

# EURAD-2 WP02 KNOWLEDGE MANAGEMENT

## EURAD-2 KM Board

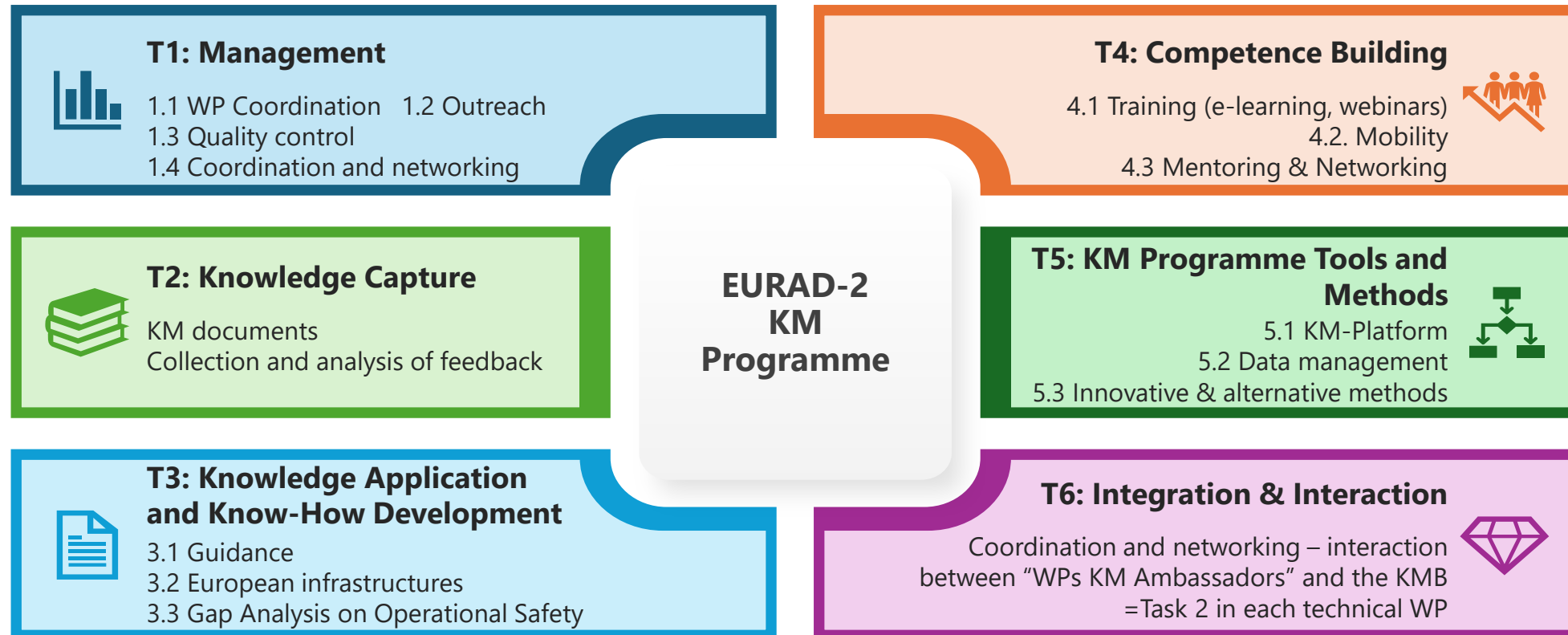
*Alexandru Tatomir, Liz Harvey, Kateryna Fuzik, Niels Belmans,  
Christophe Debayle*



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# TASK 1 – KM PROGRAMME MANAGEMENT

## SHORT OVERVIEW (REMINDER)



# TASK 1 – KM PROGRAMME MANAGEMENT

## YEAR 1-2 ACHIEVEMENTS



### T1: Management

- 1.1 WP Coordination
- 1.2 Outreach
- 1.3 Quality control
- 1.4 Coordination and networking

- **Continued coordination of the KM WP through the KM Board and KM Ambassadors**
- **Further definition and monitoring of KM activities in R&D and Strategic Study WPs**
  - Building on MS24 (Activities in Task 2) and MS69 (Needs for additional KM actions)
- **Continued international interaction**
  - Exchanges with IAEA, OECD/NEA IDKM and other European initiatives
  - Topics included training, KM platforms, AI-supported KM and potential synergies with SNETP/OFFERR

### • **Support to the technical WPs**

- Training/planning webinars; Guidance on White Paper preparation ; Review of drafts and support to consistency across the 6 StSt and 10 R&D WPs

### • **Detailed planning for KM activities in Years 3–5**

- Technical and budgetary planning completed
- New work elements introduced based on lessons learned and stakeholder feedback

- **Task Lead:** BGE (Alexandru Tatomir)
- **Co-lead:** GSL (Liz Harvey)
- **KM Board:** SCK CEN (Niels Belmans), SSTC NRS (Kateryna Fuzik), Christophe Debayle (ASNR)
- **Board supported by:** Sarah Louis (BGE), Stella Foster (GSL)

# TASK 1 – KM PROGRAMME MANAGEMENT

## LESSONS LEARNED



### T1: Management

- 1.1 WP Coordination
- 1.2 Outreach
- 1.3 Quality control
- 1.4 Coordination and networking

- **Continuous coordination** is essential for cross-cutting KM activities
  - Regular interaction with KM Ambassadors and technical WPs is essential
  - KM Ambassadors are key to linking KM WP with the technical WPs
- Clear **guidance** and follow-up are needed to ensure consistency across WPs
- **Community feedback** should inform programme development
  - Lessons from Years 1–2 were used to shape priorities and activities for Years 3–5
- **International cooperation** strengthens EURAD-2 KM
  - Interaction with IAEA and OECD/NEA IDKM was important to exchange good practices and avoid duplication

## TASK 1 – KM PROGRAMME MANAGEMENT

### PRIORITIES AND NEW ACTIVITIES (YEAR 3-5)

- Launch the Year 3 KM programme and onboard new Wave 2 KM Ambassadors / Task 2 Leaders
- Continue coordination with technical WPs, KM Ambassadors and the PMO
- Finalise D2.3 (Recommendations for long-term maintenance of critical infrastructures), D2.1 (KM platform specifications) and D2.2 (Implementation of innovative and alternative methods), and monitor updated milestone/deliverable planning
- Maintain international interaction and explore synergies with IAEA, OECD/NEA IDKM, JRC and SNETP/OFFERR
- Coordinate programme-level decisions on the KM platform, data-capture expectations and survey-tool alternatives (EUSurvey)



#### T1: Management

- 1.1 WP Coordination
- 1.2 Outreach
- 1.3 Quality control
- 1.4 Coordination and networking

## TASK 2 – KNOWLEDGE CAPTURE

### SHORT OVERVIEW (REMINDER)



#### T2: Knowledge Capture

KM documents  
Collection and analysis of feedback

**Overall aim:** Collecting experts' view on the most **relevant knowledge** and associated uncertainties in a specific domain applied in the context of a RWM programme and make it accessible to the end-users

- Production of KM documents with the active contribution of the EURAD 2 community
- Dissemination of knowledge among the EURAD 2 community and beyond
- Obtaining feedback from the KM documents developers and end-users
- Agile "learning-by-doing" approach: achieving content quickly, rather than focussing on processes first

- **Task Lead:** BGE (Alexandru Tatomir)
- **Co-lead:** SSTC NRS (Kateryna Fuzik)
- **Partners:** GSL, SKB, POSIVA, ANDRA, GRS

## TASK 2 – KNOWLEDGE CAPTURE

### YEARS 1-2 ACHIEVEMENTS



#### T2: Knowledge Capture

KM documents

Collection and analysis of feedback

#### ➤ Production of KM documents

- **7 DIs published:** 3.2.2 LL-ILW Containers; 3.3.3 Plugs and Seals; 3.4.2 Co-disposal; 4.1.1 Site Descriptive Model; 4.2.1 Perturbations; 4.3.1 Geological and Tectonic Evolution; and 4.3.2 Climate Change
- **6 DI drafts available:** 1.5.2 Options and Concept Selection; 3.1.1 SNF; 4.1.2 Aqueous transport and retention; 5.5.1 Baseline monitoring; 5.5.2 Monitoring w.r.t. onsite investigation; 7.1.1 Safety requirements
- MS6 (Methodology memo on proposing additional KM documentation needs) and MS20 (Prioritisation of KM documents) completed
- **10 SotA reports** produced by Wave 1 R&D WPs
- **6 St St White Papers** (ASTRA, FORSAFF, CLIMATE, OPTI, DITOCO, DITUSC)

#### ➤ Dissemination

- 2 DI-Webinars: 3.2.2 LL-ILW Containers (18.05.2026); 3.4.2. Co-disposal (10.03.2026)
- 2 KM-Workshops (Annual event 2025 and WP2 Webinar on planning for KM activities in Years 3-5)

#### ➤ Feedback

- Systematic feedback gathered from authors, reviewers, end-users and KM Ambassadors
- Lessons incorporated into DI production and planning activities for years 3-5

## TASK 2 – KNOWLEDGE CAPTURE

### YEARS 1-2 ACHIEVEMENTS

#### Roadmap Themes:

Theme 1. National Programme Management

Theme 2. Pre-disposal

Theme 3. Engineered Barrier System

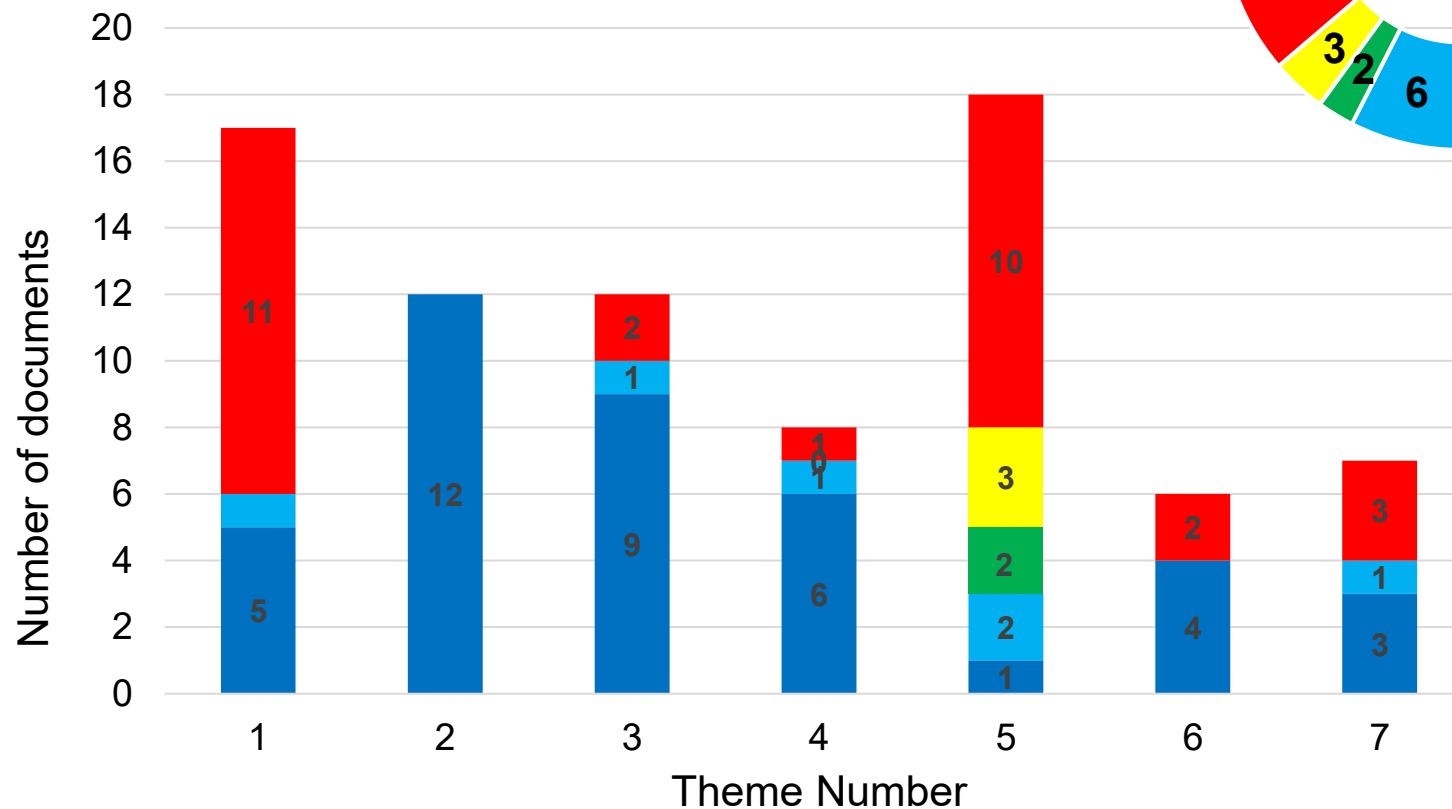
Theme 4. Geoscience

Theme 5. Disposal facility design and optimisation

Theme 6. Siting and Licensing

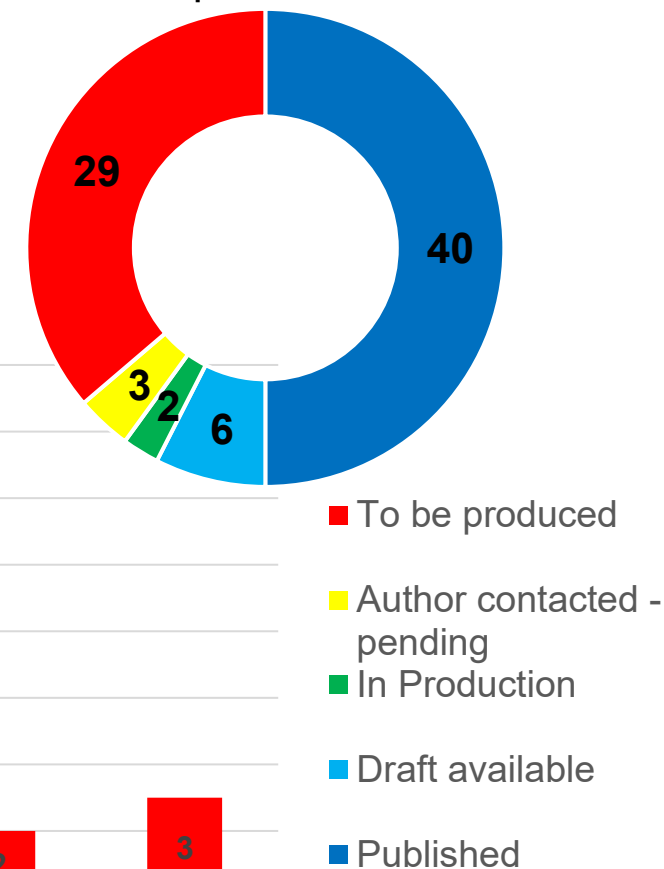
Theme 7. Safety Case

DI production status per theme



DI-document production per theme (as of 25.08.2026)

Overall DI production status



## TASK 2 – KNOWLEDGE CAPTURE

### YEARS 1-2 LESSONS LEARNED



#### T2: Knowledge Capture

KM documents

Collection and analysis of feedback

- **Finding and securing authors/reviewers remains the main bottleneck**
  - More targeted engagement with experts is needed;
- **DI production requires more time and effort than initially expected**
  - Priorities and available resources need to be better aligned
- **Knowledge capture works best when linked directly to technical WPs**
  - Stronger involvement of WP experts improves relevance and ownership
- **Dissemination is an essential part of DI production**
  - Each published DI should be followed by a dedicated dissemination session to support knowledge transfer and discussion

## TASK 2 – KNOWLEDGE CAPTURE

### ACTIVITIES YEARS 3-5 (CONTINUATION)

- **Continuation → KM document production**
  - DI documents → completion of remaining DIs
  - State-of-Knowledge (SoK) signposting & reference mapping
- **Supporting KM framework**
  - Identification and engagement of knowledge providers (experts)
  - Coordination & review of SotA, Green & White Papers
- **Knowledge transfer & feedback**
  - Knowledge sharing, dissemination & socialisation activities
  - Feedback collection and analysis (e.g. DI use in training)
- **Completing and consolidating the KM system established in Wave 1**

**T2: Knowledge Capture**  
KM documents  
Collection and analysis of feedback



## TASK 2 – KNOWLEDGE CAPTURE

### NEW ACTIVITIES (YEAR 3-5)



#### T2: Knowledge Capture

KM documents

Collection and analysis of feedback

- **New knowledge capture approaches**
  - Wall of Experts (visibility & engagement of knowledge providers)
  - Alternative knowledge formats (visual summaries, infographics, etc.)
  - AI-supported DI document development (pilot case)
- **Knowledge capture for digital learning**
  - eLearning-ready knowledge assets from KM documents
  - Transformation of KM outputs for training & reuse

- **Strategic & targeted knowledge capture**
  - Targeted SoK production (pilot in critical domain)
  - Update of EURAD Roadmap and existing DI documents
  - Short position papers / executive briefs
- **Knowledge capture to support specific communities**
  - SIMS-focused knowledge capture & competence support

## SUBTASK 3.1 –YEAR 2 ACHIEVEMENTS AND LESSONS LEARNED

### Subtask 3.1: Guidance



Support implementation of Member States' national programmes, particularly SIMS and early-stage programmes, by providing insights from more advanced programmes (including examples of successful practices)

**Partners:** GSL (lead), BGE, EIMV, PURAM, SSTC NRS, UJV

**Previous (Year 1) guidance survey revealed a need for greater exposure of existing guidance... guidance signposting series was developed in Year 2 as a result**

- Guidance signposting documents are short (5–10 pages) and identify and summarise the key existing guidance or guide-like documents on a given topic
- For non-specialised readers and new starters in the field

**Level of interest across the partnership is good: ~ 20 expressions of interest in authoring or reviewing guidance signposting – thank you to those who've contributed so far!**

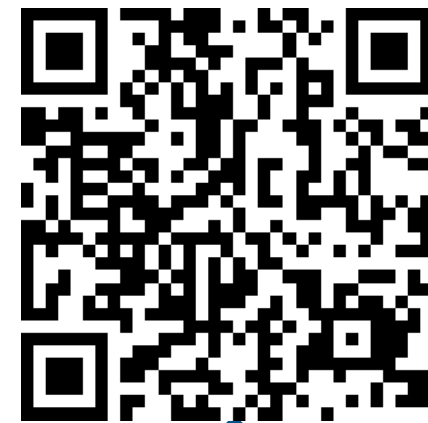
**3 guidance signposting topics nearing completion and will be published by end of October:**

- ✚ **Public engagement methods & civil society feedback**
- ✚ **Management of Disused Sealed Radioactive Sources**
- ✚ **Management of wastes arising from Small Modular Reactors**



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## SUBTASK 3.1 – YEAR 2 PRIORITIES AND LOOK AHEAD FOR YEARS 3-5



### 1. Produce and publish four more guidance signposting documents in Year 3:

- ✚ Management of radioactively contaminated organic wastes (solid and liquid)
- ✚ Management of Radioactively contaminated asbestos (RCA) or asbestos containing materials (ACM), including serpentine waste
- ✚ Management of radioactively contaminated lead (Pb)
- ✚ Small Inventory Member States (SIMS) specific transfer of knowledge

**To register your interest in contributing to the above topics in Year 3, Apply before 30<sup>th</sup> September**

### 2. Soft skills guidance

- Likely to focus (in Year 3) on production of white and green papers and impact reports
- Will integrate lessons learned - feedback welcome to the Subtask 3.1 team from Wave 1 StSt experiences:

**\*\*What do you wish you had known before you started drafting these deliverables?\*\***

20 hrs per  
author;  
2-4 hrs per  
reviewer

### 3. Knowledge continuity study - led by the University of Kassel and BGE

- Will examine institutional transfer of safety culture and knowledge continuity over long timescales

### 4. Further guidance needs survey planned for Year 4

## SUBTASK 3.2 – YEAR 2 ACHIEVEMENTS AND LESSONS LEARNED

### Subtask 3.2: European RWM Infrastructures



Increase the efficiency of RWM activities at a European level by examining the use of critical infrastructures.

**Partners:** GSL (lead), A21, KIT, SCK.CEN

36

new infrastructures added to EURAD-2 infra catalogue

12

existing catalogue entries updated

39

organisations responded

2

stakeholder groups engaged

### Year 2 achievements

- [Infrastructure catalogue](#) updated; updates published on the EURAD School website ([Milestone MS23](#), October 2025) - entries now highlight infrastructures that are open to mobility actions
- Webinar on European Infrastructure Initiatives, March 2026 – initial polling of interests and infrastructure gaps
- Long-term infrastructure needs explored via targeted engagements (July 2026), initially with SIMS (WMO) and civil society
- Feeding into D2.3 – [initial](#) recommendations on long-term maintenance of critical RWM infrastructures (September 2026)

### Infrastructure gaps:



### Lessons learned (so far!)

- Interpretation of “critical” varies hugely and is context-dependent: no single definition fits all programmes
- Interpretations span programme dependency, facility lifetime and cliff edges, scarce capabilities, knowledge, governance frameworks and public confidence
- Catalogue completeness is limited by voluntary participation; gaps remain in some countries and site categories
- Availability and timing of disposal routes is the most frequently raised infrastructure constraint / gap ... could overshadow analysis of upstream needs?

## SUBTASK 3.2 – PRIORITIES AND LOOK AHEAD FOR YEARS 3-5

### Subtask 3.2: European RWM Infrastructures



Increase the efficiency of RWM activities at a European level by examining the use of critical infrastructures.

**Partners:** GSL (lead), A21, KIT, SCK.CEN

#### Next update of the EURAD-2 infrastructures catalogue

Enhanced functionality (filtering, interactive maps); links to related initiatives (SNETP OFFERR, SMR Alliance TWG2, JRC); engagements to address gaps

#### Long-term sustainability of critical infrastructures

Build on D2.3 to identify the most critical infrastructures, analyse risk and develop recommendations for preservation and access

#### Infrastructure sharing and optimisation

Identify joint infrastructure needs across Member States and assess opportunities for sharing and co-investment

#### Year 2 – now

D2.3 initial recommendations (Sept 2026)

#### Years 3 & 4

Engage LIMS (WMOs), TSOs and regulators, Research Entities, further discussions with civil society and SIMS  
Targeted engagements, working groups within some Colleges? Other inputs welcome!

#### Year 5

D2.4 final recommendations consolidated

**We need your views on critical infrastructure needs!**  
**Please contact the [Subtask 3.2 team](#) to take part in targeted engagements**

~0.1 PM per organisation per targeted engagement

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## SUBTASK 3.3 – NEW TASK: OPERATIONAL SAFETY GAP ANALYSIS

### Subtask 3.3: Operational Safety Gap Analysis



Added in response to a cross-College need identified by the Bureau in March 2026

Will identify gaps and needs in relation to operational safety practices and protocols, and reinforce or complement related needs set out in the EURAD SRA

**Current partners:** GSL (lead), BGE, EIMV

#### Scope

- Identify gaps and needs in relation to operational safety practices and protocols
- Reinforce or complement related needs set out in the EURAD SRA
- Informed by elements of SAFEBIT proposal, but also wider reaching

#### Approach

- Feedback will be gathered through surveys and interviews
- Workshop involving subject matter experts drawn from across the three Colleges
- Milestone MS13 (early Year 4) will present possible future activities to address the gaps identified

#### Timeline

##### March 2026

Cross-College need identified by the Bureau

##### Year 3

Surveys, interviews and expert workshop; report drafting

##### Early Year 4

Report on Operational Safety Gap Analysis (Milestone MS13, January 2028)

**We would like to appoint someone to lead this subtask (deliver the gap analysis; organise the workshop; lead author of milestone report)**  
**We are also looking to identify subject experts in operational safety**  
**Interested? Please contact the [Subtask 3.3 team](#)!**

**2 PM for  
Subtask lead;  
0.25 PM per  
SME**

## TASK 4 – COMPETENCE BUILDING

### SHORT OVERVIEW (REMINDER)

#### T4: Competence Building

4.1 Training (e-learning, webinars)

4.2. Mobility

4.3 Mentoring & Networking



- **Overall aim:** The School of RWM (established in EURAD-1) is coordinating competence building activities in EURAD-2. The main aim is to contribute to continued availability of competent staff in the field of RWM. Key is here is closing the generational competence gap through training of the next generation of experts
  - Providing **training** based on end-users' needs (Subtask 4.1)
  - Providing **mobility support** to expand one's knowledge and skills (Subtask 4.2)
  - Providing a framework for **mentoring** and **networking** between junior and senior professionals (Subtask 4.3)

- **Task Lead:** SCK CEN (Niels Belmans)

- **Partners:** CIEMAT & Amphos21

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## TASK 4 – COMPETENCE BUILDING

### YEAR 1-2 ACHIEVEMENTS

- **Training and knowledge-transfer** activities continued through
  - **Training courses** (3 in Y2)
  - **DI webinars** (3 in Y2)
  - and **Lunch & Learn sessions** (7 in Y2; 1 still planned in September 2026)
- The **mentoring programme** was expanded through a new round of mentor–mentee matching (2 mentor – mentee pair were formalised)
- **Mobility** activities continued together with increasing involvement of the EURAD-2 Young Generation (74 approved mobility applications in Y1&2)
- Milestones: MS5 (Publicity of the mobility programme) (completed and updated at least twice a year); MS26 (Methodology memo on mentoring pair applications protocol and implementation guideline) (completed)

#### T4: Competence Building

4.1 Training (e-learning, webinars)

4.2. Mobility

4.3 Mentoring & Networking



## TASK 4 – COMPETENCE BUILDING

### PRIORITIES AND NEW ACTIVITIES (YEAR 3-5)

- **Training courses**

- Pilot action on providing training materials pre-training to assure everyone is on the same level at the start of a course
- Include e-materials to continue learning process after the training course
- Develop advanced training courses with IAEA

- **Mentoring**

- Continue to develop the mentoring programme
- Increase number of mentor-mentee pairs formed in Y3-4

- **Empowering the Young Generation**

- Active support;
- Create YG webpage;
- facilitate YG meetings;
- assist in organising YG sessions during EURAD-2 Annual Events;
- providing them access to the mobility programme

#### T4: Competence Building

4.1 Training (e-learning, webinars)

4.2. Mobility

4.3 Mentoring & Networking



# TASK 5 – KM PROGRAMME TOOLS AND METHODS

## YEAR 1-2 ACHIEVEMENTS

### What we delivered

- D1.3 · Data Management Plan (May 2025)
- MS22 · KM platform specifications update (October 2025)
- MS25 · Methodology memo on innovative methods (February 2026)
- D2.1 · KM Platform specification (October 2026)

### What it took to get there

- Merging different and sometimes opposite visions of KM-platform, that never converged
- Critical review of what EURAD-1 delivered, to focus on the next priorities
- Data Management session (Annual Event 1) and feedback loops with KM Ambassadors
- Connection with the Zenodo community
- Hosting discussions with the EC JRC

#### T5: KM Programme Tools and Methods

- 5.1 KM-Platform
- 5.2 Data management
- 5.3 Innovative & alternative methods



## TASK 5 – KM PROGRAMME TOOLS AND METHODS

### T5: KM Programme Tools and Methods

5.1 KM-Platform  
5.2 Data management  
5.3 Innovative & alternative methods



### LESSONS LEARNED

#### 1. Data management is a pillar with unanimous support and no volunteers

- *Every KM framework in the world puts data at the foundation. Nobody has ever woken up excited to do it. That gap is our main risk, not our main annoyance.*

#### 2. One repository, eighteen filing / naming conventions

- *ProjectPlace works exactly as designed. What varies is us...*

#### 3. There is no knowledge management without IT

- *A KM platform is not a concept, it is a server, a budget line, an owner, and a body or an institution who says "yes, I will ensure a full sustainable preservation of knowledge". We spent Year 2 finding that body.*

#### 4. End of first wave : ensure preservation of all materials used by Strategic Studies

## TASK 5 – KM PROGRAMME TOOLS AND METHODS

### T5: KM Programme Tools and Methods

5.1 KM-Platform  
5.2 Data management  
5.3 Innovative & alternative methods



### PRIORITIES AND NEW ACTIVITIES (YEAR 3-5)

- **1. KM Platform, built with the EC JRC**
  - A twin of the JRC decommissioning KM platform, no development from our side, no cost...
  - One flat corpus of EURAD public deliverables, one reliable AI retrieval layer
  - *Deliberately unambitious, the previous was more ambitious than this one.*
- **2. Data management, continued**
  - DMP update, closer work with KM Ambassadors: need more bi-directional exchanges
- **3. Innovative methods and gamification, with the Young Generation**
  - Pilot first, scale second : systemic approach
  - *Gamification is genuinely promising, like AI, everyone in this room finds it attractive. That is precisely the risk. Four organisations running four pilots is not innovation, it is fragmentation with better graphics.*
  - *Less tools, but tools that will still run in year 5 and after...*

## CLOSING REMARKS - IMPORTANT CROSS-CUTTING MESSAGES

### CAPTURING OUTPUTS FROM WAVE 1 STRATEGIC STUDIES

Before closure of Wave 1 Strategic Studies, key outputs should be complete, easy to find and properly stored

- **Please ensure the following are available in the appropriate project repositories:**
  - Final deliverables and milestones
  - Records of deliverable / milestone review (as evidence of quality assurance)
  - Underlying data gathered by the WP, including surveys, responses, and results
  - Key workshop and meeting materials (*e.g. slides, minutes / notes for the record*)
- **Goal:** preserve the knowledge generated by Wave 1 and ensure it remains accessible and reusable



## CLOSING REMARKS - IMPORTANT CROSS-CUTTING MESSAGES

### KNOWLEDGE AMBASSADORS: EARLY YEAR 3 COORDINATION MEETING

- A joint meeting between WP02 and KM Ambassadors will be organised early in Year 3.
- Purpose
  - Welcome and onboard KM Ambassadors from new Wave 2 WPs
  - Clarify Task 2 roles, expectations and interfaces with WP02
  - Address questions from ongoing R&D WPs
  - Align priorities, timelines and planned KM activities
  - Strengthen communication between technical WPs and the KM Board
- **Goal:** ensure a coordinated and effective start to Year 3 KM activities

**THANK YOU FOR  
YOUR ATTENTION**

**Contact us for any question, suggestion, proposals ....**

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On behalf of EURAD-2 KM



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