



2023 Meeting of senior representatives of organisations in formal relations with ICRP
Bristol, September 26, 2023

Activities of the European ALARA Network

1. Introduction

The strategic agenda of the European ALARA Network for 2021-2026 identified the following challenges and key ALARA themes:

Challenges:

- Medical sector
 - ALARA needs to keep pace with recent developments in the use of new imaging techniques and radiopharmaceuticals.
- Nuclear installations
 - ageing of existing installations, decommissioning
 - New nuclear installations (nuclear power plants, nuclear waste disposal, isotope production facilities, research reactors, new reactor designs, etc.) are under development or will be developed in the near future.
 - Both need knowledge and skills from the radiation protection community to implement the optimisation principle in all life stages of a nuclear installation. This requires an ongoing focus on maintaining and expanding skills and competencies, through radiation protection and ALARA education and training.
- Existing exposure situations
 - applying the ALARA principle in the prevailing circumstances is still challenging
- Harmonization of practices by promoting the sharing of experience

The following key ALARA themes were identified to be developed in 2021-2026

- Medical field
 - interventional radiology
 - new imaging techniques
 - the production and safe use of new radiopharmaceuticals, with special attention to exposure situations involving alpha exposure.
- Nuclear industry, research and the medical field EAN
 - further harmonization of practices in the implementation of the ALARA principle.
 - maintaining and further developing knowledge and skills in these fields.

The key ALARA themes are developed through the organisation of workshops, discussions in working groups and networking with different organisations and projects to explore subjects of common interest.

2. Activities

Following activities were or will be performed in alignment with the strategic agenda:

Participation in working groups, task groups and workshops

- Participation in IRPA workshops on reasonableness
- Participation in ICRP TG 104 mobile sources
- Participation in ICRP TG 127 exposure situation/categories of exposure
- Working group on ALARA for Radon at Work
 - Publication (Journal of Radiological Protection) and presentation at IRPA conference (May 2022). Participation at ROOMS conference (September 2022)
- Workshop on workplace monitoring, Cyprus
 - Co-organization IAEA and EAN, June 2022
- Italian radiation protection congress, 2023

The most recent [EAN Newsletter](#) (March 2023) concentrated on the following ALARA issue: Restriction of exposure in veterinary practice; Future challenge in theragnostic centres taking into account all the radiological protection measures and a synthesis of the European ALARA Network 1st webinar.

EAN Webinar: Challenges in applying the radiation protection system in the management of NORM and radon.

The European ALARA network organized workshops on exposure to natural radiation and existing exposure situations. Recently a webinar was organized 8th, December 2022, by the EAN to examine the challenges in applying the RP system in the management of NORM and Radon. The optimization principle was highlighted as an important tool to evaluate and implement protection measures in a graded and integrated approach.

The webinar was announced in the EAN Newsletter (EAN, 2022) and organized with the in-kind support of AGES (Austrian Ministry of Health and Food Safety – member of EAN) and took place 8 December 2022 from 09h30 to 12h00 on Zoom. More than 100 participants attended the event live. The webinar was opened by the Chairperson of the EAN, Mr. Fernand Vermeersch (SCK CEN, Belgium) and co-chaired by Mr. Franz Kabrt (AGES, Austria) then by Mr. Sylvain Andresz (CEPN, France).

All the results from the webinar are available on the [EAN website](#).

20th EAN workshop: ALARA for interventional radiology & nuclear medicine

More than 10 years after workshop n°13 'ALARA in Medical Sector' and with regard to the novel issues identified in EAN Newsletter 48 (see p. 17) and 49 (seep. 9), the European ALARA Network would like to focus workshop n°20 on the application of the optimization principle in interventional radiology and nuclear medicine (new radiopharmaceuticals).

The programme will develop in 4 sessions:

1. Setting the scene and ALARA challenges identified in the fields of interventional radiology and new radiopharmaceuticals;
2. Tools for ALARA;
3. Focus on (new) radiopharmaceuticals;
4. Education and training, culture.

The programme committee endeavours to bring the major European players - such as PODIUM, EFOMP, IOMP - the professional medical associations representing the practitioners, manufacturers and experts on the stage to provide insightful keynotes for the discussions in working groups.

As traditional, a significant part of the EAN Workshop will be devoted to discussions in Working Groups (each participant can participate in one Working Group, to be selected at the registration). The (provisional) topics for discussion by the Working Groups are:

1. The challenges for the optimization of patients AND workers in interventional radiology;
2. What are the ALARA tools available in IR? Usages and usability?
3. What are the elements of a good ALARA culture in (nuclear) medicine?
4. Technical developments in nuclear medicine: how to instill RP from the outset?

The workshop conclusions and recommendations will summarize the main points of the presentations and the discussions held during the Working Groups.

Dr. Fernand Vermeersch
Chairperson of the
European ALARA Network