

European Radiation Protection Authorities Network

(ERPAN)

Dr Nicolas Stritt, Secretary
Dr Stephen Fennell, Chairperson

European ALARA Network (EAN)

8th EAN Workshop (Uppsala, Sweden 2004)

- Occupational Radiological Control through Inspection and Self-Assessment



“National Authorities should promote communication between different National Regulatory Authorities”

- Exchange Information on licensing & inspection
- Joint inspections
- Network of contacts

European Radiation Protection Authorities Network (ERPAN)

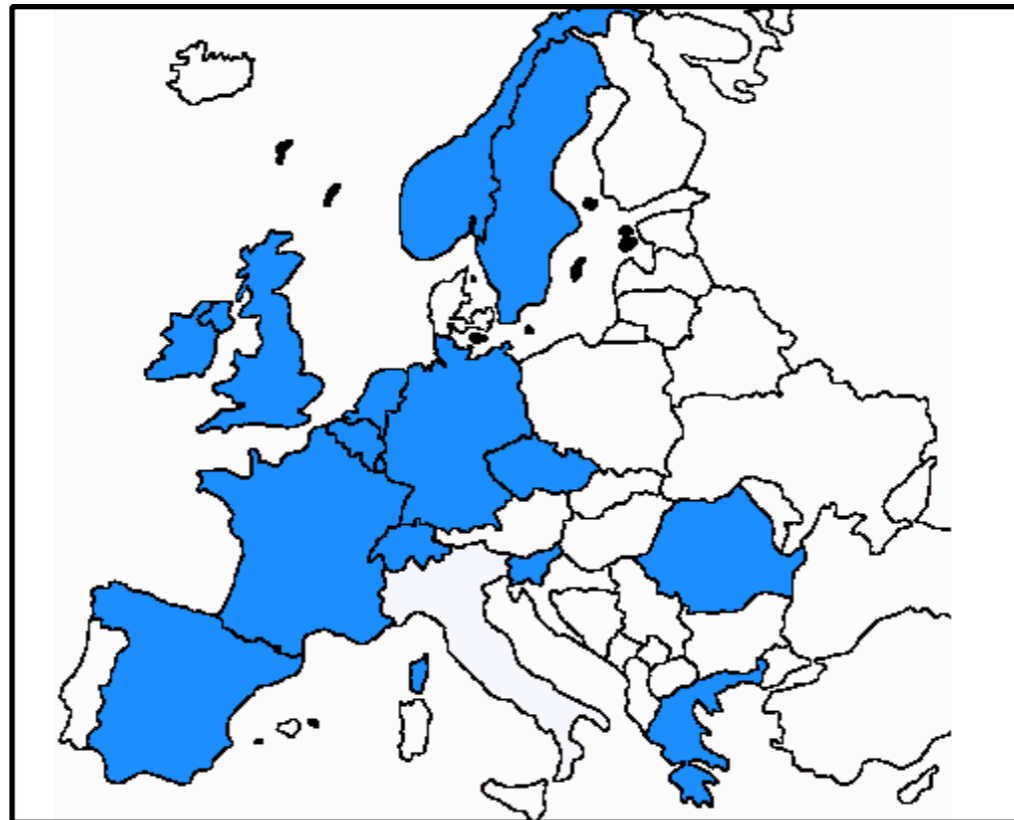
- Established in December **2005**
- First meeting June **2006**
- **Terms of Reference** adopted
- Representatives from **17** Regulatory Managers of inspection/licensing functions, technical point of view



ERPAN members

15 countries members of the ERPAN network

Belgium	<u>Ireland</u>	Slovenia
Czech Republic	Luxembourg	Spain
France	Netherlands	Sweden
Germany	Norway	<u>Switzerland</u>
Greece	Romania	United Kingdom



Purpose of ERPAN

- **Promote communication** between national regulatory authorities, including the exchange of
 - information
 - requirements and
 - experiences
- on the **process of authorisation** and **inspection/audits** methods employed in European countries in order to promote the **ALARA** principal
- **Improve the operational efficiency** of radiation control across Europe while recognising the different regulatory systems within the various countries

Scope of ERPAN

All radiation protection topics relevant to European radiation protection authorities relating mainly to **non-nuclear** users of ionising radiation such as

- **Research, education**
- **Medical** application
- **Industrial** application
- as well as **NORM**



Examples of topics discussed:

- Inspection and investigation practices
- Joint inspections
- Training of inspectors
- Authorisation processes
- Reporting systems
- Regulatory communication



Operation of ERPAN

- Meets annually in Paris in form of presentations, discussions exchange
- Persons involved are managers of inspection/licensing functions
 - Discussion on technical, practical issues
 - No direct strategic discussion
 - No harmonisation purpose, but focuses on optimisation of practice
- Open/informal discussion and exchange
- Promotes:
 - joint/witnessed inspections
 - sharing problems/experiences/solutions
- Discussion, survey through email outside meeting
- No external financial support

Meetings of ERPAN

June 2006 ERPAN meeting

- Terms of reference
- Inspection methodology
- Joint inspections
- HASS Directive
- Incident and lesson learned

June 2007 ERPAN meeting

- Training of inspectors
- Web-based authorisation
- EUTERP
- Stakeholder engagement
- ISO accreditation for inspection body
- Novel approaches
- Incident and lesson learned

Inaugural Meeting of the European Radiation Protection Authorities Network (ERPAN)

INSPECTIONS


TYPES OF INSPECTIONS

INDUSTRIAL LABORATORIES

- There are 500 industrial radiography applications
- Prior to notification inspections, on a two-year basis
- Parameters checked: radiation protection, safe use, operation, handling, transport, storage and record keeping of radiation sources.

LABORATORIES OF RESEARCH & EDUCATION

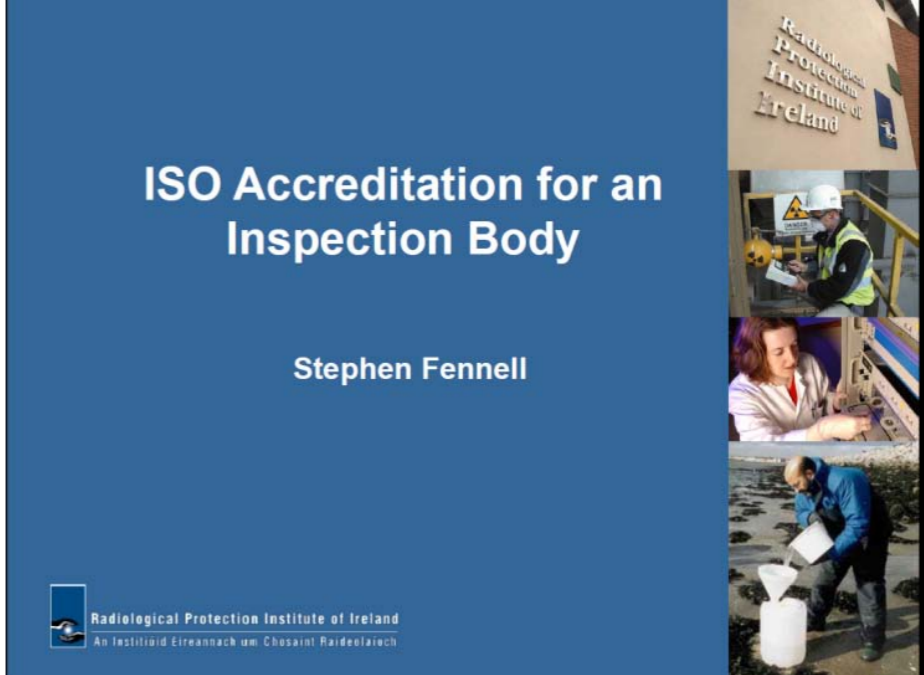
Prior to notification inspections, on a two-year basis in 180 labs

 GAEC
GREEK ATOMIC ENERGY COMMISSION

www.eeae.gr

ISO Accreditation for an Inspection Body

Stephen Fennell



Radiological Protection Institute of Ireland

An Institiúid Eireannach um Chosaint Raidheolaíoch

Meetings of ERPAN

June 2008 ERPAN meeting

- Nuclear medicine extremity doses
- **ICSD warehouse fire**
- accidental tritium release
- over-exposure during NDT
- **enforcement & prosecution**



May 2009 ERPAN meeting

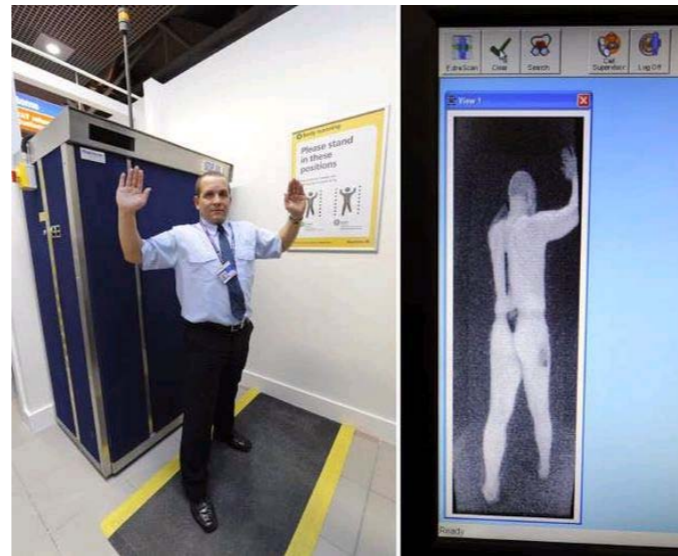
- Inspector training
- **handheld dental X-ray units**
- **mobile PET-CT**
- BSS & ICRP
- joint inspections
- Incident and lesson learned



Meetings of ERPAN

June 2010 ERPAN meeting

- HERCA presentation
- RECAST
- NORM new guidance
- Dose constraints
- Kr-85 lamps
- Security screening
- Iodine therapy, waste, radioprotection



Mai 2011 ERPAN meeting

- Involvement of medical physicists in imaging dep.
- Dose to extremities in nuclear medicine
- Result of ERPAN survey
- Merge of regulatory bodies SKI
- ICRP statement on effects of radiation on the eye
- Inspection philosophy, unannounced inspections

Health and Safety Executive 

ERPAN Meeting
23rd May 2011, CEPN Paris

 **ICRP Statement on Tissue**
Reactions April 2011
new dose limits
(personal views for discussion)

Gareth Thomas
HM Specialist Inspector of Health and Safety (Radiation)
Tel : ++ 44 29 2026 3109 gareth.thomas@hse.qsi.gov.uk
www.hse.gov.uk/radiation

Email survey and discussions

- Use of Cyberknife in Europe
- Reporting compliance on inspection reports
- Guidance on nuclear medicine source deliveries
- Personal dosimetry & lead apron requirements in dental radiology
- Use of lead aprons in dental radiology
- Handheld NDT and dental X-ray units
- Disposal of waste from nuclear medicine departments

Email survey and discussions

- Implementation of HASS Directive
- Flourine-18 biomedical trials
- Kr-85 and tritium sources
- QA requirement/programmes in medical radiology departments
- Mobile electron radiotherapy units
- Inspection of radiotherapy facilities
- Medical physics expert (MPE) requirements
- Dose constraints – survey of their application across Europe

Joint Ventures, joint inspections/audits

- Annual leave entitlements for radiographers & radiologists
- Ireland/UK – PET/CT training course for inspectors
- Belgium/Germany – inspection of Co-60 irradiator in Bavaria
- Greece/Ireland – “How to Inspect” training course
- Greece/Ireland – inspection of nuclear medicine department
- Greece/Ireland – ISO 17020 inspection standard
- Ireland/Luxemburg – bilateral visits to regulatory authority

Joint Ventures, joint inspection/audit

- Netherlands/Belgium – regulatory authorities meeting
- Netherlands/Belgium – Qualified Expert meeting
- Switzerland/France – inspection of radiology department
- France/Switzerland – inspection of radio-oncology department
- France/Switzerland – inspection of nuclear medicine department
- Ireland/UK – joint inspections
- UK/Ireland – lecture on remediation post warehouse fire

Mandate

- Mandate from EAN to perform survey on different topics
- Dose constraint survey presented at ICRP Symposium in Washington USA
- IAEA Expert Mission to South Africa to assist in the creation of a network of regulatory authorities (FNRBA) for the continent of Africa
- Answer, on new guidance from IAEA, ICRP
- Etc.
- Publication, survey, recommendation published on EAN/ERPAN Web

Why does it work ?

- involves the right people
- focuses on practical, operational issues
- face to face meeting every year – personal links
- meeting facilities / lunches provided (ASN, France)
- supported (indirectly) by regulatory authorities
- questions can be asked in a simple / unofficial manner
- allows surveys to be carried out quickly
- enthusiastic and committed participants

Difference between ERPAN / HERCA

	ERPAN	HERCA
Network type	Sub-network of EAN	Stand alone network
Terms of Reference	Yes	Yes
Scope	Radiation Protection	Radiation Protection
Website	www.eu-alara.net (restricted)	www.herca.org
Level	Practical, operational level	Strategic level
Purpose	Sharing of practical experiences, optimization of practice	Harmonization across Europe, influencing policy
Members	Managers of authorization and inspection programs	Heads of regulatory authorities
Members	17	46
EC participation	No	Yes

Difference between ERPAN / HERCA

	ERPAN	HERCA
Confidentiality	Discussions restricted to members	Open discussions
Working methods	Email surveys. Very fast answers, quick response, informal discussions	Working groups. More formal processes
Output	Summary of survey findings circulated to members. Simple / unofficial manner	Recommendation & press releases. Official statements on website
Meeting frequency	Annually (Paris)	Bi-annually (various locations)

Thanks for your attention

European Radiation Protection Authorities Network (ERPAN)

