Outcomes of the common topic seminar held on 21.05.2024 - Brainstorming on a roadmap for future developments of the KB services & metadata pipeline.

TOPIC 1 - *Inclusion of computational resources information in a/p resources metadata*

Req. Id	Requirement	Plan	Deadline
1	Include the possibility to query the information related to the consumed resources (always combined with the information about the environment configuration) in combination with the other parameters. (Suggested by Stefan)	• Investigate the best implementation solution, i.e. if creating a new Query Tool to perform the new type of queries (leaving the current Query Tool to perform the current queries) or to upgrade the existing Query Tool to optionally query also the computational resources. • Implement the selected option.	31.12.2024
2	Consider additional libraries for water/energy consumption (Suggested by Rob)	• Investigate the feasibility to implement the requirement, focusing on the existence and added value of new libraries. If feasible, then: o Update the current tool to include the selected additional libraries.	31.12.2024

3	Assign "labels" (as done for buildings, products, etc.) to a/p resources to classify them in terms of "energy efficiency" or "energy performance". (Suggested by Rob)	• Investigate the feasibility to implement the requirement. If feasible, then:
		  o Define criteria to assign "labels" (as done for buildings, products, etc.) to a/p resources to classify them in terms of "energy efficiency" or "energy performance"
		  o Implement the criteria to calculate the label
		  o Add a new attribute in the md profile
			31.12.2024

4	• Create a new metadata for the new version of the a/p resource, including the version in the title (as it happens for the name of sw versions and allowing to keep previous versions). • Add in the description field an explanation of what the new version is bringing. ==Original suggestion (by Kathi) was to include versioning of a/p resource metadata, to be used each time a new version of the resource is released.==	If the requirement is approved, it is immediately applicable	N/A
5	Display information in a more user-friendly way, e.g. using graphs (Suggested by Rob)	• Investigate the best implementation solution. • Implement the selected option.	31.12.2024

TOPIC 2: ***Query Tool upgrade to query both a/p resources and datasets metadata***

Concluding remark was to document objective/verifiable reasons to discard option b), e.g. inefficiency of querying the catalog via STAC API, especially if querying two or more different collections and using many parameters.

Should option a) be approved, the related requirements and implementation plan are listed in the table below.

Req. Id	Requirement	Plan	Deadline
1	Create an ingestion procedure to ingest dataset metadata in the Knowledge Base database.	• Read json dataset metadata from GitHub • Mapping from json dataset metadata to database table • Definition of mechanism to run the procedure	31.10.2024
2	Upgrade current Query Tool to allow complex queries.	• Definition of additional queries • Definition of layout changes	31.12.2024

		• Implementation	