	А	В	С	D	E	F	G	Н	I
1	Service provider wanting to promote	e their training resources (SP-1)							
2	Service Provider wanting to know w	here gaps are in subject coverage (SP-2)							
3	Service provider wanting to provide	an overview of training possibilities for their comm	nunity (SP-3)						
	Generic Term	Description	Metadata req (SP-1)	Useful for Extended Doc (SP-1)		Useful for Extended Doc (SP-2)	Metadata req (SP-3)	Useful for Extended Doc (SP-3)	Comment / Notes
5	title	The name of the resource.	Υ	Υ	Υ	Υ	Υ	Υ	
6	abstract	A brief overview of the item (container)	Υ	Υ	Υ	Υ	Υ	Υ	
7	abstract_data	A brief synopsis about or description of the learning resource. Choice stating whether or not there is a fee for	Υ	Υ	Υ	Y	Υ	Υ	either an abstract or description would be needed.But probably not both? Assumes that researcher wants to filter by free or not. May vary by user. Suggest information about variations in fees be included in the Description field, e.g., student may access a resource w/o fee, but a researcher may be req
8	access_cost	use of the resource (Boolean).	Y	Y	Υ	Y	Υ	Υ	to pay.
	author(s)	List of full name of the author(s)	Y	Υ	Υ	Y	Y	Υ	
Ť		Last or family name of person(s) authoring the	-	-					
10	author.familyName	resource.	Υ	Υ	Υ	Υ	Υ	Υ	
	,	First or given name of person(s) authoring the							
11	author.givenName	resource	Υ	Υ	Υ	Υ	Υ	Υ	
	author_org	Name of organization authoring the resource.	Υ	Υ	Υ	Υ	Υ	Υ	
		List of full name of secondary person(s)							
13	contributor(s)	contributing to the resource.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	
14	contributor_orgs.name	Name of contributing organization(s)	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	
	contributor_orgs.type	Type of contribution made by the organization	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	Use CRediT (Contributor Roles Taxonomy)?
16	contributors.familyName	Family or last name of the contributor.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	
17	contributors.givenName	Given or first name of contributor(s)	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	

	А	В	С	D	E	F	G	Н	I
		The unique identifier for individual or organization							
18	name_identifier	referenced.	Υ	Υ	Υ	Υ	Υ	Υ	Useful for FAIR, if available.
19	name_type	The name of the identifier scheme.	Υ	Υ	Υ	Υ	у	Υ	
		Type of contribution made by a person or							Clarify whether this is only for a person
20	contributors.type	organization.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	contributor
21	contribution_date	Date of the contribution to the resource	N	N	N	N	N	N	
		Identification of and information about entities							
		(i.e., people, organizations) contributing to the							
22	contribution_entity	resource	N	N	N	N	N	N	
		Language in which the resource was orginally							
23	language_primary	published or made available.	Υ	Υ	Υ	Υ	Υ	Υ	
		Additional languages in which the resource is							
24	languages_secondary	available, if any.	Υ	Υ	Υ	Υ	Υ	Υ	Assumes, if applicable.
25	keywords	Keywords or tags used to describe the resource.	Υ	Υ	Υ	Υ	Υ	Υ	
		A license document that applies to this content,							
26	license	typically indicated by URL.	Υ	Υ	Υ	Υ	Υ	Υ	Necessary for FAIR
		The predominant type or kind that characterizes							
27	lr_type	the learning resource.	Υ	Υ	Υ	Υ	Υ	Υ	
									May not be necessary if LR is created for a
		Principle users(s) for which the resource was							particular community or institution (i.e. a
28	target_audience	designed.	Υ	Υ	Υ	Υ	Υ	Υ	research institute vs. a general catalogue)
		Subject domain toward which the resource is							Some resources are too generic for subject
29	subject	targeted.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	specificity
		Target skill level in the topic being taught;							
		example values include: beginner, intermediate,							
30	skill_level	advanced.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	
		The typical range of ages for the content's							
31	typical_age_range	intended end user.	N	N	N	N	N	N	
		How hard it is to work with or through the							
		resource for the typical intended target audience							
		(very easy, easy, medium, difficult, very difficult,							this relates to skill_level further down the list.
32	difficulty	knowledge-dependent)	N	N	N	N	N	N	Both might not be needed.

	А	В	С	D	E	F	G	Н	I
33	published	Date of publication / broadcast.	Υ	Υ	Υ	Υ	Υ	Υ	- might help with choice if more than one topic
									Emphasis upon publication /broadcast here,
l		Date at which the educational resource was most							but should be considered with other dates,
34	modification_date	recently published or broadcast.	Υ	Υ	Υ	Υ	Υ	Υ	e.g., creation & publication dates
35	version	The specific version of the resource, if declared.	Υ	Υ	Υ	Υ	Υ	Υ	
		The organization credited with publishing or							- reputation of organisation may be important;
		broadcasting the resource (does not include the							what about shared publishing in terms of
36	publisher	repository where resource is stored).	Υ	Υ	Υ	Υ	Υ	Υ	repeatability?
	p and the transfer of the tran								
		URL that resolves to the learning resource or to a							
		"landing page" for the resource that contains							
		important contextual information including the							
37	url	direct resolvable link to the resource, if applicable.	Υ	Υ	Υ	Υ	Υ	Υ	
		Text describing information about using the							Would be place for adding attribution info
38	usage_info	resource, not addressed by the license URL.	N	У	N	у	N	Υ	(rather than "is-based-on-url above; row 50).
		Yes / No response to whether copyright or other							If no other info is available about copyright or
39	usage_restrictions	restrictions apply to the use of the resource	N	N	N	N	N	N	licensing, could use this.
									If no other info is available about copyright or
40		The URL where the owner specifies permissions							licensing, should use this as some information
40	use_rights_url	for using the resource	N	Recmnd	N	Recmnd	N	R	is req for FAIR at least.
		Descriptions of what knowledge, skills or abilities							
		students should acquire on completion of the							
	learning_outcome	resource.	Recmnd	Y	Recmnd	Y	Recmnd	Y	
42	citation	Preferred form of citation	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	
		From DC "An unambiguous reference to the							
		resources within a given context." Use a string							
1.5		that conforms to an ID system. See how							Could be the same as the persistent ID for the
43	locator.data	FAIRsFAIR deals with this	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	resource.

	Α	В	С	D	E	F	G	Н	1
		Controlled vocabulary designating the persistent							
		identifier schemes used for the resource, e.g., DOI,	,						
44	locator.type	ARK, Handle.	N	Υ	N	Υ	N	Υ	Should be used with the citable locator.
	* *	Approximate or typical time it takes to work with							
		or through the resource for the typical, intended							This maybe important when making a decision
45	completion_time	target audience.	Υ	Υ	Υ	Υ	Υ	Υ	but probably isn't necessary in all cases;
	· -	Completion status or condition of the resource							But versioning would be helpful; could be
46	completion_status	(draft, final, revised, unavailable)	N	N	N	N	N	N	useful from an internal system POV
	· -	Degree of interactivity characterizing the							,
		resource; refers to the degree to which the							
		learner can influence the aspect of behavior of							
		resource (e.g., very low, low, medium, high, very							
47	interactivity_level	high).	N	N	N	N	N	N	Indicates student amount of effort req;
	· -	The predominant mode of learning supported by							
		the learning resource (i.e., active, expositive, or							
48	interactivity_type	mixed)	N	Recmnd	N	Recmnd	N	Recmnd	
	,=	·							
									Would need to explain the issues associated
		Type of credentialing offered for the resource, if							with declaring a credential (from whom,
49	credential_status	any.	N	N	N	N	N	N	authority, academic or occupational, etc.)
		Name of person who has been asserted as the							
		contact(s) for the resource in case of questions or							
50	contact	follow-up by resource user.	Recmnd	у	Recmnd	у	Recmnd	Υ	
		Email address of person or organization that has							1 to 1 relationship for each contact name;
51	email	been asserted as the contact for the resource.	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	Recmnd	preferred address is most stable (persistent).
		Name of organization that has been asserted as							
		the contact for the resource in case of questions							
52	org	or follow-up by resource user.	N	Recmnd	N	Recmnd	N	Recmnd	
		From schema.org def: "Media type of resource,							
		typically expressed using a MIME format" from							
53	media_type	IANA site & MDN reference.	Recmnd	Υ	Recmnd	Υ	Recmnd	Υ	Useful for FAIR?

	А	В	С	D	E	F	G	Н	1
		The name of an framework to which the resource							Need to discuss if / how this relates to skill
54	ed_frameworks.name	is aligned, if any.	N	Υ	N	Υ	N	Υ	competence framework (e.g.,) FAIR4S)
		The description of a node in an educational							
55	ed_frameworks.nodes.description	framework	N	Υ	N	Υ	N	Υ	
		The name of a node in an established educational							
56	ed_frameworks.nodes.name	framework.	N	Υ	N	Υ	N	Υ	
		The URL of a node in an established educational							
57	ed_frameworks.nodes.url	framework.	N	N	N	N	N	N	
58	ed_frameworks.url	The URL of an established educational framework	N	N	N	N	N	N	
		A category of alignment between the learning							
		resource and the framework node. (See notes for							
59	alignment_type	Recmnd values).	N	Recmnd	N	Recmnd	N	Recmnd	
	9 = 71	A sub-Training resource or externally referenced							
60	hasPart	resource	N	Recmnd	N	Recmnd	N	Recmnd	Possibly one to many
		Course in which this resource was/will be used, or							
		the resource in which this resource is a part (e.g.,							
		part of a book or slide-set associated with a							
61	isPartOf	course).	N	Recmnd	N	Recmnd	N	Recmnd	Many to one
		A resource that was used in the creation of this							Attribution info included in usage information
62	is_based_on_url	resource (repeatable)	N	N	N	N	N	N	below. (row 85).
63	resource_size	Size of the resource in bytes (uncompressed)	N	Recmnd	N	Recmnd	N	Recmnd	Important for downloadable resource.
		Indicates input methods that are sufficient to fully							
		control the described resource (CV list of values at							
		https://www.w3.org/wiki/WebSchemas/Accessibil							
64	accessibility_control	ity	N	Optional	N	Optional	N	Optional	

	А	В	С	D	E	F	G	Н	I
		Content features of the resource, such as							
		accessible media, alternatives and supported							
		enhancements for accessibility (WebSchemas wiki							
		lists possible values). Only 4 values of the entire							
		list were available in the drupal production							
		system; others are to be added to the CV for this							
65	accessibility_features	field as called for.	N	Recmnd	N	Recmnd	N	Recmnd	
	· <u>-</u>	A characteristic of the described resource that is							
		physiologically dangerous to some users. (CV list							
		of values at:							
		https://www.w3.org/wiki/WebSchemas/Accessibil							
66	accessibility_hazard	ity)	N	N	N	N	N	N	
		Human readable summary of accessibility features							
67	accessibility_summary	and deficiencies	N	Recmnd	N	Recmnd	N	Recmnd	
		Indicates that the resource is compatible with the							
		referenced accessibility API (CV list of values at							
		https://www.w3.org/wiki/WebSchemas/Accessibil							
68	accessibilty_api	ity)	N	N	N	N	N	N	
69	date_created	The date on which the resource was created.	N	N	N	N	N	N	- if topic is likely to have changed
									would depend on whether the topic is country
		Code for country from which resource was							specific e.g. legislation or speak to language
70	country_of_origin	generated;	N	Recmnd	Υ	Recmnd	N	Recmnd	translatability
		Time, culture, geography or region to which this							
		learning object applies. The extent or scope of its							
		content. Coverage will typically include spatial							
		location (a place name or geographic coordinates),							- III da a a da a a banka a da a banka a
		temporal period (a period label, date, or date							would depend on whether the topic is country
		range) or jurisdiction (such as a named							specific e.g. legislation or speak to language
/1	coverage	administratie entity).	N	Recmnd	Υ	Recmnd	N	Recmnd	translatability

	A	В	С	D	E	F	G	Н	1
		Data-sets, tools, technologies, entities, other							
		training materials in the series, etc., to which the							
72	mentions	resource makes reference. **	N	N	N	N	N	N	Ambiguous term; is this duplicative of others?
		Principal environment within which the learning &							would depend on whether the topic is country
		use of the resource is intended to take place, e.g.,							specific e.g. legislation or speak to language
73	context	school, higher education, etc.	N	Recmnd	Υ	Recmnd	N	Recmnd	translatability
		The purpose of the work in the context of							·
74	purpose	education.	N	Υ	N	Υ	N	Υ	Ambiguous term;
		Data-sets, tools, technolgies, entites, etc. that are							
75	uses	actively utilised in this resource.	N	Recmnd	N	Recmnd	N	Recmnd	
		Placeholder for comments given by users							
76	rating	assessing the educational resource after use.	N	N	N	N	N	N	
		If applicable, placeholder for overall ratings for the							
		educational resource, based on a collection of							
77	ratings	reviews or ratings.	N	N	N	N	N	N	Aggregation of rating comments.
		Degree of conciseness; may be estimated in							Related to interactivity level. May be difficult
78	semantic_density	terms of its size, span or duration	N	N	N	N	N	N	to discern.
79	System MD fields below:	·							
80	id	System identifier for the MD record.	Υ	Υ	Υ	Υ	Υ	Υ	System field
		Globally unique, persistent ID for the metadata							
		record within the system for the resource being							Necessary for FAIR; should be in the form of a
81	md_record_id	described.	Υ	Υ	Υ	Υ	Υ	Υ	resolvable ID, e.g., DOI, Handle, ARK, LSID, etc.
		Person submitting the resource into the DMTC							Not necessary for discovery; useful for
82	submitter_email	queue for publication.	N	Υ	N	Υ	N	Υ	admin/system
		Email address of person submitting the resource							Not necessary for discovery; useful for
83	submitter_name	into the DMTC queue for publication.	N	Υ	N	Υ	N	Υ	admin/system
		The date on which the metadata record was							
84	created	created.	Υ	Υ	Υ	Υ	Υ	Υ	System field
		The login name of the person creating the MD							
85	creator	record.	Υ	Υ	Υ	Υ	Υ	Υ	System field
		Course instance or event where this training							
		resource was or will be featured. (inverse of							
86	featured_event	workFeatured)	N	N	N	N	N	N	Events out of scope.

	А	В	С	D	Е	F	G	Н	I
87									
88									
		A globally unique label that identifies the learning							
89	resource_id_label	object.							Used by ENVRI LOM: identifier (General 1.1)
		Name or designator of the identification or							
		cataloging scheme for the globally unique label							
90	resource_id_scheme	(resource ID)							Used by ENVRI LOM: catalog (General 1.2)
		Value of the identifier within the identification or							
		cataloging scheme that designates or identifies							
		the learning object. Should be a namespace							
91	resource_id_value	specific string.							Used by ENVRI LOM: entry (General 1.3)
92									
93	REFERENCES								
94	* Taken from https://zenodo.org/record/3903341(ENVRI LOM profile)								
95	** Taken from https://bioschemas.o	/							