



Linked Conservation Data

Sharing Conservation Vocabularies

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NKOS 2020
9 September 2020

Heritage (not biodiversity)
Documentation a critical task





Linked Conservation Data

<https://www.ligatus.org.uk/lcd/>

Overall aim:

- Make conservation documentation widely accessible

Three project strands:

- Outreach and Education
- Terminology
- Modelling

Use Linked Open Data!



Linked Conservation Data

[Home](#) [Resources](#) [Meetings](#) [Consortium](#) [Introduction to Linked Data](#) [Updates](#)

Linked Conservation Data

Linked Conservation Data is a Network of partners working on improving access of conservation documentation records. The aim of the Network is to discuss and report on ways that conservation documentation can be disseminated and re-used more effectively through Linked Data.

Project objectives

We have identified three areas of development for the network's attention: Terminology, Modelling, and Dissemination.

- **Terminology:** In the Semantic Web, communicating by using a variety of terminology traditions is important for disambiguation. The Network will assess the suitability of existing vocabularies in conservation and identify the amount of work needed both in terms of coverage and in terms of formatting to improve them for use in Linked Data applications. The relevant Linked Data standard for vocabularies is [SKOS](#).
- **Modelling:** In the Semantic Web, the type of each published record needs to be explicitly declared. For example, machines need to be able to handle records of type *condition assessment* and records of type *treatment proposal* differently. A standard which provides different types of records (classes) is the [CIDOC-CRM](#). The Network will assess the suitability of the CRM and its extensions for conservation.
- **Dissemination:** The Network will share best practices for producing Linked Data from conservation documentation and report on the readiness and capacity of existing software to host and share Linked Data.

[Read more](#)

Project update - February 2020

Submitted by Athanasios Velios on 20 March, 2020 - 13:32 GMT

Linked Conservation Data project moves to phase 2

We are pleased to announce that the Linked Conservation Data Consortium has secured further funding from the Arts and Humanities Research Council to continue with efforts to improve and harmonise documentation in conservation. The consortium is a unique environment where conservation practice, documentation, terminology and ontology are discussed in relation to their impact on the profession both in strategic and in practical terms.

[Read more](#)



Modelling workshop



This workshop took place in London, UK. Conservation documentation combines many different types of records. During this workshop the consortium investigated best practices for encoding these records.

[Recordings](#)

[Sample records](#)

[Read more](#)

Terminology workshop



This workshop took place in **Stanford, Redwood City, California**. Conservators use many vocabularies in their descriptions. As a result of this workshop we will report on the current landscape of terminology in conservation and propose future work.

[Questionnaire](#)

[Vocabularies](#)

[Read more](#)

QUESTIONS

RESPONSES

30

Linked Conservation Data - Thesaurus and Glossary Usage Questionnaire

Email address *

Valid email address

This form is collecting email addresses. [Change settings](#)

Name *

Short-answer text

Organization

Short-answer text

What is your current professional role? *

- ☐ Conservator
- ☐ Conservation Scientist
- ☐ Thesaurus editor
- ☐ Data manager
- ☐ Other...

What types of documentation do you generate? (check all that apply) *

- ☐ Conservation Treatment Documentation

[illegible]



Linked Conservation Data

[Home](#)[Meetings](#) >[Consortium](#)[Reading list](#)[Updates](#)[Home](#) » [Meetings](#) » [Terminology workshop](#) » Conservation controlled vocabularies

Conservation controlled vocabularies

A library, media, and archival preservation glossary

DEPEW, J. N., & JONES, C. L. (1992). A library, media, and archival preservation glossary. Alphabetical list of terms.

In category: [paper](#), [books](#)

[Open library link](#)[Worldcat permalink](#)

ABC of bookbinding

GREENFIELD, J. (2002). ABC of bookbinding. New Castle, Del, Oak Knoll.

In category: [books](#)

[Worldcat permalink](#)

AIC BPG Glossary of Terms

Glossary of the paper conservation group of the American Institute for Conservation

In category: [books](#), [paper](#)

[Online glossary](#)

AIC Lexicon Terms

In category: [general](#)

[Online resource](#)

Art & Architecture Thesaurus (AAT)

The AAT is a thesaurus containing generic terms, dates, relationships, sources, and notes for work types, roles, materials, styles, cultures, techniques, and other concepts related to art, architecture, and other cultural heritage (e.g., amphora, oil paint, olieverf, acetolysis, sintering, orthographic drawings, Olmeca, Rinascimento, Buddhism, watercolors, asa-no-ha-toji, sralais).

In category: [general](#)

[SPARQL endpoint](#)[Online resource](#)

Terminology workshop (pre COVID-19!)



Workshop outcomes

- Wide range of vocabularies: from LOD SKOS thesauri to unsorted wordlists without IDs
- Good coverage: materials, object components
- Poor coverage: conditions, treatment techniques
- Getty Arts & Architecture Thesaurus
 - hub for aligning vocabularies
 - best candidate to expand for coverage
- Backbone Thesaurus
 - hub for CIDOC-CRM modelling



textblocks

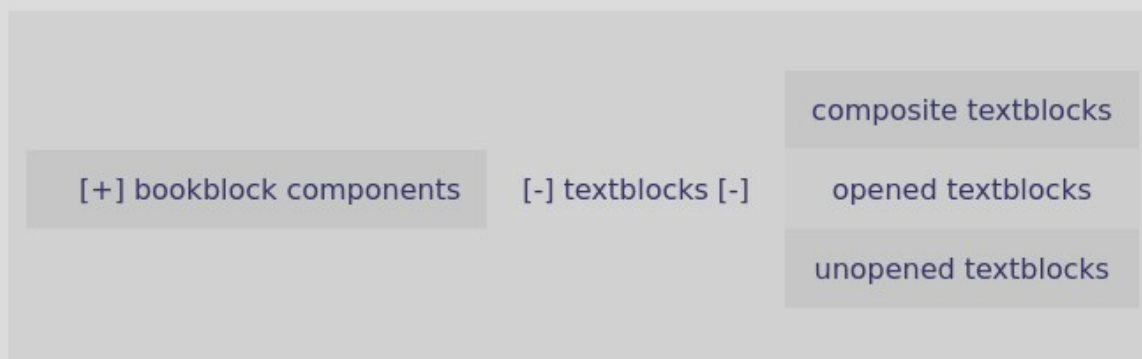
Preferred label:

textblocks

tekstblokk

The word textblock is used to describe all the leaves in a book on which the text is written or printed. Where there is more than one text in a single binding, as in the case of composite volumes or Sammelbände, all the different texts are included in a single textblock. A textblock does not include endleaves or other leaves added by a binder, such as inserted text separators or interleaving, even though these may now carry additional written material. Endleaves and all other leaves added by the binder are, however, included in a bookblock. In certain exceptional circumstances, such as dos-à-dos bindings, a single binding may contain two or more bookblocks, each of which can in theory be a composite volume. Stationery bindings will often be made with a textblock which consists of blank gatherings yet to be written in, in which the outermost leaf of the outermost gathering at each end will be used as endleaves in the form of pastedowns (i.e. integral endleaves), and in these cases the textblock and the bookblock are the same thing. If the outermost gatherings of such a book are made in a different format from the rest of the gatherings (e.g. four leaves as opposed to eight leaves, or outside hooks instead of bifolia), or made from a different, possibly coloured, paper, these can be described as endleaves, and the other leaves as the textblock, together making the bookblock.

Hierarchy:



-
- Norsk bokmål

RDF/XML
JSON
JSON LD
TURTLE

The Language of Bindings
Thesaurus is made available
under the Open Data Commons
Attribution License:
<http://opendatacommons.org/licenses/by/1.0> .

Active editorial board
Available as LOD
Limited translations

acélmetszés	Stahlstich	steel(-plate) engraving	gravure sur acier	incisione in acciaio
acélmetszet	Stahlstich	steel(-plate) engraving	gravure sur acier	incisione in acciaio
achátkő	Achatstein	agate burnisher bloodstone	brunissoir d'agate	pietra agata
acquaforte l. rézmetszet	-	-	-	-
akvarell	Aquarell Gouache Wasserfarben	aquarelle gouache painting water colour	aquarelle couleur à l'eau gouache	acquerello colore a guazzo guazzo
álbordák	falsche Bünde	false bands	faux nerfs	falsa nervatura nervi falsi nervi finti
álcazott festett metszés	verschobener Schnitt	concealed for-edge painting	-	taglio mascherato
állag	Konsistenz	consistency	consistence	consistenza sostanza
állítható körző l. mérőkörző	-	-	-	-
álló prés	Stockpresse	standing press	presse à percussion (de reliure)	pressa a percussione
állomány (könyvtári)	Bestand Buchbestand Büchersammlung	book collection bookstock holding stock	fond (de livres) stock	collezione fondo di libri materiale librario
állományvédelem	Bestandserhaltung	preservation	préservation	preservazione
ammónia	Ammoniak	anhydrous-ammonion	ammoniac	ammoniaca
ammónium-hidroxid	Ammoniakhydrat Ammoniumhydroxid Salmiakgeist	ammonia hydrate ammonium hydroxide	hydroxyde d'ammonium	hidrossido di ammoniaca hidrossido di salmiaco
ammónium-karbonát	Hirschhornsalz	carbonate of ammonia hartshornsalt	carbonate d'ammonium sel de corne de cerf	carbonato d'ammonio
anilinfesték, -színezék	Anilinfarbe	aniline-colour coal-tar dyestuff	couleur d'aniline	colore di anilina

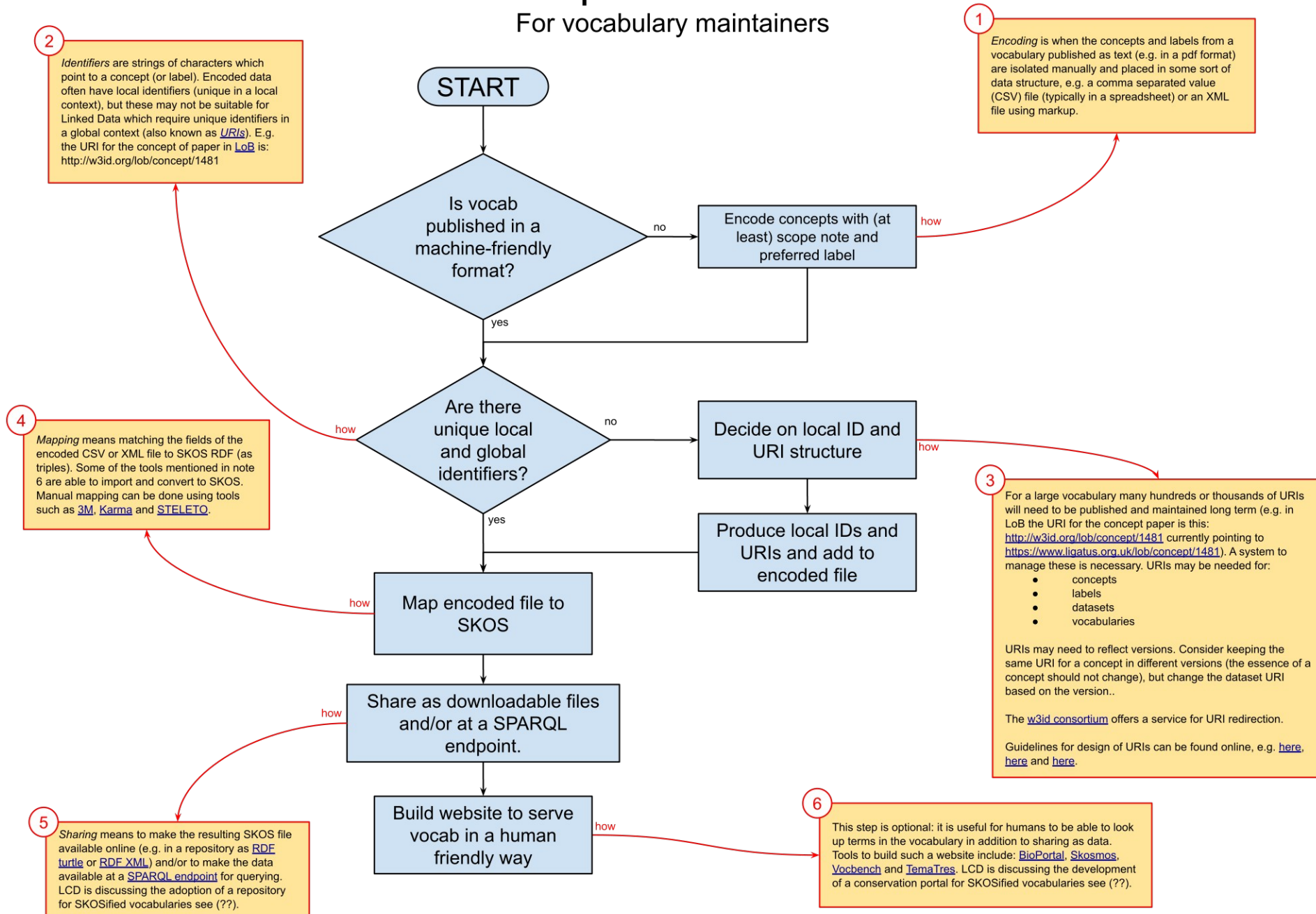
Dictionary of Book and Paper Conservation: BEÖTHYNÉ KOZOSCSA, & ALBRECHTNÉ KUNSZERI. (1997)
scanned PDF file – multilingual labels

Alignment

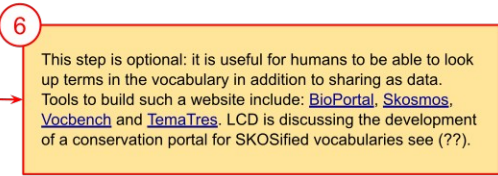
- Encoding vocabularies
 - to make them machine readable

How to publish as SKOS

For vocabulary maintainers



For vocabulary maintainers



Permanent Identifiers for the Web

Secure, permanent URLs for your Web application that will stand the test of time.

The purpose of this website is to provide a secure, permanent [URL](#) re-direction service for Web applications. This service is run by the [W3C Permanent Identifier Community Group](#).

Web applications that deal with [Linked Data](#) often need to specify and use URLs that are very stable. They utilize services such as this one to ensure that applications using their URLs will always be re-directed to a working website. This website operates like a [switchboard](#), connecting requests for information with the true location of the information on the Web. The switchboard can be reconfigured to point to a new location if the old location stops working.

There are a growing group of organizations that have pledged responsibility to ensure the operation of this website. These organizations are: [Digital Bazaar](#), [3 Round Stones](#), [OpenLink Software](#), [Applied Testing and Technology](#), [Openspring](#), and [Bosatsu Consulting](#). They are responsible for all administrative tasks associated with operating the service. The social contract between these organizations gives each of them full access to all information required to maintain and operate the website. The agreement is setup such that a number of these companies could fail, lose interest, or become unavailable for long periods of time without negatively affecting the operation of the site.

This website operates in HTTPS-only mode to ensure end-to-end security. This means that it may be used for Linked Data applications that require high levels of security such as those found in the financial, medical, and public infrastructure sectors.

All identifiers associated with this website are intended to be around for as long as the Web is around. This means decades, if not centuries. If the final destination for popular identifiers used by this service fail in such a way as to be a major inconvenience or danger to the Web, the community will mirror the information for the popular identifier and setup a working redirect to restore service to the rest of the Web.

If you would like to add or update a permanent identifier to the website, the preferred procedure is to perform the following steps:

1. [Fork the website](#) on Github.
2. Add or update a new redirect entry and commit your changes.
3. Submit a pull request for your changes.

Please help out the maintainers of the service with the following:

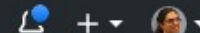
- Add contact info in a README or htaccess comment



Search or jump to...



[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)



[perma-id / w3id.org](#)

Watch **21** Star **160** Fork **559**

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master 4 branches 0 tags

[Go to file](#)

[Add file](#)

Code



davidlehn Merge pull request [#1824](#) from huanyu-li/master 30e36c8 16 hours ago 4,470 commits

	.assets	move to bootstrap 3 and minor cleanup	5 years ago
	.utils	Added README explaining how the git web hook PHP file works.	7 years ago
	0x1	Update to Juchunko	2 years ago
	360-sfs	Update .htaccess	3 years ago
	3rs	Added link to US EPA Linked Data Services blog post.	3 years ago
	AEOLUSsmartApi	Changed parent folder name	16 months ago
	ARK	adding general rules for the ARK project	2 months ago
	AcademIS	AcademIS ontology	2 years ago
	AmIFAIR	repo on GitHub was renamed. Updating the redirect	15 months ago
	BCI-ontology	BCI-O: add turtle resource	3 years ago
	BESDUI	Added entry for BESDUI	4 years ago
	CBGP_SEEK	reconfigured to accept the w3id namespace on the URL	6 months ago
	CONSIDER	Create .htaccess	7 months ago
	DEMETER_ontologies	Update README.md	4 months ago
	DockerPedia	added DockerPedia README file	2 years ago
	EVENTSKG-Dataset	Rename EVENTSKG-Dataset/README.md to EVENTSKG-Dataset...	15 months ago

About

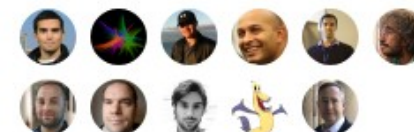
Website source code for w3id.org

[Readme](#)

Releases

No releases published

Contributors 377



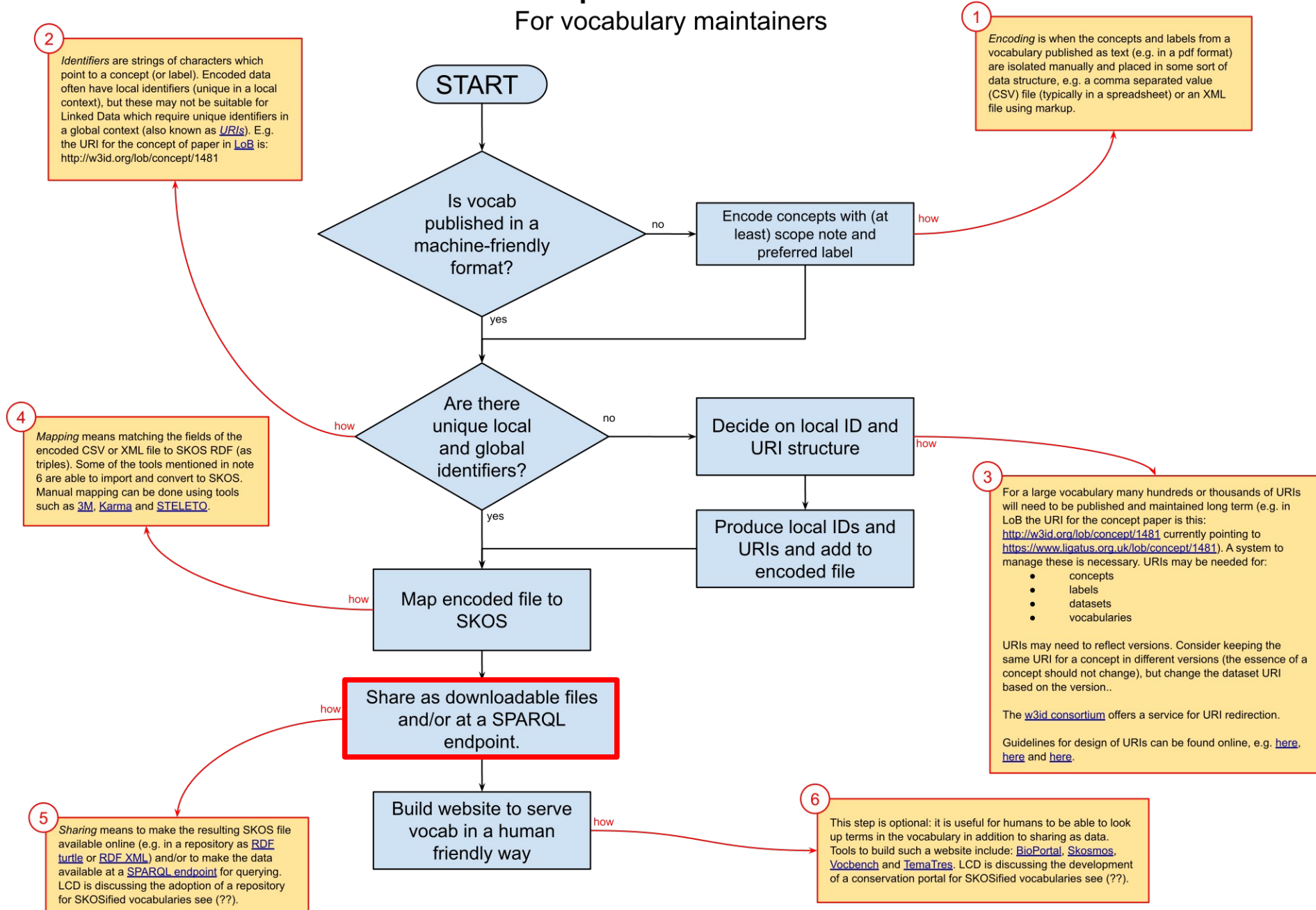
[+ 366 contributors](#)

Languages



How to publish as SKOS

For vocabulary maintainers



[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)[linked-conservation-data](#) / **conservation-vocabularies**

Unwatch 1

Star 0

Fork 0

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

master

1 branch

0 tags

[Go to file](#)[Add file](#)[Code](#)

natuk Added Stanford early pilot vocabulary

7a3b93a 21 hours ago 4 commits

align	Added Stanford early pilot vocabulary	21 hours ago
vocabs	Added Stanford early pilot vocabulary	21 hours ago
.gitignore	Added Bodleian early pilot vocabulary	yesterday
README.md	Updated README file	yesterday

README.md



Linked Conservation Data

<https://www.ligatus.org.uk/lcd>

Conservation vocabularies repository

This repository hosts raw data representing conservation vocabularies: both published thesauri as well as local wordlists and vocabularies used in institutions or studios. The repository also hosts alignment data between different vocabularies. Best practices for the use of the repository are still being agreed. Current discussions are captured in the [Terminology Guidelines document](#).

About



Datasets of contributed conservation vocabularies alongside vocabulary alignment data.

[Readme](#)

Releases

No releases published
[Create a new release](#)

Packages

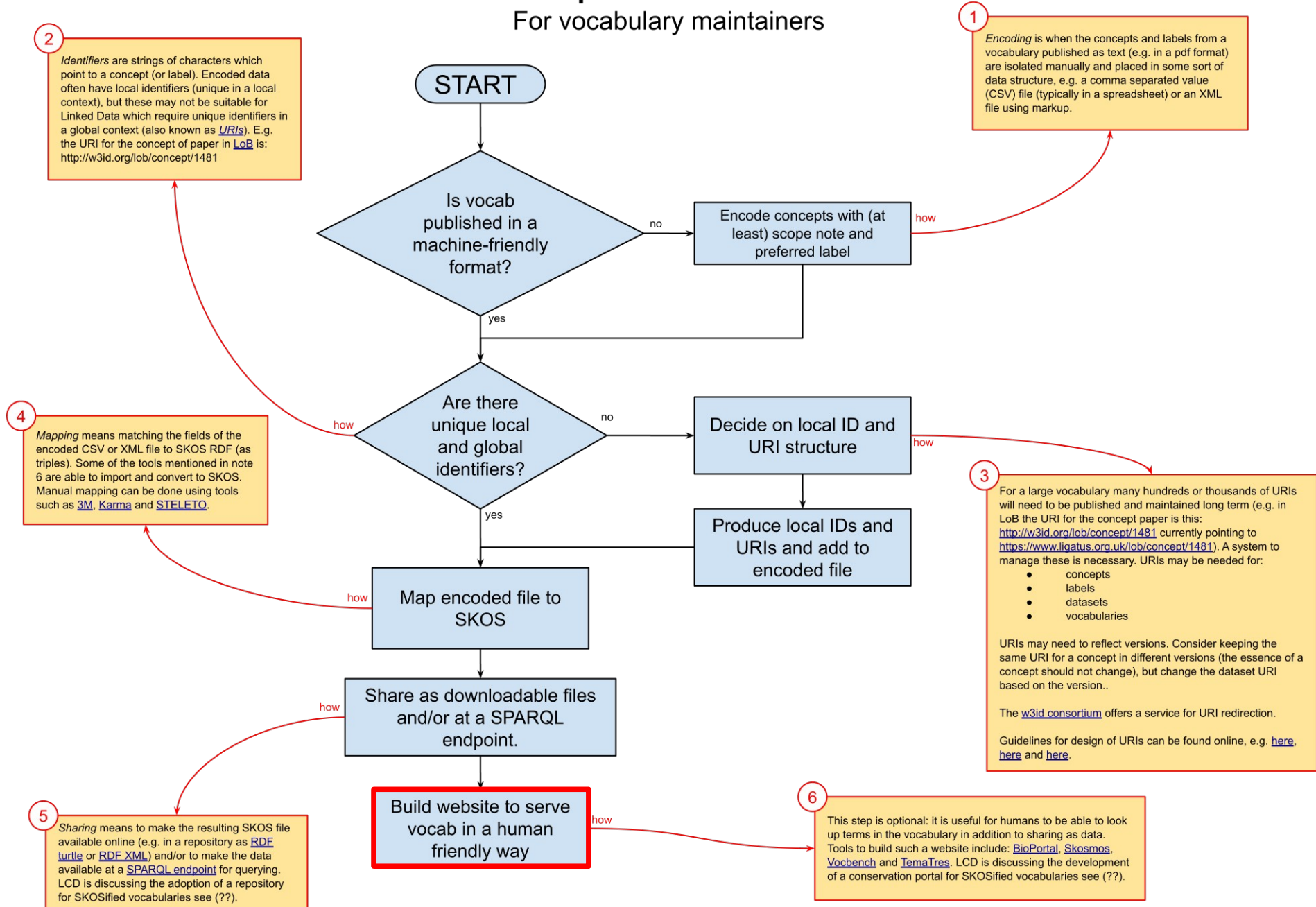
No packages published
[Publish your first package](#)

LCD repository

- Raw data, one file per vocabulary release
- Short term: engage community to enable conservators to publish
- Long term: fork and pull requests require minimum time from maintainers

How to publish as SKOS

For vocabulary maintainers



LCD terminology portal

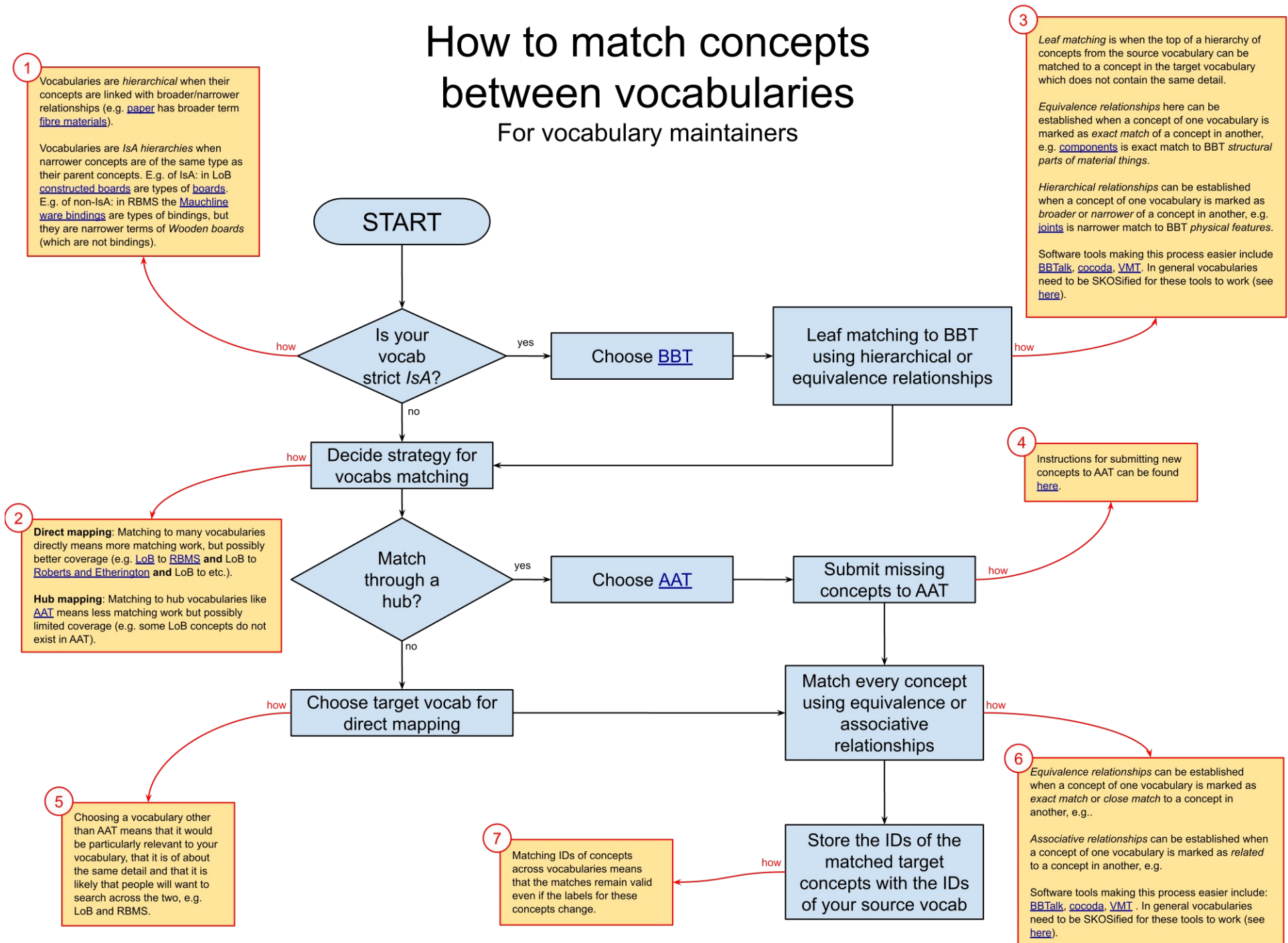
- Terminology querying
- Short term: working with the ResearchSpace project to provide interface
- Long term: ?

Alignment

- Encoding vocabularies
 - to make them machine readable
- Matching terms
 - strategies and methods for alignment

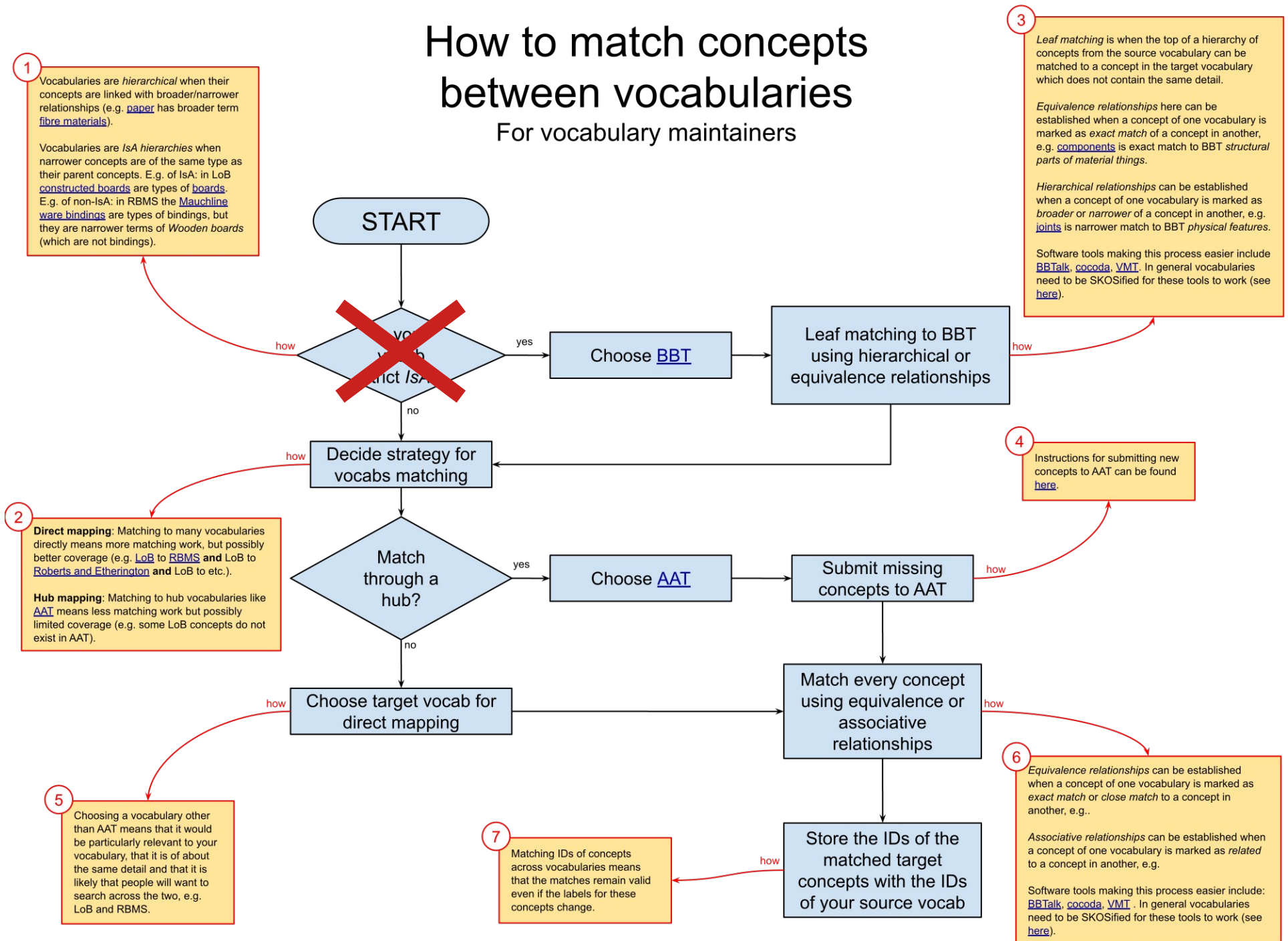
How to match concepts between vocabularies

For vocabulary maintainers



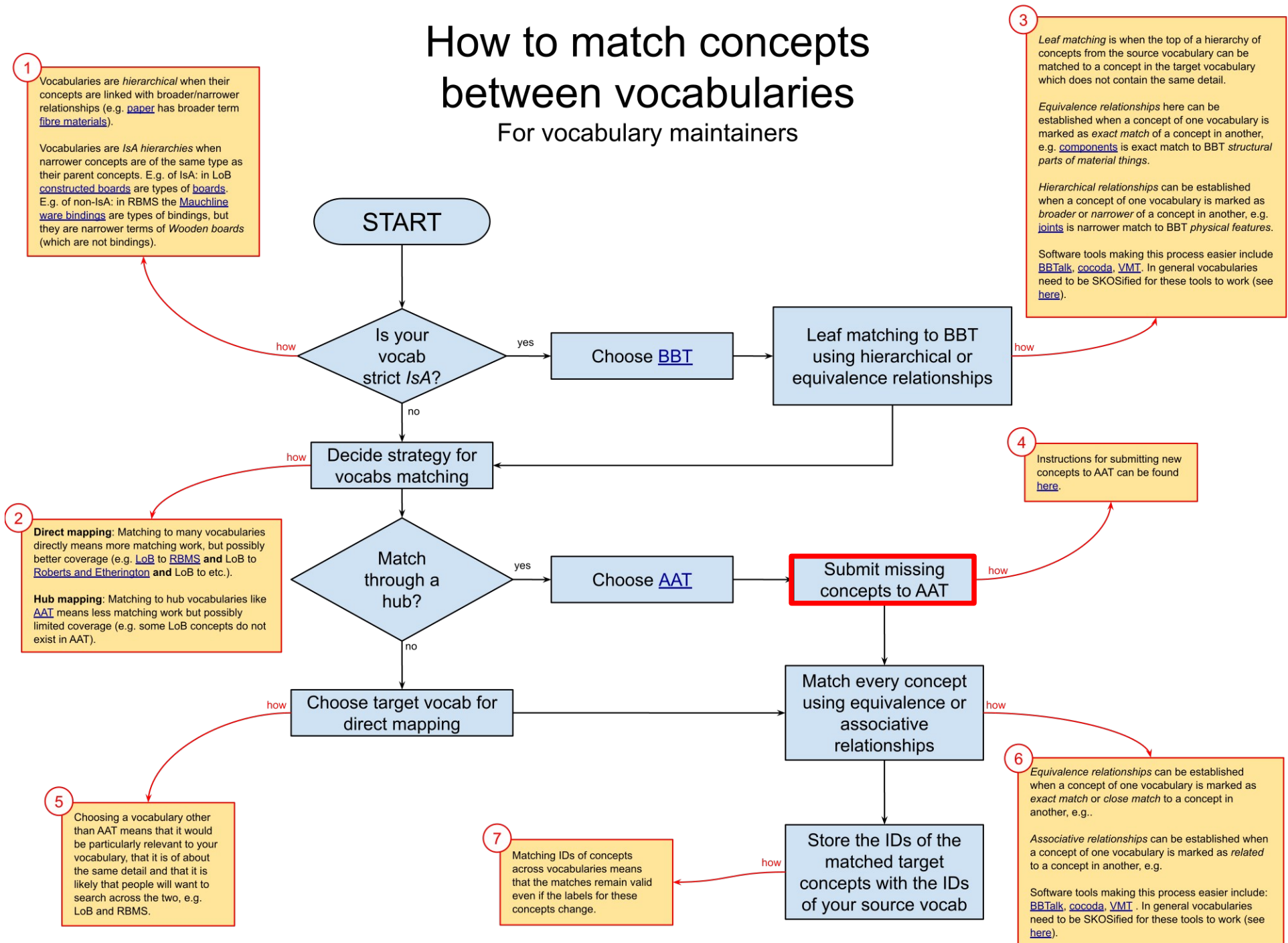
How to match concepts between vocabularies

For vocabulary maintainers



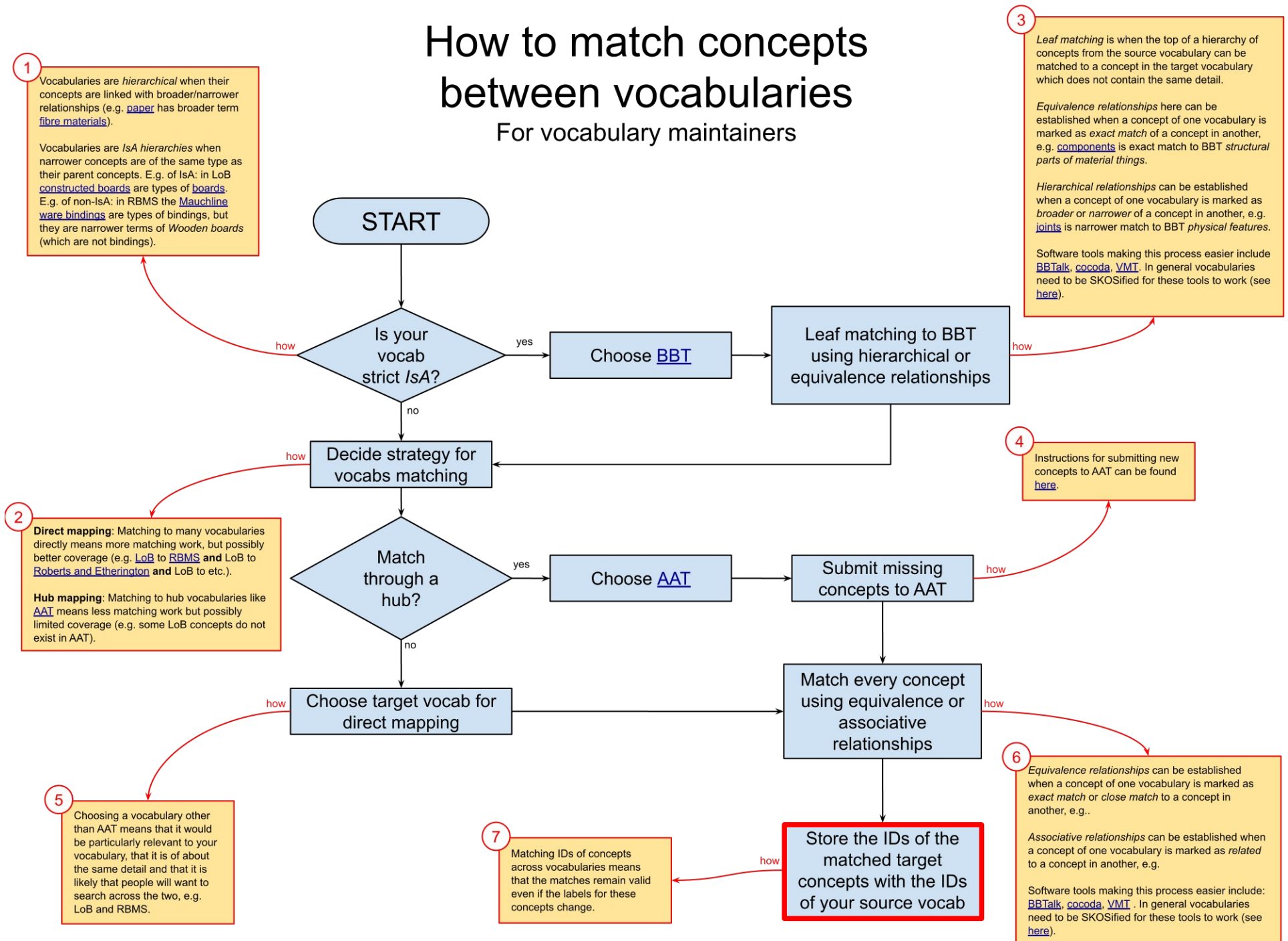
How to match concepts between vocabularies

For vocabulary maintainers



How to match concepts between vocabularies

For vocabulary maintainers



LCD repository

- Alignment data
 - different dataset to actual vocabularies to allow easier versioning



Linked Conservation Data

LCD Terminology Working Group

Vocabulary guidelines

Edited by: Athanasios Velios, Kristen St. John

Contributions by: Anastasia Axaridou, Ceri Binding, Nicola Carboni, Kirsten Dunne, John Graybeal, Ryan Lieu, Joseph Padfield, Eleni Tsouloucha, Jon Ward, Marcia Zeng and others.

Linked Conservation Data is funded by:



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Terminology guidelines (phase 2)

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Draft version of the LCD terminology guidelines. Please send your feedback to [members of the consortium](mailto:a.velios@arts.ac.uk) or directly to Athanasios Velios: (a.velios@arts.ac.uk) or Kristen StJohn (kstjohn@stanford.edu).

Attachments:

[Draft guidelines in ODT format](#)

[Draft guidelines in PDF format](#)

[Draft guidelines in DOCX format](#)

Contact

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Repository



Funded by



User menu

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Please send comments:
<https://www.ligatus.org.uk/lcd/output/193>

Future work

- Planning next phase:
 - process vocabularies
 - those which are easy to work with
 - those which are of interest to consortium
 - those ready to adopt LOD
 - populate LCD terminology portal

Thank you

- LCD terminology working group
 - Alberto Campagnolo, Anastasia Axaridou, Ceri Binding, Claudia Marinica, Douglas Tudhope, Eleni Tsoulouha, John Graybeal, Jon Ward, Joseph Padfield, Karen Waldermar, Kristen St.John, Layna White, Marcia Zeng, Maria Theodoridou, Michelle Barger, Nicola Carboni, Ryan Lieu, Stephen Stead