# International Conference on the Safe and Secure Transport of Nuclear and Radioactive Materials

13 - 17 December 2021

Virtual Event

**PROGRAMME** 

Organized by the International Atomic Energy Agency (IAEA)

#### **Conference Co-Presidents:**

Ndeye Arame Faye, Autorite de Radioprotection

et de Surete Nucleaire (ARSN), Senegal

Eric Lemoine. Canadian Nuclear Safety

Commission (CNSC), Canada

#### **Programme Committee:**

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N. Delwendé, BFA

V. Lesage, FRA

B. Whittard, World Nuclear Transport Institute

(WNTI)

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D. Pstrak. USA

J.U. Buettner, GER

E. Reber, IAEA

N. Capadona, IAEA

A. Meng, IAEA

#### IAEA Secretariat:

Scientific Secretaries: Stephen Whittingham, Division of Radiation,

Transport and Waste Safety (NSRW)

David Ladsous, Division of Nuclear Security

(NSNS)

**Event Organizer:** Martina Khaelss, Division of Conference and

Document Services (MTCD)

Administrative Support: Irena Ostrouska, NSRW

Armin Dervoz, NSNS

Michael Shannon, NSNS

Working Language: English

Resolutions: No resolutions may be submitted for consideration

on any subject; no votes will be taken.

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Android	iPhone

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Participate in voting during sessions



Raise questions to speakers during session



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## **TIMETABLE**

# Monday, 13 December 2021

Time	Session No.	Session Title / Break	Track
10:30–11:00		Opening Session & Overview of Conference Week	Α
11:00–12:40	1.1	International and Regional Arrangements	A
12:40–12:50		Break	
12:50–14:10	1.2	Transport Regulations and Regulatory Oversight	Α
12:50–14:30	1.3	Member State Regulations and Experience (Session A)	В
14:30		End of Day 1	

# Tuesday, 14 December 2021

Time	Session No.	Session Title / Break	Track
08:40-09:50	2.1	Regional Meeting: Asia and Pacific Islands	Α
09:50–10:00		Break	
10:00–10:20		Summary of Day 1	Α
10:20–11:40	2.2	Regulatory Functions: Inspections and Authorization	А
11:40–11:50		Break	
10:20–12:00	2.3	Capacity Building and Stakeholder Networks	В
12:00–12:10		Break	
11:50–13:30	2.4	Member State Regulations and Experience (Session B)	А
12:10–13:30	2.5	Emerging Technologies	В
13:30–13:40		Break	
13:40–15:00	2.6	Transport of Fissile Material	Α
13:40–15:40	2.7	Transport Assets and Technologies B	
15:00–15:10		Break	
15:10–16:50	2.8	Roundtable: Women in Nuclear Safety and Security	А
15:40–15:50		Break	
15:50–16:50		Side Event: Nuclear Transport Security – Opportunities for Strengthening the Global Regime	В
16:50		End of Day 2	·

# Wednesday, 15 December 2021

Time	Session No.	Session Title / Break	Track
08:40-09:50	3.1	Regional Meeting: Europe	A
09:50–10:00		Break	
10:00–10:20		Summary of Day 2	A
10:20–11:20	3.2	Assessing Consequences and Emergency Preparedness and Response	A
10:20–11:20	3.3	Advanced Reactor Transport Considerations for SMRs and Microreactors	В
11:20–11:30		Break	_
11:30–12:50	3.4	National Regulatory Frameworks	A
11:30–12:50	3.5	Transport Safety—Security Interface Considerations and Experiences	В
12:50–13:00		Break	_
12:50-14:50	3.6	Electronic Poster Broadcast Session	В
13:10–14:20	3.7	Regional Meeting: Africa	A
14:20–14:30		Break	
14:30–15:30		Side Event: A Case Study: The Successful Outcomes of using Virtual Platforms for Regional Cooperation of Transportation Security	A
15:30–15:40		Break	
15:40–16:50	3.8	Regional Meeting: Latin America	A
16:50		End of Day 3	

# Thursday, 16 December 2021

Time	Session No.	Session Title / Break	Track
10:00–10:20		Summary of Day 3	Α
10:20–11:20	4.1	Training	Α
11:20–11:30		Break	
11:30–13:10	4.2	Feedback from Regional Meetings	Α
13:10–13:20		Break	
13:20–14:40	4.3	Transport Safety and Security Evaluation	A
14:40–14:50		Break	
13:20–14:20	4.4	Transport Experiences	В
14:20–14:50		Break	
14:50–15:50		Side Event: Regional Cooperation on Transport Safety and Security in Southern Africa	A
15:50		End of Day 4	

# Friday, 17 December 2021

Time	Session No.	Session Title / Break	Track
10:00–10:20		Summary of Day 4	A
10:20–12:00	5.1	Public Information and Incident Case Studies	А
12:00–12:10		Break	
12:10–13:50	5.2	Transport Safety—Security Interface A	
13:50–14:00		Overview Summary of the Conference A	
14:00–14:10		Conference Co-Presidents Report A	
14:10–14:20	•	Closing Remarks A	
14:20		End of Conference	

#### 10:30-10:50 OPENING SESSION

Time	Name	Designating Member State/Organization	Title
10:30–10:40	R. Grossi	Director General, International Atomic Energy Agency (IAEA)	Opening Address
10:40–10:45	N.A. Boye Faye	Conference Co-President, Senegal	Opening Address
10:45–10:50	E. Lemoine	Conference Co-President, Canada	Opening Address

Track: A

#### 10:50-11:00 OVERVIEW OF CONFERENCE WEEK Track: A

Time	Name	Designating Member State/Organization	Title
10:50–10:55	S. Whittingham	Conference Scientific Secretary, Division of Radiation, Transport and Waste Safety (NSRW)	Overview
10:55–11:00	D. Ladsous	Conference Scientific Secretary, Division of Nuclear Security (NSNS)	Overview

11:00-12:40 **SESSION 1.1:** Track: A

**International and Regional Arrangements** 

Chairpersons: J.U. Büttner, Germany S. Vogiatzi, Greece

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:20	76	H. Bsat	Lebanon	Transport of Radioactive Material in the Pandemic Era – Mediterranean Network (MedNet)
11:20–11:40	107	D. Duhamel	United States of America	Virtual Regional Engagements on Transport Security of Nuclear and other Radioactive Material; Colombia, Romania, and the United States of America
11:40–12:00	52	E. Mergel	Germany	The ENSRA Working Group on International Nuclear Transport Security
12:00–12:20	45	K. Mrabit	Morocco	African Cooperation in the Safety and Security of Transport of Radioactive Material
12:20–12:40	69	J. A. Somda	Burkina Faso	Three Years On: Reflections on the IAEA Methodology in Supporting Member States in Drafting Transport Security Regulations
12:40–12:50	Break			

12:50-14:30 SESSION 1.2:

**Transport Regulations and Regulatory** 

Oversight

Chairpersons: C. Elechosa, Argentina

J.U. Büttner, Germany

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
12:50–13:10	4	A. Karimov	Russian Federation	Harmonization of the Russian Regulations on the Safe Transport of Radioactive Materials with the IAEA Safety Standards
13:10–13:30	16	O. Fornet Rodriguez	Cuba	Regulatory Activity Experiences and Aspects to be Strengthened in Safe and Secure Transport of Radioactive Materials
13:30–13:50	43	Z. El Faicali	Morocco	Moroccan Experience in Establishing a National Regulatory Control System for Transport of Nuclear and Radioactive Materials
13:50–14:10	113	A. Alsalman	Jordan	National Experience in Regulating Transportation of Nuclear Materials
14:30	End of	Day 1		

Track: A

12:50-14:30 SESSION 1.3:

Member States' Regulations and

Experience (Session A)

Chairpersons: S. Fayyaz, Pakistan

D. Sakkas, Cyprus

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
12:50–13:10	132	P. Amoah	Ghana	Development of the Regulatory Regime for the Safe and Secure Transport of Nuclear Materials in Ghana
13:10–13:30	19	V. Lesage	France	Renewal of Transport Security Regulation in France
13:30–13:50	112	A. Hijawi	Jordan	EMRC Supervision on Nuclear Material Transportation Security
13:50–14:10	67	K. Adhikari	Nepal	Transportation of Radioactive Source in Nepal
14:10–14:30	127	A. M. A. Dawood	Ghana	Nuclear and Radioactive Materials Transport Regime in Ghana: Successes and Challenges
14:30	End of	Day 1		

Track: B

08:40-09:50 SESSION 2.1: Track: A

Regional Meeting: Asia and Pacific Islands

Chairpersons: S. Fayyaz, Pakistan

M. Hirose, Japan

Time	Name	Designating Member State/Organization	Title
08:40-08:50	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Presentation on TRS-1001, "Managing the Interface between Safety and Security for Normal Commercial Shipments of Radioactive Material"
08:50-09:20	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Scenario-based Regional Discussion
09:20–09:50	K. Mansoor D. Nugroho M. S. Prawira	Pakistan Indonesia Indonesia	Q&A Panel Session
09:50–10:00	Break		

### **TUESDAY, 14 DECEMBER 2021**

10:00–10:20 SUMMARY OF DAY 1 Track: A

Time	Name	Designating Member State/Organization	Title
10:00–10:10	K. Jenkins	Division of Nuclear Security (NSNS)	Summary
10:10–10:20	A. Meng	Division of Radiation, Transport and Waste Safety (NSRW)	Summary

10:20-11:40 **SESSION 2.2:** 

Regulatory Functions: Inspections and

Authorization

Chairpersons: F. Feron, France

B. Kaboro, Kenya
D. Pstrak, United States of America

Paper No.	Name	Designating Member State/Organization	Title of Paper
78	T. Chrupek	France	ASN Performs Inspections at all the Stages in the Life of a Package
55	S. Maheras	United States of America	Development of a Safety Inspection Protocol for Rail Shipments of Spent Nuclear Fuel
21	C. Tertrais	France	Implementation and Lessons Learned from Joint Inspections
47	C. Jones	United Kingdom	Introduction to Safety and Security Transport Joint Inspections within the UK
Break			
	No. 78 55 47	No. Name  78 T. Chrupek  55 S. Maheras  21 C. Tertrais  47 C. Jones	No. Name State/Organization  78 T. Chrupek France  55 S. Maheras United States of America  21 C. Tertrais France  47 C. Jones United Kingdom

Track: A

10:20-12:00 SESSION 2.3:

**Capacity Building and Stakeholder** 

Networks

Chairpersons: A. Barrow, World Nuclear Transport Institute (WNTI)

A. Konnai, Japan

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
10:20–10:40	51	S. Edwards	World Nuclear Transport Institute (WNTI)	International Competence Scheme for Nuclear Transport Professionals
10:40–11:00	90	K. Mansoor	Pakistan	Institutional Capacity Building for Safe Transport of Radioactive Material - Pakistan's Approach and Challenges
11:00–11:20	79	Y. Okabe	World Nuclear Transport Institute (WNTI)	Consideration on the Development of WNTI Peer Exchange System
11:20–11:40	70	N. Almonte	Dominican Republic	Experiences of the Dominican Republic in Developing Transport Security Regulations for Radioactive Materials
11:40–12:00	71	R. Bechtel	United States of America	Using the National Infrastructure Protection Plan Framework to Enhance and Share Information on Transportation Security of Spent Nuclear Fuel
12:00–12:10	Break			

Track: B

11:50-13:30 SESSION 2.4:

Member States' Regulations and

Experience (Session B)

Chairpersons: W. Rother, Germany P. Hinrichsen, South Africa

Track: A

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:50–12:10	12	D. Bokov	Russian Federation	Challenges in Regulatory Approach for Security of Transport of Radioactive Material
12:10–12:30	144	F. Hatimi	Morocco	Moroccan Experience in Upgrading the Regulatory Framework for the Safe Transport of Radioactive Materials in Accordance with Related IAEA Regulation and ADR
12:30–12:50	143	A. Niane	Senegal	Transport Regulation Implementation Process: Senegalese Approach and Cooperation with Stakeholders
12:50–13:10	40	S. Adu	Ghana	Transport Security of Yellowcake at Southern African States SADC
13:10–13:30	48	G. Frackelton	United Kingdom	Office for Nuclear Regulation Transport Competent Authority – Regulatory Overview
13:30–13:40	Break			

12:10-13:30 SESSION 2.5:

**Emerging Technologies** 

Chairpersons: K. Anderson, United States of America

S. Repanovici, Romania

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
12:10–12:30	9	D. Pavlićević	Montenegro	Drones as Challenges in Transport of Nuclear and Radioactive Materials
12:30–12:50	30	M. Bertolli	United States of America	Emerging Cyber-Physical Landscape of Transportation Technology
12:50–13:10	68	N. K. Agbemava	Ghana	Challenges, Risk and Opportunities of Computer Security for the Nuclear Industry: Transport of Radioactive Materials
13:10–13:30	111	A. Pepperosa	CAEN SpA	Digital Platform for Radionuclide Identification and Data Integrity Verification for the Transport of Radioactive Material
13:30–13:40	Break			

Track: B

Track: A

#### **TUESDAY, 14 DECEMBER 2021**

13:40-15:00 SESSION 2.6:

**Transport of Fissile Material** 

Chairpersons: F. Feron, France

B. Whittard, World Nuclear Transport Institute (WNTI)

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
13:40–14:00	28	S. Vogiatzi	Greece	Shipments of Nuclear Fuel from a Research Reactor
14:00–14:20	42	L. Schnelzer	Germany	Return of Vitrified Residues from the United Kingdom to Germany
14:20–14:40	134	C. Karasinski	Belgium	International Transport of Fissile Material
14:40–15:00	147	O. Kozin	Russian Federation	Lessons and Experience of Arranging Transit Transportation from Western Europe to the Republic of Kazakhstan via the Russian Federation for the IAEA Fuel Bank Project
15:00–15:10	Break			

13:40-15:40 **SESSION 2.7:** Track: B

**Transport Assets and Technologies** 

Chairpersons:

C. Jones, United Kingdom A. Barrow, World Nuclear Transport Institute (WNTI)

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
13:40–14:00	66	D. Aquaro	Italy	Qualification of Nuclear Transport – Storage Casks: IAEA Furnace Test on a Mock-Up of a CP.5.2 Packaging
14:00–14:20	15	M. Budu	Russian Federation	Development and Implementation of New Dual- Purpose Casks for Spent Fuel and High-Level Waste into WWER NPPs Design
14:20–14:40	86	M. lannacone	United States of America	J1939 Heavy Vehicle Security Testbed
14:40–15:00	96	D. Nugroho	Indonesia	The Utilization of Drone for Medical Radioactive Transport from Indonesian Regulation Perspective
15:00–15:20	118	O. Kabore	Burkina Faso	Using of Global System for Mobile Communication (GSM) to Track Transport of Radioactive Materials in Burkina Faso
15:20–15:40	87	M. lannacone	United States of America	Enhanced Monitoring of Vehicle Status
15:40–15:50	Break			

15:10-16:50 SESSION 2.8: Track: A

Round Table: Women in Nuclear Safety

and Security

Chairpersons: C. Dominguez, Argentina

K. Anderson, United States of America

Time	Name	Designating Member State/Organization	Title
15:10–15:15	C. Dominguez K. Anderson	Argentina United States of America	Introduction and Overview
15:15–16:10	E. Barrero M. Sobrado C. Elechosa D. Sakkas S. Fayyaz J. Duffy	Colombia United Nations Office on Drugs and Crime (UNODC) Argentina Cyprus Pakistan Ireland	Panel Discussion on "Advancing Gender Parity in Nuclear with a Focus on Transport Safety and Security": Testimonies about Experience and Career in Transport
16:10–16:50	X. Vásquez-Maignan  M. Belinco	Organisation for Economic Co-operation and Development (OECD) Women in Nuclear (WiN) Global	Overview Presentation about International Initiatives and Programmes to Promote Gender Equality in the Nuclear Sector
16:50	End of Day 2		

#### SIDE EVENT:

- ✓ Date: Tuesday, 14 December
- ✓ Time: 15:50–16:50
- ✓ Organizer: Nuclear Transport Solution (United Kingdom)
- ✓ Title: "Nuclear Transport Security Opportunities for Strengthening the Global Regime"
- ✓ Track: B

## **WEDNESDAY, 15 DECEMBER 2021**

08:40-09:50 SESSION 3.1:

**Regional Meeting: Europe** 

Chairpersons: F. Koch, Switzerland

D. Sakkas, Cyprus

Time	Name	Designating Member State/Organization	Title
08:40–08:50	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Presentation on TRS-1001, "Managing the Interface between Safety and Security for Normal Commercial Shipments of Radioactive Material"
08:50-09:20	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Scenario-based Regional Discussion
09:20-09:50	S. Vogiatzi E. Mergel M. Morshuizen	Greece Germany Netherlands	Q&A Panel Session
09:50–10:00	Break		

Track: A

### **WEDNESDAY, 15 DECEMBER 2021**

10:00–10:20 SUMMARY OF DAY 2 Track: A

Time	Name	Designating Member State/Organization	Title
10:00–10:10	E. Reber	Division of Radiation, Transport and Waste Safety (NSRW)	Summary
10:10–10:20	H. Horne	Division of Nuclear Security (NSNS)	Summary

#### **WEDNESDAY, 15 DECEMBER 2021**

10:20-11:20 SESSION 3.2:

**Assessing Consequences and Emergency** 

Preparedness and Response

Chairpersons: D. Pstrak, United States of America

N. Lee, Republic of Korea

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
10:20–10:40	22	A. Hossain	Bangladesh	Assessing Transport Safety and Security Interfaces and Integration in Emergency Response and Management
10:40–11:00	50	T. Nouailles Mayeur	France	Emergency Preparedness for Transport of Radioactive Material
11:00–11:20	74	O. Gerber	Germany	Assessment of Radiological Consequences Due to Sabotage
11:20–11:30	Break			

Track: A

Track: B

#### **WEDNESDAY, 15 DECEMBER 2021**

10:20-11:20 SESSION 3.3:

Advanced Reactor Transport: Considerations for SMRs and

Microreactors

Chairpersons: F. Koch, Switzerland

G. Jackson, United States of America

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
10:20–10:40	77	G. Burnett	World Nuclear Transport Institute (WNTI)	Considerations for the Next Generation: Transport Security Considerations for the Deployment of Small Modular Reactors (SMRs)
10:40–11:00	53	M. Bøe	World Nuclear Transport Institute (WNTI)	Surveying the Maritime and Nuclear Transport Landscape for Deployment of Small Modular Reactors
11:00–11:20	61	H. Adkins	United States of America	Microreactor Transportation Probabilistic Risk Assessment Framework
11:20–11:30	Break			

#### **WEDNESDAY, 15 DECEMBER 2021**

11:30-12:50 SESSION 3.4:

**National Regulatory Frameworks** 

Chairpersons: C. Dominguez, Argentina

J. A. Somda, Burkina Faso

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:30–11:50	81	E. Akrobortu	Ghana	The Regulatory Infrastructure for the Safe Transport of Radioactive Materials in Ghana
11:50–12:10	31	R. Menya	Uganda	Regulatory Framework for Transport of Radioactive Material in Uganda
12:10–12:30	84	G. Nikolova	North Macedonia	Enhancing Safety in Transport of Nuclear and Radioactive Material in Republic of North Macedonia
12:30–12:50	89	S. Fayyaz	Pakistan	Regulatory Framework for Safe and Secure Transport of Radioactive Material in Pakistan
12:50–13:00	Break			

Track: A

Track: B

## **WEDNESDSAY, 15 DECEMBER 2021**

11:30-12:50 SESSION 3.5:

Transport Safety—Security Interface: Considerations and Experiences

Chairpersons: T. Katona, Hungary

M. Hirose, Japan

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:30–11:50	73	B. Massing	Germany	Security Regime for Transport of Nuclear Material in Germany
11:50–12:10	27	S. Vogiatzi	Greece	Revised National Regulations and Guidance for the Transport of Radioactive Material
12:10–12:30	23	M. Ali	Sudan	Safety and Security of Nuclear and Radioactive Materials in Air Transport
12:30–12:50	115	C. Mangwi	Cameroon	Interfacing Safety and Security in the Elaboration of Transport Regulation for Radioactive Sources
12:50–13:00	Break			

## **Electronic Poster Broadcast Session**

12:50–14:50 Track: B

Pape No.	Name	Designating Member State/Organization	Title of Paper
24	I. Vujcic	Serbia	Transports of Co-60 Radiation Source to the Radiation Unit of the Vinca Institute: Harmonization of Internal Procedures with the New Law on Radiation and Nuclear Safety and Security, and with International Conventions and Agreements
25	S. Masic	Serbia	Transport of Radioactive Source Co-60 to Serbia from the European Union Countries
29	S. Polazau	Republic of Belarus	The Experience (Good Practices) of Safety and Security Implementation at Road, Railway and Air Shipment of Fresh and Spent Nuclear Materials
36	S. Hyung	Republic of Korea	Korea's International Transportation Experience and Safety and Security Interface in Reflected Laws
44	W. Asare	Ghana	Transport of Nuclear and Radiological Materials: The Transport of Radioactive Materials in Ghana
57	M. S. Rahman	Bangladesh	Safe Transport of Radioactive Material in Bangladesh
58	A. Guliyev	Azerbaijan	Status of the Radioactive Materials Transport Regulation in Azerbaijan
60	T. Nyo	Myanmar	Study on Developing Regulations for Safe and Secure Transport of Radioactive Material in the Country Limited Used of Radioactive Materials
62	B. Hajizadeh	Iran	International Conference on the Safe Transport of Radioactive Material: A Vision for Transport Safety
63	O. Abdelgawad	Egypt	Enhancing the Security of Radioactive Materials Transport in Egypt Based on the Integrated Vehicle Transport Security System
64	A.A. Tin	Myanmar	Implementing Transport Safety Culture of Radioactive Material in Myanmar
72	M. Rodriguez	Cuba	Cuban Regulatory Experience on the Interface of Safety and Security in the Transport of Radioactive Materials (TRM) and Regulatory Actions during Covid-19
80	F. Alhammadi	United Arab Emirates	ROK-UAE's Experience on the Physical Protection for Transportation of Category III Nuclear Material
101	N. Nawar	Egypt	Improvement Security in Transport of Active Liquid Waste from Radiation facilities
103	N. Benson	Panama	The Use of Technology to Secure Radiation Sources during Transportation
110	D. Prifti	Albania	Safety and Security Upgrade of Institute of Applied Nuclear Physics Radioactive Materials Transport Van

#### **Electronic Poster Broadcast Session**

12:50–14:50 Track: B

Pape No.	<sup>r</sup> Name	Designating Member State/Organization	Title of Paper
117	S. El Myasse	Morocco	Radiation Protection within CNESTEN Transport of Radioactive Material Activity
126	E. Renstchler	Germany	Development of a Mobile, Automated, Optical Inspection System for Radioactive Drums
128	C. Zeyrek	Turkey	The Safe and Secure Transport of Radioactive Materials in Turkey: Education and Training Activities in Scope of National Regulatory Framework
133	E. Midgley	World Nuclear Transport Institute (WNTI)	World Nuclear Transport Institute (WNTI) New Nuclear Technology Working Group
137	E. Afelete	Ghana	A Three-Metric Risk Assessment Approach to Ensuring Safe Radioactive Material Transport in Ghana: Project Management Perspective

Track: A

## **WEDNESDAY, 15 DECEMBER 2021**

13:10–14:20 SESSION 3.7:

Regional Meeting: Africa

Chairpersons: N. Delwendé, Burkina Faso

B. Kaboro, Kenya

Time	Name	Designating Member State/Organization	Title
13:10–13:20	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Presentation on TRS-1001, "Managing the Interface between Safety and Security for Normal Commercial Shipments of Radioactive Material"
13:20-13:50	Scientific Secretaries	International Atomic Energy Agency (IAEA)	Scenario-based Regional Discussion
13:50–14:20	J. A. Somda P. Hinrichsen H. Elsayed	Burkina Faso South Africa Egypt	Q&A Panel Session
14:20–14:40	Break		

#### SIDE EVENT:

✓ Date: Wednesday, 15 December

✓ Time: 14:30–15:30

✓ Organizer: National Nuclear Security Administration (United States of America)

✓ Title: "A Case Study: The Successful Outcomes of using Virtual Platforms for Regional

Cooperation of Transportation Security"

✓ Track: A

# **WEDNESDAY, 15 DECEMBER 2021**

15:40-16:50 SESSION 3.8:

Track: A

Regional Meeting: Latin America

Chairpersons: N. Almonte, Dominican Republic

E. Barrero, Colombia

Time	Name	Designating Member State/Organization	Title
15:40–15:50	N. Capadona	International Atomic Energy Agency (IAEA)	Presentation on TRS-1001, "Managing the Interface between Safety and Security for Normal Commercial Shipments of Radioactive Material"
15:50–16:20	N. Capadona	International Atomic Energy Agency (IAEA)	Scenario-based Regional Discussion
16:20–16:50	C. Dominguez N. Gonzalez Rodriguez C. Elechosa	Argentina Cuba Argentina	Q&A Panel Session
16:50	End of Day 3		

## **THURSDAY, 16 DECEMBER 2021**

#### 10:00-10:20 SUMMARY OF DAY 3

Time	Name	Designating Member State/Organization	Title
10:00–10:10	A. Hammer	Division of Nuclear Security (NSNS)	Summary
10:10–10:20	A. Meng	Division of Radiation, Transport and Waste Safety (NSRW)	Summary

#### **THURSDAY, 16 DECEMBER 2021**

10:20-11:20 SESSION 4.1:

Track: A

Track: A

Training

Chairpersons: D. Duhamel, United States of America

S. Vogiatzi, Greece

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
10:20–10:40	65	B. Whittard	World Nuclear Transport Institute (WNTI)	Organisational Culture and Security - It's No Soft Subject
10:40–11:00	8	H. Shames	Libya	Training Regarding Safe and Secure Transport of Nuclear and Radioactive Materials in Libya
11:00–11:20	114	A. Konnai	Japan	Capacity Building for the Safe and Secure Transport of Radioactive Material in Japan
11:20–11:30	Break			

#### THURSDAY, 16 DECEMBER 2021

11:30-13:10 SESSION 4.2:

Feedback from Regional Meetings

Moderator: S. Whittingham, IAEA

D. Ladsous, IAEA

Time	Name	Designating Member State/Organization	Title
11:30–11:45	F. Koch	Switzerland	Europe Regional Meeting Feedback
11:45–12:00	N. Delwendé	Burkina Faso	Africa Regional Meeting Feedback
12:00–12:15	N. Almonte	Dominican Republic	Latin America Regional Meeting Feedback
12:15–12:30	S. Fayyaz	Pakistan	Asia and Pacific Islands Regional Meeting Feedback
12:30–13:10			Q&A
13:10–13:20	Break		

Track: A

## **THURSDAY, 16 DECEMBER 2021**

13:20–14:40 SESSION 4.3: Track: A

**Transport Safety and Security Evaluation** 

Chairpersons: N. Fragyoannis, United States of America

D. Sakkas, Cyprus

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
13:20–13:40	106	S. Repanovici	Romania	2021 Romania Transport Security TTX – Lessons Learned and Good Practices
13:40–14:00	17	A. Sahyun	Brazil	Evaluating Effectiveness of the Interface Between Safety and Security during the Transport of Radioactive Material
14:00–14:20	20	C. Tertrais	France	Nuclear Transport Security Exercises in France: Organisation and Lessons Learned
14:20–14:40	1	Z. A. Balbona	Cuba	Risk Analysis Focused in the Root Causes in the Transport of Radioactive Material in Cuba
14:40–14:50	Break			

#### THURSDAY, 16 DECEMBER 2021

13:20-14:20 SESSION 4.4:

**Transport Experiences** 

Chairpersons: T. Katona, Hungary

C. Jones, United Kingdom

Track: B

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
13:20–13:40	11	H. Elsayed	Egypt	Identification and Assessment of the Hazards and Threats of Nuclear Material during the Transportation
13:40–14:00	102	J.F. Beyala Ateba	Cameroon	Preparing for the Safe transport of Spent High Activity Radioactive Sources for Repatriation from Cameroon
14:00–14:20	37	M. S. Prawira	Indonesia	Implementation of the Transportation of Nuclear and Radioactive Materials through the Archipelagic Waters based on the United Nations Convention on the Law of the Sea and the Indonesian National Legislations
14:20–14:50	Break			

#### SIDE EVENT:

- ✓ Date: Thursday, 16 December
- ✓ Time: 14:50–15:50
- ✓ Organizer: International Science and Technology Center
- ✓ Title: "Regional Cooperation on Transport Safety and Security in Southern Africa"
- ✓ Track: A

#### FRIDAY, 17 DECEMBER 2021

#### 10:00-10:20 SUMMARY OF DAY 4

Time	Name	Designating Member State/Organization	Title
10:00–10:10	E. Reber	Division of Radiation, Transport and Waste Safety (NSRW)	Summary
10:10–10:20	A. Hammer	Division of Nuclear Security (NSNS)	Summary

Track: A

#### FRIDAY, 17 DECEMBER 2021

10:20-12:00 Track: A SESSION 5.1:

**Public Information and Incident Case** 

**Studies** 

Chairpersons: W. Rother, Germany B. Whittard, World Nuclear Transport Institute (WNTI)

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
10:20–10:40	95	F. Ledroit	France	Public Information in France Concerning the Safe Transport of Radioactive Materials
10:40–11:00	131	P. Malesys	World Nuclear Transport Institute (WNTI)	Transport of Radioactive Material – Should we do more than the regulations?
11:00–11:20	49	L. Garner	United Kingdom	Security Incident in the UK Relating to Illegal Immigrants Accessing an Approved Transport, Originating from Spain and Highlighting the International Co-operation and Response
11:20–11:40	120	S. Gorlin	World Nuclear Association (WNA)	Examining the Links Between Denial of Shipment of Radioactive Material and Safety and Security, and How to Moderate the Risks
11:40–12:00	148	A. Gonzalez	Argentina	Recommending a Code of Conduct for Facilitating the Safe and Secure Transport of Radioactive Materials
12:00–12:10	Break			

## FRIDAY, 17 DECEMBER 2021

12:10-13:50 SESSION 5.2:

**Transport Safety-Security Interface** 

Chairpersons: N. Fragoyannis, United States of America

V. Lesage, France

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Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
12:10–12:30	18	F. Koch	Switzerland	National Security Requirements Challenges International Transport
12:30–12:50	38	V. Ershov	Russian Federation	Application of International Requirements on Safety and Security at Radioactive Material Transport in Russia, Some Matters on Coordination and Interfacing
12:50–13:10	105	R. Elsayd	Egypt	Best Practices and Challenges for Safe and Secure the Transport of Nuclear and Radioactive Materials
13:10–13:30	39	F. Elsisi	Egypt	Egyptian Legislative Framework for the Security of Radioactive Materials in Transport
13:30–13:50	2	C. Romao	Brazil	Coordinating and Enhancing Interface between Safety and Security during Nuclear Material Transportation in Brazil

Track: A

## FRIDAY, 17 DECEMBER 2021

13:50–14:00 CONFERENCE CO-PRESIDENTS REPORT Track: A

Time	Name	Designating Member State/Organization	Title
13:50–13:55	E. Lemoine	Conference Co-President, Canada	Report
13:55–14:00	N.A. Boye Faye	Conference Co-President, Senegal	Report

#### 14:00-14:10 CLOSING REMARKS

Track	c: A
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Time	Name	Designating Member State/Organization	Title
14:00–14:10	L. Evrard	Deputy Director General, Department of Nuclear Safety and Security (NS), International Atomic Energy Agency (IAEA)	Closing Address
14:10	End of Conference		

#### IAEA PUBLICATIONS RELATED TO THE SUBJECT OF THE EVENT

STI/PUB/1872, Nuclear Security Series No. 9-G (Rev. 1), Published in 2020	Security of Radioactive Material in Transport   IAEA
STI/PUB/1846, Nuclear Energy Series No. NG-T-3.3, Publ 2019	Storing Spent Fuel until Transport to Reprocessing or Disposal   IAEA
STI/PUB/1798, Safety Standards Series No. SSR-6 (Rev. 1), Publ 2018	Regulations for the Safe Transport of Radioactive Material   IAEA
STI/PUB/1778, Safety Reports Series No. 93, Publ 2018	A Methodology for Establishing a National Strategy for Education and Training in Radiation, Transport and Waste Safety   IAEA
STI/PUB/1713, Safety Standards Series No. GSR Part 1 (Rev.1), Publ 2016	Governmental, Legal and Regulatory Framework for Safety   IAEA
STI/PUB/1686, Nuclear Security Series No. 26-G, Publ 2015	Security of Nuclear Material in Transport   IAEA
STI/PUB/1666, Safety Standards Series No. SSG-33, Publ 2015	Schedules of Provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition)   IAEA (Revision in preparation)
STI/PUB/1586, IAEA Safety Standards Series No. SSG-26, Publ 2014	Advisory Material for the IAEA Regulations for the Safe Transport of Radioactive Material (2012 Edition)   IAEA (Revision in preparation)
STI/PUB/1361, Safety Standards Series No. TS-G-1.5, Publ 2009	Compliance Assurance for the Safe Transport of Radioactive Material   IAEA (Revision in preparation)
STI/PUB/1352, Safety Standards Series No. TS-G-1.4, Publ 2008	The Management System for the Safe Transport of Radioactive Material   IAEA
STI/PUB/1269, Safety Standards Series No. TS-G-1.3, Publ 2007	Radiation Protection Programmes for the Transport of Radioactive Material   IAEA (Revision in preparation)
IAEA Safety Standards Series No. TS-G-1.2 (ST-3), Publ 2002	Planning and Preparing for Emergency Response to Transport Accidents Involving Radioactive Material   IAEA (Revision in preparation)
TECDOC 1965, Publ 2021	Assessment of Aircraft Accident Conditions in the Context of Test Requirements for Type C Packages Containing Radioactive Material   IAEA
TECDOC 1938, Publ 2020	Methodology for a Safety Case of a Dual Purpose Cask for Storage and Transport of Spent Fuel   IAEA

STI/PUB/1886, Non-series Publications, Publ 2020	The Gate to Africa Exercise Programme: Morocco–Spain Joint Tabletop and Field Exercises on Maritime Security of Radioactive Material in Transport   IAEA
IAEA-TDL-007, Non-serial Publications, Publ 2018	Preparation, Conduct and Evaluation of Exercises for Security of Nuclear and Other Radioactive Material in Transport   IAEA
IAFA Safety Standards Series No. SSG-66	Format and Content of the Package Design

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#### FORTHCOMING SCIENTIFIC CONFERENCES SCHEDULED BY THE IAEA

First International Conference on Nuclear Law: The Global Debate (CN-299) 7-11 February, Vienna, Austria

International Conference on Fast Reactors and Related Fuel Cycles: Sustainable Clean Energy for the Future (FR22) (CN-291) 25-28 April, Beijing, China

Fifth International Conference on Nuclear Power Plant Life Management (CN-297) 16-19 May, Osaka, Japan

International Conference on Accelerators for Research and Sustainable Development: from Good Practices towards Socioeconomic Impact (CN-301) 23-27 May, Vienna, Austria

International Conference on Nuclear Knowledge Management and Human Resource Development: Challenges and Opportunities (CN-306) 13-16 June, Moscow, Russia

International Conference on the Safety and Security of Radioactive Sources (CN-295) 20-24 June, Vienna, Austria

International Symposium on Managing Land and Water for Climate-Smart Agriculture (CN-305) 25-29 July, Vienna, Austria

Second International Conference on Applications of Radiation Science and Technology (ICARST-2022) (CN-290)

22-26 August, Vienna, Austria

International Conference on Occupational Radiation Protection: Strengthening Radiation Protection of Workers – Twenty Years of Progress and the Way Forward (CN-300) 5-9 September, Geneva, Switzerland

International Conference on Challenges Faced by Technical and Scientific Support Organizations (TSO) in Enhancing Nuclear Safety and Security: Enhancing Science and Adaptability in a Changing World Creating Perspective for a Young Generation (CN-307) 10-13 October, St. Petersburg, Russia

International Conference on Topical Issues in Nuclear Installation Safety: Strengthening Safety of Evolutionary and Innovative Reactors Designs (CN-308) 18-21 October, Vienna, Austria

International Ministerial Conference on Nuclear Power in the 21st Century (CN-296) 26-28 October, Washington D.C. United States of America

Safeguards Symposium (CN-303) 31 October-4 November, Vienna, Austria

International Conference on Operational Safety of Nuclear Power Plants (CN-284) 21-25 November, Beijing, China

International Conference on Integrated Medical Imaging in Cardiovascular Diseases (IMIC-2022) (CN-304)

13-16 December, Vienna, Austria

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