



European ALARA Network

14th European ALARA Network Workshop



Radiological Protection Institute of Ireland  
An Institiúid Éireannach um Chosaint Radheolaíoch

# ALARA in Existing Exposure Situations

Dublin, Ireland | 4 – 6 September 2012

FIRST ANNOUNCEMENT

## CONCLUSIONS AND RECOMMENDATIONS

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European ALARA Network

# EAN WORKSHOPS

## Objectives

- Exchange feedback 😊
  - Different stakeholders
- Aid the implementation of ALARA in practice
- Identify issues for further research and developments
- Provide conclusions and recommendations

## Aims of the 14<sup>th</sup> Workshop

- To consider how the ALARA principle can be applied to the whole range of existing exposure situations, including
  - the wider principles and strategies that might be adopted
  - specific methods for implementing ALARA in practice
- To bring together stakeholders
  - to exchange practical ideas and experience
  - to identify further improvements
  - to produce recommendations
- To **NOT** have a series of mini-workshops (Rn, NORM, etc.)



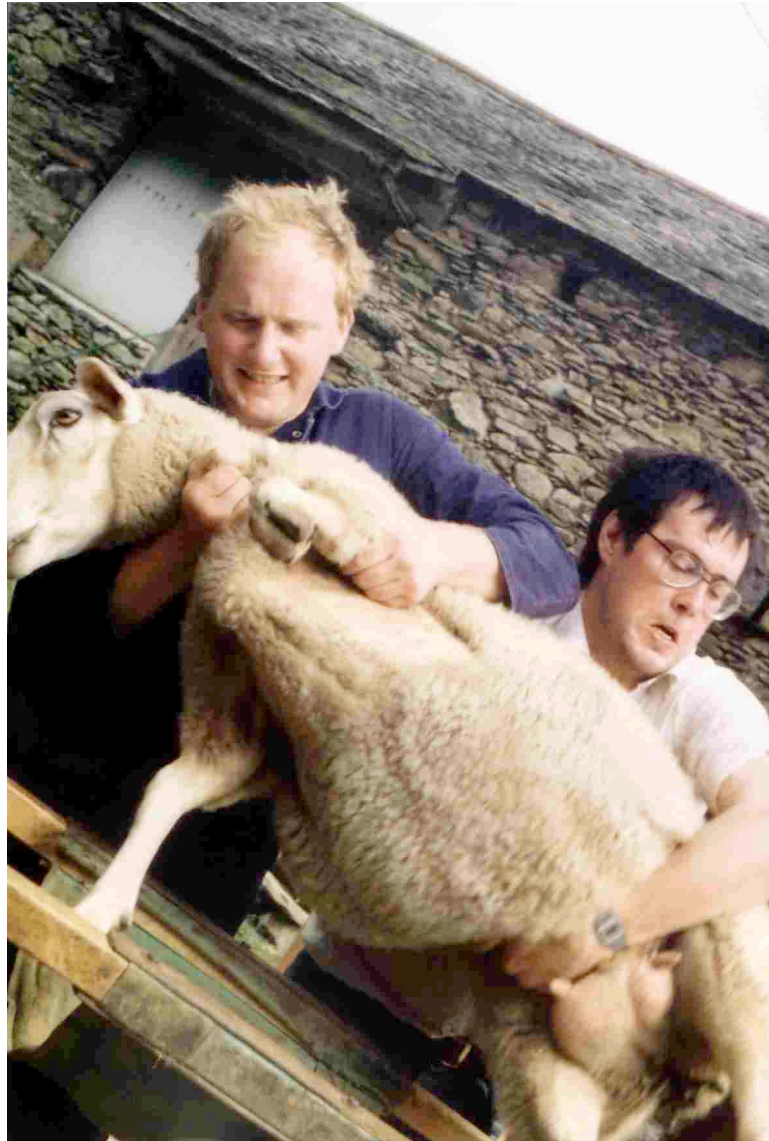
# Issues and themes from the Workshop

## Oral Presentations





European ALARA Network



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



# Issues and themes from the Workshop

## Oral Presentations



# 1. Characteristics of Existing ES

- Diverse sources – natural and man-made
- Wide range of doses (and distributions)
  - From 0.01 to 1000+ mSv/y !
  - Public and occupational
- Wide range of actors and stakeholders
  - ALARA requires action at all levels
- Diverse “mechanisms of control”
  - not just regulation
- **Very diverse potential for ALARA**
  - From cosmic rays (low) to Rn (high)

## 2. Which exposure situation?

- EXISTING or (treated as) PLANNED?
  - Depending on the dose? (eg Rn at work)
  - Depending on the Bq/g? (eg NORM)
  - Not based on the timeline, but to define what is “normal”, and what should be controlled?
    - interface with exclusion/exemption (“end of story”)?
- NORM residues in building materials - an Existing ES
  - For residues not yet used?
  - Requiring prior authorisation?



### 3. ICRP → BSS (→ “control”)?

- Reference Level → Action Level?
  - ALARA always → ALARA above?

But maybe...

- Principle → Practice?
- “Controllability” → “Enforceability” ?

And...

- *“use the most practical mechanism of control...”*
- *“full control (ALARA?) may take a long time...”*

## 4. Stakeholder engagement

- Involvement at all levels (and consider all hazards)
  - From start to finish
- Dignity and respect - for individuals and local cultures
- Focus on shared ethics and values
  - Different for different exposure situations?
- Clear and repeated 2-way communications/feedback
  - Decoding the message!
- Self-help?
  - cannot be forced on people
  - cannot achieve ALARA by itself

## 5. Other issues

- Heterogenous contamination
  - Probabilistic exposures, deterministic effects
- Interface with existing systems and controls
  - contaminated land (soil) criteria
  - industrial hygiene in NORM industries
  - Restrictions on aircrew
- Post-emergency situations
  - Preparing for and managing the transition
  - Establishing coherent reference levels (foodstuffs, etc)
- Health economics (eg radon), “the new CBA”?
- Radon – are there alternatives to remediation?

## “Soft boundaries?”

- Reference levels need to be used with care
  - Interpreted as a LIMIT
  - Create a “step change”?
  - Too low: no possibility of “success”
  - Can be difficult to measure/verify
    - eg below 1 mSv
    - Based on pessimistic scenarios
  - Of little value? (aircrew?)
- Maybe need more emphasis on the process rather than the end-point?

# RECOMMENDATIONS



## Dissemination of Workshop conclusions

- EAN dissemination
  - Website and Newsletter
    - PAPERS NEEDED!
  - To partner organisations, societies and networks
  - National Journals (UK, France, Other?)
- Further actions? Follow up?

# Thank you

# 15<sup>th</sup> EAN Workshop on ALARA Culture

CROATIA

Rovinj, Istria

12-15 May 2014

