

Objects

TerraLID ID

ID and name: O0 terralid_object_id

Provided by: TerraLID system

Obligation: mandatory

Occurrences: 1

Definition: The ID of the object in the TerraLID database.

Allowed values and other constraints: t.b.d.

Example: t.b.d.

1. Collectors

ID and name: O1 object_collectors

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Details of the creator(s), excavator(s), or other person(s) intellectually responsible for the sample collection.

with the nine subproperties:

1.1 Role

ID and name: B1.1 person_role

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The role in which the person is related to the linked information.

Allowed values and other constraints: controlled vocabulary

Example: Author

1.2 First names

ID and name: B1.2 person_name_first

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–1

Definition: The first and middle name(s) of the person.

Allowed values and other constraints: free text

Example: Jane

1.3 Last Name

ID and name: B1.3 person_name_last

Provided by: data provider, API (ORCID ID)

Obligation: mandatory

Occurrences: 1

Definition: The last name of the person.

Allowed values and other constraints: free text

Example: Doe

1.4 Persistent Identifier

ID and name: B1.4 person_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Persistent identifier(s) assigned to the person.

with the two subproperties:

1.4.1 VALUE OF PERSISTENT IDENTIFIER

ID and name: B1.4.1 person_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: A persistent identifier assigned to the analysed material.

Allowed values and other constraints: Valid persistent identifier according to S1.3 Type of persistent identifier

Example: 0000–0001–2345–678X

1.4.2 TYPE OF PERSISTENT IDENTIFIER

ID and name: B1.4.2 person_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the persistent identifier.

Allowed values and other constraints: controlled vocabulary

1.5 Affiliation name

ID and name: B1.5 person_affiliation_name

Provided by: data provider, API (ORCID ID, ROR ID)

Obligation: mandatory

Occurrences: 1–n

Definition: The name of the person's affiliation.

Allowed values and other constraints: free text

Example: Institute of Time Travels

1.6 ROR ID

ID and name: B1.6 person_affiliation_ror

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The [ROR](#) of the person's affiliation.

Allowed values and other constraints: is valid ROR ID

Example: 09af7gtg53

1.7 Address

ID and name: B1.7 person_affiliation_address

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The address of the person's affiliation.

Allowed values and other constraints: free text

Example: Teleporter Avenue 123, Ankh–Morpok, United States of Humanities

1.8 Mail address

ID and name: B1.8 person_mail

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–n

Definition: The mail address of the person.

Allowed values and other constraints: is valid mail address

Example: jane.doe@timetravels.int

1.9 Website

ID and name: B1.9 person_url

Provided by: data provider, API (ORCID ID)

Obligation: optional

Occurrences: 0–1

Definition: The URL of a person.

Allowed values and other constraints: is valid URL

Example: <https://www.timetravels.int/members/jane-doe>

2. Contributors

ID and name: O2 object_contributors

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Individuals or organizations who have contributed to the resource.

with the nine subproperties:

2.1 Role

ID and name: B1.1 person_role

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The role in which the person is related to the linked information.

Allowed values and other constraints: controlled vocabulary

Example: Author

2.2 First names

ID and name: B1.2 person_name_first

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–1

Definition: The first and middle name(s) of the person.

Allowed values and other constraints: free text

Example: Jane

2.3 Last Name

ID and name: B1.3 person_name_last

Provided by: data provider, API (ORCID ID)

Obligation: mandatory

Occurrences: 1

Definition: The last name of the person.

Allowed values and other constraints: free text

Example: Doe

2.4 Persistent Identifier

ID and name: B1.4 person_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Persistent identifier(s) assigned to the person.

with the two subproperties:

2.4.1 VALUE OF PERSISTENT IDENTIFIER

ID and name: B1.4.1 person_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: A persistent identifier assigned to the analysed material.

Allowed values and other constraints: Valid persistent identifier according to S1.3 Type of persistent identifier

Example: 0000–0001–2345–678X

2.4.2 TYPE OF PERSISTENT IDENTIFIER

ID and name: B1.4.2 person_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the persistent identifier.

Allowed values and other constraints: controlled vocabulary

2.5 Affiliation name

ID and name: B1.5 person_affiliation_name

Provided by: data provider, API (ORCID ID, ROR ID)

Obligation: mandatory

Occurrences: 1–n

Definition: The name of the person's affiliation.

Allowed values and other constraints: free text

Example: Institute of Time Travels

2.6 ROR ID

ID and name: B1.6 person_affiliation_ror

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The [ROR](#) of the person's affiliation.

Allowed values and other constraints: is valid ROR ID

Example: 09af7gtg53

2.7 Address

ID and name: B1.7 person_affiliation_address

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The address of the person's affiliation.

Allowed values and other constraints: free text

Example: Teleporter Avenue 123, Ankh–Morpok, United States of Humanities

2.8 Mail address

ID and name: B1.8 person_mail

Provided by: data provider, API (ORCID ID)

Obligation: recommended

Occurrences: 0–n

Definition: The mail address of the person.

Allowed values and other constraints: is valid mail address

Example: jane.doe@timetravels.int

2.9 Website

ID and name: B1.9 person_url

Provided by: data provider, API (ORCID ID)

Obligation: optional

Occurrences: 0–1

Definition: The URL of a person.

Allowed values and other constraints: is valid URL

Example: <https://www.timetravels.int/members/jane-doe>

3. Object title

ID and name: O3 object_title

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Name of the object to make it distinguishable.

Allowed values and other constraints: free text

Example: Coin 231 of hoard from the northwest palace in Atlantis

4. Object description

ID and name: O4 object_description

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: (Detailed) description of the object. Should include information about the object and its collection not captured in other properties. For example, the primary reason for object collection or selection in terms of analytics.

Allowed values and other constraints: free text

Example: Galena-rich sediment from the washing pit.

5. Object identifiers

ID and name: O5 object_identifiers

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Identifiers associated with the object. At least one identifier must be provided.

with the three subproperties:

5.1 Persistent Identifier

ID and name: O5.1 object_pid **Provided by:** data provider **Obligation:** recommended **Occurrences:** 0–n

Definition: Persistent identifier(s) assigned to the object.

with the two subproperties:

5.1.1 Value of persistent identifier

ID and name: O5.1.1 object_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The persistent identifier assigned to the object.

Allowed values and other constraints: Valid persistent identifier according to [05.1.2 Type of persistent identifier](#)

Example: 10.60510/ABCD123EF4567

5.1.2 Type of persistent identifier

ID and name: O5.1.2 object_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of a persistent identifier that was assigned to the object.

Allowed values and other constraints: controlled vocabulary

5.2 Value of other identifier

ID and name: O5.2 object_id_value

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Identifier by which the object is identified in a catalogue, database or comparable records (e.g., of the excavation catalogue or records of a laboratory).

Allowed values and other constraints: free text

Example: AG-01

5.3 Type of other identifier

ID and name: O5.3 object_id_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The name of the catalogue, database or comparable records to which the ID refers. Mandatory if [05.3 Value of other identifier](#) is provided.

Allowed values and other constraints: free text

Example: catalogue in the final excavation report

6. Date of collection

ID and name: O6 object_collection_date

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Collection date of the object.

Allowed values and other constraints: date formatted as YYYY-MM-DD

Example: 1990-06-08

7. Collection method

ID and name: O7 object_collection_method

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: How the object was collected or obtained.

Allowed values and other constraints: controlled vocabulary

8. Object housing

ID and name: O8 object_housing

Provided by: data provider

Obligation: recommended

Occurrences: 1–n

Definition: The material in which the object is currently stored or was stored at any time after its collection. At least the current state should be recorded.

with the two subproperties:

8.1 Housing material

ID and name: O8.1 object_housing_material

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The material the object was or is stored in at the stage in its life cycle recorded in [08.2 Stage of Storage](#).

Allowed values and other constraints: controlled vocabulary

8.2 Stage of Storage

ID and name: O8.2 object_housing_stage

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The stage of the object's life cycle when the object was stored in the material recorded in [08.1 Housing material](#).

Allowed values and other constraints: controlled vocabulary

9. Object photo

ID and name: O9 object_photo

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Photograph of the object, preferably at the time of collection. For guidance on photographs, see e.g. [L. J. Fisher \(2009\), Photography for Archaeologists Part II: Artefact recording \(BAJR Practical Guide Series 26\)](#).

Allowed values and other constraints: file path

Example: t.b.d.

10. Object weight

ID and name: O10 object_weight

Provided by: data provider

Obligation: optional

Occurrences: 0–1

Definition: The weight of the object at the point of collection, before analysis.

with the three subproperties:

10.1 Value

ID and name: O10.1 object_weight_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The value of the weight.

Allowed values and other constraints: decimal number

Example: 120.3

10.2 Unit

ID and name: O10.2 object_weight_unit

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: SI unit in which the weight is given.

Allowed values and other constraints: controlled vocabulary

10.3 Weight condition

ID and name: O10.3 object_weight_condition

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Additional information about state of object at the time the weight was measured to give a better idea how representative the measured weight is.

Allowed values and other constraints: free text

Example: dry sandy material adhering to object

11. Object dimensions

ID and name: O11 object_dimension

Provided by: data provider

Obligation: optional

Occurrences: 0–1

Definition: The dimensions of the object.

with the four subproperties:

11.1 Height

ID and name: O11.1 object_dimension_height

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The height of the object.

Allowed values and other constraints: decimal number

Example: 3.52

11.2 Length

ID and name: O11.2 object_dimension_length

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The length of the object.

Allowed values and other constraints: decimal number

Example: 10.30

11.3 Width

ID and name: O11.3 object_dimension_width

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The width of the object.

Allowed values and other constraints: decimal number

Example: 2.42

11.4 Unit of Dimensions

ID and name: O11.4 object_dimension_unit

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Unit in which the dimension(s) of the object are provided.

Allowed values and other constraints: controlled vocabulary

12. Material

ID and name: O12 object_material

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The material the object is made of.

Allowed values and other constraints: controlled vocabulary. This property determines which material-specific metadata will be additionally recorded.

13. Bulk Pb concentration

ID and name: O13 object_bulk_chemistry_pb

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The bulk lead concentration of the object.

with the eight subproperties:

13.1 Analytical method

ID and name: B4.1 chemistry_method

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The method used to determine the chemical composition.

Allowed values and other constraints: controlled vocabulary

13.2 Analysed compound

ID and name: B4.2 chemistry_compound

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The analysed chemical compound (chemical element or oxide).

Allowed values and other constraints: controlled vocabulary, not available if a mass spectrometric-method is recorded in B4.1 Analytical method .

13.3 Analysed isotope

ID and name: B4.3 chemistry_icp_isotope

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The isotope used for quantification of a chemical element.

Allowed values and other constraints: controlled vocabulary, only available if a mass spectrometric-method is recorded in B4.1 Analytical method .

13.4 Value

ID and name: B4.4 chemistry_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The concentration of the analysed chemical compound.

Allowed values and other constraints: decimal number

Example: 15.3

13.5 Unit

ID and name: B4.5 chemistry_unit

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The unit in which the concentration of the analysed chemical compound is given.

Allowed values and other constraints: controlled vocabulary

13.6 Uncertainty type

ID and name: B4.6 chemistry_uncertainty_type

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The type of analytical uncertainty.

Allowed values and other constraints: controlled vocabulary

13.7 Confidence level

ID and name: B4.7 chemistry_uncertainty_sigma

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Sigma value of the reported absolute analytical uncertainty.

Allowed values and other constraints: 1, 2, 3

Example: 2

13.8 Uncertainty value

ID and name: B4.8 chemistry_uncertainty_value

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: Value of the absolute analytical uncertainty.

Allowed values and other constraints: decimal number

Example: 0.3

14. Dating of object

ID and name: O14 object_date

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The date of the object.

with the eight subproperties:

14.1 Persistent identifier

ID and name: B3.1 date_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

with the two subproperties:

14.1.1 VALUE

ID and name: B3.1.1 date_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The value of the persistent identifier.

Allowed values and other constraints: The period's persistent identifier in one or more of the data infrastructures listed in B3.1.2 Type .

Example: 99152/p0qhb66vvth

14.1.2 TYPE

ID and name: B3.1.2 date_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The name of the data infrastructure.

Allowed values and other constraints: controlled vocabulary

14.2 Date type

ID and name: B3.2 date_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Is this an archaeological or geological age? Archaeological dates must be given in calendar years, with BCE dates as negative values. Geological dates must be given in million years.

Allowed values and other constraints: geological, archaeological

Example: archaeological

14.3 Absolute Date

ID and name: B3.3 date_absolute

Provided by: data provider, API

Obligation: recommended

Occurrences: 0–1

Definition: The absolute date of a point in time or period in years before or after common era. Values in BCE are reported as negative values. If the absolute date is given with an uncertainty such as 450 +/- 50 BC, start and end date mark the lower and upper limit of the date range, i.e. -500 and -400.

with the four subproperties:

14.3.1 START

ID and name: B3.3.1 date_absolute_start

Provided by: data provider, API

Obligation: mandatory

Occurrences: 1

Definition: The oldest possible date of the period.

Allowed values and other constraints: integer

Example: -15

14.3.2 END

ID and name: B3.3.2 date_absolute_end

Provided by: data provider, API

Obligation: recommended

Occurrences: 0–1

Definition: The youngest possible date of the period.

Allowed values and other constraints: integer

Example: 15

14.3.3 DATING METHOD

ID and name: B3.3.3 date_absolute_method

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The method used to determine the absolute date.

Allowed values and other constraints: controlled vocabulary

14.3.4 UNIT OF DATE

ID and name: B3.3.4 date_absolute_unit

Provided by: TerraLID system

Obligation: mandatory

Occurrences: 1

Definition: The unit of the date.

Allowed values and other constraints: a, Ma

Example: a

14.4 Relative Date

ID and name: B3.4 date_relative

Provided by: data provider, API

Obligation: recommended

Occurrences: 0–1

Definition: The relative date of a point in time or period.

with the two subproperties:

14.4.1 CHRONOLOGICAL UNIT

ID and name: B3.4.1 date_relative_period

Provided by: data provider, API

Obligation: mandatory

Occurrences: 1

Definition: The relative date expressed as a chronological unit.

Allowed values and other constraints: controlled vocabulary

14.4.2 DATING METHOD

ID and name: B3.4.2 date_relative_method

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The method used to determine the relative date.

Allowed values and other constraints: controlled vocabulary

14.5 Cultural unit

ID and name: B3.5 date_archaeo_cultural

Provided by: data provider

Obligation: optional

Occurrences: 0–n

Definition: Relevant cultural and user created labels for the relative date of the item.

Allowed values and other constraints: free text, only available if B3.2 Date type = "archaeological".

Example: Roman

14.6 Orogenesis

ID and name: B3.6 date_geol_orogenesis

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: The relative date expressed as anorogenic event.

Allowed values and other constraints: controlled vocabulary, only available if B3.2 Date type = "geological".

14.7 Definition of chronological unit

ID and name: B3.7 date_relative_reference

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The reference defining the relative date or period.

with the five subproperties:

14.7.1 Persistent Identifier

ID and name: B5.1 relation_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The persistent identifier or TerraLID ID associated with a resource or related research output. If referring to another entity in the TerraLID database, the TerraLID identifier must be used.

with the two subproperties:

14.7.1.1 Value

ID and name: B5.1.1 relation_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Value of the persistent identifier or TerraLID ID.

Allowed values and other constraints: valid persistent identifier according to the options listed in B5.1.2 Type .

Example: 10.60510/ICDP5054ESYI201

14.7.1.2 Type

ID and name: B5.1.2 relation_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the identifier.

Allowed values and other constraints: controlled vocabulary

14.7.2 Full reference

ID and name: B5.2 relation_text

Provided by: data provider, API (DOI)

Obligation: recommended

Occurrences: 0–1

Definition: The full reference of a publication.

Allowed values and other constraints: free text

Example: Palinkaš, L. A., 1985, Lead isotope patterns in galenas from some selected ore deposits in Croatia and NW Bosnia, Geološki Vjesnik, 38, 175–89.

14.7.3 Kind of relation

ID and name: B5.3 relation_kind

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Relationship between item and the research output.

Allowed values and other constraints: controlled vocabulary

14.7.4 Type of resource

ID and name: B5.4 relation_resource

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Type of resource or research output.

Allowed values and other constraints: controlled vocabulary

14.7.5 Additional details

ID and name: B5.5 relation_detail

Provided by: data provider

Obligation: optional

Occurrences: 0–n

Definition: Additional information about the relation, e.g., if the related work addresses a specific aspect of the item (e.g., the geological setting).

Allowed values and other constraints: free text

Example: Information about the dating of the site.

15. Keywords

ID and name: O15 object_keywords

Provided by: data provider

Obligation: optional

Occurrences: 0–n

Definition: Keywords to describe aspects of the sample not covered by other metadata.

Allowed values and other constraints: free text

Example: t.b.d.

16. Object contamination

ID and name: O16 object_contamination

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Information about potential contamination or treatment of the object that might impact the relevance of retrieved information (e.g. by post-depositional processes or conservation treatment).

Allowed values and other constraints: free text

Example: Galvanic restoration of the surface in 1967

17. Status of object

ID and name: O17 object_status

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Information about the current status of the object and how to access it.

with the two subproperties:

17.1 Institution

ID and name: B2.1 status_institution

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: The institution at which the material is located.

with the five subproperties:

17.1.1 NAME

ID and name: B2.1.1 status_institution_name

Provided by: data provider, API (ROR ID)

Obligation: mandatory

Occurrences: 1

Definition: Name of the institution.

Allowed values and other constraints: free text

Example: Institute of Time Travels

17.1.2 ROR

ID and name: B2.1.2 status_institution_ror

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: [ROR](#) of the institution.

Allowed values and other constraints: is valid ROR ID

Example: 09af7gtg53

17.1.3 ADDRESS

ID and name: B2.1.3 status_institution_address

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Address of the institution.

Allowed values and other constraints: free text

Example: Teleporter Avenue 123, Ankh–Morpok, United States of Humanities

17.1.4 STORAGE LOCATION

ID and name: B2.1.4 status_institution_location

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Location of the item within the institution.

Allowed values and other constraints: free text

Example: Archive 9, shelf 3, box 1

17.1.5 CONTACT

ID and name: B2.1.5 status_institution_contact

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Contact information for inquiries about the material. This may include, for example, a mail address or phone number of the respective department within the institution or the identification of a specific contact person as well as constraints on the availability of the point of contact such as opening hours.

Allowed values and other constraints: free text

Example: t.b.d.

17.2 Accessibility

ID and name: B2.2 status_accessibility

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Is the material accessible to other researchers and do restrictions apply?

Allowed values and other constraints: controlled vocabulary

18. Authenticity of object

ID and name: O18.1 object_authenticity

Provided by: data provider

Obligation: mandatory

Occurrences: 0–1

Definition: The contemporary legal status of an object: whether it is a genuine archaeological object, contemporary imitation, or a modern imitation. For example, authentic numismatic objects were created by an authority that had the rights to do so, while contemporary imitations were not.

with the two subproperties:

18.1 Authenticity type

ID and name: O18.1 object_authenticity_type

Provided by: data provider

Obligation: recommended

Occurrences: 1

Definition: The object's type of authenticity.

Allowed values and other constraints: controlled vocabulary

18.2 Reasoning

ID and name: O18.2 object_authenticity_description

Provided by: data provider

Obligation: recommended

Occurrences: 0–1

Definition: Reasoning for the given classification.

Allowed values and other constraints: free text

Example: The zinc content in the brass is higher than can be achieved with Roman technology.

19. Relations

ID and name: O19 object_relation

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Information about related entities, including samples belonging to the object, and other research output such as publications providing relevant information about the object. This includes any literature from which information about the object was extracted.

with the five subproperties:

19.1 Persistent Identifier

ID and name: B5.1 relation_pid

Provided by: data provider

Obligation: recommended

Occurrences: 0–n

Definition: The persistent identifier or TerraLID ID associated with a resource or related research output. If referring to another entity in the TerraLID database, the TerraLID identifier must be used.

with the two subproperties:

19.1.1 VALUE

ID and name: B5.1.1 relation_pid_value

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: Value of the persistent identifier or TerraLID ID.

Allowed values and other constraints: valid persistent identifier according to the options listed in [B5.1.2 Type](#).

Example: 10.60510/ICDP5054ESYI201

19.1.2 TYPE

ID and name: B5.1.2 relation_pid_type

Provided by: data provider

Obligation: mandatory

Occurrences: 1

Definition: The type of the identifier.

Allowed values and other constraints: controlled vocabulary

19.2 Full reference

ID and name: B5.2 relation_text

Provided by: data provider, API (DOI)

Obligation: recommended

Occurrences: 0–1

Definition: The full reference of a publication.

Allowed values and other constraints: free text

Example: Palinkaš, L. A., 1985, Lead isotope patterns in galenas from some selected ore deposits in Croatia and NW Bosnia, Geološki Vjesnik, 38, 175–89.

19.3 Kind of relation

ID and name: B5.3 relation_kind

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Relationship between item and the research output.

Allowed values and other constraints: controlled vocabulary

19.4 Type of resource

ID and name: B5.4 relation_resource

Provided by: data provider

Obligation: mandatory

Occurrences: 1–n

Definition: Type of resource or research output.

Allowed values and other constraints: controlled vocabulary

19.5 Additional details

ID and name: B5.5 relation_detail

Provided by: data provider

Obligation: optional

Occurrences: 0–n

Definition: Additional information about the relation, e.g., if the related work addresses a specific aspect of the item (e.g., the geological setting).

Allowed values and other constraints: free text

Example: Information about the dating of the site.