MODS application profile
for digitised media
Version 2.3.1

Contents

1   Introduction

The present MODS-application profile is used to standardise the development and description of digitised documents. The goal is to improve the interoperability of metadata of digitised media in order to make digital assets searchable and usable in comprehensive applications even if they were originally created in different projects and sectors. As examples of such comprehensive applications, we refer to DFG-Viewer[1], Central Directory of Digitised Prints (zvdd)[2], VD18-Portal[3] and German Digital Library[4] with the archive portal D[5].

This documentation is therefore mainly addressing persons and organisations who gather metadata for digitised documents and who want to make them accessible in different applications. We also address persons and organisations who create applications for the display of digitised media.

This application profile is normally used conjointly with the following standards:

- The METS application profile[6], which describes which metadata is necessary in order to describe the structure of digitised documents.

- the DFG-Viewer structure data record[7], which describes which structure types are used in the logical structure unit of the METS structure description;

- optionally additional application profiles to code technical meta data (e.g. MIX, BLAPSI) and process information (e.g. AES, PREMIS). These specifications are, however, not relevant for the presentation in DFG viewer and are therefore not defined in this context.

1.1   Implementation information

The basis for this application profile is the *Metadata Object Description Schema* (MODS) in version 3.5, which is maintained by the Library of Congress.[8]

The degrees of obligation for the described elements is differentiated according to obligatory, conditional (conditionally obligatory) and optional and orients itself towards the DFG-Viewers' requirements as well as the Central Directory of Digitised Prints (zvdd). Symbols highlight the specifically relevant information in the cultural category of archives (▤), libraries (▯) and sound archives(▱).

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[1] http://dfg-viewer.de

[2] http://www.zvdd.de

[3] http://vd18.de

[4] http://www.deutsche-digitale-bibliothek.de

[5] https://www.archivportal-d.de

[6] http://dfg-viewer.de/profil-der-metadaten/

[7] http://dfg-viewer.de/strukturdatenset/

[8] http://www.loc.gov/standards/mods/

The profile can be limited and upgraded for project specific requirements if necessary. All limitations and upgrades, however, have to conform with MODS and may not be in conflict with the semantics specified in the present profile.

According to the DFG's best practice for "Digitisation",[9] this profile for prints and archival materials has to be applied conjointly with the METS application profile[10] in the context of digitisation projects funded by the German Research Foundation (DFG). Together, those two application profiles describe the data format necessary for the correct presentation of digital assets in the DFG-viewer.

Metadata that corresponds to this profile has to be available in UTF-8[11] code. XML data is fundamentally case-sensitive, the specified upper case / lower case script of elements, attributes and values in the application profile is therefore mandatory.

1.2 Notes for archives about conversion from EAD(DDB) to MODS

The exchange format EAD(DDB), which maps archive-typical searching guide structures, has established itself in the context of German Digital Libraries and the archive portal EAD(DDB). The format contains the inventory tectonics and supplements these with descriptive metadata of directory units, however, is only limited in its suitability to present digital assets.

In order to present digitised archival materials in the DFG viewer, these have to be coded in METS/MODS. This can be achieved by direct conversion from EAD(DDB) to MODS whilst the following recommendation should be observed. The MODS specifications mainly serve the purpose to display the general information of the description unit. Backlinks to the searching guide structure achieve broader index information from EAD(DDB). Institutions are, however, free to specify other index information in MODS according to the MODS application profile.

Mapping EAD(DDB) - MODS		
Field description	*EAD(DDB)*	*MODS*
Title	c/did/unittitle	refer to 2.1
Institution	ancestor::archdesc/did/repository/corpname	refer to 2.13.2.1
Signature	c/did/unitid[not(@type)]	refer to 2.13.2.3
Runtime	c/did/unitdate	refer to 2.4.2.5
Context	ancestor::c/did/unittitle	refer to 2.11
ID	c/@id	refer to 2.15.2.1

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[9] http://www.dfg.de/formulare/12_151/
[10] http://dfg-viewer.de/profil-der-metadaten/
[11] http://tools.ietf.org/html/rfc3629

2   Metadata profile for use of MODS elements and attributes

The following chapter describes the permissible MODS data elements for this application profile. The description follows the following set-up:

MODS definition:	Represents the definition or description of the element or subelement in the *MODS User Guidelines Version 3*[12] .
Comments:	Contains profile specific information about the element or subelement.
Repeatable:	Indicates if an element or subelement can be repeated.
Degree of obligation:	Indicates if an element or subelement has to be present at least once. This obligation can result from a specific requirement by the DFG-Viewer and the general MODS scheme. The following values are applicable: **Obligatory:** The element has to be always present; **Optional:** The element may be present (is, however, not necessarily analysed by the DFG-Viewer); **Conditional:** The use of the element depends on the context in which it is used.
Attributes:	Names the attributes which can or must be used with an element or subelement.
Values:	Names the attributes or their value range which are permissible with the use of a certain element, subelement or attribute.

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[12] http://www.loc.gov/standards/mods/v3/mods-userguide-elements.html

2.1 Title

The following applies for the verification of title information:

- The specification of at least one title is obligatory for the root structure of a METS/MODS record. This does not apply to parts of a multi-part work without individual titles and calendrical structures. In these cases, it is sufficient to provide the superordinate title in the element `mods:relatedItem` . It is then obligatory to specify the volume/issue number in the element `mods:part` with subelements `mods:detail` and `mods:number`.

- Subtitles and additions for the main title are coded in `mods:subTitle`. The element `mods:titleInfo` is repeated each for the verification of parallel titles and further deviating title forms.

- If there are characters or character strings at the beginning of a title which are not to be considered for sorting in the search results, then those are specified in the element `mods:nonSort` and remain unconsidered in the element `mods:title` .

- The title does not necessarily have to be a bibliographical title in the narrow sense as per MODS specification. Specifically for an archival context, the specification or headline is also permissible even if they would normally be used for citation of the work.

2.1.1 Title information – mods:titleInfo

MODS definition:	A word, phrase, character, or group of characters, normally appearing in a resource, that names it or the work contained in it.
Repeatable:	yes If `mods:titleInfo` is repeated, then one of the `type`-attribute values mentioned below has to be used.
Degree of obligation:	conditional The element is obligatory if it is the root structure element of a METS/MODS record; an exception are works with several volumes without individual titles and calendrical structures of periodicals.
Attributes:	Of the attributes possible in MODS, the following are considered: • `type`: here the following values are possible: 　　***abbreviated:*** for abbreviated titles; 　　***translated:*** for parallel title or translated title; 　　***alternative:*** for deviating title forms; 　　***uniform:*** for the norm title of a work. • If `mods:titleInfo` is repeated, then the `type`-attribute is obligatory for all further elements. The `mods:titleInfo` element without `type`-attribute includes the main title. • `authorityURI`: The URI of the standard file, if the title was adopted from a standard file for titles, which can be identified with URI. • `valueURI`: The URI of the title, if the title can be identified with URI.

2.1.2 Subelements for mods:titleInfo

2.1.2.1 Main title – mods:title

MODS definition:	A word, phrase, character, or group of characters that constitutes the chief title of a resource (i. e. the title normally used when citing the resource).
Repeatable:	no Within a `mods:titleInfo` the `mods:title` cannot be repeated.
Degree of obligation:	obligatory Every `mods:titleInfo` has to contain one `mods:title` .

2.1.2.2 Non-sorting resolutions – mods:nonSort

MODS definition:	Begin and end tags surround the nonfiling text which should not be regarded in sorting.
Repeatable:	no Within a `mods:titleInfo` the `mods:nonSort` cannot be repeated.
Degree of obligation:	optional

2.1.2.3 Sub-title – mods:subTitle

MODS definition:	A word, phrase, character or group of characters that contains the remainder of the title information after the title proper.
Repeatable:	yes Several `mods:subtitle` can be associated to one `mods:titleinfo` .
Degree of obligation:	optional

2.1.2.4 Partial Titles – mods:partName

MODS definition:	"partName" is used for a part or section name of a title.
Repeatable:	yes Several `mods:partName` can be associated to one `mods:titleInfo`.
Degree of obligation:	optional

2.1.2.5 Count – mods:partNumber

MODS definition:	"partNumber" is used for a part or section number of a title.
Repeatable:	yes Several `mods:partNumber` can be associated to a `mods:titleInfo`.
Degree of obligation:	optional

2.1.3 Examples

Simple title
```
<mods:titleInfo>
    <mods:title>Medicvs Microcosmvs Sev Spagyria Microcosmi</mods:title>
</mods:titleInfo>
```

Title with article
```
<mods:titleInfo>
    <mods:nonSort>L'</mods:nonSort>
    <mods:title>Anatomie Universelle De Toutes Les Parties Du Corps Humain,
    Représentée en  Figures, & exactement expliquée</mods:title>
</mods:titleInfo>
```

Further title
```
<mods:titleInfo>
    <mods:title>De Vi Percussionis</mods:title>
</mods:titleInfo>
<mods:titleInfo type="alternative">
    <mods:title>Atrium Physico-Mathematicum Apertum Ad Aedeficium Eius Magnificum
    De Motu Animalium</mods:title>
</mods:titleInfo>
```

Addition to title
```
<mods:titleInfo>
    <mods:title>Die Landen'sche Transformation in ihrer Anwendung auf die
    Entwickelung der elliptischen Funktionen/mods:title>
    <mods:subTitle>Aus einer Correspondenz mit Herrn Professor
    Schröter/mods:subTitle>
</mods:titleInfo>
```

Volume of a work with several volumes without individual titles
```
<mods:mods>
    <mods:originInfo>
        <mods:dateIssued keyDate="yes" encoding="iso8601">1838</mods:dateIssued>
    </mods:originInfo>
    <mods:physicalDescription>
        <mods:extent>VI, 445 S.</mods:extent>
    </mods:physicalDescription>
    <mods:relatedItem type="host">
        <mods:titleInfo>
            <mods:title>Gotthold Ephraim Lessings Sämmtliche
            Schriften</mods:title>
        </mods:titleInfo>
        <mods:recordInfo>
            <mods:recordIdentifier>http://ex.info/234452</mods:recordIdentifier>
        </mods:recordInfo>
    </mods:relatedItem>
    <mods:part order="3">
        <mods:detail type="volume">
            <mods:number>3</mods:number>
        </mods:detail>
    </mods:part>
</mods:mods>
```

2.2 Names of persons or organisations

The following applies for names of persons or organisations which were part of the creation of the work or the original primary edition underlying digitisation:

- When using the element `mods:name` then the `type` attribute has to be used with the value *personal* or *corporate* .

- When using standard data records, then the standard file used can be specified in the `authority` or `authorityURI` attributes, the relevant standard data record can be referenced in the `valueURI` attribute.

- If it is the name of a person, then the subelement `mods:namePart` has to be used with the `type` attribute and the attribute values *family* and/or *given* .

- The role which has been played by a person or an organisation during the creation of the work or the original primary edition underlying digitisation, has to be identified by the subelement `mods:role` and the associated subelement `mods:roleTerm` . A code from the *MARC Code List for Relators*[13] is used for the standardised description of the function or role. For this purpose the following code is adopted:

  - stating the source in the attribute `authority="marcrelator"`

  - or stating the URIs of the source in the attribute `authorityURI="http://id.loc.gov/vocabulary/relators"`

  - or stating the code URI in the attribute `valueURI`.

- Names of persons or organisations which were not part of the creation of the work or the primary edition underlying digitisation, but who are the subject of the work are verified in the subelement `mods:name` of the element `mods:subject` .

- If the element `mods:displayForm` is available, then its content is used for the display.

2.2.1 Name information – mods:title

MODS definition:	The name of a person, organization, or event (conference, meeting, etc.) associated in some way with the resource.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	Of the attributes permissible in MODS, the following are used:

- `type`:
  personal is obligatory when it concerns the name of persons,
  corporate is obligatory when it concerns the name of organisations;
- `authority`: Can be used if the heading of the name is specified from a standard file;
- `authorityURI`: Can be used if the heading of the name is

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[13] http://id.loc.gov/vocabulary/relators.html

specified from a standard file, which is identifiable by a URI;

- `valueURI`: Can be used, if the specified heading of the name is identifiable by a URI (e.g. GND-URI).

2.2.2   Subelements for mods:name

2.2.2.1 Name components - mods:namePart

MODS definition:	Includes each part of the name that is parsed.
Repeatable:	Yes
Degree of obligation:	obligatory When using `mods:name` then at least one subelement `mods:namePart` has to be available.

Attributes:	If it is the name of a person, then `mods:namePart` has to be used with the `type` attribute and one of the following attribute values:
	    family: for the last name of the person,
	    given: for the first name of the person,
	    date: for the person's biographical data,
	    termsOfAddress: for titles of persons, organisational aids and homonym additions.
	If it is the name of an organisation, then `mods:namePart` is used without the `type` attribute .

2.2.2.2 Display form - mods:displayForm

MODS definition:	Is used to indicate the unstructured form of the name as given on the resource
Repeatable:	no Within a `mods:name` only one `mods:displayForm` may be present.
Degree of obligation:	optional

2.2.2.3 Role information – mods:role

MODS definition:	A term(s) that designates the relationship (role) of the entity recorded in name in relation to the resource
Repeatable:	yes Within one `mods:name` it is possible to have more than one `mods:role` if the person had more than one role during the creation of the resource (e.g. author and illustrator).
Degree of obligation:	obligatory Every `mods:name` has to have one `mods:role` subelement

2.2.2.4 Subelements for mods:role

2.2.2.4.1 Role – mods:roleTerm

MODS definition:	Contains the textual or coded form of a relator/role. An authority should be indicated if using a coded form for the role.
Repeatable:	yes
	`mods:roleTerm` can be repeated within a `mods:role` in consideration of the attributes mentioned below.
Degree of obligation:	obligatory
	A `mods:role` has to contain at least one `mods:roleTerm`.
Attributes:	• `type` with following attribute values:

- `type` with following attribute values:
  text for textual description of function/role,
  code for the code which stands for the function/role. The source for these relator codes is the *MARC Code List for Relators[14].*
- `authority`: Specifies the source of the used codes; mandatory attribute value is
  marcrelator.
- `authorityURI`: Specifies the URI of the used code liste, namely
  http://id.loc.gov/vocabulary/relators.
- `valueURI`: Is the URI of a single value from the list.

The use of the `type` attribute with the attribute value ***code*** is obligatory. If the role of the person/organisation is not known then the code ***oth*** is used.

2.2.3 Examples

Name of an organisation as a contributor
```
<mods:name type="corporate">
    <mods:namePart>Royal Society &lt;London&gt;</mods:namePart>
    <mods:role>
        <mods:roleTerm authority="marcrelator" type="code">ctb</mods:roleTerm>
    </mods:role>
</mods:name>
```

Name of a person as author
```
<mods:name type="personal" authority="gnd">
    <mods:namePart type="family">Beckher</mods:namePart>
    <mods:namePart type="given">Daniel</mods:namePart>
    <mods:role>
        <mods:roleTerm authority="marcrelator" type="code">aut</mods:roleTerm>
    </mods:role>
</mods:name>
```

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[14] http://id.loc.gov/vocabulary/relators.html

Use of a URI for the personal name

```
<mods:name type="personal" valueURI="http://d-nb.info/gnd/118659359">
    <mods:namePart type="family">Borelli</mods:namePart>
    <mods:namePart type="given">Giovanni Alfonso</mods:namePart>
    <mods:displayForm>Borellus, Johannes Alphonsus</mods:displayForm>
    <mods:namePart type="date">1608-1679</mods:namePart>
    <mods:role>
        <mods:roleTerm authority="marcrelator" type="code">aut</mods:roleTerm>
    </mods:role>
</mods:name>
```

Use of URIs for personal names and role

```
<mods:name type="personal" valueURI="http://d-nb.info/gnd/11872942X">
    <mods:namePart type="given">Louis</mods:namePart>
    <mods:namePart type="termsOfAddress">France, Roi, XIII.</mods:namePart>
    <mods:namePart type="date">1601-1643</mods:namePart>
    <mods:role>
        <mods:roleTerm authority="marcrelator" type="code"
        valueURI="http://id.loc.gov/vocabulary/relators/dte">dte</mods:roleTerm>
    </mods:role>
    <mods:displayForm>Ludovicus &lt;Gallia et Navarra, Rex,
    XIII.&gt;</mods:displayForm>
</mods:name>
```

2.3 Genre

This element describes the literary or mus*ical* genre of a work. It is recommended to use checked vocabulary which can be identified via the attributes `authority`, `authorityURI` or `valueURI` . Possible vocabularies are:

- *aad*: Genre terms of the Old Prints Consortium[15]
- *marcgt*: MARC Genre Term List[16]

2.3.1 Genre terms – mods:genre

MODS definition:	A term(s) that designates a category characterizing a particular style, form, or content, such as artistic, musical, literary composition, etc.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	One of the following attributes can be used: • `authority`: For the name of the checked vocabulary. • `authorityURI`: For the URI of the checked vocabulary. • `valueURI`: For the term URI, which is used from the checked vocabulary.

2.3.2 Examples

AAD genre term with URI
```
<mods:genre valueURI="http://uri.gbv.de/terminology/aadgenres/gt17">
   Archäologie
</mods:genre>
```

Marc Genre Terms
```
<mods:genre authority="marcgt">dictionary</mods:genre>
```

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[15] http://aad.gbv.de/empfehlung/index.htm
[16] http://www.loc.gov/standards/valuelist/marcgt.html

2.4 Information on the creation

The specifications for the creation of the digital asset (digitisation time, location) have to be distinguishable from the information about the creation or publication of the physical edition (publisher, location, publication date). These specifications are reflected in separate `mods:originInfo` which are distinguished via `eventType` attribute.

2.4.1   Origin information - mods:originInfo

MODS definition: Information about the origin of the resource, including place of origin or publication, publisher/originator, and dates associated with the resource.

Repeatable: yes
If in addition to information concerning the physical original, it is also necessary to consider information about the digital asset; the latter has to be listed in its own `mods:originInfo`.

Degree of obligation: conditional
Specifications about the publication of the analogue edition are obligatory for the root structure element in a METS/MODS record.

Attributes: The `eventType` attribute has to be assigned a clear value for each `mods:originInfo`:

production: for specification on the creation of the edition,
publication: for specification on the publication of the edition,
digitization: for specification on the digitisation of the edition,
distribution: for specification on the distribution of the edition

2.4.2   Subelements for mods:originInfo

2.4.2.1 Place information – mods:place

MODS definition: Name of a place associated with the issuing, publication, release, distribution, manufacture, production, or origin of a resource.

Comments: Publication/creation location of physical template of the digital asset.

Repeatable: yes
`mods:originInfo` provides its own `mods:place` with the relevant `mods:placeTerm` for every place in which the resource was published.

Degree of obligation: optional

2.4.2.2 subelements for mods:place

2.4.2.2.1 Publication place – mods:placeTerm

MODS definition: Used to express place in a textual or coded form. If both a code and a term are given that represent the same place, use one <place> and multiple occurrences of <placeTerm>. If different places, repeat <place><placeTerm>.

Repeatable: yes
If it concerns several name forms of a place or it is the name and a code or similar, then mods:placeTerm is repeated. If it is a different place, then mods:place has to be repeated.

Degree of obligation: obligatory
A mods:place has to contain at least one mods:placeTerm .

Attributes:
- type with following attribute values:
  - *text* for the place name in text form or
  - *code* for the place name as code.
- authority: For the name of the standard file from which the place name or code came.
- authorityURI: For the URI of the standard file from which the place name or code came.
- valueURI: For the URI of the place name.

2.4.2.3 Publisher – mods:publisher

MODS definition: The name of the entity that published, printed, distributed, released, issued, or produced the resource.

Comments: Publisher or printer of analogue edition or digital asset of the publisher.

Repeatable: Yes

Degree of obligation: optional

2.4.2.4 Publication date – mods:dateIssued

MODS definition: The date that the resource was published, released or issued.

Comments: Date of publication, publication year

Repeatable: yes
For the time periods the mods:dateIssued has to be repeated and the start and end date have to be identified by the attribute point (point="start" and point="end".)

Degree of obligation: conditional
The specification of the publication date is obligatory for published works.

Attributes:
- encoding: The value *iso8601* is obligatory for the information regarding the key date and periods.
- point: For information on start (point="start") and end of (point="end") a time period.
- keyDate: The relevant year information is highlighted with keyDate="yes" and is used for the search or filtering of search results. A keydate can only be allocated once mods:originInfo

.
- qualifier: The use of this attribute shows that the date cannot be specified exactly. The following attribute values can be used:

  approximate
  inferred
  questionable.

2.4.2.5 Creation date – mods:dateCreated

MODS definition:	The date of creation of the resource
Comments:	Date of the creation or runtime of the analogue original, especially if no year of publication can be specified.
Repeatable:	yes For time periods mods:dateCreated has to be repeated using the attribute point.
Degree of obligation:	conditional The specification of the creation date is obligatory for not published works.
Attributes:	The attributes and possible attribute values for mods:dateCreated are the same as for mods:dateIssued

2.4.2.6 Capturing date - mods: dateCaptured

MODS definition:	The date on which the resource was digitized or a subsequent snapshot was taken.
Comments:	Date of the creation of the digital asset
Repeatable:	yes For time periods mods:dateCaptured has to be repeated using the attribute point.
Degree of obligation:	optional
Attributes:	The attributes and possible attribute values are the same as for mods:dateIssued, with exception of the keyDate attribute.

2.4.2.7 Other date information - mods:dateOther

MODS definition:	A date that does not fall into another category but is important to record.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	The attributes and possible attribute values for mods:dateOther are the same as for mods:dateIssued

2.4.2.8 Edition – mods:edition

MODS definition:	Information identifying the edition or version to which the

resource belongs.

Comments: Edition name

Repeatable: no

Within a `mods:originInfo`-element only one `mods:edition`-subelement is permissible.

Degree of obligation: optional

2.4.3 Examples

Publication note and edition name with approximate publishing date

```
<mods:originInfo eventType="publication">
   <mods:place>
      <mods:placeTerm type="text">Geneva</mods:placeTerm>
   </mods:place>
   <mods:publisher>Marcus</mods:publisher>
   <mods:dateIssued keyDate="yes" encoding="iso8601" qualifier="approximate">
      1633
   </mods:dateIssued>
   <mods:edition>In hac postrema editione ab erroribus expurgata</mods:edition>
</mods:originInfo>
<mods:originInfo eventType="digitization">
   <mods:place>
      <mods:placeTerm type="text">Wolfenbüttel</mods:placeTerm>
   </mods:place>
   <mods:publisher>Herzog August Bibliothek</mods:publisher>
   <mods:dateCaptured encoding="iso8601">2008</mods:dateCaptured>
</mods:originInfo>
```

Publication note with several publishers and places

```
<mods:originInfo eventType="publication">
   <mods:place>
      <mods:placeTerm type="text">Leipzig</mods:placeTerm>
   </mods:place>
   <mods:publisher>Georg</mods:publisher>
   <mods:place>
      <mods:placeTerm type="text">Milan</mods:placeTerm>
   </mods:place>
   <mods:place>
      <mods:placeTerm type="text">Florence</mods:placeTerm>
   </mods:place>
   <mods:publisher>F. Lucca</mods:publisher>
   <mods:dateIssued keyDate="yes" encoding="iso8601">1960</mods:dateIssued>
   <mods:edition>2. Aufl.</mods:edition>
</mods:originInfo eventType="digitization">
<mods:originInfo>
   <mods:dateCaptured encoding="iso8601">2005-01-24</mods:dateCaptured>
</mods:originInfo>
```

Publication note with publishing period

```
<mods:originInfo eventType="publication">
    <mods:place>
        <mods:placeTerm>Leipzig</mods:placeTerm>
    </mods:place>
    <mods:place>
        <mods:placeTerm>Wiesbaden</mods:placeTerm>
    </mods:place>
    <mods:publisher>Insel Verlag</mods:publisher>
    <mods:dateIssued encoding="iso8601" keyDate="yes" point="start">
        1930
    </mods:dateIssued>
    <mods:dateIssued encoding="iso8601" point="end">
        1964
    </mods:dateIssued>
</mods:originInfo>
<mods:originInfo eventType="digitization">
    <mods:place>
        <mods:placeTerm>Koblenz</mods:placeTerm>
    </mods:place>
    <mods:publisher>Rheinische Landesbibliothek</mods:publisher>
    <mods:dateCaptured encoding="iso8601" point="start">
        2009
    </mods:dateCaptured>
    <mods:dateCaptured encoding="iso8601" point="end">
        2010
    </mods:dateCaptured>
</mods:originInfo>
```

2.5 Language and Script

For language information, the codes from ISO 639-2b[17] have to be used, for script information ISO 15924[18].

2.5.1 Language information - mods:language

MODS definition:	A designation of the language in which the content of a resource is expressed.
Comments:	If there is more than one language, then `mods:language` is repeated. If the same language is represented in different form (e.g. once code, once text) then the subelement `mods:languageTerm` is repeated within the `mods:language`-element.
Repeatable:	Yes
Degree of obligation:	optional

2.5.2 Subelements for mods:language

2.5.2.1 Language - mods:languageTerm

MODS definition:	Contains the language(s) of the content of the resource. It may be expressed in textual or coded form. If in coded form, the source of the code is contained in the value of the authority attribute. If no authority is given, it is assumed that the content is textual.
Repeatable:	yes If it concerns different display forms of the same language.
Degree of obligation:	obligatory `mods:language` has to contain at least one `mods:languageTerm`-element, which includes the language as per ISO 639-2b.

Attributes:	• `type`: This attribute indicates if the language is specified in text form or coded form. The use of this attribute is obligatory. Possible attribute values are
	    code for language codes and
	    text for text.
	• `authority`: Specifies the code list from which the language code was taken. Stating a code according to ISO 639-2b is obligatory.
	• `authorityURI`: URI of the code list.
	• `valueURI`: URI of the value which is used[19].

---

[17] http://www.loc.gov/standards/iso639-2/php/code_list.php

[18] http://unicode.org/iso15924/iso15924-codes.html

[19] http://www.lexvo.org/page/iso639-3/eng

2.5.2.2 Script – mods:scriptTerm

MODS definition:	Contains the language(s) of the content of the resource. It may be expressed in textual or coded form. If in coded form, the source of the code is contained in the value of the authority attribute. If no authority is given, it is assumed that the content is textual.
Repeatable:	yes If several scripts are used for the same language.
Degree of obligation:	optional

Attributes:	• type: This attribute indicates if the script is specified in text form or coded form. The use of this attribute is obligatory. Possible attribute values are
	    code for script codes and
	    text for text.
	• authority: Specifies the code list from which the language code was taken. Stating a code according to ISO 15924 is obligatory.
	• authorityURI: URI of the code list.
	• valueURI: URI of the value which is used [20].

2.5.3 Examples

Latin text

```
<mods:language>
    <mods:languageTerm type="code" authority="iso639-2b">lat</mods:languageTerm>
    <mods:languageTerm type="text" valueURI="http://lexvo.org/id/iso639-3/lat">
        Latein
    </mods:languageTerm>
</mods:language>
```

Russian text in Cyrillic script

```
<language>
    <languageTerm type="code" authority="iso639-2b">rus</languageTerm>
    <scriptTerm type="code" authority="iso15924">Cyrl</scriptTerm>
</language>
```

---

[20] z.B. http://www.lexvo.org/page/script/Latn

2.6   Physical description

The following applies for the physical description of the resource:

- The extent of the analog template is specified in the subelement `mods:extent` .

- The subelement `mods:digitalOrigin` is used in order to describe what kind of a resource is the basis for the digital asset.

2.6.1   Physical properties - mods:physicalDescription

MODS definition:	Contains all subelements relating to physical description information of the resource described. Data is input only within each subelement.
Repeatable:	No
Degree of obligation:	optional (zvdd: obligatory)

2.6.2   Subelements for mods:location

2.6.2.1 Extent – mods:extent

MODS definition:	A statement of the number and specific material of the units of the resource that express physical extent.
Comments:	Specification of pages, sheets, illustrations, format, supporting materials and suchlike of the analog original.
Repeatable:	Yes If the resource is made up of different components.
Degree of obligation:	optional

2.6.2.2 Origin - mods:digitalOrigin

MODS definition:	A designation of the source of a digital file important to its creation, use and management.
Comments:	`mods:digitalOrigin` is only used with the values listed below.
Repeatable:	No
Degree of obligation:	optional
Values:	The following values defined in *MODS User Guidelines* are permissible: • `born digital` if it concerns an original electronic document, • `reformatted digital` if it concerns an physical original, • `digitized microfilm` if the original is a micro form, • `digitized other analog` if it is a different kind of analog original (e.g. photocopies).

2.6.3 Example

```
<mods:physicalDescription>
    <mods:extent>[8] Bl.,170 S., [3] Bl.</mods:extent>
    <mods:extent>zahlr. Ill.</mods:extent>
    <mods:digitalOrigin>reformatted digital</mods:digitalOrigin>
</mods:physicalDescription>
```

2.7 Abstract

The element `mods:abstract` is used to describe a short abstract of the content.

2.7.1 Abstract – mods:abstract

MODS definition:	A summary of the content of the resource.
Repeatable:	Yes
Degree of obligation:	optional

2.7.2 Example

```
<mods:abstract>
    Boberach: Um ihren Anspruch zu erfüllen, die Partei der Zukunft zu sein, soll
    die Linke die indirekten Steuern als ungerecht ebenso wie die Schutzzölle
    ablehnen und eine einzige direkte Gewerbe- und Einkommensteuer verlangen
</mods:abstract>
```

2.8   Comments

The following applies to comments:

- Here information is given, which cannot be put into any other, more specific fields.

- The type of information has to be specified more closely using a `type`-attribute.

2.8.1   Note – mods:note

MODS definition:	General textual information relating to a resource.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	`type`: Type of comment: Permissible are the values from the list for MODS note types.[21]

2.8.2   Examples

```
<mods:note type="statementOfResponsibility">Ab Hermanno Boerhaave</mods:note>
```

```
<mods:note type="bibliography">Guibert, A. J.: Bibliographie des OEuvers de René
Descartes publies au XVII siècle, 1976, S. 196 Ausg.</mods:note>
```

---

[21] http://www.loc.gov/standards/mods/mods-notes.html

2.9 Subjects

The following applies to subjects:

- If it is controlled vocabulary, then the name of the vocabulary is named in the attribute `authority` or displayed via `authorityURI` . If the subject is identified via `valueURI` then stating it in `authority` can be omitted.

- Within `mods:subject` several subjects, if they originate from the same or no controlled vocabulary, can be combined by using subelements.

- The reviewed work can be described in `mods:subject` for reviews.

2.9.1 Subject – mods:subject

MODS definition:	A term or phrase representing the primary topic(s) on which a work is focused
Comments:	The name of the controlled vocabulary or the `authorityURI` is named in the relevant attribute of the element `mods:subject` . If a `valueURI` is used, then this is specified in the relevant attribute of the respective subelement (e.g. `mods:topic`).
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	• `authority` if the subject was taken from a standard file, • `authorityURI` if the subject was taken from a standard file which can be identified by a URI.

2.9.2 Subelements for mods:subject

2.9.2.1 Topical subject – mods:topic

MODS definition:	"topic" is used as the tag for any topical subjects that are not appropriate in the <geographic>, <temporal>, <titleInfo>, or <name> subelements. If there is an uncontrolled term, <topic> is used (since <subject> is a binding element).
Comments:	The attributes `authority` and `authorityURI` are specified in `mods:subject` , the attribute `valueURI` is used, however, in `mods:topic` .
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	`valueURI` if the subject can be identified by a URI (e.g. GND-URI)

2.9.2.2 Geographic reference – mods:geographic

MODS definition:	"geographic" is used for geographic subject terms that are not

parsed as hierarchical geographics. If the geographic name is part of a corporate body (i.e., United States. Senate), it is coded as <name>, not <geographic>.

Comments: The attributes `authority` and `authorityURI` are specified in `mods:subject` , the attribute `valueURI` is used, however, in `mods:geographic` .

Repeatable: Yes

Degree of obligation: optional

Attributes: `valueURI` if the subject can be identified by a URI (e.g. GND-URI)

2.9.2.3 Temporal reference – mods:temporal

MODS definition: "temporal" is used for chronological subject terms or temporal coverage. It may be expressed as a controlled subject term or as a structured date using the same data definition as MODS dates.

Comments: The attributes `authority` and `authorityURI` are specified in `mods:subject` , the attribute `valueURI` is used, however, in `mods:temporal` .

Repeatable: Yes

Degree of obligation: optional

Attributes: `valueURI` if the subject can be identified by a URI.

2.9.2.4 Work reference – mods:titleInfo

MODS definition: "titleInfo" includes a title used as a subject. All subelements and attributes used under the top-level element <titleInfo> may be used with this subelement. An authority attribute may also be used at this level if desired, in addition to at the highest level (under <subject>).

Comments: `mods:titleInfo` can also be used for the specification of reviewed works.
The attributes `authority` and `authorityURI` are specified in `mods:subject` , the attribute `valueURI` is used, however, in `mods:titleInfo` .
All subelements and attributes can be used which are listed in chapter 2.1.1 for the use with `mods:titleInfo` .

Degree of obligation: optional

Attributes:
- `valueURI` (if the subject can be identified by a URI).
- `nameTitleGroup` if it is a reviewed work. The attribute provides a reference between the title of the reviewed work and its author. In order to achieve this, it is necessary to use this attribute with an identical value within a `mods:subject` both in `mods:titleInfo` as well as in `mods:name` .

2.9.2.5 Name reference – mods:name

MODS definition: "name" includes a name used as a subject. All subelements and

attributes used under the top-level element <name> may be used. An authority attribute may also be used at this level if desired in addition to at the highest level (under <subject>).

Comments: The attributes `authority` and `authorityURI` are specified in `mods:subject`, the attribute `valueURI` is used, however, in `mods:name`.

All subelements and attributes can be used which are listed in chapter 2.2.1 for the use with `mods:name`.

Repeatable: Yes

Degree of obligation: optional

Attributes:
- `valueURI`: If the subject can be identified by a URI (e.g. GND-URI).
- `nameTitleGroup`: If it is a reviewed work. The attribute provides a reference between the title of the reviewed work and its author. In order to achieve this, it is necessary to use this attribute with an identical value within a `mods:subject` both in `mods:titleInfo` as well as in `mods:name`.

2.9.3 Examples

Use of controlled vocabulary without URI
```
<mods:subject authority="lcsh">
   <mods:topic>Real property</mods:topic>
   <mods:geographic>Mississippi</mods:geographic>
   <mods:geographic>Tippah County</mods:geographic>
</mods:subject>
```

Description of a reviewed work
```
<mods:subject>
   <mods:name type="personal">
       <mods:namePart type="family">Goethe</namePart>
       <mods:namePart type="given">Johann Wolfgang von</namePart>
   </mods:name>
   <mods:titleInfo>
       <mods:title>Wilhelm Meisters Lehrjahre</title>
   </mods:titleInfo>
</mods:subject>
```

Description of a reviewed work using the attribute nameTitleGroup

```
<mods:subject>
    <mods:name type="personal" nameTitleGroup="1">
        <mods:namePart type="family">Goethe</namePart>
        <mods:namePart type="given">Johann Wolfgang von</namePart>
    </mods:name>
    <mods:titleInfo nameTitleGroup="1">
        <mods:title>Wilhelm Meisters Lehrjahre</title>
    </mods:titleInfo>
    <mods:name type="personal" nameTitleGroup="2">
        <mods:namePart type="family">Goethe</namePart>
        <mods:namePart type="given">Johann Wolfgang von</namePart>
    </mods:name>
    <mods:titleInfo nameTitleGroup="2">
        <mods:title>Wilhelm Meisters Wanderjahre</title>
    </mods:titleInfo>
</mods:subject>
```

Use of controlled vocabulary with URI

```
<mods:subject authority="gnd">
    <mods:topic valueURI="http://d-nb.info/gnd/4451062-7">
        transformation
    </mods:topic>
    <mods:geographic valueURI="http://d-nb.info/gnd/4449157-8">
        Nowosibirsk
    </mods:geographic>
</mods:subject>
```

Combination of controlled vocabulary and free subjects

```
<mods:subject>
    <mods:topic valueURI="http://d-nb.info/gnd/4451062-7">
        transformation
    </mods:topic>
    <mods:geographic valueURI="http://d-nb.info/gnd/4449157-8">
        Nowosibirsk
    </mods:geographic>
    <mods:topic>
        Industriestandort
    </mods:topic>
    <mods:topic>
        Ob
    </mods:topic>
</mods:subject>
```

2.10 Classifications

The name of the classification is specified in the attribute `authority` or referenced with a URI in the attribute `authorityURI` . The notation can be referenced via information in `valueURI` . If this is the case, then the attribute `authority` can be omitted.

2.10.1 Classification – mods:classification

MODS definition:	A designation applied to a resource that indicates the subject by applying a formal system of coding and organizing resources according to subject areas.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	One of the following attributes has to be used: • `authority`: Name of the used classification • `authorityURI`: URI of the used classification (e.g. http://dewey.info/) • `valueURI`: URI of the notation.

2.10.2 Examples

```
<mods:classification authority="lcc">QM21</mods:classification>
<mods:classification authority="gdz">Itineraria</mods:classification>
<mods:classification authority="ddc">337.14</mods:classification>
```

2.11 References to other resources

The following applies for the description of references to other resources:

- The hierarchical linking of document parts has to be carried out via the METS structure using a METS pointer `mets:mptr`, which references directly to superordinate and subordinate METS files.[22]

- It is possible to show more than just hierarchical references in `mods:relatedItem`. In fact, it is possible to show a wide range of references using the `type`-attribute.

- Clear identifiers have to be used in order to create the reference between documents or document parts to MODS.

2.11.1 Reference information – mods:relatedItem

MODS definition:	Information that identifies other resources related to the one being described.
Repeatable:	Yes
Degree of obligation:	conditional
	If the METS files are created for volumes of limited works with several volumes, then linking to the complete works is obligatory via `mods:relatedItem[@type="host"]`.
	For the archival area, the inventory context of the resource is shown via `mods:relatedItem`. For this purpose, the individual superordinate directory levels are shown.
Attributes:	Of the attribute values for `type` mentioned in MODS, the following can be used:
	host: If it concerns an information to a superordinate unit of the resource.
	preceding: If it concerns an information to a previous publication of the resource.
	succeeding: If it concerns an information to a later publication of the resource.
	series: If it concerns an information on a series in which the resource was published.
	original: If it concerns information about the origin of a derivative.

---

[22] The hierarchical linking between the bibliographic files of a volume of a limited work with several volumes and the associated complete works is displayed in the element `mods:relatedItem[@type="host"]`. This is specifically necessary, if an individual METS file is created for every volume. A separate METS file is created for the complete works which references the files of the volumes in order to group the volumes and to show their coherence. This reference is made in `mods:relatedItem[@type="host"]` in the subelement `mods:recordInfo/mods:recordIdentifier`. Furthermore, the element `mods:part` has to be used in these cases. Thereby, the `mods:part` is not used as a subelement of `mods:relatedItem`. Additionally, it is necessary to reference interactively between complete works and volumes within the structural data (refer also to METS application profile).

2.11.2 Subelements for mods:relatedItem

2.11.2.1 Title information – mods:titleInfo

MODS definition:	A word, phrase, character, or group of characters, normally appearing in a resource, that names it or the work contained in it.
Comments:	All subelements and attributes apply which are listed in chapter 2.1.1 .
Repeatable:	Yes If mods:titleInfo is repeated, then one of the attributes listed in chapter 2.1.1. has to be used.
Degree of obligation:	conditional If in mods:relatedItem the mods:recordInfo element does not occur, then mods:relatedItem has to have mods:titleInfo which includes the title information.

2.11.2.2 Count – mods:part

MODS definition:	The designation of physical parts of a resource in a detailed form.
Comments:	If the resource, related to the resource in question, is part of a series, then the volume count is specified in mods:relatedItem/mods:part .
Repeatable:	No Within one mods:relatedItem there is only one mods:part. If a hierarchical structure is necessary, then this is carried out within mods:part using the type-attribute in mods:detail
Degree of obligation:	conditional If the resource described in mods:relatedItem is a series with count, then this has to be documented in mods:part .[23]

2.11.2.3 Subelements for mods:part

2.11.2.3.1   mods:detail

MODS definition:	Contains numbering and type of designation of the part in relation to the host/parent item in which a host item resides.
Repeatable:	Yes If mods:detail is repeated, then there has to be a type-attribute with one of the attribute values mentioned below. Each attribute value can only be used once within the same mods:part-element. This element is mainly used in archive settings for inventory contextualisation.
Degree of obligation:	obligatory mods:part has to contain at least one mods:detail element.
Attributes:	Of the attribute values for the type-attribute mentioned in MODS, the following have to be used:

---

[23] Unlike to version 1.0 of this application profile, the use of mods:part is obligatory for counted series parts.

volume for a volume of a work with several volumes
issue for an issue or similar of a magazine
chapter for a chapter within a limited work
collection for (archival) inventory
class for classification levels
series for (archival) series
file for the levels of a directory unit

2.11.2.3.2   Subelements for mods:detail

2.11.2.3.2.1 mods:number

MODS definition:	Contains the actual number within the part.
Repeatable:	no Within `mods:detail` there is only one `mods:number`.
Degree of obligation:	obligatory Every `mods:detail` has to contain one `mods:number` .

2.11.2.4 Resource – mods:recordInfo

MODS definition:	Information about the metadata record.
Comments:	All subelements and attributes mentioned in chapter 2.15 have to/can be used.
Repeatable:	no A `mods:relatedItem` can only contain one `mods:recordInfo` .
Degree of obligation:	conditional If in `mods:relatedItem` the element `mods:titleInfo` is not present, then `mods:relatedItem` has to have a `mods:recordInfo` with the subelement `mods:recordIdentifier` which links to the metadata record with the title information.

2.11.3 Examples

Hierarchical linking via data record identifier
```
<mods:relatedItem type="host">
   <mods:titleInfo>
       <mods:title>Tapfers Herze</mods:title>
       <mods:subTitle>Alte und neue Kriegslieder</mods:subtTitle>
   </mods:titleInfo>
   <mods:recordInfo>
       <mods:recordIdentifier source="dnb">
           http://d-nb.info/560570333
       </mods:recordIdentifier>
   </mods:recordInfo>
</mods:relatedItem>
<mods:part order="2">
   <mods:detail type="volume">
       <mods:number>Bd. 2</mods:number>
   </mods:detail>
</mods:part>
```

Link to a previous version of the resource

```
<mods:relatedItem type="preceding">
   <mods:titleInfo>
       <mods:title>
           Acta Academia Electoralis Moguntinae scientiarum utilium quae
           Erfordiae est
       </mods:title>
   </mods:titleInfo>
   <mods:recordInfo>
       <mods:recordIdentifier>
           urn:nbn:de:gbv:66-drucke/wt-1777x
       </mods:recordIdentifier>
   </mods:recordInfo>
</mods:relatedItem>
```

Reference to a series with count
```
<mods:relatedItem type="series">
   <mods:titleInfo>
       <mods:title>Verhandlungen des Deutschen Bundestages</mods:title>
   </mods:titleInfo>
   <mods:part>
       <mods:detail type="volume">
           <mods:number>16/2461</mods:number>
       </mods:detail>
   </mods:part>
</mods:relatedItem>
```

Reference to a series without count with data record identifier
```
<mods:relatedItem type="series">
   <mods:titleInfo>
       <mods:title>
           Digitalisierung naturwissenschaftlicher, technischer und medizinischer
           Texte der Leibnizzeit, Projekt der Herzog August Bibliothek
       </mods:title>
   </mods:titleInfo>
   <mods:recordInfo>
       <mods:recordIdentifier source="hab">
           http://diglib.hab.de/?link=011
       </mods:recordIdentifier>
   </mods:recordInfo>
</mods:relatedItem>
```

2.12 Identifier

`mods:identifier` is used as identifier for objects. The identifier for the metadata record which describes this object, is shown in `mods:recordInfo` (refer to chapter 2.15). An identifier should be persistent so the object can be identified in the longterm using this identifier.

The type of identifier has to be specified via `type`-attribute. Possible types are e.g. *uri*, *urn, doi, isbn, issn, purl, zdb*.[24] For old prints, it is also possible to use identifier types*vd16, vd17* or *vd18* . The *matrix number* is relevant for sound recordings.

2.12.1 Identification – mods:identifier

MODS definition:	Contains a unique standard number or code that distinctively identifies a resource.
Repeatable:	Yes
Degree of obligation:	optional
Attributes:	• `type` describes the type of identifier. The use of this attribute is obligatory. • `invalid="yes"` is used if the identifier is formally wrong or meanwhile invalid.

2.12.2 Examples

```
<mods:identifier type="urn">
   urn:nbn:de:gbv:23-drucke/17-16-quod-285
</mods:identifier>

<mods:identifier type="isbn">978-3-938616-82-6</mods:identifier>
<mods:identifier type="isbn" invalid="yes">978-3-938616-82</mods:identifier>

<mods:identifier type="vd17">12:118620T</mods:identifier>

<mods:identifier type="zdb">131551-1</mods:identifier>
```

---

[24] http://www.loc.gov/standards/mods/v3/mods-userguide-elements.html#identifier

2.13 Access to the resource

The following has to be adhered to if a digital asset is published according to the specifications of this application profile:

- The image files and/or sound documents associated with the digital asset are referenced via the `mets:fileSec`-element within the METS record. Compare for this purpose the METS application profile.[25]

- Further referencing can be made possible by using `mods:location` with subelement `mods:url` . This does not apply, however, to the individual image files but to the homepage from which (e.g. using a viewer) access to the individual image files is possible.

- Information to the location of the physical original are saved in the subelement `mods:shelfLocator` in a separate `mods:location`-element.

- If a `mods:location` element contains the subelement `mods:shelfLocator`, then it is mandatory that in the same element the institution for which the signature applies is specified in the subelement `mods:physicalLocation` .

- If a `mods:location` element contains the subelement `mods:url`, then it is optional to specify the institution, which provides the access to the digital asset, in the subelement `mods:physicalLocation` .

- Information about the creator of the digital asset are saved in `mets:amdSec` in the METS structure.

2.13.1 Repository – mods:location

MODS definition:	Identifies the institution or repository holding the resource, or a remote location in the form of a URL where it is available.
Repeatable:	Yes
Degree of obligation:	conditional
	For unique media, specifically from archives, the specification of the storage location is obligatory.

2.13.2 Subelements for mods:location

2.13.2.1 Physical location - mods:physicalLocation

MODS definition:	The institution or repository that holds the resource or where it is available.
Repeatable:	no
	within a `mods:location` the `mods:physicalLocation` cannot be repeated.
Degree of obligation:	conditional
	`mods:location` has to contain either `mods:physicalLocation` or

---

[25] http://dfg-viewer.de/profil-der-metadaten/

mods:url or both.

Attributes: The following attributes can be used:
- authorityURI: URI of a standard file from which name of the organisation or repository was taken.
- valueURI: URI of the organisation or repository.

2.13.2.2 Virtual location – mods:url

MODS definition: The Uniform Resource Location of the resource.

Repeatable: Yes

Degree of obligation: conditional

mods:location has to contain either mods:physicalLocation or mods:url or both.

Attributes: The attribute access can be used with the following values:

preview: If the URL refers to a preview.

raw object: If the URL refers directly to the described object.

object in context: If the URL refers to the object in a certain context.

2.13.2.3 Signature – mods:shelfLocator

MODS definition: Shelfmark or other shelving designation that indicates the location identifier for a copy.

Comments: Can be used e.g. for location signatures.

Repeatable: no

Within a mods:location-element the mods:shelfLocator cannot be repeated.

Degree of obligation: optional

2.13.3 Examples

```
<mods:location>
    <mods:physicalLocation>HAB Wolfenbüttel</mods:physicalLocation>
    <mods:url access="object in context">
        http://digilib.hab.de/drucke/nc-6-1/start.htm
    </mods:url>
</mods:location>

<mods:location>
    <mods:physicalLocation>
        Museumsbibliothek Kleinfiesenückel
    </mods:physicalLocation>
    <mods:shelfLocator>A-2358</mods:shelfLocator>
<mods:location>
```

2.14 Specification of volumes and other parts

If the described resource is a volume or part of another resource, then the specification of volume names or part names is carried out in `mods:part`. Thereby:

- In order to sort the volumes in the right sequence, the attribute `order` has to be allocated with integral, positive values.

- The volume count is saved parallel for the display as number or text within the subelement `mods:detail/mods:number` .

- If the element `mods:relatedItem[@type="host"]` is used for multi-part work, then `mods:part` has to be always available.

2.14.1 Volume count – mods:part

MODS definition:	The designation of physical parts of a resource in a detailed form.
Comments:	If the described resource is a volume of a work with several volumes or a sequential compilation, but not a series, then the volume specification is specified in an element `mods:part` as subelement of the root structure element. If the original is a volume of a series, then the count of the volume is specified within the series in an element `mods:part` as subelement of the `mods:relatedItem` element which also specifies the title of the series.
Repeatable:	no If a hierarchical structure is necessary, then this is carried out within `mods:part` using the `type`-attributes in `mods:detail`.
Degree of obligation:	conditional If the described resource is a volume or part of a limited work with several volumes or a sequential compilation, then the use of `mods:part` is obligatory.
Attributes:	`order` includes the value as positive number. The attribute is obligatory.

2.14.2 Subelements for mods:part

2.14.2.1 mods:detail

MODS definition:	Contains numbering and type of designation of the part in relation to the host/parent item in which a host item resides.
Repeatable:	yes If `mods:detail` is repeated, then there has to be a `type` attribute with one of the attribute values mentioned below. Every attribute value can only occur once in a `mods:detail` element within a `mods:part` element.
Degree of obligation:	obligatory `mods:part` has to contain at least one `mods:detail` with the subelement `mods:number` .

Attributes: The `type` attribute can include e.g. the following values:[26]
                    volume
                    issue
                    chapter
                    album

2.14.2.2 mods:number

MODS definition: Contains the actual number within the part.

Comments: Subelement for `mods:detail`

Repeatable: no
              Within one `mods:detail` there is only one `mods:number`.

Degree of obligation: obligatory
              Every `mods:detail` has to contain one `mods:number` .

2.14.3 Examples

```
<mods:relatedItem type="host">
   <mods:titleInfo>
       <mods:title>Tapfers Herze</mods:title>
   </mods:titleInfo>
   <mods:recordInfo>
       <mods:recordIdentifier>http://d-nb.info/560570333</mods:recordIdentifier>
   </mods:recordInfo>
</mods:relatedItem>
<mods:part order="2">
   <mods:detail type="volume">
       <mods:number>Bd. 2</mods:number>
   </mods:detail>
</mods:part>
```

---

[26] In version 1.0 for this application profile, it was intended to use the attribute value for `type` in `mods:part` as the value *host* . This does, however, not comply with the intended use of this element as per MODS standard and has been changed accordingly.

2.15 Information to the metadata record

In order to be able to link metadata records (see also chapter 2.11), each metadata record requires a clear identifier. This identifier can also be the data record number of the supplier system. In that case it is, however, necessary to specify the source using the `source` attribute.

2.15.1 Data record information – mods:recordInfo

MODS definition:	Information about the metadata record.
Repeatable:	No
Degree of obligation:	obligatory

2.15.2 Subelements for mods:recordInfo

2.15.2.1 Identifier – mods:recordIdentifier

MODS definition:	Contains the system control number assigned by the organization creating, using, or distributing the record.
Repeatable:	no Within a `mods:recordInfo` the `mods:recordIdentifier` cannot be repeated.
Degree of obligation:	obligatory `mods:recordInfo` has to contain at least one `mods:recordIdentifier` .
Attributes:	`source` for the code or identifier of the organisation whose domain specific identifier is used. If domain specific data record numbers are used, then this attribute is obligatory.

2.15.2.2 Development standard – mods:descriptionStandard

MODS definition:	Designates the rules used for the content of the description, if applicable.
Comments:	Includes specification about the general development standard.
Repeatable:	no Within a `mods:recordInfo` the `mods:descriptionStandard` cannot be repeated.
Degree of obligation:	optional

2.15.3 Examples

```
<mods:titleInfo>
    <mods:title>Dat grönt so grön</mods:title>
</mods:titleInfo>
<mods:recordInfo>
    <mods:recordIdentifier source="gvk-ppn">481975071</mods:recordIdentifier>
    <mods:descriptionStandard>RAK</mods:descriptionStandard>
</mods:recordInfo>

<mods:titleInfo>
    <mods:title>
        Vade mecum das ist zu Teutsch: aller guten Gesellen Weg- u. Haus-
        Büchlein, darinnen ... : Werden und Würcken der Herberge Varender Gesellen
        beim Alten Peter ... ; Und ist vürliegendes Büchlein des Vademeci Anderer
        Theyl: Chronica geheyssen ... ; [Tagebuch-Chronik d. Schlaraffia-Herberge
        Varender Gesellen beim Alten Peter]
    </mods:title>
</mods:titleInfo>
<mods:recordInfo
    <mods:recordIdentifier>http://d-nb.info/576745553</mods:recordIdentifier>
    <mods:descriptionStandard>RDA</mods:descriptionStandard>
</mods:recordInfo>
```

3   Metadata profiles to use other elements and attributes

The MODS standard provides the option to expand the data record with proprietary fields using `mods:extension` . These are always subelements of `mods:extension` and it is mandatory that they have their own namespace which has to be declared according to the XML standard. The specifications described below for the Central Directory of Digitised Prints (zvdd) very clearly indicate this.

3.1   Extension - mods:extension

MODS definition:	Is used to provide for additional information not covered by MODS. It may be used for elements that are local to the creator of the data. In addition, it may be used to extent MODS for various purposes when another XML schema may handle the type of information.
Repeatable:	Yes
Degree of obligation:	optional

3.2   zvdd-specific additions for title keywords

In order to make individual words with different spellings from the title of the original searchable, it is possible to use the element `zvdd:titleword` as subelement of `zvdd:zvddWrap` .

3.2.1   zvdd:zvddWrap

Definition:	Container for zvdd-specific elements
Repeatable:	No
Degree of obligation:	optional

3.2.2   zvdd:titleWord

Definition:	Is used for individual words which are to be indexed as title keywords despite not being used in the title.
Comments:	This subelement for `zvdd:zvddwrap` makes it possible to provide the different spellings of title keywords for search purposes
Repeatable:	No Different keywords are separated with spaces and listed one after

the other.

Degree of optional
obligation:

3.2.3 Examples

```
<mods:titleInfo>
    <mods:title>Drey Bücher Der Magnetischen Artzney-Kunst</mods:title>
    <mods:subTitle>
        Worin[n]en  so  wol  die  Theorie  als  Practic,  wie  auch  viel  Neues/
        Wunderbares  und  höchst  Nützliches  enthalten ;  So  dann  viel  geheime  Natur-
        Wunder  geoffenbaret/  die  bisher  unbekannte  Würckungen  des  Lebens-Geistes
        entdecket/  und ...  vorgestellet worden
    </mods:subTitle>
</mods:titleInfo>
<mods:extension>
    <zvdd:zvddWrap>
        <zvdd:titleWord>Drei Arznei Praktik Praxis Wirkungen</zvdd:titleWord>
    </zvdd:zvddWrap>
</mods:extension>
```