

## **15.2 Implementing ALARA approach together: the in-house feedback exchange systems and outside networks (Part 2)**

# International System on Occupational Exposure (ISOE)

ISOE works since 30 years now with an increasing success

During the workshops in one world region the best presentations are distinguished and invited to the next workshops in the other regions

We can say that ISOE merges **top down and bottom-up** approaches and that even if the data base is the glue:

*Personal contacts with other professional facing the same problems are considered essential by most participants*

ISOE is a world wide sector-specific network; financially supported by the NPP's and regulatory bodies and IAEA support for non OECD countries

# European ALARA Network (EAN)

It has been set up in 1996 following an initiative from the European Commission

It relies on voluntary participation from individuals and institutions to improving occupational exposure in industry, research, medicine, NORM industries...

The EAN main tools are the Newsletter and the workshops

Widen to patient - public exposures in 2005

Totally **bottom up**

# EAN Objectives

To maintain and develop competences in radiation protection, with special emphasis on optimization for all types of exposures in routine operations and emergency situations.

To contribute to harmonization of radiation protection policies and practices, particularly concerning optimization, at regulatory and operational levels.

To cover all types of practices within the different sectors.

To cover radiation protection themes relevant to all sectors, as well as themes specific to one or more sector(s).

- Contrarily to ISOE it is regional self sustainable multi-sectors network (open to many stakeholders).

# The European ALARA Newsletter



European ALARA Network Issue 22 - February 2008  
<http://www.alara.eu>

## European ALARA Newsletter

### Editorial

2008 begins with a lot of important news for the European ALARA Network.

First of all, it is time to announce the election of our new Chairperson, Annemarie Schmitt-Hannig, who was nominated during the last Administrative Board meeting, in December 2007. As before, CEPN will continue the general coordination of the network, with the assistance of HPA. Together, we will pursue our efforts to make EAN more and more active and influential on the radiological protection scene.

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#### Editorial Board

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But every rose has its thorn, and the new appointment coincides, and indeed has been brought about, by Christian Lefaire's retirement. It is time to pay tribute to Christian's talent and enthusiasm in launching and then driving EAN since 1996. He spared no effort to promote the implementation of the ALARA principle throughout Europe in the nuclear, industrial and medical fields, and his contribution to the cause of restricting occupational doses has been very significant. Hopefully, he has decided not to devote the rest of his life to gardening or bird watching, and will continue to help us in the development of ALARA networking throughout the world (Asia, Africa, South America, etc.). For these reasons, he remains an honorary member of the EAN Steering Group and no doubt we will continue to meet him whenever the optimisation of radiological protection is still at stake.

The third main EAN event is the organisation of the 11<sup>th</sup> Workshop on "ALARA in waste management" in Athens (Greece, 9-11 April 2008). Radioactive waste management has always been considered as the Achilles' heel of nuclear activities, and is increasingly of concern in other sectors such as nuclear medicine and NORM. That is why it is very important for operators from all sectors to demonstrate their commitment to applying ALARA for the characterisation, measurement, control, packaging, disposal and final storage of radioactive waste. As well as responding to the immediate concerns regarding radioactive waste, implementing ALARA in waste management is also an opportunity to integrate this activity - often seen as a poor relation - into the main operational and decisional chains. Only by doing so, can we hope to achieve real optimisation of doses, for both workers and the public, now and in the future.

2008 is also an olympic year; we have the ALARA torch in our hands, and must take it a little bit further. It is a real challenge.

A. Schmitt Hannig, EAN Chairperson  
 P. Crostal, EAN Coordinator  
 P. Shaw, EAN Secretary

Twice a year EAN produces an ALARA Newsletter, a link between all those concerned with ALARA, health physicists, managers, radiation protection organisations, research bodies, regulatory bodies, trade union representatives and medical doctors.

This Newsletter intends to present evolution of regulations, results of research, analyses of dosimetry data, authorities and utilities ALARA programmes, available ALARA tools, lessons learnt from incidents, and recommendations coming from the panel sessions of the EAN Workshops.

Each issue includes one or two feature articles, as well as experts' viewpoints and ALARA information

Coordinated by CEPN

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# The EAN workshops

European ALARA Network  
8<sup>th</sup> Workshop

Threatened Radiological Protection Context  
through Inspection and Self-assessment  
Osaka, Japan: 22-24 September 2004

7<sup>th</sup> European ALARA Network Workshop  
Decommissioning and Site Remediation  
Amstelveen, The Netherlands  
October 29 - 31, 2003

NRC cepn

2<sup>nd</sup> EUROPEAN ALARA NETWORK WORKSHOP on  
GOOD RADIATION PRACTICES  
in INDUSTRY and RESEARCH  
NRPB - UK  
November 23-25, 1998

NRPB cepn

4<sup>th</sup> European ALARA Network Workshop

Management of Occupational Radiological and non Radiological Risks - Lessons to be learned  
Belgium, Antwerp, Radisson SAS Hotel  
November 20 - 22, 2000

cepn SCK CEN NRPB

Sponsored by the European Commission "Radiation Protection"

5<sup>th</sup> EUROPEAN ALARA NETWORK WORKSHOP on  
Industrial Radiography: Improvements in Radiation Protection  
Rome - Italy  
Palazzo Rospigliosi  
October 17 - 19, 2001

cepn ANPA  
Italian Environmental Protection Agency

Sponsored by the European Commission "Radiation Protection"

12<sup>th</sup> European ALARA Network Workshop:  
„ALARA Issue arising for Safety and Security of Radiation Sources and Security Screening Devices“  
Vienna, Austria  
21-23 October 2009

1<sup>st</sup> European ALARA Network Workshop  
ALARA and the medical sector  
Osloberg Fortress, Norway  
7-10<sup>th</sup> June 2011  
First announcement  
<http://alara2011.alara.eu>

Morten Skjoldnes

11<sup>th</sup> Workshop:  
ALARA in Radioactive Waste Management  
ATHENS, GREECE  
APRIL 09 - 11, 2008

GAEC

14<sup>th</sup> European ALARA Network Workshop  
ALARA in Existing Exposure Situations  
Wroclaw, Poland (1<sup>st</sup> of 2 workshops)  
WROCLAW, POLAND  
14-15 November 2007

European ALARA Network



ALARA and DECOMMISSIONING  
Saçlıy - FRANCE  
December 1-3, 1997

cepn instn NRPB

9<sup>th</sup> European ALARA Network Workshop on  
"Occupational Exposure to Natural Radiation"  
Augsburg, Germany  
October 18 - 21, 2002

cepn

3<sup>rd</sup> EUROPEAN ALARA NETWORK WORKSHOP on  
MANAGING INTERNAL EXPOSURE  
Neuherberg - GERMAN  
NOVEMBER 15-18, 19

cepn NRPB

Sponsored by the European Commission "Radiation Protection"

6<sup>th</sup> EUROPEAN ALARA NETWORK WORKSHOP  
Occupational Exposure Optimization in the Medical Field and Radiopharmaceutical Industry  
Madrid, Spain  
October 23-25, 2002

CSN  
Cicemat

Sponsored by the European Commission "Radiation Protection"

10<sup>th</sup> European ALARA Network Workshop on  
"Experience and new developments in implementing ALARA in occupational, public and patient exposures"  
September 12 - 15, 2006  
Czech Republic  
Prague, Břichovo 7, 115 19

SUŠE  
Marek Ševčík  
Radiation Physics

# The EAN workshops

The annual Workshops topics are selected :

- Where improvements are possible
- Dealing with exposures management
- And existing possibilities of actions to be implemented at national or European levels

Few tens of participants

Conclusions and about 10 recommendations per workshop addressed to EU, ICRP, IAEA, National Regulatory Authorities, Operators, Workers trainers, and so on ....

# Let's try going to EAN through ORPNET

## Go to Google

Ask for IAEA, ORPNET

Go to ORPNET

Ask for EAN

Go to workshops

Select one of them

Have a look to the program and downloadable papers

Download summary and recommendations

Back to the main menu

Go to lessons learned (partly extract from OTHEA, but also from many other countries)

## GO back to ORPNET

And introduce quickly the other ALARA networks

RECAN  
ARAN,  
REPROLAM (in Spanish),

AFRAN  
EMAN  
ISEMIR

Regional European and Central Asian ALARA Network  
Asia Regional ALARA Network  
REd de optimización de Protección Radiológica  
Ocupacional en Latino América  
AFRica ALARA Network  
European Medical ALARA Network  
International System on Occupational Exposure in Medicine,  
Industry and Research



## ORPNET is also a useful tool

With a search engine *Google like* but going only into the documents published by the different networks and organizations.

This allows to share more quickly what is issued in the different networks : it is a kind of network of networks.

There is also, in two languages (English and French a FAQ (frequently ask questions) on optimization with their answers; they cover more than 70 questions.

# Emergence of ORPNET

Emergence of these networks has been made possible because of the context evolution during the 90's and beginning of the 21<sup>st</sup> Century

Development of standards (ICRP, IAEA, EC...)

- - The concept of ALARA and how to develop it (end of the last century)

Socio political evolutions

- - *“the involvement of stakeholders is seen as an important input to the optimization process”* because it *“reinforces the safety culture and introduces the necessary flexibility in the management of the radiological risk that is needed to achieve more effective and sustainable decisions”*. ICRP 101
- - Fourth word *Time, distance, shielding, Stakeholders commitment*

Technological evolutions

- - New communication means web, emails

# Lessons learned from these networks

Personal links and Communication	Enthusiasm	Flexibility	Collective efficiency	Constraints and limits of the networks
Opportunities for communication between individuals, not institutions	A real keyword	Much more than any other type of organisation between institution	Differences lead to solutions more generic	Difficulties for involving stakeholders due to their availability and for financial reasons
	To put forward for discussion the real problems	No permission has to be requested	Solutions with more chance of sustainability	To find resources and time
	To try to find together solutions <hr/> Through actions favouring a bottom-up approach	No formal rules have to be followed. <hr/> Initiatives are easily taken		To find an optimal size for the network, allowing direct contacts through meetings and workshops

# Conclusions

During the nineties and later on, as an answer to the evolution of socio political demand, and thanks to the technological communication means, a new generation of radiation protection networks has grown up.

They are set up on different geographical bases from worldwide networks to very local ones; they sometimes cover a specific topic (training for example) or a specific domain (medical for example), they are more often multi-topic and multi-sectors; they always rely on communication and exchanges through direct contacts, most often complemented by emails, web sites and forum...

## Annex EAN Impacts examples (1)

A research project on optimization of radiological protection of internal exposure (W1 & 3)

A European survey for the setting up of a new European system dealing with radiological incidents follow up (W2)

Following a W9 recommendation. ICRP RP06 paragraph 133 is directly related to the results of the research project (dose coefficients and low radon emanation).

All sub networks have been set up (or will be) after W recommendations.

## Annex Impacts examples (2)

One of the most interesting impact has been the setting up by the Norwegian regulatory body of a long term national plan for improving radiological protection in implementing the recommendations from the previous EAN workshops.

Many countries have set up working groups between regulatory bodies and other stakeholders after W5 and W6 workshops

After W5, EDF, the French nuclear utility has promoted the development of an alarm device called “sentinelle” for advising worker when the source is not back in the container.