuclear Security Events: Experience Gathered By the Federal Office for Radiation Protection
12:10 – 12:30	525	J. Serrano	Spain	Nuclear Facilities Security Model
12:30 – 14:00	Lunch Break and	Side Events	For full list of side the end of the Pro	events, see the Schedule of Side Events at gramme

10:30 – 11:10 Interactive Content Presentations

(Ground Floor of M Building – outside Press Room)

INTERACTIVE CONTENT PRESENTATIONS

ICP Station	No. of Paper IAEA-CN-244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	78	M. Sperrin	United Kingdom	Training and Infrastructure to Aid Response and Criminal Investigations.
2	298	H. Looney	USA	Emerging Threats: What the 2014 Ebola Crisis Teaches Us About Nuclear Terrorism Risk and Nuclear Security
3	394	P. Armand	France	The role and input of CERES® decision- support system in the mitigation of a nuclear or radiological emergency
4	406	Z. Xu	China	Achievement and Prospect of Nuclear Security Education and Training in China
5	130	H. Schoech	France	Support and technical reach-back expertise for frontline officers facing a RN threat: the French TRIAGE concept
6	337	C. Potter	USA	Security Thresholds for Radiation Source Protection

09:00 - 12:30 Poster Session - 5P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
1	0	O. Kosbadt	Germany	The "Competence Center Radiation Protection" of Baden-Württemberg
2	15	O. Hakam	Morocco	Engaging the Next Generation in Nuclear Security: Experience of University of Ibn to fail in Morocco
3	22	S. Jonah	Nigeria	A Curriculum for a Certificate Course in Nuclear Security for Scientists, Technicians and Engineers in Nigeria
4	32	G. Krzysztoszek	Poland	Conversion of MARIA research reactor from HEU to LEU fuel.
5	51	O. Bouhelal	Morocco	Nuclear Security Education at the ENSMR Engineering School : Achievement and Perspective
6	68	A. Goel	India	Impact of Nuclear Security Education and Training
7	75	M. Sperrin	United Kingdom	Impact on health of organising a nuclear security infrastructure: Lessons to be learnt from domestic healthcare.
8	76	M. Sperrin	United Kingdom	Suggestions for the creation of a best practice dataset in support of responders: iRAD
9	109	X. Bastidas Pazmiño	Ecuador	Improving Skills and Knowledge of Police Personnel for An Effective Response to A Radiological Event
10	111	M. Pomper	USA	Alternatives to Cesium Chloride in Medical Irradiators: the Case of New York
11	114	N. Hamid	Malaysia	Development and Implementation of Undergraduate Nuclear Security Course at College of Engineering, Universiti Tenaga Nasional, Malaysia
12	122	E. Gosset	France	Malicious acts or not? Coordination challenges in preparedness and response to radiological emergencies

09:00 - 12:30 Poster Session - 5P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
13	127	I. Knežević	Serbia	Removal of the Fresh and Spent Nuclear Fuel At Vinca Site in Serbia
14	152	A. Dragolici	Romania	Contributing to Global Nuclear Safety By HEU Removal from IFIN-HH Magurele Site
15	159	I. Vidovszky	Hungary	HEU in Hungary
16	185	K. Adedoyin	Nigeria	HEU/LEU - Conversion of Nirr-1 (Project Status, Safety & Security)
17	205	M. Pomper	USA	Treatment, not Terror: Policies to improve external cancer treatment and reduce securing risks in low- and middle-income countries
18	213	C. Coleman	International Cancer Experts Corps, Inc.	Security of global nuclear material requires addressing the unacceptable lack of cance care.
19	218	Y. Li	China	Conversion of Prototype MNSR from HEU to LEU
20	222	A. Solodov	United Arab Emirates	Security Approaches Mitigating Unmanned Aerial Vehicles Threats to Nuclear Facilities: An Overview & Suggested Research Framework
21	236	W. Kim	Republic of Korea	New Nuclear Material Categorization Approach for Risk informed Regulation to Advanced Fuel Cycle Facilities
22	241	L. Mahale	India	Development of Documents Required for Regulatory Oversight of NPPs and Other Facilities
23	251	J. Serrano	Spain	CBRN Defense Systen in Law Enforcemen Agenciaes: Guardia Civil Model
24	256	M. Cervera	USA	Multijurisdictional incident Response to Lost and Stolen Radioactive Material During Transit
25	265	M. Cervera	USA	Ten Years of Experience with Pre- Licensing Guidance in the USA

09:00 - 12:30 Poster Session - 5P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
26	268	N. Nguyen	Viet Nam	Experience and Achievements On HEU Removal and Core Conversion of the Dala Nuclear Research Reactor
27	269	M. Cervera	USA	Demonstrable Competence of Security inspectors
28	277	A. Amirjanyan	Armenia	Upgrading of the Nuclear Security Legislation and Physical Protection System
29	296	N. lyer	USA	Nuclear Material Minimization through Packaging and Removal of Excess Separated Plutonium inventories
30	308	M. Chabashvili	Georgia	Neutron activation analysis device "Breeder-1": Operational History and Fuel Removal.
31	316	D. Higginson	USA	AmBe Source Replacement via Dense Plasma Focus (DPF) Z-Pinch
32	333	J. Lautier	France	Security design studies
33	335	R. Ramirez	Mexico	"The Nuclear Security Actions Taken in Mexico to Get An
34	341	M. Samiei	Austria	Addressing Cancer Care Needs in Developing Countries while Reducing Security Threats
35	349	A. Thakur	India	GCNEP- Boosting Global Efforts on Nuclear Security
37	367	V. Derouet	France	The French Nuclear Centre of Excellence CoE
38	418	S. Hustveit	Norway	Minimization of stocks of HEU in U-Th mixture
39	423	R. Schulz	USA	Linac & Co-60 are Comparable Options for Cranial Radiosurgery: University of California, San Diego Experience
40	437	M. Dragusin	Romania	Nuclear security exercises and response to nuclear security event

09:00 - 12:30 Poster Session - 5P0

(Poster Area – outside Board Room A)

POSTER PRESENTATIONS

Poster Station	No. of Paper IAEA–CN–244/	Name of Presenter	Designating Member State/Organization	Title of Paper
41	443	M. Moreira	Brazil	Methodology for the development of a National Response Plan for Nuclear Security Events
42	492	M. Taalbi	USA	Permanent Risk Reduction Through the Use of Alternative Technologies: A Radiological Security Approach
43	498	L. Van Dassen	Sweden	INFCIRC/225 and all that Jazz! the Roots and Developments of a Crucial Nuclear Security Document
44	503	M. Taalbi	USA	Replacing a Gamma-Ray Irradiator with an X-ray Irradiator – Reducing User Concerns through Education and Providing Comparison Data for their Specific Applications
45	507	R. Lanza	USA	Alternative X-ray Technologies for Blood Irradiators
46	553	D. Salisbury	United Kingdom	Human Resource Development in Nuclear Security: the COEs after the final Summit
47	569	D. Cochrane	Canada	"Research Reactor Security inspection – A Regulatory Perspective"
48	573	B. Srimok	Thailand	Thailand Physical Protection Regime: Improvements Through Regulatory Framework
49	1062	A. R. Badea	GICNT	Law Enforcement Dialogue Series: Exercise OLYMPUS

SCHEDULE OF SIDE EVENTS

Monday, 05 December 2016

18:00 – 20:00 Nuclear Industry Steering Group on Security: Learn about the global industry's approach beyond the Summits

Organized by the Nuclear Energy Institute (NEI)

(Board Room C, C building, 4th floor)

Tuesday, 06 December 2016

13:00 – 14:00 Industry Support for the IAEA Mission on Nuclear Security

Organized by the World Nuclear Association (WNA)

(Conference Room M4, M building, Ground floor)

13:00 – 14:00 "Terror Unleashed" - an Assessment of Global and National Impacts of a Nuclear Terrorist Attack.

> Organized by the Permanent Mission of Argentina and the Nonproliferation for Global Security Foundation

(Conference Room M7, M building, Ground floor)

15:40 – 16:20 Launch of the Hungarian National Nuclear Security Support Centre

Organized by the Hungarian Permanent Mission

(Coffee Area outside Boardroom B/M1, M Building, First Floor)

Wednesday, 07 December 2016

12:40 – 13:40 Award Ceremony for the IAEA Nuclear Security Essay Competition on the Future of Nuclear Security: Commitments and Actions

> Organized by the IAEA Division of Nuclear Security and the Permanent Mission of the United Kingdom

(Board Room A, M building, 2nd floor)

12:30 – 13:45 IAEA Arrangements for Response to Nuclear or Radiological Emergencies

Organized by the IAEA Incident and Emergency Centre

(Conference Room M5. M building, Ground floor)

12:30 – 13:00 Guided visit to the IAEA Incident and Emergency and Centre

13:15 – 13:45 Organized by the IAEA Incident and Emergency Centre

(Interested Participants should sign up at the IEC Booth on the Ground Floor of the A-Building)

12:30 – 13:45 Keeping up the Momentum on Nuclear Security Improvements

Organized by the Fissile Material Working Group (FMWG)

(Press Room, M building, Ground floor)

12:30 – 14:00 Strengthening Nuclear Security through Exercises and Scenario-Based Policy Discussions

Organized by the Permanent Mission of the USA

(Board Room C, C-Building, 4th Floor)

18:30 – 20:30 Supporting the Development and the Adoption of Alternative Technologies to Radioactive Sources

Organized by the World Institute for Nuclear Security (WINS)

(Press Room, M building, Ground floor)

Thursday 08 December 2016

12:45 – 13:45 International Physical Protection Advisory Service (IPPAS) – Twenty Years of Achievement

Organized by the IAEA Division of Nuclear Security and the Permanent Mission of the United Kingdom

(Board Room A, M building, 2nd floor)

12:30 – 13:00 Guided visit to the IAEA Incident and Emergency and Centre

13:15 – 13:45 Organized by the IAEA Incident and Emergency Centre

(Interested Participants should sign up at the IEC Booth on the Ground Floor of the A-Building)

12:35 – 13:50 Scaling up Worldwide Capacity to Manage Disused Sealed Radioactive Sources

Organized by the IAEA

(Press Room, M Building, Ground floor)

12:30 – 14:00 Cooperation to Counter Illicit Trafficking of Nuclear or Other Radioactive Materials

Organized by the Permanent Missions of Lithuania and Jordan

(Conference Room M7, M building, Ground floor)

12:30 – 14:00 "Last Best Chance" Nuclear Security Film Screening & Panel Discussion

Organized by the Permanent Mission of the USA

(UNIS Cinema Room (G0575), G Building, 5th floor)

Friday 09 December 2016

12:30 – 13:00 Guided visit to the IAEA Incident and Emergency and Centre

13:15 - 13:45

Organized by the IAEA Incident and Emergency Centre

(Interested Participants should sign up at the IEC Booth on the Ground Floor of the A-Building)

A complete Side Events programme, including descriptions of each event can be found on the Conference App and on the IAEA Website, https://www.iaea.org/events/nuclear-security-conference.

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Representatives of the press, radio, television or other information media and members of the public, the latter as "observers", may also be authorized to attend, but without the right to take part in the proceedings.

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PUBLICATIONS

Proceedings

The proceedings of the conference containing all released presentations and posters delivered at the meeting, as well as the findings and recommendations, will be published on the NUSEC web site by the IAEA as soon as possible after the conference.

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IAEA PUBLICATIONS RELATED TO THE SUBJECT OF THE CONFERENCE

IAEA Nuclear Security Objective and Essential Elements of Series No. 20 (2013) a State's Nuclear Security Regime IAEA Nuclear Security **Nuclear Security Recommendations** on Physical Protection of Nuclear Series No. 13 (2011) Material and Nuclear Facilities (INFCIRC/225/Revision 5) **Nuclear Security Recommendations** IAEA Nuclear Security on Radioactive Material and Series No. 14 (2011) Associated Facilities **Nuclear Security Recommendations** IAEA Nuclear Security Series No. 15 (2011) on Nuclear and Other Radioactive (Co-sponsored by Material out of Regulatory Control EURÓPOL, ICAÓ, INTERPOL, UNICRI, UNODC, and WCO) IAEA Nuclear Security Security of Nuclear Information Series No. 23-G (2015) IAEA Nuclear Security Computer Security at Nuclear **Facilities** Series No. 17 (2011) IAEA Nuclear Security **Nuclear Security Culture** Series No. 7 (2008) IAEA Nuclear Security Preventive and Protective Measures Series No. 8 (2008) Against Insider Threats IAEA Nuclear Security Security in Transport of Radioactive Series No. 9 (2008) Material IAEA Nuclear Security Development. Use and Series No. 10 (2009) Maintenance of the Design Basis Threat IAEA Nuclear Security Security of Radioactive Sources Series No. 11 (2009) Establishing the Nuclear Security IAEA Nuclear Security Series No. 19 (2013) Infrastructure for a Nuclear Power Programme Radiological Crime Scene IAEA Nuclear Security Series No. 22-G (2014) Management IAEA Nuclear Security Use of Nuclear Material Accounting Series No 25-G (2015) and Control for Nuclear Security Purpose at Facilities IAFA International Law The International Legal Framework Series No. 4 (2011) for Nuclear Security

IAEA International Law Amendment to the Convention on Series No. 2 (2006) the Physical Protection of Nuclear Material IAEA TECDOC No. 1662 Preparing and Conducting Review Missions of Instrumentation and (2011)Control Systems in Nuclear Power Plants IAEA Services Series No. International Physical Protection 29 (2014) Advisory Service (IPPAS) Guidelines IAEA Proceedings Series Nuclear Security: Enhancing Global (2014)Efforts Proceedings of an International Conference held in Vienna, Austria, 1-5 July 2013

FORTHCOMING SCIENTIFIC MEETINGS SCHEDULED BY THE IAEA

NOTES

2017

International Conference on Applications of Radiation Science and Technology (ICARST-2017) (CN-249), 24–28 April 2017, Vienna, Austria

Third FAO-IAEA International Conference on Area-wide Management of Insect Pests: Integrating the Sterile Insect and Related Nuclear and Other Techniques (CN-248), 22–26 May 2017, Vienna, Austria

International Conference on the IAEA Technical Cooperation Programme: Sixty Years and Beyond – Contributing to Development (CN-257), 30 May – 1 June 2017, Vienna, Austria

International Conference on Topical Issues in Nuclear Installation Safety: Safety Demonstration of Advanced Water Cooled Nuclear Power Plants (CN-251), 6–9 June 2017, Vienna, Austria

International Conference on Advances in Radiation Oncology (ICARO2) (CN-250), 20–23 June 2017, Vienna, Austria

International Conference on Fast Reactors and Related Fuel Cycles: Next Generation Nuclear Systems for Sustainable Development (FR17) (CN-245), 26 – 29 June 2017, Yekaterinburg, Russian Federation

Fourth International Conference on Nuclear Power Plant Life Management (CN-246), 23-27 October 2017, Lyon, France

Ministerial Conference on Nuclear Power in the 21st Century (CN-247), 30 October–1 November 2017, Abu Dhabi, UAE

International Conference on Physical Protection of Nuclear Material and Nuclear Facilities (CN-254), 13–17 November 2017, Vienna. Austria

International Conference on Radiation Protection in Medicine (CN-255), 11-15 December 2017, Vienna, Austria

For information on these meetings, please consult the IAEA web site: http://www.iaea.org/

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Conference website:

http://www-pub.iaea.org/iaeameetings/50809/ International-Conference-on-Nuclear-

Security-Commitments-and-Actions

