

2ND ANNUAL WORKSHOP – SIMS & IRELAND LOCAL STAKEHOLDER PANEL

8 September 2026, at 9-10 in Dublin

Moderators:

Erika Holt (VTT, PMO) & Mikel Dieguez (Enresa)



Co-funded by the European Union under Grant Agreement n° 101166718

SIMS/IRELAND STAKEHOLDER PANELLISTS – MONDAY MORNING

- **Gianfranco Brunetti**, Head of Unit “Nuclear Energy, Nuclear Waste and Decommissioning”, European Commission, Luxembourg
- **Felicia Dragolici**, Radioactive Waste Management Specialist, International Atomic Energy Agency, Vienna
- **David Fenton**, Senior Scientist, Ireland Environmental Protection Agency (regulator)
- **Ruairi O’Donnell**, Radiation Protection Advisor, University College Dublin
- **Geraldine O’Reilly**, Chief Physicist, Head of Department of Medical Physics & Bioengineering, St. James’s Hospital, Dublin



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EU energy policy

European Commission – Directorate-General for Energy

Energy efficiency

Markets and consumers

Infrastructure

Energy security

International cooperation

Clean energy transition initiatives

Renewable energy

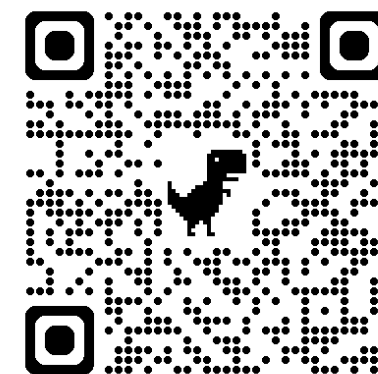
EU's energy system

Nuclear energy

Carbon management and fossil fuels

Research and technology

Funding and financing



- **Developing international safety standards, technical guidance and good practices** for the safe management of radioactive waste, from generation to disposal.
- **Supporting Member States in strengthening national radioactive waste management programmes**, including strategies, infrastructure and technical capabilities.
- **Providing technical assistance and capacity building** through expert missions, workshops, training, fellowships and scientific visits.
- **Facilitating international and regional cooperation and knowledge sharing**, including the exchange of experience, technologies and good practices.
- **Addressing specific radioactive waste management challenges**, including legacy waste, disused sealed radioactive sources, waste characterization, processing, storage and disposal.
- **Promoting sustainable national capacity and transfer of expertise**, including cooperation and experience sharing among Member States.

Publications, Coordinated Research Projects, Databases & Benchmarking systems, Training courses & Workshops, Peer review missions, Networks & e-Tools

- Established in 1957
- 183 Member States
- ~2,500 multidisciplinary professional & support staff from more than 150 countries

IAEA Statute

“....accelerate & enlarge the contribution of atomic energy to peace, health and prosperity....”



Environmental Protection Agency



- Established in 1993 as an **independent statutory body** under the Environmental Protection Agency Act, 1992
- **The Radiological Protection (Miscellaneous Provisions) Act 2014** provides for the EPA to be the Competent Authority in Ireland for radiation protection
- **EPA's purpose** - to protect, improve and restore our environment through regulation, scientific knowledge and working with others
- **EPA's vision for Ireland** - we live sustainably in a healthy environment that is valued and protected by all

Radiation Protection Regulation



The regulation of practices using sources of ionising radiation in Ireland is managed by the EPA's **Radiation Protection Regulation Section (RPR) team**.

What are the current issues for Ireland as a SIMS?

- Ireland hosted IAEA IRRS mission in January 2026.
 - Ireland has a robust regulatory infrastructure and is in compliance with IAEA standards,
 - Long-term management or disposal of all disused radioactive sources and radioactive waste was an IRRS recommendation;

- Ireland's inventory is small comprising 14 DSRS, (Ra-226, Category 5). Legacy / orphan sources being discovered and declared as waste cannot be discounted.
 - Ireland does not have a centralised store for DSRS and radioactive waste.
 - Can the “clearance” provisions in the EU BSSD be applied to Ireland's inventory and legacy LLW?
 - Guidance is needed on the disposal of sources below the exemption levels set out in the EU BSSD
 - All sealed sources require a “take back agreement” as part of EPA authorisation. EPA will shortly publish guidance on what these take back agreements should comprise
 - Succession planning and competence continuity is a challenge



Integrated
Regulatory
Review Service
IRRS



University College Dublin
An Coláiste Ollscoile,
Baile Átha Cliath

☐ EPA Licence:

☐ Range of practices including:

- ☐ Radiological imaging (veterinary, medical training, etc)
- ☐ XRF, XRD sample analysis
- ☐ Unsealed sources - R&D
- ☐ Sealed sources - Calibration

☐ RPA:

- ☐ Ruairi O'Donnell





- Largest acute academic teaching hospital in Ireland
- Acute, emergency and specialist services across vast range of medical and surgical specialties
- Wide range of diagnostic imaging facilities including Nuclear Medicine & PET-CT
- > 5,000 Nuclear Medicine & PET-CT exams per annum
- Nuclear Medicine and PET-CT are Authorised Practices, regulated by EPA
- Radioactive materials in use or held must be specified as part of the Authorisation
- Typically approx. 35 sealed sources held under licence on site (no HASS)
- Most sealed sources have half lives <1yr; require regular replacement every 2 yrs
- Inventory value of sources approx. €75k. Annual returns/disposal fees approx. €5k
- Radioactive waste generated is stored securely on site and allowed to decay before disposal
- In-house expertise on radiation safety and regulatory compliance

SIMS/IRELAND STAKEHOLDER PANELLIST – QUESTIONS

- 1) What are the concerns that a “small inventory” or non-nuclear country has for safe and efficient handling of disused radioactive material (such as DSS, as well as legacy and orphan DSS) and other radioactive waste?
- 2) How can the international R&D community help address these challenges?
- 3) Do you have specific calls to action that are most urgent and critical to solve, which the EURAD-2 community could help with in this context?
- 4) What are your thoughts on ways SIMS can better implement the Euratom Waste Directive Article 8?
- 5) What actions are you taking to ensure we have enough of the “next generation experts” to address these waste management solutions for decades to come, specifically in countries with small inventories?
- 6) Audience questions



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