

# Loterre charter

## Preamble

Loterre (**L**inked **o**pen **t**erminology **r**esources) is a platform designed by the Inist for exposing and sharing multidisciplinary and multilingual scientific terminology resources<sup>1</sup>, complying with open and linked data ([LOD](#)) web standards and [FAIR principles](#).

- Open data = data published under an open licence, freely reusable by third parties.
- Linked data = interconnected data constituting a global network

In this context, a resource deposited in the form of RDF triplets in the triplestore (Jena-Fuseki) of Loterre:

- can be browsed (via Skosmos)
- is searchable with SPARQL queries
- can be queried via the Skosmos REST API

Each concept is assigned a URI that can be used to cite the concept and make alignments with other resources exposed in the web of data.

Therefore: all the data stored in the triplestore of the Loterre are open and can be queried and downloaded by human or machine. The use that may be made of this data is linked to the licence attached to it.

## Resource selection

The owners of the Loterre reserve the right to moderate the proposals and may refuse to integrate a resource if they consider that it does not meet the expected criteria in terms of quality and format, particularly those presented in Appendix 1.

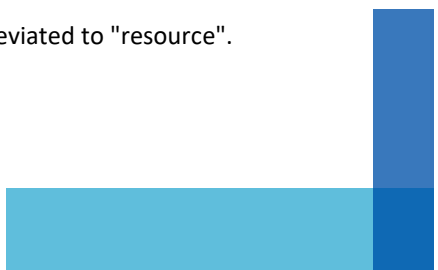
## Loterre commitments

The publication of resources in Loterre is free of charge, within the limits of the volumes that are commensurate with the technical capabilities of the platform and within the limits of the criteria defined in the paragraph "Resource selection".

The administrators of Loterre undertake to do their utmost to guarantee continuity of access to the service.

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<sup>1</sup> In the remainder of the document, the term "terminology resource" will be abbreviated to "resource".



## Metadata

The Inist produces a metadata file for each resource, based on the information provided by the resource owner. This metadata can be collected in a VoID.ttl (Vocabulary of Interlinked Datasets) file. The list of metadata can be found in Appendix 2 of this document.

## Management of dereferable URIs

By default, the URIs displayed in Loterre are of the type:

- For a resource:  
**<https://www.data.loterre.fr/Producer/Resource>**
- For a concept in this resource:  
**<https://www.data.loterre.fr/Producer/Resource/concept#xxxx>**

With:

- Producer: organization producing the resource
- Resource: name of the resource
- xxxx: identifier for the concept in this resource

## Perennial identifiers

If the producer is registered with the CDL (California Digital Library) and has obtained a NAAN (Name Assigning Authority Number) type identifier allowing him to assign ARK identifiers to his resources, the URI of his resources in Loterre can be formed by integrating these elements.

More about ark identifiers: [http://n2t.net/e/ark\\_ids.html](http://n2t.net/e/ark_ids.html)

If the producer has an account allowing him to register a DOI for his resource, this element can be registered in the metadata of his resource in Loterre.

## Management of versions

In case of updates to a resource, the version stored in the triplestore and consultable with the tools mentioned above is the most recent.

Older versions are removed from the triplestore but can be kept in Loterre to allow a global download of skos, pdf or csv formats.

## User file management

Loterre will offer services to allow users to process their own data online (control, enrichment or alignment).

The user data processed by these services will only be used for the duration of a session and will not be stored by the Inist.

## Contributors' commitments

The contributor who requests the deposit of a resource on Loterre must make sure that he has any authorization from the owner or the legal successor of the resource and that he has an exact knowledge of his rights of use.

Thus the contributor must:

- be empowered to take any decision concerning the use and dissemination of the resource (intellectual property in particular);
- be able to provide all the information relating to the sources of the resource.

To be published on Loterre, the resources should ideally be provided as SKOS/RDF files. However, if the contributor is not able to provide data in this format, the Inist can take care of carrying out the necessary conversion/control work on the basis of the data provided by the contributor. Similarly, the Inist can also create PDF or CSV files proposed for download.

Note: an online service will soon be available on Loterre to allow users to perform themselves transformations from a spreadsheet format such as CSV to SKOS or from SKOS to CSV, HTML or PDF.

## Licence

At the time he submits a resource, the contributor must specify the nature of the licence attached to this resource. This licence must allow for the provision and reuse of the data, in an "Open Science" perspective.

Examples of open licenses applicable to this type of data:

- Creative Commons licences<sup>2</sup>: <https://creativecommons.org/>
  - CC0
  - CC BY
  - CC BY-SA
  - CC BY-ND
  - CC BY-NC-SA
  - CC BY-NC
  - CC BY-NC-ND
- Open Data Commons licences
  - ODC-By: <https://opendatacommons.org/licenses/by/1-0/>
  - ODbL: <https://opendatacommons.org/licenses/odbl/1.0/>
  - PDDL: <https://opendatacommons.org/licenses/pddl/1-0/>

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<sup>2</sup> Only the CC0, CC BY and CC BY-SA licenses can be qualified as "open" licenses, the others being called "open distribution" licenses.

## Appendix 1 - Typology of resources

### Nature of the resources

The terminological resources exposed on Loterre can be of the type:

- Vocabulary in the wider sense of the term
  - Glossaries, lists of terms
  - Thesaurus;
- Taxonomies (classification plans and similar elements).

### Multilingualism and structure

The resources exposed in Loterre may:

- Be monolingual, provided the language is French or English;
- Be multilingual, provided that one of the languages is either French or English.
- Present a hierarchy: simple, multiple, or none;
- Include groupings (collections, groups, fields, facets).

### Scientific cover

The scientific cover of data exposed on Loterre is multidisciplinary and depends on one or several of the following scientific fields:

- Sciences and technology
  - Mathematics
    - Algebra
    - Mathematical analysis
    - Numerical analysis, scientific computation
    - Combinatorics, ordered structures
    - Geometry
    - Probability and statistics
    - Dynamic systems, global analysis and analysis on manifolds
    - Group theory
    - Topology, manifolds and cell complexes
  - Physics
    - Acoustics
    - Crystallography
    - Electromagnetism, optics
    - Solid mechanics, fluid dynamics, rheology
    - Metrology
    - Atomic and molecular physics
    - Condensed-matter physics
    - Physics of gases and plasmas
    - Nuclear physics
    - Classical physics, quantum physics, statistical physics, relativity and gravitation
    - Thermodynamics, heat transfer
  - Earth and universe sciences
    - Aeronomy, meteorology, climatology

- Astronomy
    - Geology, internal geophysics
    - Glaciology
    - Oceanography
  - Chemistry
    - Analytical chemistry
    - Theoretical chemistry, general chemistry and physical chemistry
    - Inorganic chemistry
    - Organic chemistry
  - Engineering
    - Aeronautics, transportation
    - Operational research, control theory
    - Electronics, computer sciences
    - Energy, electrical engineering, electrical power engineering
    - Chemical engineering, chemical and paracheical industry
    - Civil engineering, buildings and public works
    - Mechanical engineering
    - Metallurgy
    - Polymer industry, paints, wood
    - Telecommunication, signal theory and processing
- Nanosciences, nanotechnology
- Life sciences, environmental sciences
  - Biology, health
    - Molecular and structural biology, biochemistry
    - Genetics, genomics, bioinformatics
    - Animal cellular and developmental biology, zoology, veterinary sciences
    - Physiology, pathophysiology, systemic medical biology
    - Neurobiology
    - Immunology, microbiology, virology, parasitology
    - Epidemiology, public health, clinical research, biomedical technologies, pharmacology, toxicology, medical sciences
  - Environmental sciences
    - Plant cellular and developmental biology, botany
    - Evolution, ecology, population biology
    - Biotechnologies, environmental sciences, synthetic biology, agronomy, forestry, food industry
- Humanities and social sciences
  - Markets and organisations
    - Economy
    - Finance, management
  - Standards, institutions and social behaviour
    - Law
    - Political sciences
    - Anthropology and ethnology
    - Sociology, demography
    - Information and communication sciences
  - Space, environment and society

- Geography
- Land and urban planning
- Architecture
- Human spirit, language, education
  - Linguistics
  - Psychology
  - Educational sciences
  - Science and technology in physical activities and sport
- Languages, texts, arts and cultures
  - Ancient and french languages and literature, comparative literature
  - Foreign literatures and languages, civilisations, regional cultures and languages
  - Arts
  - Philosophy, religion sciences, theology
- Ancient and contemporary worlds
  - History
  - History of art
  - Archeology

## Appendix 2 - Metadata

The resources stored in Loterre are characterized by the following metadata:

Terminology data	Class/Property used	Cardinality
Terminology	skos:ConceptScheme	1
Resource URI	rdf:about	1
Resource type	rdf:type	optional, repeatable
Resource name	dc:title	at least 1 for each language
Resource creation date	dcterms:created	optional
Resource last update date	dcterms:modified	optional
Resource creator	dc:creator	at least 1
Resource contributor	dc:contributor	optional, repeatable
Resource publisher	dc:publisher	optional, repeatable
Licence type	cc:License	at least 1
Licence attribution name	cc:attributionName	at least 1
Licence attribution URL	cc:attributionURL	at least 1
Resource description	dc:description	at least 1 for each language
Top concepts	skos:hasTopConcept	optional, repeatable
Resource version	owl:versionInfo isothes:VersionHistorySet isothes:VersionHistory isothes:hasVersion	optional
Resource subject	dc:subject	mandatory, repeatable
Relation	dcterms:relation	optional
Language	dcterms:language	at least 1
Identifier	dc:identifier	at least 1
Download URL		at least 1