

**EURAD Training Course**  
**on application of requirements management systems**

Tuesday (16/01/2024) - General	
09:00-10:30	<p style="text-align: center;">Training session 1</p> <ul style="list-style-type: none"> <li>• Introduction + Objectives of the training course (TBA)</li> <li>• Radioactive Waste Management: Life cycle from cradle to grave (Lecturer TBA) <ul style="list-style-type: none"> <li>○ Rad waste streams include materials that may not be there yet but could be in the planning, be aware of implications for the back-end of the cycle</li> </ul> </li> </ul>
10:30-11:00	Coffee break
11:00-12:30	<p style="text-align: center;">Training session 2</p> <ul style="list-style-type: none"> <li>• Overview of WM planning instruments and role of RM Systems (Lecturer TBA) <ul style="list-style-type: none"> <li>○ Roadmap as an integral part of the RMS</li> <li>○ Refer to INCOSE reports, as example</li> </ul> </li> <li>• Requirements Management System in different stages of Radioactive Waste Management (Lecturer TBA)</li> </ul> <p><i>Key messages: it is important to see how the system evolves with time, not a linear system. What are the issues/challenges? Plan the system so that it is flexible and it accepts changes and future iterations; each country has or will end up with their own RMS, depending on regulations, historical context, stakeholder expectations etc</i></p>
12:30-13:30	Lunch
13:30-15:00	<p style="text-align: center;">Training session 3</p> <ul style="list-style-type: none"> <li>• RMS guidance documentations <ul style="list-style-type: none"> <li>○ Disposal System-RMS, Topic A (Post-closure) RMS, Topic B (RMS implementation for the whole WM programme)</li> <li>○ <i>Key messages: there are slides available from the WP 12 workshops (for those who did not attend)</i></li> </ul> </li> <li>• Results of the literature survey on requirements management system (Peter Ormai)</li> </ul>
15:00-15:30	Coffee break
15:30-16:30	<p style="text-align: center;">Training session 4</p> <ul style="list-style-type: none"> <li>• Topical Guide A (post-closure) presentation</li> <li>• How the system evolves with time  <p style="text-align: center;"><i>Example: the SNF canister and its surrounding</i></p> many requirements, conflicts, supply chain, production and installation</li> </ul>
16:30-17:00	Test/Practice for day I
Wednesday (17/01/2024) – Practical implementation of the example: the SNF canister and its surrounding	
9:00 – 9:30	Questions/clarification needs from the previous day
09:30-10:30	<p style="text-align: center;">Training session 5</p> <ul style="list-style-type: none"> <li>• Requirements Management Systems: Development Process (Lecturer TBA) <ul style="list-style-type: none"> <li>○ Constraints and boundaries (waste, geology)</li> <li>○ Identification of stakeholders, their role, responsibilities and their expectations</li> <li>○ Who is responsible for requirement management? (Lecturer TBA) – <i>how is RM embedded in various WMOs? Who is director, major counterparts, how is it working?</i></li> </ul> </li> </ul>

10:30-11:00	Coffee break
11:00-12:30	<p>Training session 6</p> <ul style="list-style-type: none"> <li>• Requirements Management System: Example and lessons learned from Finland (Lecturer TBA)</li> <li>• Requirements Management System: Example and lessons learned from broad experience(Lecturer TBA)</li> <li>• Requirements Management System: Example and lessons learned from the UK (Lecturer TBA)</li> </ul> <p><i>Key messages: start early and simple, identify interfaces and handle conflicts asap, different countries developed different RMS, use the experience from senior experts (historical background of requirements to be documents)</i></p>
12:30-13:30	Lunch
13:30-15:00	<p>Training session 7</p> <ul style="list-style-type: none"> <li>• Requirements architecture (see Topical Guide A), for example: <ul style="list-style-type: none"> <li>○ L0 mission of the programme</li> <li>○ L1 High-level goals</li> <li>○ L2 Functions</li> <li>○ L3 Targets (performance and quality targets)</li> <li>○ L4 Design requirements and specifications (what it should look like)</li> <li>○ L5 Specifications for the production</li> <li>○ L6 Verification, validation of requirements is documented along with “as built” documentation</li> </ul> </li> <li>• Division of systems and sub-systems</li> <li>• Guidance for producing well-written functions, long-term “targets”, design requirements and specifications (Lecturer TBA)</li> </ul> <p><i>Key messages: terminology cannot be fully unified, discuss about the long-term targets, differences with other engineering systems – cannot verify the “targets”, dose criteria vs. targets, division of responsibilities between WMOs and designers (UK vs. Finland)</i></p>
15:00-15:30	Coffee break
15:30-16:30	<p>Training session 8</p> <ul style="list-style-type: none"> <li>• Softwares for Requirements management – evaluation criteria for the tools and work flows (Lecturer TBA)</li> </ul>
16:30-17:00	Test/Practice for day II
Thursday (18/01/2024)	
09:00-10:00	Questions/clarification needs from the previous day
10:00-11:30	<p>Training session 9</p> <p>Your RMS - Practical implementation</p>
	Coffee break (flexible)
11:30-12:30	<p>Training session 10</p> <p>Discussion, feedback and path forward, end of the training</p>
12:30-13:30	Lunch

## **Description**

The EURAD guidance work package (WP12) aims at developing a comprehensive suite of instructional guidance documents that can be used by EU Member-States and associated countries with radioactive waste management programmes, regardless of their phase or level of advancement with implementing their waste management activities. Requirements management has been selected as the broad topic for further guides to be developed within EURAD. To effectively support the understanding of the application of RMS, a training session has been organised in collaboration with EURAD WP13 (focussed on training). The training will also provide a platform where the participants can express their views and ask questions, which will be used as feedback to finalise the guidance documents on requirement management systems applied to the overall waste management programme. The training will include the theory and principles of RMS (i.e. the way of thinking) at different phases of an WM programme, practical examples from advanced programmes and hands-on training.