

A3. ENVRI Knowledge Base

The attributes marked with a * are confidential and should not be disclosed outside the service provider.

Service overview					
Service name	ENVRI Knowledge Base				
Service area					
Service phase	Beta				
Service description					
Customer group	<ul style="list-style-type: none">• RI architects/developers,• Investigators into RI design or current RI assets and technologies.				
User group					
Value					
Tagline					
Features	<ul style="list-style-type: none">• Uses Open Information Linking for environmental science research infrastructures (OIL-E).• Captures information about research infrastructure characteristics and design ("RI design wisdom"), structured according to ENVRI RM.• Captures information about technologies and standards used by RIs for key services.• Provided as an (RDF) knowledge graph, accessible via SPARQL requests over HTTP.• Permits analysis and comparison of RI characteristics.				
Service options	<ul style="list-style-type: none">• SPARQL end-point: <a href="http://oil-e.vlan400.uvalight.net/rm/sparql?format=<format>&query=<query>">http://oil-e.vlan400.uvalight.net/rm/sparql?format=<format>&query=<query>• Notebook (example queries): http://oil-e.vlan400.uvalight.net				
	Option	Name	Description	Attributes	
	1				
	2				
	3				
Access policies					
Service management information					
Service owner *	University of Amsterdam				
Contact (internal) *	Zhiming Zhao (z.zhao@uva.nl)				
Contact (public)					

Request workflow *	<pre>graph TD RI_arch[RI architects] --> Consider[Consider modelling your RI using ENVRI RM] RI_arch --> Want_study[Want to study ENVRI RM examples?] RI_arch --> Specified[Specified RI using ENVRI RM?] Specified --> Compare_designs[Want to compare with other RIs' designs?] Compare_designs --> Machine_ref[Need a machine-actionable reference to RI design?] Machine_ref --> Contribute[Contribute to ENVRI KB] Want_study --> Refer_KB[Refer to ENVRI KB] Researchers[Researchers] --> Wish_compare[Wish to compare RI technologies/ standards?] Wish_compare --> Refer_KB Researchers --> Understand_rel[Want to understand the relationship between RIs and e-Is?] Understand_rel --> Semantic_rel[Need semantic relations between concepts?] Semantic_rel --> No_need_KB[No need for KB] Semantic_rel --> Use_vocab[Want to use ENVRI RM vocabulary for semantic search?] Use_vocab --> Link_data[Link data with ENVRI KB] Data_providers[Data providers] --> Improve_vis[Want to improve visibility of data collections?] Improve_vis --> Your_call[Your call.] Your_call --> No_need_KB No_need_KB --> Contribute</pre>															
Service request list																
Terms of use																
SLA(s)																
Other agreements																
Support unit	<ul style="list-style-type: none">• email support.• open for new case studies.															
User manual	online accessible documentation via http://oil-e.vlan400.uvalight.net/															
Service architecture																
Service components	<div>TRL 6, live demonstrator</div> <table><tr><th>#</th><th>Type</th><th>Name</th><th>Description</th><th>TRL [1]</th></tr><tr><td>1</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td></td><td></td><td></td><td></td></tr></table>	#	Type	Name	Description	TRL [1]	1					2				
#	Type	Name	Description	TRL [1]												
1																
2																
Finances & resources																
Payment model (s)	free															
Pricing																
Cost *																
Revenue stream (s) *	The ENVRI Knowledge Base should be maintained as part of the ENVRI community portal. At end of project, the usefulness of aggregating design wisdom and technology landscape for RI should be evaluated and, if positively received, a recipe for provisioning new knowledge bases for similar cluster initiatives should be compiled and published.															
Action required																

[1] Technology Readiness Levels (TRL) are a method of estimating technology maturity of components during the acquisition process. For non-technical components, you can specify "n/a". For technical components, you can select them based on the following definition from the EC:

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

- **TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
- **TRL 7** – system prototype demonstration in operational environment
- **TRL 8** – system complete and qualified
- **TRL 9** – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies)