“KNOWLEDGE MANAGEMENT IN EURAD: SURVEY AND THE LESSON LEARNED IN RWM ORGANIZATIONS”

PREDIS Knowledge Management webinar, 25.11.2021

EURAD WP 11 team.

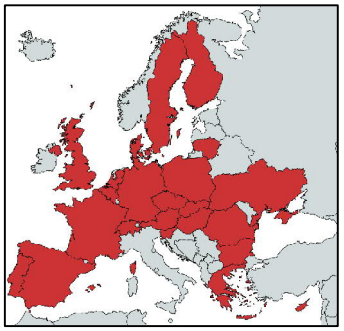
The project leading to this application has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement n° 847593.

EURAD MANDATED ACTORS (BENEFICIARIES)

Ministries from **23 European countries** (21 Member-States, 2 Associated countries) provided **mandates** to **51 organisations** acting as **Beneficiary** within EURAD, recognising their role of directing RD&D at national level, as:

- Waste Management Organisation (**WMO**);
- Technical Support Organisation (**TSO**); or
- Research Entity (**RE**).

EURAD project is supporting UN Sustainable Development Goals: 4, 9, 11, 17



19 Waste Management Organisations *Whose mission covers the management and disposal of radioactive waste*

13 regulatory Technical Support Organisations *Providing S/T basis for supporting regulators' decisions*

19 nationally funded Research Entities *Working on the RWM challenges under the responsibility of MS*

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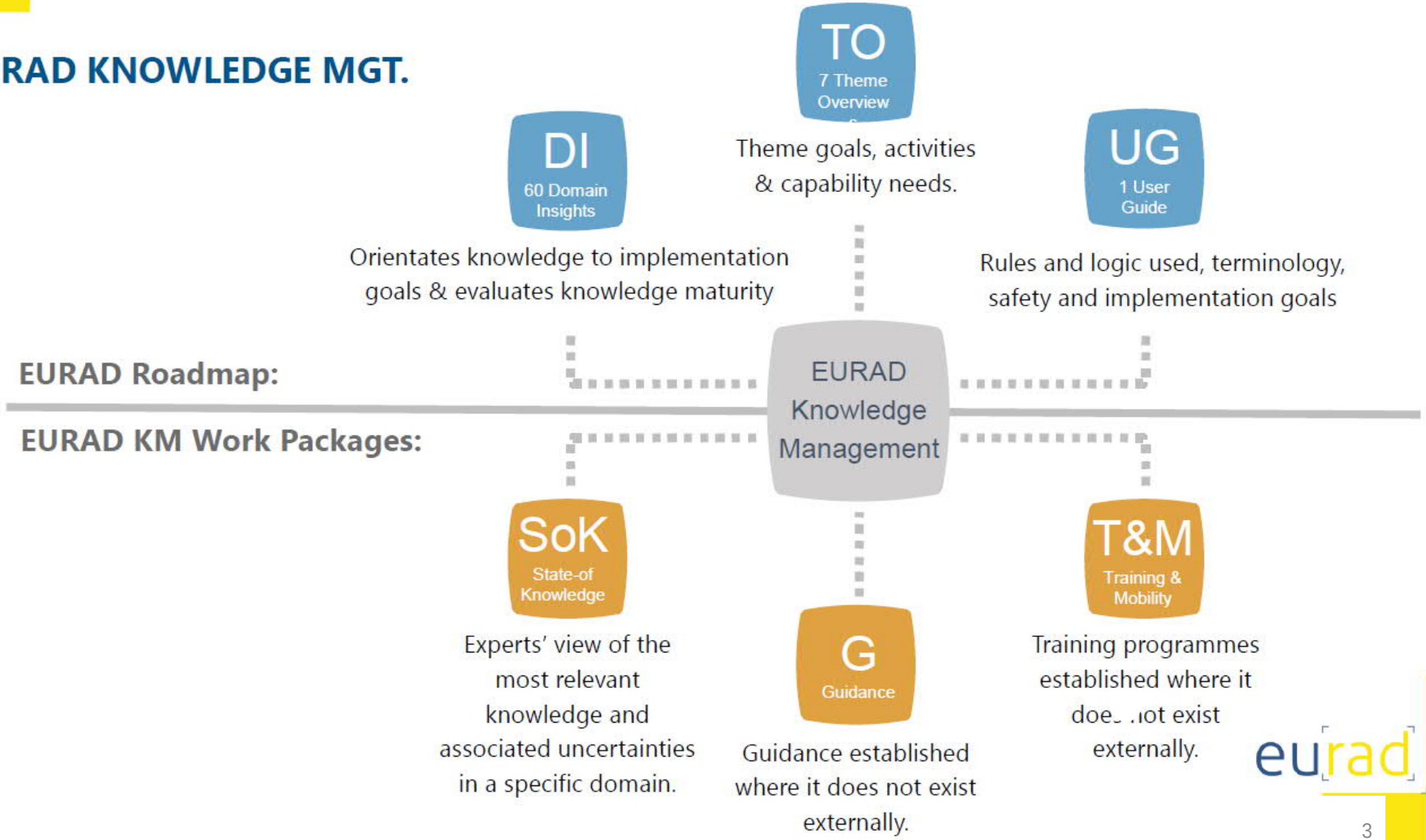
EURAD KNOWLEDGE MGT.



WP-11 TEAM

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SSTC NRS ДЕРЖАВНЕ ПІДПРИЄМСТВО ДЕРЖАВНИЙ НАУКОВО-ТЕХНІЧНИЙ ЦЕНТР З ЯДЕРНОЇ ТА РАДІАЦІЙНОЇ БЕЗПЕКИ

Dr Svitlana Kaltigina
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EURAD VISION

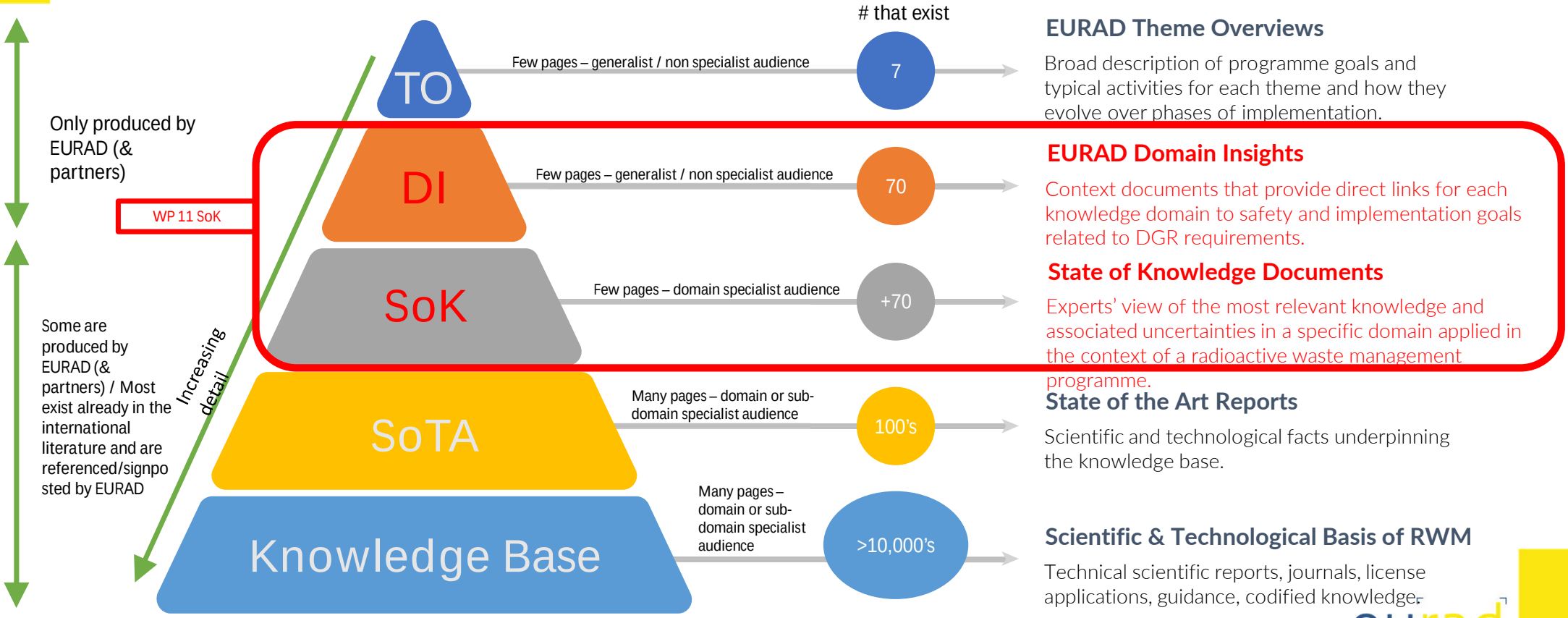
"A step change in European collaboration towards safe radioactive waste management (RWM), including disposal, through the development of a robust and sustained science, technology and knowledge management programme that supports timely implementation of RWM activities and serves to foster mutual understanding and trust between Joint Programme participants."

EURAD KM VISION

"It is essential to implement an efficient and integrated Knowledge Management programme at the EU level in order to establish, capitalize and transfer the state of scientific and technical knowledge in the field of RWM."

Document Hierarchy

Description and definition of common document terms in use within EURAD.



EURAD Theme Overviews

Broad description of programme goals and typical activities for each theme and how they evolve over phases of implementation.

EURAD Domain Insights

Context documents that provide direct links for each knowledge domain to safety and implementation goals related to DGR requirements.

State of Knowledge Documents

Experts' view of the most relevant knowledge and associated uncertainties in a specific domain applied in the context of a radioactive waste management programme.

State of the Art Reports

Scientific and technological facts underpinning the knowledge base.

Scientific & Technological Basis of RWM

Technical scientific reports, journals, license applications, guidance, codified knowledge.

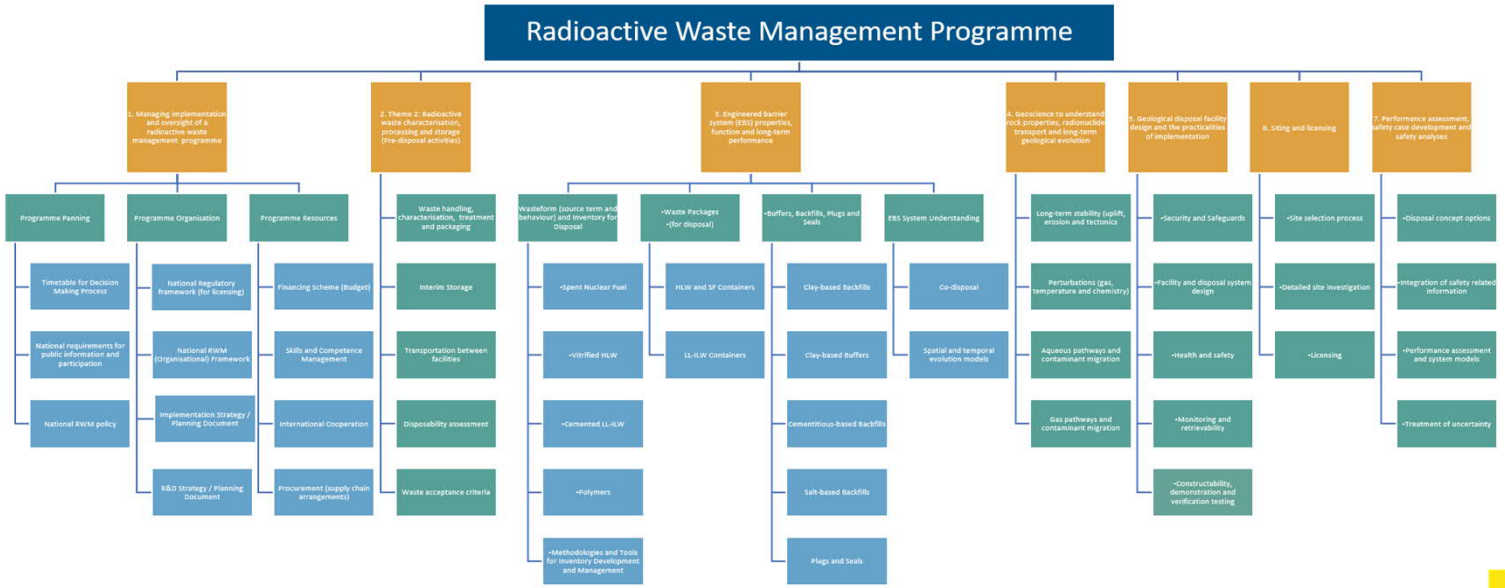
WHICH TOPICS?

- Topics aligned with the EURAD - Goals Breakdown Structure
  - Domain Level (Level 3) for Domain Insight and SoK documents

Level 1 — Theme

Level 2 — Sub-theme

Level 3 — Domain



EURAD-KM

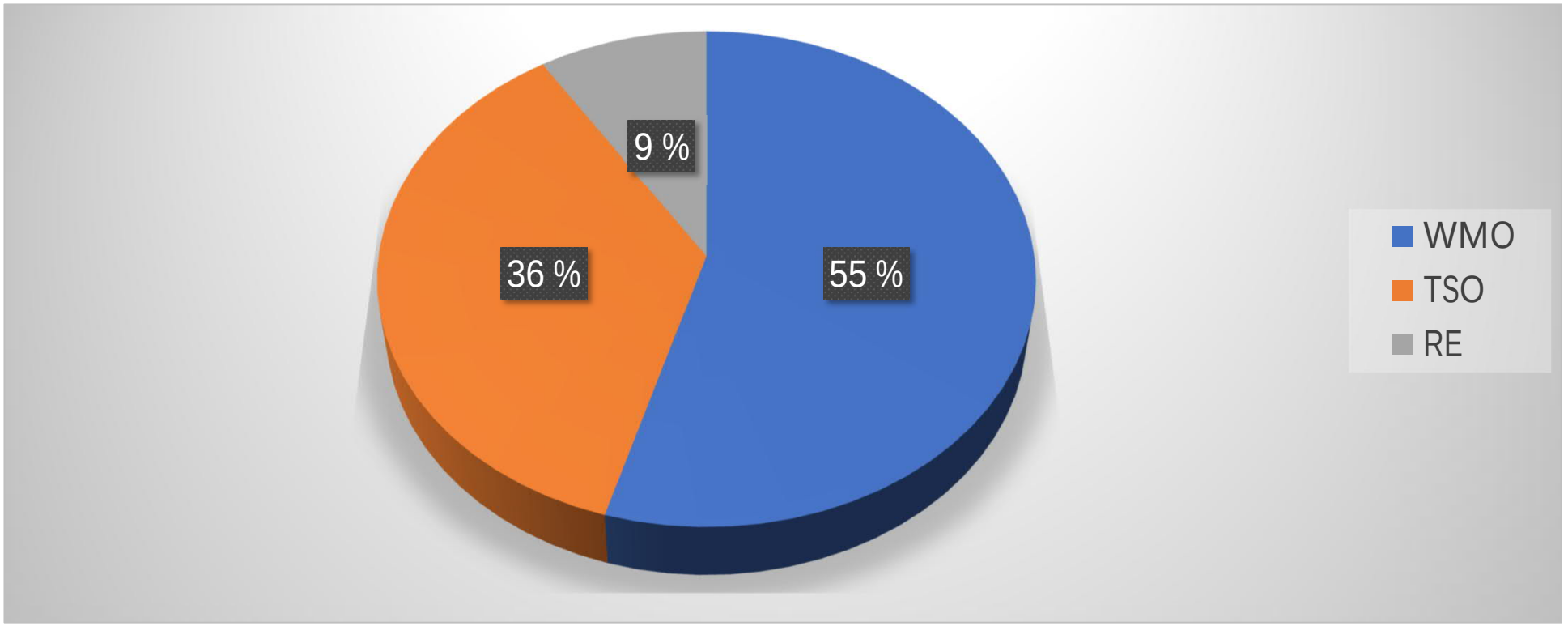
- ✓ Knowledge is crucial for the safe management and disposal of radioactive waste. The European Joint Programme on Radioactive Waste Management (EURAD) will generate and manage knowledge to support EU Member States with their implementation of the Waste Directive (EC 2011/70/EURATOM), taking into account the different stages of member states' national programmes.
- ✓ EURAD has the potential to identify and compile critical knowledge, address this properly in respective knowledge management (KM) tasks, and provide European added value, by accessing organisational and expert tacit knowledge and codifying it to support knowledge transfer between programmes, member states and generations.
- ✓ For both, a **systematic approach of establishing the current state-of-knowledge** and **its transfer** to the end users **in the field of Radioactive Waste Management (RWM)** is **urgently needed**.

EURAD WP 11

- Safe management and disposal of radioactive waste relies predominantly on state-of-the-art knowledge. This is reflected in a strong commitment of EURAD to enhance knowledge management (KM) and transfer between organisations, member states and generations.

- Task 1 within EURAD WP 11 (State-of-Knowledge) deals with the screening and review of existing KM approaches and/ tools that have been developed for similar purposes. The screening of currently used KM systems in the RWM field (and beyond) collects information on their typical functionalities and consequently identifies helpful aspects for the development of the EURAD KM system (KMS). This includes lessons learnt and best practice.

SURVEYED ORGANIZATIONS :



MOST COMMON LESSON LEARNT:

- Personnel who play an effective, integrated role in organization encouraged to documenting essential knowledge in such a way that it can be effectively retrieved and utilized when needed;
- A process that is in place to encourage, monitor, and address employee feedback on KP and other organizational initiatives;
- Organization personnel who are self-critical and frequently provide feedback to improve KM processes, plant performance, processes, plans, procedures, and training. (The personnel should willingly report the problems, error-likely situations and safety hazards)
- Lessons learned from technical experience that are systematically institutionalized through changes to station processes, procedures, equipment, and training programmes;

MOST COMMON LESSON LEARNT:

- To use a database (portals) for tracking performance, events causes, corrective actions implementation and lessons learned.
- Avoid to generate an “empty” or “dead” portal because of poor organization and promotion, absence of the training and financial support for sustainable maintenance of the portal. For this portal capacity and functionality should be planned for several years ahead.
- A process that is in place to encourage, monitor, and address employee feedback on KP and other organizational initiatives;

THANK YOU FOR YOUR ATTENTION

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