



IAEA

60 Years

Atoms for Peace and Development

Nuclear Installation Safety

EDUCATION AND TRAINING

Systemic Approach to Safety Workshop

Why is this important?

Nuclear power reactors are designed and built to be safe and reliable, with multiple safety systems designed to cope with a wide range of conditions. They are also operated by highly competent personnel. Taken together these represent a multi-layer defence to address the human or equipment failures that might occur. This philosophy is called Defence in Depth since no single layer is relied upon exclusively. Its goal is to protect the health and safety of workers, the public and the environment from undue exposure to ionising radiation.

Experience has shown that this robust approach to safety can be enhanced further. Lessons from the Fukushima Daiichi accident and other events have shown the benefits of recognizing the complex interactions among Humans, the Technologies they use and the Organizations (HTO) they work in. This complementary approach addresses a wider range of risks and is known as the systemic approach to safety. This workshop will develop the expertise of participants in understanding how HTO interactions can be used to significantly strengthen safety and build resilience to manage the unexpected.

What do I need to know?

This workshop draws on IAEA safety standards, state-of-the-art research and lessons from severe events to provide participants with hands-on learning about strengthening safety within complex systems. Participants will learn the tools and techniques they need to apply the Systemic Approach to Safety in practice. A maximum of 30 participants will be accepted into the workshop to ensure effective group dynamics.

Course information:

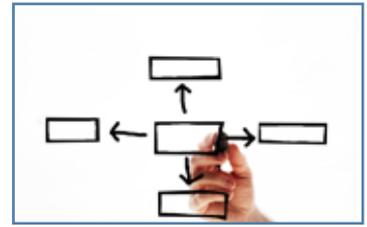
Who should attend this workshop? This workshop is designed primarily for middle managers of operating organizations, regulatory bodies, and technical support organizations.

What does this workshop cover? This workshop features engagement with a cross-cultural, cross-discipline network of leaders and experts and provides a compendium of workshop materials. Topics covered within the workshop, include:

Examples of topics covered in the Systemic Approach to Safety Workshop

- Differences and relationships among human, technological and organizational factors, a review of defence-in-depth principles, and the application of a systemic approach to safety;
- Systems mapping of human, technical, organizational relationships whose dynamics affect and shape safety performance;
- Inquiry and dialoguing techniques for leadership practices;
- Exploration of safety challenges existing within the participant's organization, using the methods and tools introduced in the workshop as well as the expertise of other participants and the workshop facilitators.

What actions are recommended?



Member States interested in this workshop can contact
Operational-Safety.contact-point@iaea.org

Member States should select participants who are middle managers. Workshops are limited to 30 participants.

Member States are encouraged to contact the IAEA should they need further assistance with applying the systemic approach to safety.

For a list of additional training and dates scheduled by the IAEA, check the current IAEA Meeting Schedule.

Other Important Information

What should I know before I attend this workshop?

The participants should be prepared to explore a long-standing and unresolved challenge to their organization during the workshop. Since the training will be conducted in English, participants should have sufficient proficiency to follow lectures and express themselves without difficulty.

Who leads this workshop?

The workshop facilitators are experts from a range of different disciplines including technical, managerial, social, organizational and behavioural sciences. They are chosen to ensure diversity of expertise, perspectives, and experience providing participants with the fundamental elements of the systemic approach to safety

How long is this workshop?

The workshop duration is four days.

Resources

IAEA Meeting Schedule <http://www-pub.iaea.org/mtcd/meetings/PDFplus/current.pdf>

Email: Operational-Safety.contact-point@iaea.org

Visit: <https://www-ns.iaea.org/home/ni/dir-ni-message.asp?s=2&l=16>

