

# ALARA NEWS AND ALARA INFORMATION IN EAN MEMBERS COUNTRIES

*This document summarized the main events dealing with ALARA in EAN Members countries discussed at the occasion of the 9<sup>th</sup> June 2015 Steering Group meeting.* 

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# BELGIUM – MR. F. VERMEERSCH (SCK•CEN)

#### Ethical issues in RP on 19 June 2015 in Brussel by the ABR-BVS

- a. Feedback from the EU seminar 18 November 2014
- b. Ethical lessons from Fukushima
- c. Ethical issues in medical exposures
- d. Second European workshop on the ethical dimensions of the radiological protection system (Madrid, 4-6 February 2015: IRPA, SFRP, SPR ICRP)

#### Other news from Belgium

- a. General news
  - i. Transport of spent fuel to La Hague
  - ii. Review process for D3/T2 still going on
  - iii. Optimised use of CT scanners discussed at HERCA
  - iv. New guidance on nuclear installations classe I
- b. Incidents
  - v. Overexposure in industrial radiography 3x legal dose
    Analysis showed no apparent reason for the overexposure → medical follow
    up
  - vi. Co-60 source stuck outside the container during gammagraphy
    - Measurements were performed inside a bunker  $\rightarrow$  no exposure to worker A protocol to retrieve the source was established  $\rightarrow$  successful retrieval of the source

*Cause: defect in the system to move the source in radiation position. Source moved on the dusty floor causing the automatic retraction system to get stuck* 

- vii. Interlock system deactivated in a cyclotron system Worker enters the cyclotron room  $\rightarrow$  dosis normal, no dosis exceeding limits
- viii. Xe release in an isotope production facility Leak in a circuit leading to exceed of the daily release limit. System restored  $\rightarrow$  3.4% of the yearly release limit
  - *ix.* During testing of a gammagraphy container an Ir-192 source dropped out of the container

A worker and an inspector of the agency and were exposed to a level of 2 mSv.  $\Box$ 

# NORWAY – MR. G. SAXEBOL (NRPA)

#### Main topics:

- Focus on representative doses in medical sector
- Interaction with Hospital RIS/PACS systems to extract demographic data regarding patient dose data in radiology/nuclear medicine/radiation therapy
- Survey of education in RP for 11 different health professionals
  - Not so good
  - $\circ\,$  Large variations in content and volume of RP between groups and educational institutions.
- Meeting with Health Professional Societies and Educational institutions regarding RP education (level, volume, content, quality)
- Inspection of all hospitals/institutions performing cardiological interventions regarding RP and ALARA in particular.
- Substitution of all gamma-based blood-irradiators with X-ray systems completed (11)
- Survey of possible substitution of gamma-sources in industrial radiography.
- Test of pilot of WEB based inspections in industrial radiography will be reported in ERPAN meeting.

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- $\circ$  Efficient
- Cost-effective
- Welcomed by the "clients"
- Big and efficient impact on companies to update procedures, registration obligations, improve awareness on RP.

### SWITZERLAND - MR. N. STRITT (FOPH)

#### **Radium action plan**

Radium (226) luminescent painting was used in Switzerland between 1920 and 1960 in the watch industry for needles and frame. This work was done before the radiation protection law enters into force. After the 70, the use of radium was prohibited in the watch industry and replaced with tritium or with other no radioactive techniques.

The watch industrial sector was controlled quite carefully and the regulatory body issued licenses. Remediations of polluted sites were also performed. However some work and manipulation of radium substances before the 60ties were also performed not only in industrial sites, but also in private houses. At that time traces of radium were low and there was no need to search and remediate systematically these houses.

In the beginning of 2014, the found of some contaminated area with radium in an construction site for a new road change the perception of the population and the media about this risk. The media did some research to see were this radium could come from. They found lists of private accommodations / houses in federal archive, which mentioned that work with radium have been done in it.

The media published all these addresses online and in newspapers and the population asked a lot of question. The regulatory bodies were obliged to performed measurements on site to reassure the population. As the knowledge and fear of the population was increasing, the politics ask the regulatory body (Swiss federal office of public health and the SUVA) to react to solve this problem.

The Swiss federal Office of Public Health decided to launch a radium action plan in order to systematically search, find, measure and remediate sites where contamination is still present. This action plan will last from 2015 to 2020 until all potentially contaminated locations are found and remediated if necessary. The goal of this action plan is to remediate all contaminated sites and to be sure that no one in the population received an effective dose greater than 1 mSv due to radium. The financing of this action plan was approved by the government and the plan has now started. Measurements in several cities have been performed and first remediations of polluted houses are under way.

#### Swiss radiation protection legislation

The current Swiss radiation protection legislation is based on the recommendations ICRP 60, which have been replaced in 2007 by ICRP 103 [1]. Switzerland has started the transposition of the new version of the ICRP 103 and the EURATOM BSS into its national law. Ten radiation protection ordinances are being revised. The process of changing the legislation started in 2012, the first consultation of the federal office (justice, finance, personal, etc.) was launched in November 2014. The consultation of all stakeholders should begin in Summer 2015 after taking into account all the remarks receive during the first consultation and the last consultation of the office will start in the middle of 2016. Finally, the revised legislation should, according to plan, come into force in the end of 2016.  $\Box$ 

# UNITED KINGDOM - MR. P. SHAW (PHE)

(There is very little to report from the UK: the UK general elections caused a temporary halt to Government-related publications, which will now resume).

- 1. PHE undertakes radiation safety surveys for manufacturers of mobile security inspection systems, and the reports are sometimes requested by National Authorities as part of the approval process. Recently we have been sent a copy of a report (for a lorry-mounted linear accelerator inspection system) submitted to the Turkish authorities, which is **not** genuine it looks like a PHE report, and contains the PHE logo, but has had different text pasted into it. The suppliers are investigating; however, in the meantime if you have any questions about the authenticity of a PHE report please contact Peter Shaw.
- 2. Four education providers have been named as partners in the **National College for** Nuclear, which is a key part of the government's strategy to address a future national skills shortage in the nuclear industry, and is a partnership between Lakes College, Sellafield Ltd and the University of Cumbria (SRP Affiliate), which will create the Northern hub. More details can be found at: https://srp-uk.org/news/article/74/national-college-for-nuclear-collaboration-to-combat-future-national-skills-shortage#sthash.Yohq7Kmb.dpuf. ■

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