

C3. Data / metadata generation from semantic annotations

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

Service overview																									
Service name	Data / metadata generation from semantic annotations																								
Service area																									
Service phase																									
Service description																									
Customer group	<ul style="list-style-type: none"> • RI metadata and data managers and publishers • e-Infrastructure semantic operators 																								
User group																									
Value																									
Tagline																									
Features	<ul style="list-style-type: none"> • A-Generation of ISO19139 metadata records from rdf triples. <ul style="list-style-type: none"> • Step 1) conversion of OBOE-based triples to DCAT-AP • Step 2) from DCAT-AP to ISO. This second step can be re-used alone. • B- Generation/identification of datasets from raw data OBOE-based RDF triples. <ul style="list-style-type: none"> • Step 1) data perimeter delimitation (from metadata), • Step 2) identification of dataset dimensionalities • Step 3) Data file (NETCDF) generation and • Step 4) DOI generation 																								
Service options	<table> <tr> <th>Option</th><th>Name</th><th>Description</th><th>Attributes</th><th></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> <tr> <td>3</td><td></td><td></td><td></td><td></td></tr> </table>					Option	Name	Description	Attributes		1					2					3				
Option	Name	Description	Attributes																						
1																									
2																									
3																									
Access policies																									
Service management information																									
Service owner *																									
Contact (internal) *																									
Contact (public)																									

<p>Request workflow *</p>	<p>The diagram illustrates two main workflow paths for a request workflow:</p> <ul style="list-style-type: none"> Ontology specific (OBOE for AnaEE): This path starts with a 'metadata producer' interacting with a 'UI application'. The application performs 'perimeter delimitation' on 'OBOE metadata'. This leads to 'OBOE to DCAT' conversion, which then uses an 'API (XSLT)' to generate 'ISO 19139' output. A 'Semantic annotation of resources' step is also shown, leading to 'RDF OBOE metadata' and 'RDF raw data', which are then processed into 'A ISO19119 EML?' and 'B Datasets prod/identif. & public. (DOI)'. Generic: This path starts with a 'metadata producer' interacting with a 'UI application'. The application performs 'metadata record selection', leading to 'RDF Geo DCAT'. This then uses an 'API (XSLT)' to generate 'ISO 19139' output. OBOE specific: This path starts with a 'Data manager & publisher' interacting with a 'UI application'. The application performs 'data set selection', leading to 'RDF OBOE raw data'. This then uses an 'API' to generate 'NETCDF' and 'DOI' outputs. An 'annotation pipeline' is also shown, leading to 'RDF data generation' and 'RDF OBOE metadata'.
<p>Service request list</p>	<ul style="list-style-type: none"> • Development stage • Open Source
<p>Terms of use</p>	
<p>SLA(s)</p>	
<p>Other agreements</p>	
<p>Support unit</p>	
<p>User manual</p>	
<p>Service architecture</p>	

Service components	#	Type	Name	Description	TRL [1]
	1				
	2				
Finances & resources					
Payment model (s)					
Pricing					
Cost *					
Revenue stream (s) *					
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)