The European ALARA Network
Review of 5th EAN Workshop

Welcome address to
European ALARA Network workshop
ALARA in industrial radiography:
How can it be improved?

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Chairman EAN

Bern, March 14, 2016

http://www.eu-alara.net/
ALARA Network
History and Evolution

- **1996**
  - Cooperation of experts from various European organisations mediated by the European ALARA training course
    - European Support from 1996 to 2004
- **2005**
  - Evolution to a self supporting network
  - EAN a legal entity, non-profit organisation under French law
    - Coordination CEPN, PHE and a group of European experts
  - Evolution from 8 to 20 countries since 1996
EAN objectives

- First
  - ALARA in industry and research
    - Industry → non NPP (ISOE for NPP)

- Later
  - ALARA in the medical field
  - ALARA in NORM-industry

- Future
  - All exposure situations, planned, existing and emergency situations
ALARA Network objectives

- Promote a wider and more uniform implementation of the ALARA principle for the management of worker, public and patient exposures in all exposure situations,

- Provide a focus and a mechanism for the exchange and dissemination of information from practical ALARA experiences

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

ACTIVITIES AND ACHIEVEMENTS
Contacts with other organisations
Networking

Medical field
EFOMP – European Federation of Organisations for Medical Physics
EFRS – the European Federation of Radiographer Societies

Industry
EFNDT – European Federation for Non-Destructive Testing

Special Liaison Organisation to ICRP
Possible committee 4 working group on NDT
EAN Activities and outputs

- EAN Workshops
- Support to European Surveys
- EAN working groups
- ALARA Newsletter
- EAN Website
Workshops

European ALARA Network

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 radio-pharmaceutical sectors, Madrid, 2002
ALARA and the medical sector, Oscarborg, 2011
Industrial radiography, improvements in radiation protection, Rome, 2001
ALARA in industrial radiography: How can it be improved?, Bern, Switzerland 2016
ALARA and decommissioning Saclay 1997
Decommissioning and site remediation, Arnhem, 2003

Medical

Occupational exposure optimisation in the medical and radio-pharmaceutical sectors, Madrid, 2002
ALARA and the medical sector, Oscarborg, 2011

NDT

Industrial radiography, improvements in radiation protection, Rome, 2001
ALARA in industrial radiography: How can it be improved?, Bern, Switzerland 2016

decommissioning

ALARA and decommissioning Saclay 1997
Decommissioning and site remediation, Arnhem, 2003

Existing

Occupational exposure to natural radiation, Augsburg, 2005
ALARA in existing exposures situations, Dublin, 2012
Possible subject on evolution in the NORM industry

Emergency

ALARA issues arising for safety and security of radiation sources and security screening devices, Vienna, 2009 (partim)
17th EAN workshop 2017 Jointly with NERIS on optimisation in accident and post-accident situations
Review of 5th EAN Workshop

- 5th EAN workshop, 2001, specifically considered ALARA in industrial radiography.
- Working group recommendations
Working Group Issues – Equipment

- Manufacturers need to liaise closely with users and regulators to ensure that designs are optimised.

- There is a need for an active detection system integral to gamma radiography source containers to indicate when the source is not fully retracted.
  - This will not be easy, but the potential benefits are large.

- The NDT industry is very competitive: NDT companies may not invest unless there are commercial incentives from Clients as well as supporting regulatory pressures.
Incident reporting needs to be encouraged to ensure that lessons are learnt. This requires an effective reporting and feedback mechanism that protect the anonymity of persons and organisations.

Where serious accidents occur, detailed investigations to identify the underlying causes should be encouraged.

A unified categorisation system should be developed.

Make feedback available in the local language.

In addition, there is a need to learn from good practices. The EAN newsletter provides one means of doing this but there is scope for more.
There is a case for harmonised standards of training for industrial radiographers and supervisors within Europe.

- This should include periodic refresher training.

- Accreditation or certification should be introduced, for:
  - Radiographers and supervisors
  - Trainers and Training Centres

- Incident feedback should be a part of the training.

- Training should include practical exercises, such as source recovery.
Working Group Issues – Safety Culture

- There is a need to encourage better work planning and dose management
- Regulatory bodies can influence safety culture and they must have (and use) appropriate enforcement powers
- Licensing of radiography companies should include requirements for radiographer training
- Clients are potentially very influential on the standard of radiological safety. There is a need to raise their awareness and to also remind them of their responsibilities for safety during industrial radiography
16th European ALARA Network Workshop
Working group topics

5th Workshop Recommendations
- Equipment
- Accidents
- Training
- Safety culture

Meanwhile
- Industrial radiography has remained an area of concern
- Levels of radiation exposure received
- The number and magnitude of accidental exposures
- Equipment
- Some significant developments in gamma radiography equipment
- Accidents
- OTHEA website
- Training?
- Safety Culture?

16th Workshop
- How did we progress and what can we improve
- Radiography equipment
- Learning from radiography accidents
- Training and safety culture
- The ALARA process in radiography
Thanks to

Programme Committee
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Thank you and have a Successful Workshop