Milestone 22: Memo about specifications of the Knowledge Management platform

Work Package 02 – Knowledge Management

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Disclaimer

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Executive Summary

This memo provides a status report on the EURAD Knowledge Management (KM) Platform initiative. It synthesises the extensive top-down planning conducted during EURAD-1 (summarised in Deliverable 11.9) with the real-world user feedback and strategic analysis gathered through the activities of EURAD-2 Task 5 within the Work Package (WP) 2 on KM. This memo includes preliminary outcomes of the EURAD-2 Data Management session at the Annual Workshop in Bologna (September 2025) and the synthesis of strategic "open questions" conducted by the Task 5 force. This Milestone will be further updated as Deliverable D2.1 in March 2026.

The initial vision for the platform (p-KMS) developed in EURAD-1 (2019-2024) was ambitious and technically comprehensive, detailing a fully integrated, feature-rich hub for all of EURAD's knowledge assets. This vision, however, has not been implemented. The Bologna Annual EURAD-2 workshop and Task 5 analysis provided a crucial reality check, revealing that the community's most urgent needs are more foundational: practical guidance on the existing DMP, streamlined collaboration, consistent use of established tools, and solving fundamental partner access issues. These issues are feedback to be utilised in future milestones and deliverables from the KM work package.

Our analysis reveals a clear disconnect between the ideal platform envisioned and the daily operational challenges faced by partners. The feedback from across the breakout groups diagnosed two chronic problems: the "fragmented workflow", where critical data and knowledge remain trapped locally or in emails, and the "lost legacy," where valuable data is not preserved beyond the life of a project or report.

The primary recommendation of this memo is to formally shift our strategy from pursuing a large-scale, single-step implementation to adopting an agile, user-centric, and phased approach. We have a solid foundation of planning and a clear mandate from the community. The path forward must focus on delivering immediate, practical value while building a modular, sustainable foundation for the future. This memo outlines how crucial the hosting of web tools on a centralised place hosted in a sustainable manner by EC could provide a powerful support to the future KM Platform.

Keywords

Knowledge Management, Data Management, FAIR Principles, Sustainability and Long-Term Preservation, Metadata, KM Platform

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1. Introduction

This report provides a status on the EURAD KM Platform initiative and proposes an actionable path forward. It synthesises several sources of information: the feedback from a first survey, the technical specifications developed during EURAD-1, and the outputs from the EURAD-1 milestones (MS)245 & 333, in which the KM-prototype functionalities are described.

The analysis reveals a significant gap between the ambitious platform originally envisioned and the SharePoint-based prototype which was developed at the very last stage of EURAD-1, between March and May 2024.

Therefore, this document formally recommends a strategic shift: from a single-step, "big bang" implementation to a more agile, user-centric, and phased approach. The focus must move from building the perfect system on paper to delivering a practical one that solves real problems for our community now, while establishing a modular foundation that can grow to meet our long-term vision. The purpose of this document is to formally synthesise these two perspectives – the "as-planned" and the "as-is" – to forge a unified and realistic path forward.

A fundamental prerequisite must also be addressed to ensure the long-term hosting of existing tools (including the EURAD website, EURAD School, wiki, and other sometimes dispersed initiatives) that already form part of the KM platform. Currently, no partner funded by the European Commission can guarantee the sustained financing and maintenance of these tools over the long term. For this reason, discussions are underway with the Joint Research Center (JRC) to hopefully transfer the existing infrastructure to an EU-owned server. It is intended that the future KM platform will be hosted in accordance with this principle.

The following sections will first revisit the planning from EURAD-1 to establish our starting point. It will be then presented an analysis of the current challenges and user needs as expressed by the community, based on EURAD-2 direct user feedback and WP2 Task 5 analysis.

2. Historical context: the EURAD-1 vision ("the as-planned")

The work for a EURAD KM Platform was a significant focus of EURAD-1's WP11. The process was documented across four reports:

- Abbasova D., Arnold, T., Brendler, V., Franzen, C. (2021): Screening and review of existing/available knowledge management approaches and/or tools. Final version as of 08.03.2021 of deliverable D11.1 of the HORIZON 2020 project EURAD. EC Grant agreement no: 847593. with requirements extracted from the survey and the questionnaire “Screening and review of existing/available knowledge management approaches and/or tools,
- Abbasova D., Arnold, T., Brendler, V., Franzen, C. (2022): Specification of the EURAD KM platform (p-KMS). Final version as of 30.05.2022 of deliverable D11.9 of the HORIZON 2020 project EURAD. EC Grant agreement no: 847593., which laid out the detailed specifications,
- Abbasova D., Arnold, T., Brendler, V., Franzen, C. (2022): Specification of the EURAD p-KMS. Final version as of 27.01.2023 of milestone MS242 of the HORIZON 2020 project EURAD. EC Grant agreement no: 847593, which defined the implementation plan and governance and
- Tatomir A., Schönhofen-Romer M., Göbel A., Dierschow F. (2024): Implementation status, results, lessons learned and improvements on DI and SoK document production. Final version as of 29/05/2024 of milestone MS245&333 of the HORIZON 2020 project EURAD. EC Grant agreement no: 847593. which highlight what was donre with a prototype. The work conducted for KM-Platform in EURAD-1 was organised through three major steps for which we propose here to summarise the main ideas and establish a critical review, to evaluate on which priorities, the future work should focus on.

2.1 Main expectations from KM-Platform

The initial vision was for a strategic asset for the entire programme, built on several key expectations that defined its purpose, functionality, and design philosophy:

- **Strategic and sustainable**: the platform was expected to be guided by a clear policy and strategy to ensure high user adoption and long-term sustainability, reflecting the multi-generational timescale of radioactive waste management.
- **Open and collaborative**: a core principle was sharing and open access. The platform was expected to foster a culture of transparency and become an interactive hub for collaboration among partners and, where appropriate, with the broader community.
- **Comprehensive and user-centric**: the system needed to manage a wide array of different data typologies – from formal reports and structured data to informal knowledge. To ensure high adoption, it had to be intuitive and easy to use.
- **Efficient and modular**: the architecture needed to be modular to allow for phased development and future extensibility, while being designed for cost efficiency.

2.2 Results of survey feedback

The initial phase of planning for the KM Platform was grounded in a formal survey detailed in Deliverable 11.1 of EURAD-1. This survey was designed to gather high-level expectations from across the EURAD programme. It is essential to preface this analysis with a critical disclaimer: the feedback was gathered from a limited sample of only 11 partner organisations (6 WMOs, 2 REs, and 3 TSOs), and the raw survey information is no longer accessible for re-analysis. Therefore, the following conclusions represent a high-level interpretation of that initial feedback, which served as the foundational input for the subsequent, more detailed specification work.

The survey's outcomes can be broken down into three main categories: a set of clear strategic directives and minimal requirements, significant ambiguities regarding the platform's architecture, and invaluable "lessons learned" from existing KM systems. These are each detailed in the next sections, taking excerpts from the existing deliverables (not written by EURAD-2 experts).

2.2.1 Strategic directives and minimal requirements

- A professional, web-based platform: there was a clear preference for an integrated, digital web-based platform. Critically, participants explicitly rejected "Simple Wiki-based approaches or repositories" as insufficient, indicating a demand for a professional, feature-rich system, not an ad-hoc solution.
- A culture of collective contribution: the platform was envisioned as a living ecosystem that enables collective contribution. It needed to be an interactive hub that supports collaborative tools like forums, not just a static library for one-way information consumption.
- Integration with advanced tools: a forward-looking requirement to plan for the integration of new AI tools to manage the volume and complexity of knowledge, particularly for advanced search capabilities.
- A shared organisational framework: the need for a shared organisational logic, specifically the EURAD Goals Breakdown Structure, was deemed essential to prevent the platform from becoming a chaotic "data swamp" and to ensure predictable, consistent navigation.
- Robust and granular access control: it was a non-negotiable requirement that not all documents should be shared. This was driven by the diverse nature of the programme and the need to manage commercial sensitivity, intellectual property (IPR), and confidentiality.
- Harmonisation with international efforts: a strategic goal to harmonise efforts with the EC, IAEA, and OECD/NEA to avoid "reinventing the wheel" and ensure EURAD's outputs are compatible with the global knowledge ecosystem.

2.2.2 KM system architecture and key unresolved questions

While the survey defined what was wanted at a high level, it revealed significant ambiguity and a lack of consensus on how to build it.

- System Architecture - "cloudy at this stage": A highly significant finding was that there was "no clear answer about structuration of information." The path from high-level requirements to a concrete technical blueprint was acknowledged to be unclear, though the mention of "agile methods" suggested a need for a flexible approach.
- Unresolved technical and functional questions: several core questions were left open:
  - Input/output formats: the lack of a clear answer on something as basic as data formats signalled a core interoperability issue that needed to be solved. While the final report noted a preference for PDF for preservation and MS Word/XML for editing and transport, this was not yet a settled policy.
  - Communication tools: the noted "interest about communication tools" (seen in systems from IAEA, JRC, etc.) needed justification but suggested a desire for an active collaborative workspace.
- The metadata vs. search engine dilemma: the feedback captured a key philosophical and technical debate. On one hand, "metadata are mentioned as good practices." On the other, the feedback questioned if this manual effort was necessary, suggesting that "with a good research engine, perhaps no need for this." This unresolved tension between manual, structured curation and automated, intelligent discovery was a central strategic question left for the specification phase to answer.

2.2.3 Critical "lessons learned" from existing KM systems

The survey asked partners about their experiences with existing or abandoned KM systems, providing invaluable insight into the primary risks of failure.

- Organisational, not technical, failure: the most critical lesson was that KMS initiatives typically fail due to organisational issues, not technical problems. The main reasons cited for abandoning previous systems were a lack of sponsorship, poorly organised content provision, poor promotion and training, and a failure to keep the system continually updated and moderated.
- Strategy and culture are paramount: the conclusions strongly emphasised that a clear policy and strategy is the most important factor for success. Furthermore, a supportive organisational culture that promotes and trusts in knowledge sharing is essential for active usage. Without these, even the best technology will fail.
- Need for professional governance: a recurring theme was the need for formal roles, specifically a "content curator" to manage quality and respond to queries, and dedicated management to provide promotion, training, and ongoing system improvement.

3. EURAD-1 KM-Platform specifications

3.1 The formal p-KMS specification

The work in EURAD-1 culminated in Deliverable 11.9, which provided a comprehensive specification for the proposed KM Platform (p-KMS). This blueprint translated the high-level needs and open questions from the initial survey into a detailed set of architectural principles and core user-facing functions.

3.1.1 Architectural and non-functional specifications

This first set of specifications defined the fundamental qualities of the system – the "how well" it must perform – to guarantee its longevity, security, and reliability. These principles were designed to ensure the platform would be a future-proof asset for a multi-generational mission.

1. Modularity, extensibility and longevity: recognising that the platform must remain functional for "many decades," a core architectural principle was modularity. The system was specified to be extensible, allowing new features, technologies, and knowledge domains to be added over time without requiring a complete rebuild, thus avoiding technological obsolescence.
2. Scalability: the platform was specified to be highly scalable, capable of handling significant and continuous growth in data volume, the number of users, and the complexity of knowledge assets as the EURAD programme evolves.

3. Interoperability and integration capabilities: to avoid creating another knowledge silo, the platform was designed with strong interoperability capabilities. This included the ability to integrate with internal EURAD systems (such as Project Place) and to link to or import knowledge from external repositories (e.g., from IAEA, OECD/NEA), acting as a "single pane of glass" for the RWM knowledge landscape.
4. Security and compliance: this was a critical specification, mandating a robust system for user management and security. It included the need for granular access rights and clearly defined user roles (e.g., visitor, contributor, custodian, administrator) to reduce risks and ensure compliance with the diverse needs of the partnership (including commercial sensitivity and IPR).
5. Performance and reliability: the platform was specified to be highly performant and reliable, ensuring a responsive user interface, high availability, and minimal downtime to encourage the "constant use" envisioned by the project's stakeholders.
6. Usability and accessibility: the system was required to be intuitive and user-friendly, complying with international standards for accessibility. The goal was to create a platform that new users could navigate with minimal training, regardless of their technical expertise.
7. Long-term data preservation and portability: this went beyond simple backups. The specification required a clear strategy for ensuring that all data and knowledge within the system could be preserved in open, non-proprietary formats. This guarantees its portability and usability for migration to future technology platforms decades from now, ensuring the data outlives the system itself.

3.1.2 Core Functional Specifications

This second set defined the features and capabilities of the platform – the "what" the system would do for its users.

1. Content and document management (knowledge asset management): this is the core "library" function of the platform. It specified a comprehensive system for managing the entire lifecycle of a knowledge asset, from creation and uploading, through versioning and quality control, to final validation and archival.
2. Search and retrieval: the platform needs to be specified to include a powerful search engine capable of indexing all document types. The vision included both simple keyword search and advanced, faceted search (allowing users to filter by author, date, Work Package, etc.), with the ultimate goal of a full semantic search capability.
3. Collaboration and community features: the p-KMS shall be designed as a dynamic community hub, not a static repository. This included specifications for dedicated CoP workspaces where communities of practice could collaborate, as well as an Expert Finder or "Competence Map" to help users identify and connect with experts across the EURAD partnership.
4. Navigation and organisation: to prevent a "data swamp," the platform need to be specified to have a highly structured navigation system based on the GBS and a formal Knowledge Organisational Structure (KOS), ensuring that knowledge could be browsed in a logical and predictable manner.
5. User interaction and feedback: the system must be designed to be interactive, with features allowing users to comment on, rate, and provide direct feedback on knowledge assets. This creates a continuous improvement loop, where the community itself helps to enrich and validate the knowledge base.
6. Administration and governance tools: the platform should include a suite of back-end tools for administrators and content custodians to manage users, oversee content quality, monitor platform health, and generate analytics on usage, all to be overseen by a recommended EURAD IT expert's group.

3.1.3 Proposed implementation and cost management strategy

The EURAD-1 deliverable authors of the specification acknowledged the significant cost and complexity of this ambitious vision. Therefore, a pragmatic and realistic implementation strategy was proposed to manage resources effectively:

1. Prioritise open-source components: to minimise licensing costs and avoid vendor lock-in, the strategy recommended using open-source components where viable.
2. Adopt a phased implementation: instead of a single, "big bang" development, a phased or agile approach was recommended. The project would start with core features like content management, basic search, and simple CoP spaces, using manual integration processes initially.
3. Defer complex features: more complex and costly features, such as full semantic search, deep AI-driven recommendations, and complex automated integrations, would be deferred to future enhancement phases, to be implemented only when the foundational system is stable and well-adopted.
4. Focus on configuration over custom development: to control development costs, the strategy advised to focus on configuring an off-the-shelf or open-source base system rather than engaging in heavy, from-scratch custom software development.

4. Review of the EURAD-1 WP11 activities

While the EURAD-1 planning phase produced a technical blueprint, a critical review from the current EURAD-2 perspective reveals several foundational assumptions, unresolved tensions, and procedural gaps. This analysis is based on a retrospective examination of key statements from the EURAD-1 original specifications (D11.9) and the strategic questions that emerged during the subsequent planning phases (MS242, Task 5 analysis and MS 245 & 333).

4.1.1 Reflections on the EURAD-1 MS 245 & 333

Reading EURAD-1 D11.9 and MS242 together provides valuable insights into the "as-planned" vision, highlighting a number of areas where expectations and approaches could be further balanced or refined. The EURAD-2 expert team reflections are as follows:

- **Dimension 1: Top-down curation and bottom-up collaboration.**
  The statement that "Users can access all information and can share their own information if the curator decides so" illustrates the dual aim of maintaining quality while encouraging participation. This curator-led approach brings the benefit of oversight, but it also raises the question of how best to balance quality assurance with the agility and openness that support dynamic collaboration.
- **Dimension 2: Ambition and user engagement.**
  The assumption that "All surveyed organisations plan to use their KMS constantly" reflects a strong commitment to adoption and justified investment in a rich platform. At the same time, it points to the importance of considering user habits and ensuring the system directly addresses immediate, day-to-day needs, so that engagement can be both natural and sustainable.
- **Dimension 3: What counts as “Knowledge.”**
  The prioritisation of formal outputs such as "reports, scientific papers and presentations" helped to shape the platform as a robust document management system. Complementing this with greater attention to informal or “tacit” knowledge,such as processes, context, code, and discussions, could enrich the system further, supporting long-term reproducibility and practical knowledge exchange.
- **Dimension 4: Agile aspiration and implementation pathways.**
  The recommendation to adopt agile methods was forward-looking and ambitious. The implementation plan in MS242, however, reflects a more traditional stage-gated structure. This suggests an opportunity: to explore how elements of agility,such as iterative feedback loops—could be more fully integrated into future developments, enhancing responsiveness and user satisfaction.
- **Dimension 5: Addressing Key Ambiguities**
  A review of the final documents MS245 and MS333 reveals persistent confusion surrounding certain terms that require clarification and consistent usage—such as "collaborative" vs. "collective" and "platform" (which is not defined in the glossary). Additionally, there is a blurring of boundaries between what a Knowledge Management platform should be and a project management tool. Our approach must remain systemic to avoid duplication and ensure clarity of purpose.

Furthermore, the rationale behind the selection of SharePoint remains unclear. Questions arise due to its functional overlap with ProjectPlace, as well as references to extensive prior experience with SharePoint for KM within EURAD (experience that is not documented in earlier materials). Finally, it will be essential to reaffirm and clarify the open-data commitments of EURAD-2 partners regarding this platform to eliminate any ambiguity upfront.

4.2 KM-Prototype planning: feedback and unresolved strategic questions

The strategic planning for a prototype outlined a logical "division of labor" for EURAD's digital ecosystem, which remains a valid model:

- ejp-eurad.eu: public web page as the public face for curated, high-level outputs.
- ProjectPlace: restricted active workspace for "work-in-progress" within WPs, limited to very active participants.
- the new p-KMS hub: the permanent, central repository for synthesised, validated knowledge from all sources, acting as the "single pane of glass" for EURAD's knowledge landscape.

However, the planning for this logical model also brought two unresolved questions:

- The metadata vs. search engine dilemma.

Open question: is it absolutely necessary to categorise data and documents if a powerful research engine is able to perform fast and smart search functionalities?

- The case for a powerful search engine: this approach prioritises user convenience, promising a "Google-like" experience that reduces the administrative burden of manual tagging.
- The case for categorization and metadata: this approach prioritises long-term data integrity, precision, machine-readability (true FAIRness), and the ability to browse and filter knowledge logically.

- Procedural and governance disconnect.
- Continuity of expertise: The transition from the requirements phase to implementation appears to have created some distance from the team most familiar with user needs. This raises the risk of knowledge dilution or misinterpretation of the original specifications, underlining the importance of maintaining strong links between phases.
- Alignment with agile principles: Agile development emphasises the continuous involvement of requirement owners. The limited carry-over of direct involvement suggests an opportunity to strengthen the translation of agile aspirations into management practice, ensuring closer alignment between vision and execution.
- Governance model: This experience highlights the need to reinforce governance mechanisms for complex, multi-stage projects. Ensuring continuity of involvement from planning to implementation would help safeguard knowledge transfer and support a more seamless development process.

5. Preliminary outcomes from EURAD-2 data management session

A dedicated breakout session was organised during the EURAD-2 annual event in Bologna (September 2025), in order to capture the "on-the-ground" reality of data management within the EURAD community. Using the "Cease, Conserve, Create" framework, more than 80 participants provided extensive, detailed, and often overlapping feedback. Even if the session was not dedicated to “knowledge management platform”, some feedback were quite interesting. This section synthesises part of the raw information from all tables into a cohesive summary of the community's collective diagnosis and priorities. This information will be updated later, as we still wait for all outputs from this session.

5.1.1 CONSERVE: what we must keep and strengthen

Across all breakout groups, there was strong consensus on the foundational elements that are working and must be preserved.

- The centrality of ProjectPlace: there was an agreement that the use of a shared tool as the central platform for collaboration is a critical practice to conserve. It is recognised as being significantly better and more professional than insecure, siloed methods like email. The group also values the existing "good structure and labelling" as a foundation to build upon.
- The principle of the DMP: the existence of a Data Management Plan (DMP) is considered vital. However, this support is conditional: the DMP must be a flexible framework that "needs to be better trained and enforced," with a clear policy that every WP adapts the general plan for its own specific needs.
- Commitment to Open Science: the principle of open access for publications and the practice of publishing raw data alongside papers were strongly endorsed. These were seen as essential for transparency and for providing the data needed to convince civil society and regulators.
- Effective collaborative practices: certain existing practices were highlighted as highly valuable for forcing data standardisation, such as the cross-partner benchmark exercises, which naturally align teams on data formats and create FAIR exchange.

5.1.2 CEASE: what we must stop

The most passionate and urgent feedback was focused on eliminating practices that create inefficiency and risk.

- Cease local data storage: the single most repeated and forceful point was the need to stop keeping raw data and results on personal computers, local servers, or insecure tools like Dropbox. This habit was identified as the root cause of the "Silo Effect," a direct prevention of real-time collaboration, and a major risk for permanent data loss. The mandate is clear: data must be on shared, secure platforms from its creation.
- Cease data exchange via email: sharing data via email was universally condemned as insecure and a primary source of data fragmentation and version control chaos.
- Cease developing siloed data procedures: a key insight was the need to stop developing data management procedures at the individual WP level without central guidance. While WPs need to adapt the DMP, they should not be inventing their own separate systems from scratch, which leads to a collection of "parallel data repositories."
- Cease creating new, unconnected portals: participants expressed frustration with the proliferation of new portals and tools. The clear message was to stop creating new systems and instead focus on improving and integrating the ones we have.
- Cease inefficient administrative / reporting work: a desire was expressed for more concise and actionable reporting, moving away from "massive SotAs" that are difficult to find and read, and eliminating "bureaucratic language."
- Cease the debate, start the action: a strong feeling emerged that the community should stop discussions about the principle value of Research Data Management. The value is now clear, and the focus must shift entirely to how to implement it effectively.

5.1.3 CREATE: what we must build and implement

The "Create" category generated a wealth of specific, actionable ideas, which can be grouped into four key themes.

A. Create universal access and information sharing
   - Solve the access problem: a top priority is to solve the problem that not all partners have access to all levels of ProjectPlace. This requires both a technical and procedural solution to ensure seamless information flow.
   - Improve information discovery: there is a strong need for better tools to find information. Suggestions included creating a unified guidance document for all EURAD KM Ambassadors, a searchable list of EURAD experts with keywords on their expertise, and a public contact list for each partner organisation. The EURAD

website needs significantly improved search functions and clear links to make deliverables and presentations easy to find.
- Ensure reproducibility and legacy: a desire was expressed to create "Reproducibility model systems," where all required input files and models are stored together. This includes a call to better archive past data from EURAD-1, PREDIS, and earlier projects, with explicit links between computational data and its original measurement source.
- Formalise data outputs: implement DOIs for raw datasets and deliverables to make them citable, first-class research outputs.

B. Create practical guidance and training
- DMP training is the top priority: the single most important "WOW" (low effort and high impact) idea was a "Webinar (recording), tutorial, or short slides for WP leaders" on how to practically adopt and use the DMP.
- Guidance for newcomers: create clear guidance for newcomers on how to navigate EURAD's platforms (Project Place, website) and find help.
- Develop a "10-page Guideline" for the DMP: distil the complex DMP document into a short, practical guide for everyday use.

C. Create better tools and technical solutions
- Provide adequate, user-friendly tools: there is a demand for a more user-friendly interface for collaborative work, including tools that facilitate collaborative modelling ("model-huts") and provide for continuous integration and checking of functionality.
- Improve data quality and visualisation: implement a peer-review process for data entries to ensure quality. There is also a strong need for better visualisation and mind-mapping of data to understand its origin and use.
- Embrace open standards: a forceful point was made that all codes and software should be open source, and all data formats should be interoperable and non-proprietary (e.g., XML, JSON, not .docx, .xlsx).

D. Create a resourced and governed system
- Allocate proper resources: a critical and repeated theme was that data management cannot be an unfunded task for technical experts. EURAD must allocate funds and human resources specifically for the support and maintenance of these systems.
- Establish clear responsibilities: there is a need to create "1 DM responsible person at each organisation" and to ensure that responsibilities for data quality are clearly described.
- Ensure a sustainable data repository: the created data repository must have a guaranteed lifetime beyond EURAD-2, preferentially located on a central EU platform (e.g., at the EC).

6. The evolving strategic route for the KM Platform

Based on the critical review of the EURAD-1 vision and the real-world feedback from the EURAD-2 community, a new, more agile and pragmatic strategic route for the KM Platform is required. This chapter outlines this evolving strategy, from the rationale for a new approach to a practical implementation pathway and governance model.

6.1 Rationale for a new approach: validating user expectations

A foundational principle of our revised strategy is to ensure all development is driven by a current and accurate understanding of user needs. A critical review of the original survey work performed in EURAD-1 (as documented in D11.1) has revealed significant limitations:

- The loss of raw information from the survey, making it impossible to re-analyse the feedback.
- A low number of answers collected (11 in total), which is insufficient to represent the full EURAD Partnership.
- Several missing questions that would have provided crucial detail on practical requirements.

These combined factors lead to the necessity to get a new vision about the needs. Therefore, a new, targeted survey will be developed by the end of 2025 and disseminated through KM Ambassadors and WP leaders to partners. This will not repeat the broad questions of the original EURAD-1 survey but will be a focused exercise to validate and prioritise specific requirements, such as the nature of collaborative tools, to ensure the final platform specifications are lean, effective, and directly aligned with the current needs of end-users and stakeholders.

6.2 Securing the foundation: long-term hosting and IT infrastructure

A long-term knowledge platform cannot exist without a stable technical foundation. To address this critical prerequisite, a meeting is planned on October 2025 with the JRC (Ispra). The objective is to discuss and evaluate how a future KM Platform and its bridged tools can be hosted in a sustainable way on a dedicated IT infrastructure that is better supported by the EC. This proactive step is essential to secure the longevity and viability of our knowledge assets before significant development begins.

6.3 The new platform philosophy: an agile, FAIR-first "interface" model

The KM Platform will no longer be considered a monolithic application to be built in a single step. Instead, the KM-Platform should be first considered as an interface creating the bridge between all the diverse objects that constitute EURAD's knowledge (data, code, reports, meeting minutes, deliverables, milestones, etc.), also including the huge possibility to bridge with knowledge created in PREDIS, EURAD-1, and also past EC projects related to waste management.. Its primary added value will be to facilitate seamless and intelligent access to this wide knowledge.

The development philosophy will follow a deliberate, bottom-up sequence:

1. First, define what are the relevant information, workflows, and codes we want to keep.
2. Then, define how to keep this information, ensuring it adheres to FAIR principles from the very beginning. This is the foundational and most critical step.
3. Finally, think what modules for interaction (e.g., search, visualization, collaboration) would be useful to build on top of this solid foundation.

To implement this philosophy, our focus will be first on defining the core specifications – such as simple text-based data formats, schemas, and metadata – followed by the specifications for the interfaces between data, models, and processing tools. This modular and systemic approach is the highest priority, ensuring that, regardless of how technology evolves, all components can be easily reconstructed and combined. We must avoid the trap of building something overly complex that may not work in the future or will be difficult to maintain. The outcomes of these reflections and the precise definition of the next steps will be detailed in deliverable D2.1 in March 2026.

6.4 Implementation via a pilot-based use case

As a next step, we will adopt an agile methodology and consider using one or two Work Packages from EURAD-2 (ideally from the second wave) as a use case. This pilot-based approach will allow us to test and refine the core principles in a real-world environment.

We do not expect that a complex system can be built at this stage. However, by ensuring that this pilot system adheres strictly to FAIR principles, it will be easy to develop modular components later (for example, an AI-powered report summarization module, a training module, or a "knowledge-gaming" module based on the available, up-to-date knowledge). This method allows us to deliver value incrementally and adapt to user feedback.

6.5 Governance: an empowered, expert-led community

This agile, bottom-up approach requires a corresponding governance model that empowers the people who know the data best. Building on the recommendation in EURAD-1 MS242, we propose to create and activate a real IT Experts Group.

- Composition: it will be composed of both scientific experts and IT experts from the WPs or new partners, who have the deepest understanding of their data, supported by IT specialists. But it is also important that, through KM actions inside the community, scientific experts realise that data management and knowledge management is fully “part of their job”, and that it should be anticipated from the beginning.
- Mandate: this group, operating as part of the KM activities within each WP, will be responsible for defining the FAIR-compliant formats and schemas for their respective data and documents.
- The "Interface" principle: their core responsibility is to ensure that while their specific formats are tailored to their needs, they are also compatible with a defined "general interface." If all data from any WP is compatible with this general interface, then all data can be read and used seamlessly by any future platform, ensuring both domain-specific flexibility and project-wide interoperability.

6.6 Analysis of open strategic questions

The analysis by Task 5, prior to and including the breakout session of the annual event 1, has clarified several high-level strategic questions that require a decision from EURAD governance:

1. Open Access: what is our definitive policy on what knowledge must be fully open versus restricted to partners?
2. Long-term hosting and budget: the EURAD-1 analysis noted a potential cost (of nearly €6 million) for development and 50-year support. Do we commit to this long-term operational cost, or prioritise a more minimalist, open-source solution that fits a smaller budget but requires more community maintenance?
3. Structuration: should the platform's primary structure be optimised for specialists, or for a broader public audience? This will fundamentally influence the User Interface (UI) design.
4. Search engine: do we require a complex semantic search engine, or is a simpler, more powerful keyword-based search sufficient for an MVP? Should a chatbot-style interface be considered?
5. Governance and maintenance: who will ultimately own and be responsible for the platform's security and maintenance beyond the life of EURAD-2? A long-term commitment is needed from a stable entity.

6.7 The proposed strategic path forward ("the to-be")

The strategic approach must shift from a large-scale, single-step implementation to an agile, bottom-up, and user-centric process that delivers immediate value while building a modular foundation for the future.

6.7.1 Phased action plan

Step 1: Revaluate specifications and launch new survey during interactive meeting with KM Ambassadors (Q4 2025)

- Action: organise a meeting with all task 2 leaders (KM ambassadors) to ask targeted questions to individual WPs. It will not re-ask broad questions but will focus on prioritising the features from EURAD-1 D11.9 against the urgent needs identified in Bologna.
- Goal: define a "Minimum Viable Product" (MVP) for the KM Platform, focusing on a practical, user-centered set of core functionalities.

Step 2: Decide on implementation path and sustainable hosting (Q2 2026)

- Action: based on the specifications and the outcomes of the JRC meeting on sustainable hosting, present a formal proposal to EURAD-2 governance.

- Goal: make a strategic decision on the implementation path: an external tender for the MVP, or an agile, in-house adaptation and integration of existing open-source tools.

Step 3: Pilot implementation with a Use Case (Starting End-2026)

- Actions: one or two Work Packages to act as a pilot implementation use case. This pilot will focus on establishing simple data formats, schemas, metadata, and the interfaces between data and tools.
- Goal: test and refine the core platform functionalities with a real user group. This agile method ensures we build a system that is useful, adheres to FAIR principles, and avoids the trap of building a complex tool that nobody uses.

6.7.2 Formalise governance and the role of the IT Experts Group

As part of this process, we will formally activate the IT Experts Group as envisioned in EURAD-1 D11.9. Its role will be as follows: to provide technical guidance, to help WPs define their data schemas "like code," to ensure all developments are compatible with a general EURAD interface, and to ensure a systemic and future-proof approach to knowledge management.

7. Conclusion

The EURAD-2 programme now possesses two critical assets: a comprehensive technical blueprint developed in EURAD-1 and a clear, pragmatic mandate from the EURAD-2 community to initiate the KM platform. The recommended path forward, therefore, is not to discard the original vision, but to build towards it incrementally, starting with the most urgent needs of its users. A focus on practical guidance, solving access issues, and adopting an agile, pilot-based implementation will deliver tangible value quickly, foster user buy-in, and build the sustainable knowledge management ecosystem.

The next steps of the work are clearly prioritised with hosting purpose and KM ambassadors feedback, to collect updated needs and develop a simple iterative approach-based step by step proof of concept. This will be fully implemented in the next D2.1 Report on the KM platform specifications in 2026.

Some open questions or uncertainties are also still to be solved depending of several parameters or actors.

What	When	Who	Potential issues
Meeting with KM Ambassadors	December 8th 2025,		Get the widest participation and involvement as possible
Hosting of IT tools on EC servers	Q4 2026	EURAD-2 KM Task 05 with EC/JRC	Agreement from JRC and uncertainty about possible costs for EURAD partnership.
New survey with participants, (stakeholders ?) to update priorities	Q1 2026	EURAD-2 KM Task 05 with KM Ambassadors and WP leaders + PMO…	Do not duplicate previous survey but ensure to get a clear mandate about how to move on.
Updated specifications for KM Platform	Q3 2026	KM Task 05	Deliverable D 2.1 may be delayed to September 2026 to account for sufficient feedback and accurate specifications

Engage scientists and IT experts to move on and deploy effectively KM Platform	Q1 2027	Task 05	Ensure a smooth pathway, flexible and agile approach
Engage community on KM Platform for feedback and promote through massive communication	From 2027	EURAD-2	Possible issue to manage to promote widely and ensure sustainability.

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