ALARA for decommissioning and site remediation

The European ALARA Network in collaboration with ISOE

Former EAN workshops on ALARA for decommissioning and site remediation

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Chairman EAN
Content

• Re-visiting the topic of the 1\textsuperscript{st} and the 7\textsuperscript{th} EAN workshop
  – Establishing the state of the art and identify topics that still need further attention

• The EAN network and its activities

http://www.eu-alara.net/
The European ALARA Network

EAN started in 1996

- EAN a legal entity, non-profit organization (since 2005)
- 18 Members (organizations) in Europe
- + working groups
- + active sub-networks (ERPAN, EAN_{NORM}, ...)
- + in relation with other organisations ... Including ICRP!

Objectives are to promote implementation of ALARA in all exposure situations and provide mechanism for exchange/dissemination of ALARA

- Identify and investigate topical issues of common interest to further improve the practical implementation of ALARA

http://www.eu-alara.net/
EAN Activities and outputs

Input
• Information
• Networking
• Workshops
• Survey

Output
• Recommendations
• Guidance
• Return of experience

• EAN Workshops
• Support to European Surveys
• EAN subnetworks
• ALARA Newsletter
• EAN Website
EAN has organized 17 workshops since 1996

**Planned**
- Industry and research
  - Good radiation practices in industry and research, Oxford, 1998
  - Managing internal exposure, Munich, 1999
  - Management of occupational radiological and non-radiological risks: lessons to be learned, Antwerp, 2000
  - Occupational radiological protection control through inspection and self-assessment, Upsalla, 2004
  - Occupational exposure optimisation in the medical and radiopharmaceutical sectors, Madrid, 2002
  - ALARA and the medical sector, Oscarborg, 2011
- Medical
  - Industrial radiography, improvements in radiation protection, Rome, 2001
  - ALARA in industrial radiography: How can it be improved?, Bern, Switzerland 2016
- NDT
  - ALARA and decommissioning Saclay 1997
  - Decommissioning and site remediation, Arnhem, 2003
- Decommissioning
  - Occupational exposure to natural radiation, Augsburg, 2005
  - ALARA in existing exposures situations, Dublin, 2012
  - ALARA issues arising for safety and security of radiation sources and security screening devices, Vienna, 2009 (partim)
  - ALARA in accident and post-accident situations, Lisbon, 2017

**Existing**
- ALARA in existing exposures situations, Dublin, 2012

**Emergency**
- ALARA issues arising for safety and security of radiation sources and security screening devices, Vienna, 2009 (partim)
- ALARA in accident and post-accident situations, Lisbon, 2017
EAN 19th workshop
Innovative ALARA tools
Jointly organized with the PODIUM project (Horizon 2020, PODIUM, CONCERT)
Athens, 26-29 November 2019
Feedback former workshops, recommendations

1st EAN WS, 1997, Saclay
ALARA and decommissioning

Development of tools for dose assessment in complex environments

Need for tools to predict internal exposure

The holistic approach to risk

Risk perception and transparency in decision making

Improve ALARA beyond the nuclear sector, needs for guidance on and decommissioning in the non-nuclear sector

Uniformity in clearance of materials

Site remediation, clear criteria and protocols

http://www.eu-alara.net/
Feedback former workshops, recommendations

- Management of internal exposure
- Integrated risk approach
- Stakeholder involvement in the decision making process
- Inventory of non-nuclear site to be decommissioned/remediated
- External dose prediction tool network and training
- Site characterization tools

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Workshop 18

What will be the recommendations of the 18th Workshop?
Is there an evolution in the field?

Contributions

Your expertise and knowledge

Working group

Resulting in conclusions and recommendations

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Contributions to the workshop

Current workshop contributions:

- Decommissioning of installations in the nuclear sector
- Site remediation
- Characterization
- Dose assessment and prediction, radiological impact
- Optimization
- Stakeholder involvement
- Clearance
- Decommissioning, remediation's in the non-nuclear sector
- Risk management

http://www.eu-alara.net/
Working group themes

How to apply ALARA for workers in decommissioning and site remediation?

How to be ALARA in the context of other risks

The challenges posed by wastes

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Welcome

Thanks to
• ISOE
• Program committee
• Local organization

Welcome and thanks to you all, presenters, contributors and participants

Have a Successful Workshop

http://www.eu-alara.net/