The project leading to this application has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement n° 847593.
EURAD Knowledge Management & Networking Programme

1. **Roadmap**
   - A common framework to structure knowledge

2. **State of Knowledge**
   - What we know and why it's important

3. **Guidance**
   - Best practice and lessons learned

4. **Training & Mobility**
   - Nuclear experience and know-how

5. **Networking & Tools**
   - Connecting people to people, and people to content
EURAD Knowledge Management & Networking Programme

1. **Roadmap**
   A common framework to structure knowledge

2. **State of Knowledge**
   What we know and why it’s important

3. **Guidance**
   Best practice and lessons learned

4. **Training & Mobility**
   Nuclear experience and know-how

5. **Networking & Tools**
   Connecting people to people, and people to content
EURAD Knowledge Management & Networking Programme

IAEA defines knowledge management (KM) as:

“an integrated, systematic approach to identifying, acquiring, transforming, developing, disseminating, using, sharing and preserving knowledge, relevant to achieving specified objectives”*
IAEA defines knowledge management (KM) as:

“an integrated, systematic approach to identifying, acquiring, transforming, developing, disseminating, using, sharing and preserving knowledge, relevant to achieving specified objectives”*

- “Enhance knowledge management and transfer” is one of EURAD’s main objectives
- EURAD Knowledge Management & Networking Programme

*: Karseka and Yanev, IAEA, 2013
The EURAD School of Radioactive Waste Management

- The School of Radioactive Waste Management (RWM) aims to assist end-users in:
  - “an integrated, systematic approach to identifying, **acquiring**, transforming, **developing**, **disseminating**, using, **sharing and preserving knowledge (and skills)**, relevant to achieving specified objectives”
The EURAD School of Radioactive Waste Management

- The School of Radioactive Waste Management (RWM) aims to assist end-users in:
  - "an integrated, systematic approach to identifying, acquiring, transforming, developing, disseminating, using, sharing and preserving knowledge (and skills), relevant to achieving specified objectives"

- To this end, the School supports competence (= knowledge, skills and attitudes) building
The EURAD School of Radioactive Waste Management

School of Radioactive Waste Management
(https://euradschool.eu/)

Courses  Mobility  Webinars  PhDs

Input from end-users (bottom-up)
EURAD School of RWM - Needs-driven training courses

• Needs-driven
  • End-user feedback was gathered (March – May 2020): 80 respondents
  • Training needs were identified (April 2021): 363 training needs, 262 of which were identified as difficult to find
EURAD School of RWM - Needs-driven training courses

- Needs-driven
  - End-user feedback was gathered (March – May 2020): 80 respondents
  - Training needs were identified (April 2021): 363 training needs, 262 of which were identified as difficult to find

- Identification of existing training courses
  - Over 150 courses identified (September 2021)
  - Will be followed by a gap analysis
EURAD School of RWM - Needs-driven training courses

• Needs-driven
  • End-user feedback was gathered (March – May 2020): 80 respondents
  • Training needs were identified (April 2021): 363 training needs, 262 of which were identified as difficult to find

• Identification of existing training courses
  • Over 150 courses identified (September 2021)
  • Will be followed by a gap analysis

• Training courses organized in EURAD are:
  • Based on end-user needs and gap analysis
  • In collaboration with RD&D and Strategic Studies WPs
  • Provide access to nuclear experience and know-how of the EURAD subject matter experts
EURAD School of RWM – Needs-driven training courses

• Needs-driven
  • End-user feedback was gathered (March – May 2020): 80 respondents
  • Training needs were identified (April 2021): 363 training needs, 262 of which were identified as difficult to find

• Identification of existing training courses
  • Over 150 courses identified (September 2021)
  • Will be followed by a gap analysis

• Training courses organized in EURAD are:
  • Based on end-user needs and gap analysis
  • In collaboration with RD&D and Strategic Studies WPs
  • Provide access to nuclear experience and know-how of the EURAD subject matter experts

• Main goal: effective knowledge transfer and competence building towards end-users
Eurad School of RWM - Needs-driven training courses

- Implementation of training courses varies depending on the:
  - Training needs
  - Target audience
  - Type of knowledge to be transferred (explicit vs implicit vs tacit)
  - Desired competences to be acquired
  - Learning outcomes
Eurad School of RWM - Needs-driven training courses

- Implementation of training courses varies depending on the:
  - Training needs
  - Target audience
  - Type of knowledge to be transferred (explicit vs implicit vs tacit)
  - Desired competences to be acquired
  - Learning outcomes

Guidance document: ‘Quality criteria and training specifications as a reference guide of requirements and expectations of the training courses to be developed’
Eurad School of RWM - Needs-driven training courses

- Implementation of training courses varies depending on the:
  - Training needs
  - Target audience
  - Type of knowledge to be transferred (explicit vs implicit vs tacit)
  - Desired competences to be acquired
  - Learning outcomes

➤ Guidance document: ‘Quality criteria and training specifications as a reference guide of requirements and expectations of the training courses to be developed’

- Based on IAEA’s Systematic Approach to Training
  - Analysis
  - Design
  - Development
  - Implementation
  - Evaluation
EURAD School of RWM - Mobility Programme

- The EURAD Mobility Programme supports PhDs, post-docs and junior professionals in performing:
  - Internships
  - Technical visits
EURAD School of RWM - Mobility Programme

• The EURAD Mobility Programme supports PhDs, post-docs and junior professionals in performing:
  • Internships
  • Technical visits

• Focussed mostly on implicit and tacit knowledge
EURAD School of RWM – Mobility Programme

• The EURAD Mobility Programme supports PhDs, post-docs and junior professionals in performing:
  • Internships
  • Technical visits

• Focussed mostly on implicit and tacit knowledge

• Based on learner needs
  • Applicants can contact EURAD partners directly with specific questions
  • List of infrastructures is available on School website: https://euradschool.eu/infrastructures/
EURAD School of RWM - Mobility Programme

- The EURAD Mobility Programme supports PhDs, post-docs and junior professionals in performing:
  - Internships
  - Technical visits
- Focussed mostly on implicit and tacit knowledge
- Based on learner needs
  - Applicants can contact EURAD partners directly with specific questions
  - List of infrastructures is available on School website: https://euradschool.eu/infrastructures/
- EURAD partners can offer internships on the School website
EURAD School of RWM - Webinars

- The School organizes webinars on broad and specific topics by subject-matter experts, e.g.:
  - Nuclear Knowledge Management
  - PREDIS
  - The US Nuclear Waste Management and Disposal Strategy
  - ...
EURAD School of RWM - Webinars

- The School organizes webinars on broad and specific topics by subject-matter experts, e.g.:
  - Nuclear Knowledge Management
  - PREDIS
  - The US Nuclear Waste Management and Disposal Strategy
  - ... 

- Sharing knowledge with the entire EURAD community and beyond (e.g. IAEA, OECD-NEA, ...)

25/11/2021

PREDIS Knowledge Management webinar
EURAD School of RWM – Support the PhD community

• The School wants to support the EURAD PhD community by providing:
  • Information on available/upcoming courses
  • The possibility to perform mobility actions
  • An overview of all PhD research performed in EURAD ([https://euradschool.eu/overview-of-phds/](https://euradschool.eu/overview-of-phds/))
  • A list of events of interest for PhD students
  • A discussion forum ([https://forum.euradschool.eu/](https://forum.euradschool.eu/))

• The aim is to foster a community between the PhD students, researchers and the Training and Mobility work package

  ➔ PhD students are the future key figures in radioactive waste management!
How do we reach out to the School of RWM’s end-users?
Website and discussion forum

Website was launched on December 21st 2020
Website and discussion forum

Website was launched on December 21\textsuperscript{st} 2020

Number of site visits as of November 2021:

- 1,596 new users
- 5,513 page views

Discussion forum was launched in June 2021
Website and discussion forum

The forum contains the following sub-forums:

- **EURAD School of Radioactive Waste Management**
  - Courses & Events
  - Mobility actions
  - PhD students
  - Publications
- **EURAD Roadmap**
  - Theme 1
  - ... (omitted)
  - Theme 7
- **General**
Two training courses have been successfully organized:

- ‘Multiphysical couplings in geomechanics’
  - January 22\textsuperscript{nd} 2020 – January 24\textsuperscript{th} 2020 (face-to-face)
  - 70 participants
Two training courses have been successfully organized:

• ‘Multiphysical couplings in geomechanics’
  • January 22\textsuperscript{nd} 2020 – January 24\textsuperscript{th} 2020 (face-to-face)
  • 70 participants

• ‘Introductory course to EURAD and Radioactive Waste Management’
  • September 14\textsuperscript{th} 2020 (online)
  • 260 participants
  • Recording of lectures is publically available and were viewed 537 times (as of September 2021)
EURAD School of RWM - Achievements - Training courses

Two training courses have been successfully organized:

- ‘Multiphysical couplings in geomechanics’
  - January 22\textsuperscript{nd} 2020 – January 24\textsuperscript{th} 2020 (face-to-face)
  - 70 participants

- ‘Introductory course to EURAD and Radioactive Waste Management’
  - September 14\textsuperscript{th} 2020 (online)
  - 260 participants
  - Recording of lectures is publically available and were viewed 537 times (as of September 2021)

Three courses are currently planned:

- Uncertainty management
- EURAD Roadmap Domain Insights and State of Knowledge
- Safety case production and review
EURAD School of RWM - Achievements - Mobility Programme

- Launched on April 8th 2020
- Guidelines, applications and evaluations via an online platform (Evalato)
  - https://pro.evalato.com/2185
- Numbers (as of October 2021)
  - 12 applications (6 complete applications)
  - 4 mobility actions approved (2 still under review)
  - 2 mobility actions completed
Mobility Programme

- Launched on April 8th 2020
- Guidelines, applications and evaluations via an online platform (Evalato)
  - [https://pro.evalato.com/2185](https://pro.evalato.com/2185)
Mobility Programme

- Launched on April 8th 2020
- Guidelines, applications and evaluations via an online platform (Evalato)
  - https://pro.evalato.com/2185
- Beneficiaries are obliged to submit a mission report on their activities
  - Mission report contains:
    - Agenda
    - Work performed
    - Techniques used
    - Lessons learned
Mobility Programme

• Launched on April 8th 2020

• Guidelines, applications and evaluations via an online platform (Evalato)
  • https://pro.evalato.com/2185

• Beneficiaries are obliged to submit a mission report on their activities
  • Mission report contains:
    • Agenda
    • Work performed
    • Techniques used
    • Lessons learned

• Mission reports are made available through School’s website
  = sharing and distributing of knowledge
Webinars

- Webinars are open to all
- Recorded in order to preserve knowledge and facilitate dissemination
  (https://www.youtube.com/playlist?list=PLahXOQn-bremN911IEn0w8yAzQyuUR3ky)
<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th># attendees</th>
<th># views (YouTube)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synergies of EURAD with the PREDIS project addressing pre-disposal waste treatment; <em>Erika Holt (VTT)</em></td>
<td>28/10/2020</td>
<td>30</td>
<td>62</td>
</tr>
<tr>
<td>News from the German Site Selection Procedure; <em>Astrid Göbel (BGE)</em></td>
<td>25/11/2020</td>
<td>19</td>
<td>77</td>
</tr>
<tr>
<td>Celebrating 20 years of the IGSC; <em>Lucy Bailey (IGSC)</em></td>
<td>27/01/2021</td>
<td>45</td>
<td>34</td>
</tr>
<tr>
<td>Knowledge Management in Nuclear Organizations; <em>Dinara Abbasova (HZDR)</em></td>
<td>24/02/2021</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>The IGD-TP: European waste management organisations coordinating international R&amp;D activities; <em>Irina Gaus (Nagra, IGD-TP)</em></td>
<td>31/03/2021</td>
<td>19</td>
<td>57</td>
</tr>
<tr>
<td>The next-generation scientific research for the safe management of radwaste – EURADSCIENCE; <em>Christophe Bruggeman (SCK CEN)</em></td>
<td>28/04/2021</td>
<td>75</td>
<td>9</td>
</tr>
<tr>
<td>Steps for Sharing (ERDO Association); <em>Ewoud Verhoef (ERDO)</em></td>
<td>26/05/2021</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>The SITEX.Network; <em>D. Pelligrini (IRSN), F. Bernier (FANC), N. Zeleznik (NTW)</em></td>
<td>30/06/2021</td>
<td>53</td>
<td>16</td>
</tr>
<tr>
<td>EC-JRC activities on RWM and decommissioning; <em>Manuel Martin-Ramos (EC-JRC)</em></td>
<td>29/09/2021</td>
<td>51</td>
<td>11</td>
</tr>
<tr>
<td>US Nuclear Waste Management and Disposal Strategies; <em>Rodney Ewing (Stanford University and Spogli Institute)</em></td>
<td>06/10/2021</td>
<td>107</td>
<td>17</td>
</tr>
<tr>
<td>News on the siting process in Italy</td>
<td>27/10/2021</td>
<td>57</td>
<td>10</td>
</tr>
</tbody>
</table>

* Up until November 15th 2021
Support PhD community

Two events were organized specifically aimed at the EURAD PhD Community:

- **EURAD PhD Event N°1**
  - September 15\textsuperscript{th} 2020 (online)
  - 22 PhD students presented themselves and their work to the EURAD community
  - 65 EURAD experts attended this event
  - Recording was viewed 163 times (as of October 2021)
Support PhD community

Two events were organized specifically aimed at the EURAD PhD Community:

- **EURAD PhD Event N°1**
  - September 15\(^{th}\) 2020 (online)
  - 22 PhD students presented themselves and their work to the EURAD community
  - 65 EURAD experts attended this event
  - Recording was viewed 163 times (as of October 2021)

- **PhD session during EURAD Annual Event N°1**
  - March 17\(^{th}\) 2021
  - 6 PhD students presented the PhD work being done in each of the RD&D WPs
  - Presentations followed by short debate between PhD students and experts
Increasing the visibility of the School’s activities

To increase the visibility of the School’s activities to our end-users, we participate to

- EURAD Annual event
- International conferences
- Workshops on education & training and knowledge management
Summary

- School of RWM was successfully launched
- Through its 4 pillars it is an integral part of EURAD’s KM programme
- All initiatives are end-user needs-driven
- Outreach towards end-users and beyond through
  - Website
  - Discussion forum
  - Mobility Programme mission reports
  - Webinars
  - Contribution to EURAD Annual event, conferences, workshops, webinars
QUESTIONS?

Niels Belmans (nbelmans@sckcen.be)