

PROGRAMME



Radiological Protection During Armed Conflict

Improving Regulatory and Operational Resilience

22-24 November 2023

Hotel Bristol, Oslo, Norway



Practical information and venue

The workshop will take place at:

Hotel Bristol
Kristian IVs gate 7, Oslo, Norway
<https://hotelbristol.no/en/>

Access to the venue and registration

Registration of participants is scheduled from **07:45 to 08:45 am CET on 22 November 2023**.

Please **plan to arrive at the venue 30 minutes in advance of the event start time** in order to register at the welcome desk. To gain admission to the workshop, you will be required to present a valid ID.

For security reasons, participants not registered or arriving without an identity document will not be granted access to the workshop room.

Transport to the venue

For more information about getting to the venue, please visit: <https://ruter.no/en>

Metro stops: Stortinget station (3 minutes by foot) or Jernbanetorget or Nationaltheateret station (10 minutes by foot)

Tram stop: Tinghuset (1 minute by foot)

Local contact person

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Background and context

The war in Ukraine marks the first time in history that a country with significant nuclear and radiological capacities has been engaged in armed conflict. These events raise new questions about nuclear safety and security, as well as radiological protection and public health.

From a radiological protection perspective, the challenge for any country in an armed conflict situation is twofold:

- (1) to maintain and enhance the capability and capacity to effectively monitor, analyse and manage radiological protection and public health; and
- (2) to continuously anticipate consequences that such conflicts will have on the implementation of radiological protection regulation and practices.

These challenges apply before, during and after situations of armed conflict.

Ultimately, we must question whether the radiological protection systems and regulatory frameworks that countries rely upon to ensure safety, which have evolved over many decades and are not designed to be applied in wartime, have the resilience and flexibility to be applied to situations of armed conflict. If these frameworks cannot adapt to such situations – whether before, during or after armed conflict – then what are the gaps in the existing arrangements and what measures need to be applied?

Workshop scope and objective

Building upon reflections of the [Nuclear Energy Agency \(NEA\) – Committee on Radiological Protection and Public Health \(CRPPH\)](#) and the existing joint co-operation between the State Nuclear Regulatory Inspectorate of Ukraine (SNRIU) and the Norwegian Nuclear Safety Authority (DSA), this workshop aims to address prospective issues of radiological protection in the context of armed conflict – including potential radiological emergencies caused by war-related damage to nuclear and radiological facilities. The specific objectives are:

- (1) To share the knowledge and experience of Ukrainian and other participating national regulators, as well as relevant international organisations and associations, on the operational management and regulation of radiological protection and public health during and after armed conflict;
- (2) To identify the challenges of maintaining or restoring radiation safety, including the involvement of different stakeholders and the consideration of all hazards, as well as the application of standard emergency preparedness, response actions during wartime, and post conflict recovery strategies;
- (3) To develop proposals for further international collaboration in this area, including how to adapt the regulatory framework and practice for the radiological protection of workers, the public and the environment during wartime, taking into account the challenges and risks associated with armed conflict.

Approach

Based on practical experience, mainly from Ukraine and the SNRIU, of how to deal with radiological protection and radiation and nuclear safety during war situations, the workshop will be a forum to discuss the consequences and resilience of radiological protection systems as well as practical regulatory approaches.

A combination of technical sessions, panel discussion and “what if” exercises make up the programme and will help to address the three main objectives of the workshop.

Audience

The workshop, supported by the NEA, is open to national and local government representatives, experts, regulators, operators, non-governmental stakeholders, international organisations and associations.

The programme was prepared by a programme committee gathering renowned experts from the bureau of the NEA CRPPH and its Working Party on Nuclear Emergency Matters (WPNEM), and from SNRIU and Ukraine’s State Scientific Technical Center for Nuclear and Radiation Safety (SSTC NRS).

All presentations and discussion will be in English. Please note that no translation will be offered.

Day 1 – **Wednesday, 22 November 2023**

7:45-8:45 **Registration**
Hotel Bristol – Workshop venue

Introductory session

8:45-10:30

Moderated by the workshop co-Chairs:

[Malgorzata Sneve](#), Director, Regulatory Cooperation Program, Radiation and Nuclear Safety Authority (DSA), Norway

[Thierry Schneider](#), Director of the Nuclear Protection Evaluation Centre (CEPN), France, Chair of the NEA Committee on Radiological Protection and Public Health (CRPPH)

8:45-9:30 **Welcome address**

[Per Strand](#), Director General, Radiation and Nuclear Safety Authority (DSA), Norway

[William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)

[Lars Ragnar Hansen](#), Director, Department for Security Policy and the High North, Section for Eastern Europe, Central Asia and Regional Organisations, Ministry of Foreign Affairs, Norway

9:30-9:50 **Nuclear safety and security in Ukraine: Risks, threats, lessons learnt**

[Oleh Korikov](#), Acting Chair of State Nuclear Regulatory Inspectorate of Ukraine (SNRIU), Ukraine

09:50-10:10 **Regulatory and operational radiological protection issues and challenges in Ukraine**

[Nataliia Rybalka](#), Director of the Department of Radiation Technologies and Radioactive Waste Management Safety – Deputy of State Chief Inspector of Nuclear and Radiation Safety of Ukraine (SNRIU), Ukraine

10:10-10:30 **Overview of the NEA's radiological protection activities potentially related to the workshop theme**

[Jacqueline Garnier-Laplace](#), Deputy Head of Radiological Protection and Human Aspects of Nuclear Safety Division, and secretary to the NEA Committee on Radiological Protection and Public Health (CRPPH)

10:30-11:15 Coffee break and group photo

Session 1: **Resilience practices from a human and organisational factor perspective – Focus on occupational radiological protection**

11:15-13:00

Moderated by: [Greg Lamarre](#), Head of Division, Radiological Protection and Human Aspects of Nuclear Safety, Nuclear Energy Agency (NEA)

Rapporteur for the summary session: [Luke Lebel](#), Research Scientist, Nuclear Response and Analysis Branch Portfolio Lead, Canadian Nuclear Laboratories (CNL), Canada

11:15-11:30 **Radiation monitoring in conditions of military operations and occupation of a nuclear facility**

[Valentyn Kostenko](#), State Enterprise «National Nuclear Energy Generating Company» Energoatom, Ukraine

11:30-11:45 **Adaptive decision making in nuclear emergency response: A view from the control room**

[Salvatore Massaiu](#), Senior Research Scientist, Institute for Energy Technology (IFE), Norway

11:45-12:00 **Facing disruptive situations by developing resilience capacities: The experience of COVID-19 and initial perspectives of how it can be applied to a wartime context**

[Tania Navarro-Rodriguez](#), Task lead of the NEA Committee on the Safety of Nuclear Installations Working Group on Human and Organisational Factors (WGHOFF)

12:00-12:15 **How should a licensee integrate a more resilient approach into its management system? A regulator's perspective on lessons learnt from unexpected events**

[Hiroko Takada](#), Nuclear Regulation Authority (NRA), Japan (remotely)

12:15-12:30 **Occupational radiological protection in wartime**

[Shengli Niu](#), Senior Specialist on Occupational Health, International Labour Organization (ILO)

12:30-13:00 **Discussion with participants**

13:00-14:00 Lunch break

Day 1 – **Wednesday, 22 November 2023** (cont'd)

Session 2: **Characterisation of the radiological situation and environmental monitoring systems**

14:00-15:30

Moderated by: [Peter Wright](#), Acting Section Head, Coordination and Operations Preparedness, Radiation Protection Bureau, Health Canada (HC), Canada

Rapporteur for the summary session: [Antony Bexon](#), Head of the Radiation Assessments Department, UK Health Security Agency (UKHSA), United Kingdom

14:00-14:15 **Consequences of occupation for the safety and security of radiation sources of the National Scientific Centre “Institute of Metrology”**

[Volodymyr Skliarov](#), Scientific Secretary, Head of Scientific Centre of Legal Metrology, International Collaboration and Information Technology, National Scientific Centre “Institute of Metrology” (known as Kharkiv Metrology), Ukraine (remotely)

14:15-14:30 **Findings and performance of the SURVEY projects: Environmental monitoring results in areas temporarily occupied by Russia and now liberated**

[Svitlana Chupryna](#), Consultant on Issues of Emergency Preparedness and Response, Department for Emergency Preparedness and Radiation Monitoring (SSTC NRS), Ukraine

14:30-14:45 **Issues related to source term characterisation and subsequent dispersion resulting from military activities**

[Luke S. Lebel](#), Research Scientist, Nuclear Response and Analysis Branch Portfolio Lead, Canadian Nuclear Laboratories (CNL), Canada

14:45-15:00 **Lessons learnt for crisis organisation, with a focus on environmental data and monitoring systems**

[Damien Didier](#), Head of department, Institute of Radiation Protection and Nuclear safety (IRSN), France

15:00-15:30 **Discussion with participants**

15:30-15:50 Coffee break

Session 3: **Adapting emergency preparedness and response and recovery in armed conflict situations**

15:50-17:35

Moderated by: [Astrid Liland](#), Director for Emergency Preparedness and Response, Radiation and Nuclear Safety Authority (DSA), Norway

Rapporteur for the summary session: [Christopher Mogg](#), Radiological Protection Specialist, Environment Agency (EA), United Kingdom

15:50-16:05 **Restore the activities and regulatory control to overcome consequences of Russian military occupation of Chernobyl exclusion zone**

[Nataliia Rybalka](#), Director of the Department of Radiation Technologies and Radioactive Waste Management Safety, Deputy Chief State Inspector of Nuclear and Radiation Safety of Ukraine (SNRIU), Ukraine

16:05-16:20 **Activity of Association Radon in wartime: Challenges and achievements**

[Oleksii Zhyvotenko](#), Head of the Department for industrial-technological issues and radioactive waste management of the State Special Enterprise "Association Radon", Ukraine

16:20-16:35 **Development of a Swedish framework for radiation protection during heightened state of alert and war**

[Jan Johansson](#), Government Specialist, Department of Emergency Preparedness, Security and Licensing, Swedish Radiation Safety Authority (SSM), Sweden

16:35-16:50 **Overview of assessment and monitoring strategies during an emergency in Korea and its potential challenges during armed conflict**

[Kyuwon Choi](#), Senior Nuclear Safety Inspector for Emergency Preparedness and Incident Response, Korea Institute of Nuclear Safety (KINS), Korea

16:50-17:05 **Actions taken by Poland's National Atomic Energy Agency and the Radiation Emergency Centre in the context of the conflict in Ukraine**

[Dawid Frencel](#), Senior Specialist, National Atomic Energy Agency (PAA), Poland

17:05-17:35 **Discussion with participants**

Day 1 – **Wednesday, 22 November 2023** (cont'd)

Session 4: **Adapting national strategies and international support for medical response**

17:35-18:55

Moderated by: [Selwyn Runacres](#), Senior Radiation Protection Scientist, Radiation Emergency Response Group, United Kingdom Health Security Agency (UKHSA)

Rapporteur for the summary session: [Paulo Nunes](#), Senior Officer, Emergency Preparedness and Response Unit, Department of Emergencies and Radiation Protection, Portuguese Environment Agency (APA), Portugal

17:35-17:50 **WHO support for strengthening Ukraine’s health sector’s preparedness to radiation emergencies**

[Zhanat Carr](#), Scientist, World Health Organization (WHO)

17:50-18:05 **The interdisciplinary NATO workshop “Regional strategy for medical response as part of the disaster management in case of radiation emergency caused by the war in Ukraine” – Lessons learnt and future actions**

[Cosmin Dugan](#), Consultant Physician, Bucharest University Emergency Hospital (BUEH), Romania

18:05-18:20 **Regulatory strategies for acceptance of medical equipment: New challenges**

[Yevheniia Kudriashova](#), Deputy Head of Department for Emergency Preparedness and Radiation Monitoring, State Scientific Technical Center for Nuclear and Radiation Safety, (SSTC NRS), Ukraine

18:20-18:45 **Discussion with participants**

18:45-18:55 **Closing remarks**

[Thierry Schneider](#), Director, Nuclear Protection Evaluation Centre (CEPN), France and Workshop co-Chair

18:55 End of day 1

20:00 Reception dinner

Day 2 – Thursday, 23 November 2023

Introductory session

8:30-9:10

8:30-8:40 **Opening remarks and highlights from Day 1**

[Malgorzata Sneve](#), Director, Regulatory Cooperation Program, Radiation and Nuclear Safety Authority (DSA), Norway and Workshop co-Chair

8:40-9:10 **Keynote remarks**

Regulatory threat assessment: Methodology for review and strategy to address changed and new threats (Ukraine)

[Oleksandr Pecherytsia](#), Deputy Director for Scientific and International Activities, State Scientific and Technical Center for Nuclear and Radiation Safety (SSTC NRS), Ukraine

EU policy, preparedness and support to Ukraine

[Pascal Daures](#), Senior Expert, Directorate General for Energy, Euratom coordination and international relations Unit, EC, Luxembourg

Session 5: Identifying key lessons learnt on managing RP during armed conflict: Improving regulatory resilience

9:10-10:30

Moderated by: [William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)

Rapporteur for the summary session: [Sara De Cair](#), Associate Director, Center for Science, Environmental Protection Agency (EPA), United States, and Chair of the NEA Working Party on Nuclear Emergency Matters (WPNEM)

9:10-10:30 **Roundtable**

Panellists:

[Oleh Korikov](#), Acting Chair of State Nuclear Regulatory Inspectorate of Ukraine (SNRIU), Ukraine

[Andrzej Głowacki](#), President of National Atomic Energy Agency (PAA), Poland

[Géraldine Pina](#), Commissioner, Nuclear Safety Authority (ASN), France

[Per Strand](#), Director General, Radiation and Nuclear Safety Authority (DSA), Norway

[Gareth Thomas](#), Lead for regulation of radiation protection, Office for Nuclear Regulation (ONR), United Kingdom

[Petteri Tiippana](#), Director General, Radiation and Nuclear Safety Authority (STUK), Finland

10:30-11:00 Coffee break

Day 2 – Thursday, 23 November 2023 (cont'd)

Session 6: “What if” conversation: Lessons from experience for a more resilient regulation and application of radiological protection in armed conflicts

11:00-17:00

Moderated by: [Tristan Barr](#), Section Head, Planning, Outreach, Exercises and Training section, Radiation Protection Bureau, Health Canada (HC), Canada

and [Astrid Liland](#), Director for Emergency Preparedness and Response, Radiation and Nuclear Safety Authority (DSA), Norway,

both Vice-Chairs of the NEA Working Party on Nuclear Emergency Matters (WPNEM)

11:00-11:20 **Key activities under WPNEM and INEX-6**

[Jacqueline Garnier-Laplace](#), Deputy Head of Radiological Protection and Human Aspects of Nuclear Safety Division, and secretary to the NEA Committee on Radiological Protection and Public Health (CRPPH) and [Tristan Barr](#), Section Head, Planning, Outreach, Exercises and Training section, Radiation Protection Bureau, Health Canada (HC), Canada

Part 1: Topical areas to explore and instructions for the “what if?” exercise

11:20-12:20 **Topic 1 – Radiological protection management in armed conflict situations** **EC-JRC accident assessment and benchmarking of radiological consequences**

[Juan Carlos de la Rosa Blul](#), Project Leader of the Radioactivity Environmental Monitoring and Emergency Preparedness and Response project, European Commission Joint Research Centre (JRC), Directorate G- Nuclear Safety and Security, Netherlands

Dose control levels and other radiation protection strategies applicable to Canadian Armed Forces personnel during emergencies and military operations

[Roger Hugron](#), Senior Nuclear Specialist, Assistant Deputy Minister (Infrastructure and Environment)/Director General Infrastructure and Environment Engineering Services/Director Nuclear Safety, National Defence, Government of Canada (remotely)

Addressing key radiation protection challenges in military operations – A Canadian perspective

[Zachary Myers](#), Radiological and Nuclear Portfolio Manager, Defence Research and Development Canada (DRDC), Centre for Security Science (CSS), Canada (remotely)

Report of the HERCA-WG Emergencies Task Force supporting Ukraine and neighbouring countries

[Gareth Thomas](#), Chair of the Heads of European Radiation Protection Competent Authorities (HERCA) Working Group on Emergencies (WGE)

12:20-12:50 **Topic 2** – Communication and stakeholder engagement in situations where daily life is disrupted

Preparing for the worst: A focus on communication and stakeholder engagement

[Karim Peltonen](#), Head of Division, Coordinated Services Emergency Preparedness and Response, Communication and Public Relations, International Cooperation, Radiation and Nuclear Safety Authority (STUK), Finland

DSA operations during the war in Ukraine

[Astrid Liland](#), Director for Emergency Preparedness and Response, Radiation and Nuclear Safety Authority (DSA), Norway

12:50-13:00 **Briefing on the scenario to support the afternoon's small-group discussion**

[Tristan Barr](#), Vice-Chair of the NEA Working Party on Nuclear Emergency Matters (WPNEM)

13:00-14:00 Lunch break

Part 2: Scenario-based breakout group discussions per topical area

14:00-14:45 *Topic 1 – Identify best practices and areas for improvement (gaps) in national planning for the application of radiological protection during armed conflict*

14:45-15:30 *Topic 2 – Identify best practices and areas for improvement (gaps) in communication plans for nuclear emergencies during armed conflict*

15:30-16:00 Coffee break

16:00-17:00 **Report in plenary**

Report from each of the breakout groups on best practices and gaps identified for radiological protection and communications plans in armed conflict situations

Day 2 – Thursday, 23 November 2023 (cont'd)

Session 7: **Keynotes: Safety, security and emergency preparedness interfaces**

17:00-18:30

Moderated by: [Olivier Isnard](#), Deputy Director of Emergency, Institute of Radiation Protection and Nuclear Safety (IRSN), France

Rapporteur for the summary session: [Grant Ingham](#), Inspector, Office for Nuclear Regulation (ONR), United Kingdom

17:00-17:20 **Special keynotes: How to address the interface with security**

Security-EP interface in the Nuclear Regulatory Commission's regulations

[Todd Smith](#), Senior Level Advisor for Emergency Preparedness and Response, Office of Nuclear Security and Incident Response, Nuclear Regulatory Commission (NRC), United States

17:20-17:50 **IAEA's Roles in Emergency Preparedness and Response**

[Frederic Stephani](#), Emergency Preparedness Officer, International Atomic Energy Agency (IAEA)

17:50-18:20 **Discussion with participants**

18:20-18:30 **Closing remarks**

[Thierry Schneider](#), Director, Nuclear Protection Evaluation Centre (CEPN), France, and Workshop co-Chair

Day 3 – Friday, 24 November 2023

Introductory session

8:30-10:00

8:30-8:40 **Opening remarks and highlights from Day 2**

[Malgorzata Sneve](#), Director, Regulatory Cooperation Program, Radiation and Nuclear Safety Authority (DSA), Norway and Workshop co-Chair

8:40-9:00 **STUK's response to the War in Ukraine**

[Petteri Tiippana](#), Director General, Radiation and Nuclear Safety Authority (STUK), Finland

9:00-10:00 **Summary of the workshop findings and discussion with participants**

[Thierry Schneider](#), Chair of the NEA Committee on Radiological Protection and Public Health (CRPPH) and [Sara De Cair](#), Chair of the NEA Working Party on Nuclear Emergency Matters (WPNEM), based on the topical session rapporteurs' report

10:00-10:30 Coffee break

Closing session: **Strengthening international collaboration and establishing a list of potential actions to help regulators reduce radiological risks**

10:30-12:30

Moderated by: [William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)

10:30-11:45 **Roundtable:**

[Oleh Korikov](#), Acting Chair of State Nuclear Regulatory Inspectorate of Ukraine (SNRIU), Ukraine

[Per Strand](#), Director General, Radiation and Nuclear Safety Authority (DSA), Norway

[Thierry Schneider](#), Chair of the NEA Committee on Radiological Protection and Public Health (CRPPH)

[Pascal Daures](#), Senior Expert, Directorate General for Energy, Euratom Coordination and International Relations Unit, EC, Luxembourg

[Anne Nisbet](#), Member of Committee 4, International Commission on Radiological Protection (ICRP)

[Anastasios Zodiates](#), advisor on radiation issues for workers, International Labour Organization (ILO)

11:45-12:15 **Discussion with participants**

12:15-12:30 **Closing remarks**

[William D. Magwood, IV](#), Director-General, Nuclear Energy Agency (NEA)

[Per Strand](#), Director General, Radiation and Nuclear Safety Authority (DSA), Norway

12:30 End of workshop / Lunch

Speaker biographies



William D. MAGWOOD, IV has been the NEA's Director-General since 2014. Prior to that, he served as Commissioner of the US Nuclear Regulatory Commission (NRC), appointed by the US President and confirmed by the Senate. In 2005-2010 he provided independent strategic and policy advice on energy, environmental and technology policy issues. From 1998 to 2005, Mr Magwood was Director of Nuclear Energy at the US Department of Energy, where he launched several important initiatives, including the Generation IV International Forum (GIF). He began his career working as a scientist for Westinghouse and Edison Electric Institute. Mr Magwood holds Bachelor's degrees in physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.



Per Strand obtained a doctorate in radiation protection and radioecology in 1994 from the medical faculty of the University of Oslo, dealing with the effects of radiation on people and on the health consequences in Norway following the Chernobyl accident. Mr Strand joined the equivalent of what is now the Norwegian Radiation and Nuclear Safety Authority (DSA) as a researcher in 1986. He subsequently held a series of positions before becoming a department director in 1998, and then the Director General in September 2020. Since 2014, he has also held the position of Professor at the Norwegian University of Environmental and Life Sciences.

Mr Strand has been involved in a number of international activities for the International Atomic Energy Agency (IAEA), the World Health Organization (WHO) and the International Commission on Radiological Protection (ICRP). He has been president of the International Radioecology Union and chaired the NEA Expert Group on Characterisation Methodology of Unconventional and Legacy Waste, with a particular focus on waste management and decommissioning of the Fukushima Daiichi Nuclear Power Plant in Japan after the nuclear accident in 2011. He has also undertaken a number of projects for the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and he is the Norwegian representative on the Committee.



Malgorzata Sneve has been working at the Norwegian Radiation and Nuclear Safety Authority (DSA) since 1994. Throughout her tenure, she has played a key role in the development of major regulatory co-operation programmes involving the DSA and its sister authorities in various countries.

Since the beginning of her career, Ms Sneve has been actively involved in international co-operation efforts, participating in organisations such as the International Atomic Energy Agency (IAEA), International Commission on Radiological Protection (ICRP), Nuclear Energy Agency (NEA) and the European Commission (EC). Within the NEA, she serves as a member of the Committee on Radiation Protection and Public Health (CRPPH) and Committee on Decommissioning of Nuclear Installations and Legacy Management (CDLM), while also being a member of the Bureau of the CDLM. Furthermore, Ms Sneve chairs the NEA Expert Group on Legacy Management (EGLM).



Thierry Schneider has been Director of the Nuclear Protection Evaluation Centre (CEPN) in France since January 2017. He holds a PhD in economics, in the field of health and insurance.

He is currently the Chair of the NEA Committee on Radiological Protection and Public Health (CRPPH). He is also the Chair of Committee 4 (in charge of the application) of the International Commission on Radiological Protection (ICRP). He has been involved in research projects related to the assessment and management of radiological risk and to the methodological approach to optimisation of radiological protection, including societal and ethical issues. He has been involved in post-accident management projects since 1990 at the national, European and international levels, dealing with the management of the consequences of the Chernobyl and Fukushima Daiichi accidents.



Tristan Barr is the section head of Planning, Outreach, Exercises and Training within the Radiation Protection Bureau of Health Canada. He has a Master's degree in biology and has worked in the field of radiation protection in private industry and government since 2002. Mr Barr has extensive expertise in radiation detection, characterisation, dosimetry, radioactive waste management and emergency response and has recently focused on nuclear emergency exercises and the management of the Canadian Federal Nuclear Emergency Plan. Mr Barr represents Health Canada in a number of national and international forums, including the International Atomic Energy Agency (IAEA), the NEA Working Party on Nuclear Emergency Matters (WPNEM), and Arctic Council Emergency Prevention, Preparedness and Response Radiation Expert Group (EPPR).



Antony Bexon is Head of the Radiation Assessments Department at the Radiation, Chemicals and Environmental Hazards Directorate (RCE) of the United Kingdom Health Security Agency (UKHSA).

His main work areas are concerned with the assessment of the impacts of natural and artificial radionuclides, primarily on members of the public in planned, existing and emergency exposure situations, and the consideration of aspects of patient safety during medical exposures.

Mr Bexon has been responsible for a number of major projects, including those for the European Commission and for UK Government Departments and Agencies. He also has wide experience of collaborating with other organisations, for example the UK Committee on the Medical Aspects of Radiation in the Environment (COMARE), and in international activities, such as being part of the UK delegation to the NEA Committee on Radiological Protection and Public Health (CRPPH) and a member of the CRPPH bureau. He is also a member of the European NERIS platform on radiological emergency preparedness, response and recovery, being part of the Management Board and chair of the R&D committee. He has been a delegate of the United Kingdom to UNSCEAR since 2015 and is currently the UK National Contact.



Dr Zhanat Carr has more than 20 years of experience in the area of radiation protection, radiation health and radiation emergencies preparedness, response and recovery management, with the focus on public health and medical aspects.

Dr Carr is WHO's focal point for matters pertaining to preparedness and response to radiation emergencies. In this capacity, Dr Carr was a technical lead for the WHO response to the Fukushima Daiichi nuclear accident in 2011. Today, she is leading the radio-nuclear hazards area of the Organization's response to the Ukraine crisis. Dr Carr co-ordinates two WHO global expert networks – the Radiation Emergency Medical Preparedness and Assistance Network (REMPAN) since 2004 and BioDoseNet, a biodosimetry laboratory network that she set up in 2007. Her work is related to the development and implementation co-ordination of projects related to evidence-based health policy development (including norms, guides and recommendations, and tools for capacity building), to strengthening countries' preparedness for radiation emergencies through training and exercise, and to risk communication and advocacy. She represents the WHO in high-level inter-agency committees and advisory groups. She works with member states' national public health authorities and other sectors, NGOs (such as ICRP, where she represents WHO on the Committee 1 and Task Group 120 of the Committee 4), professional societies (IRPA, IARBED, IAR, etc.) and other partners on radiation protection and radiation safety, fostering international co-operation in the area of radiation and health.



Kyuwon Choi is a professional in the field of nuclear science and technology. He holds an MSc in nuclear science and technology from the University of Manchester. With a decade of experience in the industry, Mr Choi currently serves as a Senior Nuclear Safety Inspector for Emergency Preparedness and Incident Response at the Korea Institute of Nuclear Safety. Prior to this, he served as a Water Chemistry Manager at the Korea Hydro & Nuclear Power Company.



Svitlana Chupryna joined Ukraine's State Scientific and Technical Center for Nuclear and Radiation Safety (SSTC NRS) in 2014 as a consultant on issues of emergency preparedness and response. She works with the technical reviews of licensee documentation and as expert support to the State Nuclear Regulatory Inspectorate of Ukraine (SNRIU) in the development and revision of the Ukrainian legal and regulatory framework in the field of emergency preparedness, including by updating national regulations in accordance with international safety requirements. Since 1997 she has been participating in the activities of the SNRIU's Information and Emergency Centre, and since 2014 she has been acting as the IAEA International Nuclear and Radiological Event Scale (INES) Deputy National Officer. She has also worked with the State Nuclear Regulatory Committee of Ukraine, the Ministry for Ecology and Natural Resources of Ukraine, the Scientific and Research Hygienic Institute, and the Chernobyl Nuclear Power Plant. Ms Chupryna holds a Diploma in Engineering of Nuclear Power Plants and Installations from Odessa Polytechnic Institute.

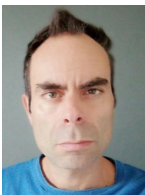


Pascal Daures is an engineer in nuclear science and technology. He worked for 10 years at the French Commissariat à l'Énergie Atomique et aux Énergies Alternatives, dealing with nuclear waste management and safeguards issues. He joined the European Commission in 1994 at the Joint Research Centre first in Karlsruhe (Germany) and later on in Ispra (Italy), specialising in nuclear safeguards and nuclear security. In 2011 he moved to Brussels and joined the Directorate General Development and Cooperation as the Head of the Nuclear Safety and Safeguards Sector at the Directorate General for International Partnerships, managing the Instrument for Nuclear Safety Cooperation that finances the EU assistance to third states in nuclear safety and safeguards. He recently moved to Luxemburg, joining the Directorate General for Energy as senior expert at the Euratom co-ordination and international relations unit.



Sara De Cair has been a health physicist with the Environmental Protection Agency's Office of Radiation and Indoor Air since 2003. She has transitioned from an emergency preparedness role, having finalised the PAG Manual revision in 2017, to become the Associate Director for the Center for Science and Technology – a small group of radiation experts who support EPA's radiation programme and provide Federal Guidance Reports, among other things.

She previously worked for seven years with the State of Michigan's Department of Environmental Quality in nuclear power plant emergency preparedness, radioactive materials regulation and radiation incident response.



Juan Carlos De La Rosa Blul is the project leader of the Radioactivity Environmental Monitoring and Emergency Preparedness and Response (REMON) project at the European Commission Joint Research Centre. He graduated from the Polytechnic University of Valencia with a Doctorate in nuclear engineering, specialising in thermal-hydraulics and safety analysis.

He is currently in charge of performing research activities on small modular reactors (SMRs) and existing reactors related to reactor safety, severe accidents and emergency preparedness and response, including by investigating emergency planning zones for SMRs and methods for nuclear emergency prognosis and diagnosis. Prior to joining the European Commission, Dr de la Rosa Blul worked as Explosion Safety Analyst for the ITER fusion facility, where he was responsible of explosion issues and the safety of the fuelling and vacuum systems. Before working for the ITER organisation, Dr de la Rosa Blul served as Probabilistic Risk Assessment Senior Engineer at Westinghouse, providing services for different nuclear power plants.

Dr de la Rosa Blul has also worked for the International Atomic Energy Agency (IAEA) as an expert consultant with the aim of assessing the IAEA's own capabilities in the field of emergency preparedness and response, in particular dealing with the design, implementation objectives and results of the Agency's assessment and prognosis role in response to a nuclear or radiological emergency. From the beginning of the war in Ukraine, Dr de la Rosa Blul has contributed to the JRC's role of providing scientific support to the European Commission through the analysis and assessment of nuclear accidents in Ukraine and calculation of radiological risk.



Damien Didier has worked in the Emergency Preparedness and Response Department of the IRSN for 20 years. He began as a research engineer developing models and tools for EPR, with a focus on atmospheric dispersion modelling. Over time, he took charge of the section responsible for developing radiological assessment capabilities in crisis situations. This section conducted research on atmospheric dispersion and related numerical techniques (uncertainties and inverse modelling). Besides research, they also organised national exercises, trained responders and developed operational methods and tools. With his team, he also contributed to the development of the French post-accident doctrine working on topics including the transition phase, food restrictions and recovery. He now heads the department that conducts applied research on atmospheric and aquatic transfers at the IRSN. He remains involved in EPR as an on-duty responder, leading the radiological consequences unit, serving as the deputy head of expertise, and as a representative of the IRSN in prefecture.

He contributes to the activities of the Nuclear Energy Agency by chairing the Expert Group on Dose Prognosis (EGDP), by being a member of the Expert Group on Food Safety Framework (EGFSF) and by serving as a member of the bureau of WPENEM (Working Group on Nuclear Environment Emergencies and Management).



Cosmin Dugan is a Consultant Physician at Bucharest University Emergency Hospital with dual PhDs in clinical neurology and national security policy studies. He also holds a Master's degree in medical and clinical engineering and has studied terrorism and security, international relations, geopolitics, and security and information analysis. Additionally, he serves as the Executive Director of the Black Sea University Foundation "Mircea Malița", which fosters regional collaboration in education and beyond.



Dawid Frencel has worked in the Radiation Emergency Centre with the National Atomic Energy Agency (PAA) for 11 years. During this time, he has performed various tasks related to emergency preparedness and response. He also works as a Duty Officer in the Radiation Emergency Centre and is a member of HERCA Working Group on Emergencies (WGE).

Dawid Frencel's background is biophysics with a focus on medical physics (M.Sc.). He graduated from the Faculty of Physics at Adam Mickiewicz University in Poznan. He also completed post-graduate studies in nuclear energy at the Faculty of Power and Aeronautical Engineering at the Warsaw University of Technology and is pursuing post-graduate studies in chemical rescue and hazardous materials at the Faculty of Advanced Technologies and Chemistry at the Military University of Technology. Dawid Frencel also completed a number of national and international training programmes related to emergency preparedness and response. These include on-the-job training at the US Nuclear Regulatory Commission (US NRC) in conducting inspections and emergency preparedness and response at the construction site of the Vogtle Nuclear Power Plant, well as on-the-job training in the field of EPR at the Canadian Nuclear Safety Commission.



Jacqueline Garnier-Laplace is the Deputy Head of the Division of Radiological Protection and Human Aspects of Nuclear Safety at the NEA. She joined the Agency in May 2019. She serves as Scientific Secretary for the Committee on Radiological Protection and Public Health (CRPPH), the Working Party on Nuclear Emergency Matters (WPNEM), the High-Level Group on Low Dose Research (HLG-LDR) and a number of topical expert groups. Previously, she was the Deputy Director in charge of Research for Radiological Protection at the Pôle Santé- Environnement of the French Institute for Radiological Protection and Nuclear Safety (IRSN). During her 35-year career in the field of radiological protection, she has held various managerial positions, e.g. Deputy Director of the Environment (2015-2017), and Head of Division on Research and Expertise on Environmental Risks (2007-2015). She is a member of the International Commission on Radiological Protection (ICRP). After being the Scientific Secretary of Committee 1 on "Effects of ionising radiation" from 2017 to 2021, she is now serving Committee 4 on "Application of the Commission's recommendations" until 2025. She has (co)-authored around 120 peer-reviewed papers mainly dealing with various radiological protection scientific issues.



Andrzej Głowacki has been the President of the Polish National Atomic Energy Agency (PAA) since 22 March 2023. He has been associated with the National Atomic Energy Agency for more than 15 years. Since September 2020, he has served as Vice-President of the Agency. Previously, he held the position of Director of the Nuclear Safety and Security Department, responsible, among other things, for overseeing the safety of the country's nuclear facilities, including the MARIA research reactor. At the PAA, Mr Głowacki also held the position of Director of the Supervision and Inspection Department, as well as Head of the Nuclear Facility Inspection Division.

Mr Głowacki holds a Master's degree in physics. He graduated from the Faculty of Mathematics and Physics at the University of Białystok. He perfected his skills during his post-graduate studies in nuclear energy at the Faculty of Power and Aeronautical Engineering at the Warsaw University of Technology. He also completed a number of national and international trainings related to nuclear safety and radiation protection, including on-the-job training at the US Nuclear Regulatory Commission in conducting inspections at the construction site of the Vogtle nuclear power plant and V.C. Summer, as well as the commissioning of the Watts Bar 2 nuclear power plant in the United States. As an expert, he participated in the international IRRS mission in Canada.

He is one of the authors of the *Handbook for Regulatory Inspectors of Nuclear Power Plants* published by the IAEA.



Lars Ragnar Aalerud Hansen is Director of the Section for Eastern Europe, Central Asia and Regional Organisations at the Norwegian Ministry of Foreign Affairs. Mr Hansen started his career in the Norwegian Army and then served four years in the office of the Defense Attaché at the Norwegian Embassy in Moscow, Russia before joining the Foreign Service. He later served as First Secretary at the Norwegian Embassy in Baku, Azerbaijan before he was seconded as Personal Advisor to the OSCE High Commissioner on National Minorities. He has served with the Section for Eastern Europe, Central Asia and Regional Organisations since 2014, first as desk officer for Ukraine and later on the Russia desk. He was deputy head of the section before his appointment as Director.

Mr Hansen completed his officer training at the Norwegian Defence Intelligence and Security School where he studied Russian language and graduated with a BA in Russian studies from the University of Oslo. He later earned an MSc in International Strategy and Diplomacy from the London School of Economics and Political Science and an MA in International Relations from The Fletcher School of Law and Diplomacy at Tufts University, where he studied as a Fulbright Scholar.



Roger Hugron received his Master's degree in nuclear engineering from the Canadian Royal Military College in 1996 while serving as an army officer. Upon graduating, he started working in the Nuclear Safety Directorate of the Canadian Department of National Defence in Ottawa, Canada, where he has been working ever since. He became a public servant in 2000 and is now a senior nuclear specialist and a section head. He is a Certified Health Physicist as recognised by the American Board of Health Physicists. He has extensive experience in radiation protection, radiation measurement, nuclear safety analysis, radiation/nuclear emergency preparedness, and the assessment of the needs, design, development of nuclear emergency response training programmes and courses for emergency response teams and medical personnel. He has delivered radiological emergency response training courses and exercises at home and abroad. He was a Radiological/Nuclear Scientific Advisor to Base Commanders during exercises and visits of nuclear-powered vessels to Canadian ports and to the Royal Canadian Mounted Police during the Vancouver 2010 Winter Olympics, the G20 meeting in Toronto, visits of the President of the United States and various radiological emergency response exercises.



Grant Ingham has worked in the UK nuclear industry for over 20 years as a Radiological Protection and Emergency Preparedness and Response (EP&R) specialist. He has been a Principal Inspector in the Office for Nuclear Regulation for the last 14 years, with experience in regulating radiological protection at operating and decommissioning nuclear power plants, reprocessing sites, and defence facilities. He has also led the safety assessment of designs for new civil nuclear reactors. Currently he is the Policy and International Lead for EP&R at ONR. He represents ONR at the NEA's Committee for Radiological Protection and Public Health and the Working Party on Nuclear Emergency Matters, and is the United Kingdom's representative at the IAEA Emergency Preparedness and Response Standards Committee (EPReSC).



Olivier Isnard serves as the Deputy Executive Director for Emergency Preparedness and Response of France's IRSN. Olivier joined the IRSN in 2000 as a researcher on atmospheric dispersion and consequences management and held positions of increasing responsibility, including as Head of the Modelling on Atmospheric Transfers Lab and Deputy Head of the Emergency Preparedness and Response Department. Mr Isnard is an emergency responder, with duties as Adviser to Government Decision Makers, Radiological Consequence Unit Leader and Mobile Unit Leader.

He holds a PhD from the Fluid Mechanics and Acoustic Laboratory of the École Centrale de Lyon on atmospheric dispersion through groups of obstacles, and a Master's degree in mechanical engineering from the University Pierre et Marie Curie (Sorbonne University).



Jan Johansson has worked at the Swedish Radiation Safety Authority for 19 years. He works on radiation protection and emergency preparedness and response in connection with nuclear and radiological emergencies, both in Sweden and at an international level.

Currently, Mr Johansson is responsible for developing a framework for radiation protection in radiological and nuclear emergencies during a heightened state of alert and war. He is also responsible for developing radiological acceptance criteria to be used in deterministic safety analyses for new nuclear power reactors. In recent years, Jan has worked on the development of a decision support for nuclear emergencies as part of the Swedish protection strategy. Between 2015 and 2017, he was also responsible for a governmental assignment to propose new emergency planning zones and distances around nuclear power plants and other relevant facilities in Sweden. The proposed new emergency zones and distances became operational as of 1 July 2022. Furthermore, he worked on the implementation of requirements for emergency exposure situations in the new Swedish radiation protection act and ordinance that entered into force in 2018.

At the international level, Mr Johansson is the Swedish representative in the IAEA Emergency Preparedness and Response Standards Committee (EPreSC) and one of the Swedish representatives in the Heads of European Radiological protection Competent Authorities – Working Group on Emergencies (HERCA-WGE).



Oleh Korikov was appointed Acting Chairman of the State Nuclear Regulatory Inspectorate of Ukraine – Acting Chief State Inspector on Nuclear and Radiation Safety of Ukraine according to the Resolution of the Cabinet of Ministers of Ukraine № 1674-p, dated 15 December 2021.

Prior to this appointment, Mr Korikov served as First Deputy Chairman of SNRIU – Deputy Chief State Inspector on Nuclear and Radiation Safety of Ukraine.

Mr Korikov was born in Odessa, Ukraine. He graduated from the Obninsk Institute of Nuclear Energy with a Master's degree in engineering and heat energy. He also obtained a post-graduation Master's degree in business administration.

Before joining SNRIU, Mr Korikov worked as Deputy Director General – Technical Director of the State Specialised Enterprise “Central Enterprise for Radwaste Management”.

From 2018 to 2020, he worked at the Ministry of Energy and Coal Industry of Ukraine.

From 1993 to 2018, Mr Korikov worked in different positions in the Ukrainian nuclear operating company – National Nuclear Energy Generating Company “Energoatom”.



Valentyn Kostenko is Director of the Department for Radioactive Waste Management and Radiation Safety, at Ukraine’s SE NNEGC “Energoatom”. He has been working in the field of radiation safety since 1996. For almost 20 years, he worked at the Khmelnytskyi Nuclear Power Plant in various positions, from health physicist to Head of Department for Radiation Safety. For three years he worked as a WANO advisor. Since 2019, he has been leading the Department for Radioactive Waste Management and Radiation Safety at Energoatom. From the beginning of the full-scale invasion of Ukraine by the Russian Federation, he has been serving as the Acting Director for Radioactive Waste Management and Radiation Safety. He has extensive experience in the practical organisation of radiation protection at nuclear power facilities. Currently, his responsibilities include, among other things, the organisation of radiation monitoring in the Ukraine-controlled area adjacent to the Zaporizhzhia Nuclear Power Plant.



Yevheniia Kudriashova joined the State Scientific and Technical Center for Nuclear and Radiation Safety (SSTC NRS) in 2019 as a researcher specialising in radiation surveillance, dosimetry monitoring and measurement techniques in the field of medical ionising radiation applications. With an extensive background in radiation safety, she has served as a Radiation Safety Officer for several clinical hospitals in Ukraine since 2006. In this capacity, she held overall responsibility for comprehensive radiation safety initiatives encompassing personnel and patient safety, as well as quality control of equipment. Her professional journey commenced as an engineer at Donetsk National Technical University, where she earned a Master's degree in electromechanical engineering and automation.



Greg Lamarre was appointed Head of the Division of Radiological Protection and Human Aspects of Nuclear Safety at the Nuclear Energy Agency in March 2021. In this capacity, he is responsible for the implementation of the Division’s mandate as it relates to advancing nuclear safety across NEA member countries, specifically in the areas of radiological protection and the human aspects of nuclear safety.

Mr Lamarre has over 30 years of experience as a systems engineer and leader in government, in an international organisation and previously in the military. He joined the NEA from the Canadian Nuclear Safety Commission (CNSC) in Ottawa where he was most recently the Director General, Safety Management Directorate. In this role, he was responsible for leading a number of divisions responsible for providing the organisation with world-class technical expertise in the areas of safety management. He held progressively more senior roles at the CNSC in the areas of licensing and compliance of research facilities, safety management and emergency preparedness, security and safeguards. Mr Lamarre also previously worked at the NEA for a three-year period as deputy head of the Nuclear Safety Division. Prior to commencing his career in the nuclear industry, he served as a marine systems engineering officer in the Royal Canadian Navy. A Canadian national, Mr Lamarre holds undergraduate (chemical engineering) and graduate degrees (nuclear engineering) from the Royal Military College in Kingston Ontario and a Master of Business Administration degree from the University of Ottawa. He is a licensed professional engineer in his home province of Ontario.



Luke Lebel is a research scientist and emergency response Science and Technology portfolio lead at the Canadian National Laboratories (CNL). He has spent his career focusing on the implications of nuclear accidents and radiological incidents, and on how to protect the public from them. Dr Lebel’s main expertise is in the transport of radionuclides out of, for example, nuclear power plant containment buildings and into the environment, as well as the aerosol science and fluid mechanics expertise that supports those efforts. Highlights of his work include: i) the development of Canada Deuterium Uranium (CANDU) specific operational intervention levels; ii) experiments and analysis to support the development of Small Modular Reactor emergency planning zones and potential beyond design basis accident releases; iii) analysis of environmental radioiodine transport in the wake of the Fukushima Daiichi accident; and iv) involvement in the 2012 Defence Research and Development Canada (DRDC) Suffield full-scale radiological dispersal device experiments.



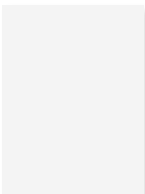
Astrid Liland is the Director for Emergency Preparedness and Response at the Norwegian Radiation Protection Authority (DSA). She is a nuclear chemist with over 20 years' experience in the field of radiation protection, radioecology and nuclear emergency preparedness. She has been active in the international community and in numerous research projects related to these topics. For the past 8 years, she has been responsible for the DSA's work on emergency preparedness and response, including during the war in Ukraine.



Salvatore Massaiu works as a Senior Research Scientist at the Institute for Energy Technology (IFE). Since 2002, he has been working at the Halden Human-Machine Laboratory studying nuclear power plant control room operators' decision-making and performance. His research interests include naturalistic decision-making, cognitive systems engineering, resilience engineering, human reliability analysis, and emergency response organisations. He holds a Master of Science in marketing research from the Norwegian Business School BI and a Master of Arts in philosophy from the University of Pisa.



Christopher Mogg is a Radioactive Substances Regulation Advisor with the Environment Agency in England, working on policy and regulatory matters associated with new and operational nuclear sites. Mr Mogg specialises in radiological protection and has considerable experience in nuclear and radiological emergency preparedness, response and recovery. Until September 2023, Mr Mogg worked as a Radiological Protection Specialist for the NEA, which involved acting as scientific secretary for the NEA's Working Party on Nuclear Emergency Matters (WPNEM), and a number of other groups, including secretariat of the Expert Group on the 6th International Nuclear Emergency Exercise (EGINEX6) and the Expert Group on International ICRP Recommendations, which co-ordinates the NEA's input into the ICRP's review of the System of Radiological Protection. Mr Mogg represented the NEA within a number of international groups led by the ICRP, IAEA and HERCA and now actively participates in several groups as part of the UK delegation, including as a member of WPNEM and EGINEX-6. He holds an MSc, BSc (hons), PGCE and a FdSc in Radiological Protection.



Zachary Myers works as a nuclear scientist with Defence Research and Development Canada. He began his career as an academic physicist before joining the Canadian Army's Corps of Engineers. During his time in the military, Captain Myers specialised in nuclear, biological and chemical (NBC) threat mitigation, both domestically and overseas. In his current capacity, Dr Myers oversees several research projects pertaining to national defence and nuclear security.



Tania Navarro-Rodriguez is a Researcher in Social Sciences at the Laboratory of Humanities and Social Sciences (LSHS) of the IRSN. She is expert in human and organisational factors assessment and in the diagnosis of nuclear safety management, especially in surveillance fabrication, decommissioning of nuclear installations, preservation of records and memory, and business continuity in critical situations (such as the COVID-19 pandemic). She conducted and published research in social sciences in the areas of risk management, expertise production and public policies. Her scholarly work mainly concerns radioactive waste management, organisational adaptation and nuclear installations' conformity issues. Her current research is about the continuity of operations in the face of major disruptions (COVID-19 pandemic, wartime context, climate change), the conformity issues of nuclear installations and the risk management of sociotechnical systems. In 2016, she was a recipient of the Research Award of the French Foundation for Social Sciences.



Anne Nisbet is Radiation Recovery Lead at the UK Health Security Agency and has over 35 years of experience in radiation protection. She has worked as an expert in the field of emergency planning, response and recovery, including the development of strategies for stakeholder engagement. Ms Nisbet has also undertaken environmental assessments and radioecological studies. At the national level, she has responsibility for providing UK advice for public health protection in the event of radiation emergencies and is lead for UK Recovery Handbooks for Radiation Incidents. Ms Nisbet has served as a member of the International Commission on Radiological Protection (ICRP) Committee 4 since 2013 and was actively involved in the drafting of ICRP Publication 146 (2020). She is chair of ICRP Task Group 120 on Radiological Protection for Radiation Emergencies and Malicious Events. Previously, she was a consultant to the International Atomic Energy Agency, the NEA, and the US National Council on Radiation Protection and Measurements. She is a co-author of the 2022 NEA publication *Building a Framework for Post-Nuclear Accident Recovery Preparedness: National Level Guidance*.



Shengli Niu is trained in medicine and is specialised in occupational health. He is currently working as a senior specialist in occupational health and radiation at the headquarters of the International Labour Organization (ILO) in Geneva, Switzerland.

He has worked for more than 30 years in the fields of occupational health, radiological protection of workers and ergonomics. He has worked for the Ministry of Health of the People's Republic of China for eight years and for the World Health Organization for two years at its Beijing office, before he joined the ILO in 1994.

Dr Niu has led a number of international efforts in the development of global policies and standards on occupational safety and health, including the revision of the ILO's international list of occupational diseases, the International Guidance Notes on the Diagnostic and Exposure Criteria for Occupational Diseases published by the ILO in 2022. He has been the ILO focal point on occupational radiation protection since 1995. He represents the ILO at several international expert/standards committees relevant to occupational safety and health, radiation safety and protection. He has contributed to many publications and tools of the ILO, IAEA, WHO and other international organisations. He has authored and co-authored numerous articles in peer-reviewed journals and books on occupational health, the radiological protection of workers, and ergonomics.



Paulo Nunes holds a degree in chemical engineering and a PhD in chemistry. Since 2015, he has been working as a Senior Officer at the Emergency Preparedness and Response Unit of the Portuguese Environment Agency (Agência Portuguesa do Ambiente, APA) with competences in radiological and nuclear emergency preparedness and response. He has represented Portugal on a regular basis in national and international working groups, particularly in the framework of the International Atomic Energy Agency and the NEA, on radiological and nuclear emergency preparedness and response.

Presently, he is a member of the Management Board of the NERIS Platform (European Platform on Preparedness for Nuclear and Radiological Emergency Response and Recovery). He is also involved in the implementation and updating of the radiological dispersion modelling capacities at APA and is contributing to research projects in the field of radiological and nuclear emergency preparedness and response. He is the author of several international scientific publications in the area of physical chemistry and in radiological and nuclear emergency preparedness and response.



Oleksandr Pecherytsia joined Ukraine's State Scientific and Technical Center for Nuclear and Radiation Safety (SSTC NRS) in 1994 and after several years became Deputy Head of the Operational Safety Analysis Department. His main professional background includes participation in the development of regulatory requirements and guidelines (in particular, operational event investigations, regulatory reviews of deterministic and probabilistic safety studies), participation in the planning and implementation of regulatory oversight activities, and expert assessment of licensee safety cases. Since May 2014, Mr Pecherytsia has been serving as Deputy Director for Scientific and International Activities at SSTC NRS. In his current role he serves as manager and projects lead and he provides oversight of the SSTC NRS scientific and international activities and co-operation (including with US and EU scientific and technical institutions and international platforms). Mr Pecherytsia earned his engineering diploma in physics and thermal energy from the National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute" and holds a PhD degree in technical sciences (thermal and nuclear installations) from Odesa National Polytechnic University.



Karim Peltonen has been at the service of STUK, Finland's Radiation and Nuclear Safety Authority, since 2020. As a head of department, he is responsible for STUK's communications and public relations, emergency preparedness and international co-operation.

Mr Peltonen has a long experience in developing national emergency preparedness and civil defence both at the policy and practical levels. He has worked on topics related to crisis and risk communication, individual preparedness and national emergency supply.

He holds a Master's degree in cultural studies from the University of Helsinki, with complementary studies in management and communications. He is also an alumnus of national defence courses.



Géraldine Pina is a nuclear physician and assistant professor at the Lyon University teaching hospital. She is also an electrical engineer as well as a reserve army doctor specialising in chemical, biological, radiological and nuclear (CBRN) risk management.

She was the nuclear and radiological risk advisor for the south-eastern civil defense zone and has taught radiological protection at the university teaching hospital and the centre for emergency care in Lyon. As a reservist doctor in the armed forces, she was assigned to the chemical decontamination chain management team and the centre for the treatment of radiocontaminated victims, as well as for the training of medical teams in CBRN risks for the armed forces' mobile decontamination units. She was also a medical expert for the committee for the compensation of nuclear test victims, responsible for examining the medical aspects of cases.

Ms Pina was appointed a member of the ASN Commission for a six-year term by decree of the President of the Republic of France on 15 December 2020.



Selwyn Runacres is Vice-Chair of the NEA Expert Group on the Sixth International Nuclear Emergency Exercise (EGINEX6). He has 20 years' experience as a civil servant in the United Kingdom and is a member of the Society for Radiological Protection. While operating as a civil servant, he has worked for the Food Standards Agency on lifting Chernobyl restrictions in Wales, the United Kingdom's response to the Fukushima Daiichi Nuclear Power Plant accident, radiological surveillance programmes, risk assessment design and methodologies for food safety, negotiations with the European Commission on maximum permissible levels of feed and food in emergency situations, and as an international technical expert (with the help and support of the Society of Radiological Protection [SRP] members) on articles 35 and 36 of the Euratom Basic Safety Standards Directive (BSSD). He has also worked on implementing article 37 of the Euratom BSSD. He then specialised in Emergency Preparedness and Response for the UK Department of Business Energy and Industrial Strategy.

Dr Runacres has worked for a number of years on improving equality within the UK civil service. He leads several disability groups working on improving reasonable adjustments as well as a national conference on disability delivered in 2022.



Nataliia Rybalka has more than 20 years' experience in the Ukrainian Regulatory Authority. In 2001, she joined the Unit of Radioactive Waste Management and Decommissioning Safety. Ms Rybalka has provided licensing and supervision for the Chernobyl Nuclear Power Plant decommissioning and for all radioactive waste management facilities in Ukraine, and was also involved in the safety assessment of safety-related documentation. She has been deeply involved in international co-operation projects of the European Commission, the IAEA and the G-7, as well as bilateral activities. She has drafted State Policy Legal Documentation and safety regulations development. Currently, in her position of Director of the Department of Radiation Technologies and Radioactive Waste Management Safety – deputy Chief State Inspector of Nuclear and Radiation Safety of Ukraine, the scope of her responsibilities includes management of the regulatory activity in the fields of nuclear decommissioning, radioactive waste management, uranium industry, environment remediation and radiation protection.



Volodymyr Skliarov's professional experience lies in the field of metrology and scientific research. He currently serves as the Scientific Secretary and Head of the Scientific Centre of Legal Metrology, International Collaboration, and Information Technology at the National Scientific Centre "Institute of Metrology" in Ukraine. His research interests encompass ionising radiation, mechanical measurements, material hardness measurement, structural control, health monitoring, numerical calculation and artificial intelligence. He holds multiple degrees, including a DSc (Tech) in standardisation, certification and metrological assurance, which he earned in November 2020.



Todd Smith is the Senior Level Advisor for Emergency Preparedness and Response in the Office of Nuclear Security and Incident Response at the United States Nuclear Regulatory Commission (NRC). He previously served in the Policy and Oversight Branch developing emergency preparedness policies, regulations and guidelines for NRC-licensed facilities and conducting related research to advance the state-of-the-practice in radiological emergency preparedness and response. Prior to joining the NRC, Dr Smith served in the United States Navy as a Submarine Warfare Officer, including assignments as Chemistry and Radiological Controls Assistant, Naval Reactors Lead Engineer for Advanced Reactor Digital Instrumentation & Control (I&C), Engineering Department Head, and Special Assistant for Radiological Emergency Planning at Submarine Group 10 in Kings Bay, Georgia. He graduated from Purdue University with a MS and PhD in Nuclear Engineering, specialising in thermal-hydraulics and reactor safety and holds a MS in radiation health physics from Oregon State University.



Frederic Stephani holds a degree in power and nuclear engineering. He worked for seven years at the French Institute for Radiological Protection and Nuclear Safety as a thermal hydraulics and crisis management engineer. In 2018, he joined the IAEA's Incident and Emergency Centre (IEC) in Vienna, where currently works as Emergency Preparedness Officer. Mr Stephani's duties include serving as Coordinator of the Emergency Preparedness and Response Standards Committee.



Hiroko Takada has a postgraduate degree in physics from the University of Tsukuba. She was a researcher at the Japan Nuclear Energy Safety Organization (JNES) from 2011 to 2014. Since 2014, she has been working as Associate Senior Researcher in the Regulatory Standard and Research Department of the Secretariat of Nuclear Regulation Authority. Ms Takada is pursuing research on human and organisational factors (HOF) and the safety culture of nuclear power stations. She was also involved as an expert in the issue of nuclear inspection systems, HOF inspection and regulatory activities. Her major accomplishments include the development of a safety culture guide at the NRA and the detailed HOF inspection methods of NRA nuclear safety inspections, among others. She is a member of the NEA Working Group on Human and Organisational Factors (WGHO) and the Working Group on Leadership and Safety Culture (WGLSC).



Gareth Thomas is the professional lead for regulation of radiation protection at 35 nuclear sites in the United Kingdom. At the Office for Nuclear Regulation (ONR), his team regulates all aspects of radiation protection and includes experts in the fields of health physics, emergency planning, criticality, shielding, radiation consequences and transport of radioactive materials.

Mr Thomas is also Chair of the Heads of European Radiation protection Competent Authorities (HERCA) Working Group on Emergencies (WGE), which consists of emergency planning experts from all European regulators who work to improve the application of protective actions in national emergency planning and also to promote consistent and compatible emergency preparedness and response arrangements within and between European countries for nuclear emergencies occurring both within Europe and elsewhere. It produced the important document entitled the “HERCA-WENRA Approach for a better cross-border co-ordination of protective actions during the early phase of a nuclear accident”.

Mr Thomas chairs the HERCA Task Force supporting Ukraine and neighbouring countries during the war, which is the topic of his presentation at the workshop.

He has been a radiation protection and emergency planning regulator for 23 years, with experience of most radiological and nuclear practices. He is the UK representative for radiation protection at the IAEA, the EC and HERCA and played a role in developing both the IAEA and EC Basic Safety Standards Directives. He supports development of UK legislation and has participated in IAEA Integrated Regulatory Review Service (IRRS) Missions to help other countries strengthen and enhance the effectiveness of their regulatory infrastructure for nuclear, radiation, radioactive waste and transport safety.

Prior to becoming a regulator, in the 1990s, he worked in radiation protection in the non-nuclear sector and was also head of professional training at the former National Radiological Protection Board (NRPB) and Health Protection Agency (HPA) of the United Kingdom, and more recently at the UK HSA.



Petteri Tiippana Director General, Radiation and Nuclear Safety Authority (STUK), Finland

Mr Tiippana joined the Finnish Radiation and Nuclear Safety Authority in May 1996 and has had various positions at STUK during his career. He has been Director General of STUK since 2013. Prior appointment to DG Mr Tiippana was the Director of the Nuclear Reactor Regulation. Mr Tiippana has master’s degree on power plant engineering from Lappeenranta University of Technology.

His career history includes active participation in the work of the OECD/NEA, the IAEA and EU. He is the chair of the NEA Committee on Nuclear Regulatory Activities (CNRA) and vice chair of WENRA.



Peter Wright has been with Health Canada’s Radiation Protection Bureau since 2015, in the Nuclear Emergency Preparedness and Response Division. He has contributed to the planning, design and conduct of numerous radiological/nuclear emergency response exercises and is a member of the NEA’s INEX-6 Expert Group. Mr Wright was one of the lead authors of Canada’s Guidance on Planning for Recovery Following a Nuclear or Radiological Emergency and is currently involved in co-ordinating and maintaining operational readiness of the Radiation Protection Bureau’s Field Response Team assets for radiological survey and sampling activities in the event of a nuclear or radiological emergency



Oleksii Zhyvotenko is a Ukrainian professional with a strong background in nuclear power engineering and radioactive waste management. He holds a mechanical engineering degree from the National Mining University and is currently pursuing a Master’s degree at Kyiv Polytechnic Institute. During his career, Mr Zhyvotenko has held significant roles, including Technological Engineer and Leading Engineer at the State Corporation “UkrSA Radon.” Later, he served as the Head of Industrial and Technical Management at SSE “Association Radon.” Currently, he holds the position of Head of Management for Industrial and Technical Issues and Radioactive Waste Management at the same organisation.



Anastasios Zodiates has accumulated over three decades of experience in the nuclear industry. His diverse professional background includes involvement in the design and construction of nuclear power stations, safety case development, technical assessments, and support for operational nuclear facilities. Anastasios has made significant contributions in areas such as dosimetry, radiation instrumentation, radiochemical services, environmental monitoring, discharge assessments, and emergency preparedness. He has also played a crucial role in shaping international radiation protection standards, with a primary focus on Radiation Protection during normal operations and assessing radiological consequences resulting from equipment failures, both on-site and off-site.

His influence extends to his position as the nominated Trade Union member on the Technical Advisory Panel of the UK Office of Nuclear Regulation, where he played a significant role in reviewing the implications for the UK nuclear industry following the events at the Fukushima Daiichi nuclear power station and the EU Stress Tests.

Notes

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