



IAEA

International Atomic Energy Agency

Introduction to the IAEA School on Nuclear and Radiological Leadership for Safety

28 July 2022

Maria J. Moracho Ramirez, Programme and Strategy Coordination Section
Department of Nuclear Safety and Security, IAEA



Co-funded by
the European Union

Agenda

- Background
- Objective
- School concept
- Methodology
- E-support
- Implementation of Schools 2017 – 2020
- E-support and virtual programme
- Future plans
- Contact

School on Leadership for Safety

Objective

*training and supporting **early-** to **mid-**career professionals in developing their safety leadership skills and potential*



What is the School's concept?

Audience:
Leadership for **future leaders**,
young/junior professionals and
mid-range

Multiple Perspectives:
nuclear and
radiological safety,
(security), **normal operation** and in
emergencies,
operator, user and
regulator perspective

Experiential Learning: based on
real scenarios studied
through practical
cases, role play, root
cause, prevention
dialogues, reflection
exercises, “games”

Methodology



experiential
learning



case studies



group dynamics



role play



lectures

GSR Part 2

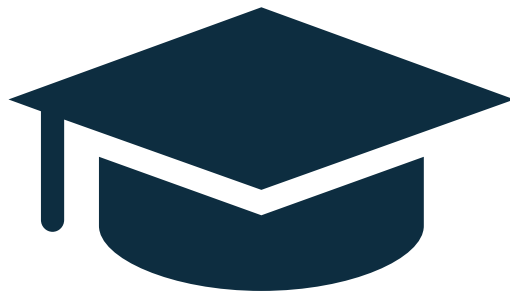
School concept and case studies

So far, we have **6 Case Studies** focusing on:

- Medical Applications
- Nuclear Power Plants operation
- Emergency Preparedness and Response
- Development of the Legislative Framework for Safety
- Establishment of a Regulatory Body
- Nuclear Security



Leadership School in numbers



9 Schools in person

2 Virtual Schools



276 Participants

75 Nationalities

Implementation of Schools 2017 - 2022

Regional two-week Schools

- Regional Europe (France) in 2017
- Regional Latin America (Mexico) in 2018
- Regional Europe (Turkey) in 2019
- Regional School Africa (Morocco) in 2019
- Regional School Asia (Japan) in 2020
- Pilot Virtual School (IAEA) in 2021
- Regional School Europe (Greece) in 2021
- Regional School Asia (Japan-Vienna) – virtual format - 2022

National one-week Schools

- National School in India in 2018
- National School in Pakistan in 2019
- National School in Brazil in 2019

Participants' profile

Work experience

5-15 
years

Professional background



regulatory
bodies

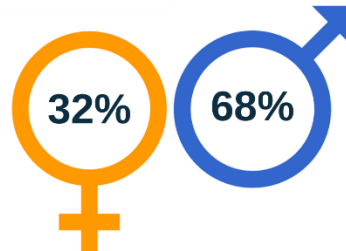


technical support
organizations



operators/
users

Gender



Average age

37 YEARS

General Reflection Survey 2020

90% - training **increased their knowledge of leadership for safety**, and they used it at work

84% - Leadership School increased their understanding and awareness of the **IAEA safety standards** as well as their ability to apply them in real life situations

84% - Leadership School **increased their international perspective** and that they have kept in touch with fellow participants and facilitators

97% - would welcome further courses and digital learning support

Over 30% - **have been promoted to a more senior position** or advanced onto higher education studies since participating in the Leadership School

E-support

- A platform for the Leadership
- A dedicated space for each school is created
 - ✓ General information and reference material for the upcoming school
 - ✓ Community Forum for registered users – specifically participants and teachers, where they can chat and share experience
 - ✓ Facilitators only collaboration space, including teaching materials and notes
 - ✓ Access to eLearning walkthroughs of the case studies
 - ✓ Assessment tools and questionnaires designed to assess the school and its impact

Plans

- Train-the-trainers programme – increasing of the pool of expert facilitators
- Further e-Learning development
 - Videos and e-Learning modules
- Refresher course
- Further Alumni engagement
- Translation of the material to French and Spanish
- Syllabus publication – almost achieved

Mid- long-Term Future

Partnership, Learning, Sustainability

- **Incorporating lessons** and knowledge from the Agency
- **Regional network of training centres** that provide the School in cooperation with the Agency
- **Link to other Agency programmes** TC, (NE- Lead Project)
- **Link to Training Providers** in Member States
- **Link to capacity building programmes** of Member States
- **Link to relevant research and university programmes** in Member States
- **Knowledge transfer between countries** of the region and interregional

Mid- long Term Future

- **Link to capacity building programmes of Member States**
- **Link to relevant research and university programmes in Member States**
- **Knowledge transfer between countries of the region and interregional**

Upcoming Leadership Schools

2022

Regional Leadership School in Egypt – 9-20 October

Regional Leadership School in Mexico – 14-25 November

National Leadership School in Pakistan – 5-9 December

2023

Regional Leadership School Japan – 20 February-3 March

Regional Leadership School for FNRBA countries in Vienna – 15-26 May

Regional Leadership School in Nice – 12-23 June

Contact

Official website : <https://www.iaea.org/services/education-and-training/training-courses/international-school-on-nuclear-and-radiological-leadership-for-safety>



Training courses

The International School on Nuclear and Radiological Leadership for Safety is a training course that supports governments in their work to foster leadership for safety and safety culture by helping early to mid-career professionals to develop their safety leadership potential. It does this through improving their understanding of what leadership means in practice in nuclear and radiological working environments with their inherent complexities and often competing considerations.

Curriculum

The Leadership School's curriculum is based on the IAEA safety standards. It contributes to global nuclear and radiological safety by strengthening capacity-building efforts.

The Leadership School examines safety leadership in both normal and emergency scenarios, and it includes an element of nuclear security. Its programme is based on case studies, with participants analysing and interacting in scenarios that involve topics such as unintended medical exposure, a nuclear power plant outage, and leaks of radioactive materials.

The programme also includes presentations, briefings, interactive activities, individual study, in-class group work, and discussions.

Key facts: the Leadership School...



Past Schools

- Athens, Greece - 2021
- Virtual school (pilot) - 2021
- Ankara, Türkiye - 2019

Related resources

- Brochure
- Human and organizational factors
- Leadership and management for safety and security
- Management in nuclear

Inquire about future Schools

Send an email



Strengthening Nuclear and Radiological Leadership for Safety

Maria Josefa Moracho Ramirez, IAEA Department of Nuclear Safety and Security
Karin Costrell, IAEA Department of Nuclear Safety and Security

DEC
3
2021



Junior and mid-career professionals learn about safety leadership skills through group exercises at an IAEA training course held in Athens, Greece. (Photo: R. Pacheco/IAEA)

Leadership for safety in nuclear and radiological environments, ensuring high levels of nuclear safety and radiation protection and that a healthy culture for safety is established throughout organisations, were among the main topics discussed at the recently held IAEA International School on Nuclear and Radiological Leadership for Safety, in Athens, Greece.

Through case studies and leadership games, participants analysed scenarios, such as unintended medical exposure, leaks of radioactive material and challenges establishing an effective regulatory body. An interactive programme also helped them to identify gaps and ways that could help an organization improve its nuclear safety processes and mechanisms. The school included lectures and case studies and references for leadership



Related stories

- Test and Learn: IAEA Conducts Pilot Virtual School on Nuclear and Radiological Leadership for Safety
- Nuclear Professionals Share How to Promote Strong Safety Culture: IAEA School on Leadership for Safety
- IAEA Holds First School of Leadership for Safety in Ibero-American Region

Related resources

- International School of Nuclear and Radiological Leadership for Safety
- Safety standards
- Leadership and Management for Safety
- Human and organizational factors
- Department of Nuclear Safety and Security



IAEA

International Atomic Energy Agency

THANK YOU FOR YOUR ATTENTION



Co-funded by
the European Union