Editorial Guidelines for MEI Editing in the E-LAUTE Project

General Remarks

This document is referring to MEI encoding procedures within the E-LAUTE Electronic Linked Annotated Unified Tablature Edition project. For further information please consult the **E-LAUTE: Editorial conventions (Tablatures, CMN)**. In the project we produce, in general, four types of formats, all encoded following the Music Encoding Initiative (MEI) standard:

1. true-to-original (diplomatic) transcription in the original tablature type, supplemented with transliterations in the other tablature types (following the MEI.stringtab module): e.g. *enc_dipl_GLT* + *enc_dipl_ILT* and *enc_dipl_FLT*
2. edition in all types of tablature (following the MEI.stringtab module): *enc_ed_FLT*, *enc_ed_GLT* and *enc_ed_ILT*
3. true-to-original (diplomatic) transcription in Common Western Music Notation (CMN), the so called notehead notation as a pitch representation that retains tablature-specific components in customized MEI structure, created by abtab — a toolbox for processing and analysing music in lute tablature: *enc_dipl_CMN*
4. edition in CMN in two staves (following the MEI.cmn module): *enc_ed_CMN*.

Shared Features of All Types of Encodings

MEI Header

The meiHead Template

To create a template for each source, editors refer to the meiHead Template shown in the Appendix. The template contains comments that are used as placeholders as well as instructions or explanations of elements that should be filled or replaced by editors. Once all elements that are required according to the instructions in the meiHead template are completed, the comments are removed.

All the metadata regarding each source and every individual piece, like titles, person names, source descriptions and identifiers, always corresponds to the information found in the E-LAUTEdb. Until the process of entering the metadata is automated, it is done manually by editors.

Titles

In general, there are three types of titles: original, normalized, and main:

- the original title (recorded in the `<title>` element with attribute `type="original"`) reproduces the exact title as in the source;
- the normalized title (recorded in the `<title>` element with attribute `type="normalized"`) records the title in modern language and writing;

- the main title (recorded in the `<title>` element with attribute `type="main"`) includes both the original and the normalized title as well as additional information as explained below.

Titles or parts of titles may be enclosed in square brackets in the E-LAUTEdb (for further information see **E-LAUTEdb: Database conventions**), indicating that they are not preserved in the source. In the encoding, such blocks of text are additionally put in `<supplied>` element.

```
<title type="main">Longier me faút F<supplied>rantzosisch</supplied> S<supplied>tukh</supplied>
(Languir me fais)<titlePart> edition in <abbr expan="French Lute
Tablature">FLT</abbr></titlePart></title>
```

If the source doesn't contain any title, this is always encoded as:

```
<title type="original"><supplied>untitled</supplied></title>
```

This is often followed by a title that is supplied by an editor:

```
<title type="normalized"><supplied>Hoftanz: Schwarz Knab</supplied></title>
```

The additional information about the transcription in the main title is recorded as follows:

```
<title type="main">[...]<titlePart> transcription in <abbr expan="German Lute
Tablature">GLT</abbr></titlePart></title>
```

for the *transcription* in German lute tablature, and as follows:

```
<title type="main">[...]<titlePart> edition in <abbr expan="French Lute
Tablature">FLT</abbr></titlePart></title>
```

for the *edition* in French lute tablature.

We use the following abbreviations for the types of transcriptions and editions:

```
<abbr expan="German Lute Tablature">GLT</abbr>
<abbr expan="Italian Lute Tablature">ILT</abbr>
<abbr expan="French Lute Tablature">FLT</abbr>
<abbr expan="Common Music Notation">CMN</abbr>
```

Person Names

Two types of person names are recorded in the element `<persName>`: names of historical persons included in the `<sourceDesc>` and names of editors, that is, staff

members of the E-LAUTE project, in the `<titleStmt>`. The main difference is in the xml:id, where historical persons have the value `xml:id="person-IDno"`, while staff members have `xml:id="projectstaff-IDno"`. The values of the `@role` attribute and `@auth.uri` are also handled differently. See below for a detailed explanation and examples.

In Title Statement

In the `<titleStmt>` container, the information about the person(s) who worked on each encoding, their first and last name, project-specific ID and URI and their role in relation to that encoding, is recorded within an individual `<persName>`. Whether they have done the (raw) typesetting or finished the encoding, all contributors are recorded.

This is done in the `<respStmt>` within the `<titleStmt>` of a `<fileDesc>` (file description), where you can find information about the editorial team, the meiHead modelers and the E-LAUTE administration. The editors update, in each encoding, the editor's name, `@auth.uri`, `@xml:id`, and `@role` of the `<persName>`.

```
<titleStmt>
      [...]
      <respStmt>
      <!-- editorial team -->
      <persName role="meiEditor" auth.uri="https://e-laute.info/data/projectstaff/11"
            xml:id="projectstaff-11">
            <foreName>Olja</foreName>
            <famName>Janjuš</famName>
      </persName>
      <!-- meiHead modelers -->
      <persName role="metadataContact" auth.uri="https://e-laute.info/data/projectstaff/10"
            xml:id="projectstaff-10">
            <foreName>Ilias</foreName>
            <famName>Kyriazis</famName>
      </persName>
      <!-- E-LAUTE administration -->
      <corpName role="provider" xml:id="elaute">
            <ref target="https://doi.org/10.55776/I6019 ">
            <abbr>E-LAUTE</abbr>
            <expan>Electronic Linked Annotated Unified Tablature Edition</expan>
            </ref>
      </corpName>
      <corpName role="funder" xml:id="weave">
            <ref target="https://weave-research.net/">Weave</ref>
      </corpName>
      </respStmt>
</titleStmt>
```

The `@auth.uri` and `@xml:id` values for each editor can be found here: xml:ids. Possible values for `@role` are: `fronimoEditor`, `musescoreEditor` and `meiEditor`. Note that a person can have more than one role. In this case the whole `<persName>` is repeated and the value of the `@role` changed. In the repeated `<persName>`, the attribute

`@xml:id` is replaced with `@corresp="#[ID of the project staff member as defined in the header]"`.

```
<respStmt>
      [...]
      <persName role="fronimoEditor" auth.uri="https://e-laute.info/data/projectstaff/11"
      xml:id="projectstaff-11">
         <foreName>Olja</foreName>
         <famName>Janjuš</famName>
      </persName>
      <persName role="meiEditor" auth.uri="https://e-laute.info/data/projectstaff/11"
      corresp="#projectstaff-11">
         <foreName>Olja</foreName>
         <famName>Janjuš</famName>
      </persName>
      [...]
</respStmt>
```

In Source Description

If available, information about the historical person(s) associated with the encoded piece is also recorded in a `<respStmt>`, now within the `<sourceDesc>`. Here you can find bibliographical information about the piece being encoded. The editors update the `<persName>`(s) accordingly for each piece, i.e. change the person's name, `@auth.uri` and `@xml:id`, if necessary, as well as their appropriate `@role` in this source.

```
<sourceDesc>
      <source>
      <biblStruct>
            <analytic>
            [...]
            <respStmt>
                  <persName role="composer" auth.uri="https://e-laute.info/data/persons/108"
                        xml:id="persons-108">
                        <foreName>Ludwig</foreName>
                        <famName>Senfl</famName>
                  </persName>
                  <persName role="collector" auth.uri="https://e-laute.info/data/persons/78"
                        xml:id="persons-78">
                        <foreName>Hans</foreName>
                        <famName>Judenkünig</famName>
                  </persName>
                  [...]
            </respStmt>
            [...]
            </analytic>
            <monogr>[...]</monogr>
      </biblStruct>
      </source>
</sourceDesc>
```

However, if the person's name is not provided in the source, this information is considered "assumed", in which case it is recorded in square brackets in the E-LAUTEdb.

This is also indicated in the encoding by the `<supplied>` tag around the name of the person.

```
<respStmt>
      <persName role="composer" auth.uri="https://e-laute.info/data/persons/108"
      xml:id="persons-108">
         <foreName>
             <supplied>Ludwig</supplied>
         </foreName>
         <famName>
             <supplied>Senfl</supplied>
         </famName>
      </persName>
</respStmt>
```

The `@auth.uri` and `@xml:id` values for each historical person can be found here: xml:ids. Possible values for `@role` are: `collector`, `composer`, `intabulator` and `scribe`. Note that a person can have more than one role. In this case the whole `<persName>` is repeated and the value of the `@role` changed. In the repeated `<persName>, t`he attribute `@xml:id` is replaced with `@corresp="#[ID of the historical person as defined in the header]"`.

```
<respStmt>
      <persName role="collector" auth.uri="https://e-laute.info/data/persons/78"
      xml:id="persons-78">
         <foreName>Hans</foreName>
         <famName>Judenkünig</famName>
      </persName>
      <persName role="scribe" auth.uri="https://e-laute.info/data/persons/78"
      corresp="#persons-78">
         <foreName>Hans</foreName>
         <famName>Judenkünig</famName>
      </persName>
</respStmt>
```

For further information about required entries in `<sourceDesc>` see Source Description.

Publication Statement

There are two elements in the `<pubStmt>` that are unique for each encoding file. The first is the `<date>` element, which records the date as a value of `@isodate`.

```
<date isodate="YYYY-MM-DD">YYYY-MM-DD</date>
```

The second is the identifier, consisting of two parts: the required prefix `o:lau.` and the work ID as specified in the E-LAUTEdb.

```
<identifier type="PID">o:lau.Jud_1523-2_n25</identifier>
```

Source Description

The `<sourceDesc>` contains metadata of two different components: the (individual) piece itself and its source. The metadata of the individual piece is recorded in `<analytics>`. The metadata of the source (whether manuscript or print) is recorded in `<monogr>`. The `<identifier>` element in the `<sourceDesc>` does not require a prefix (like in the `<pubStmt>`), as it represents bibliographical information.

Like `<persName>`, `<geogName>`, which can be used if information about the persons, places (localisations) of the manuscript or print is available, can also contain an `@auth.uri`. The `@auth.uri` and `@xml:id` values for all locations can be found here: xml:ids.

```
<sourceDesc>
      <source>
        <biblStruct>
             <!-- A. individual piece -->
             <analytic>
                <title>Elslein liebes Elslein </title>
                <respStmt>
                   <persName role="composer" auth.uri="https://e-laute.info/data/persons/108"
                          xml:id="persons-108">
                          <foreName>
                          <supplied>Ludwig</supplied>
                          </foreName>
                          <famName>
                          <supplied>Senfl</supplied>
                          </famName>
                   </persName>
                   <persName role="intabulator" auth.uri="https://e-laute.info/data/persons/78"
                          xml:id="persons-78">
                          <foreName>Hans</foreName>
                          <famName>Judenkünig</famName>
                   </persName>
             </respStmt>
             <biblScope>24v</biblScope>
             <identifier>Jud_1523-2_n25</identifier>
             </analytic>
             <!-- B. source (print or manuscript) -->
             <monogr>
             <title>1.5.2.3. Ain schone kunstliche vnderweisung</title>
             <identifier>A-Wn MS47356-8°</identifier>
             <respStmt>
                    <persName role="publisher" auth.uri="https://e-laute.info/data/persons/79"
                          xml:id="persons-79">
                          <foreName>Johannes</foreName>
                          <famName>Singriener</famName>
                    </persName>
                    <persName role="collector" auth.uri="https://e-laute.info/data/persons/78"
                          corresp="#persons-78">
                          <foreName>Hans</foreName>
                          <famName>Judenkünig</famName>
                    </persName>
```

```
            </respStmt>
            <imprint>
                  <pubPlace>
                        <geogName auth.uri="https://e-laute.info/data/places/88"
                        xml:id="places-88">Wienn</geogName>
                  </pubPlace>
                  <date isodate="1523">1523</date>
            </imprint>
            </monogr>
         </biblStruct>
      </source>
</sourceDesc>
```

Encoding the Music

Staff Definition

Mensuration, Meter and Time Signatures

Time signatures are encoded in the `<staffDef>` container using `<meterSig>` or `<mensur>`. Depending on the type, *editions* use both modern time signatures (enclosed in square brackets) and original mensurations. In *transcriptions*, only original mensurations are encoded.

Meter Signatures

Modern time signatures (`<meterSig>`) are specified using the attributes `@count` and `@unit` in `<meterSig>` element. The visualization of the signatures can be customized with `@form` (data.METERFORM) and `@sym` (data.METERSIG). Some of the most common values and their renderings are:

`<meterSig count="3" unit="4" form="num"/>`	
`<meterSig count="4" unit="4" sym="common"/>`	
`<meterSig count="2" unit="2" sym="cut"/>`	
`<meterSig count="3" unit="4"/>`	

Mensuration

Mensural signs (<mensur>) are specified using @sign, @orient, @slash and @dot (att.mensural.vis). Because of their high level of complexity, information about the division levels (which can be specified with other attributes like att.mensural.shared) is not recorded. For further information, see chapter 5.2 Mensuration of the MEI Guidelines.

Some of the most common values and their renderings are:

Tempus perfectum prolatio maior	
`<mensur sign="O" dot="true"/>`	
Tempus perfectum prolatio minor	
`<mensur sign="O" dot="false"/>`	
Tempus imperfectum prolatio minor	
`<mensur sign="C" dot="false"/>`	
Tempus imperfectum proportio dupla	
`<mensur sign="C" dot="false" num="2"/>`	
Tempus perfectum diminutum	
`<mensur sign="O" dot="false" slash="1"/>`	
Tempus imperfectum diminutum	
`<mensur sign="C" dot="flase" slash="1"/>`	

sesquialtera	
`<mensur sign="C" dot="false" num="3"/>`	
`<mensur num="3"/>`	
`<mensur num="3" numbase="2"/>`	
Tempus imperfectum (diminutum) proportio tripla | sesquialtera diminuta	
`<mensur sign="C" dot="false" slash="1" num="3"/>`	
`<mensur num="3"/>`	

Tuning

To enable a flawless interoperability, the tuning is specified in all string tablature encodings as shown in chapter 7.1.2 The Instrument Setup and Tuning of the MEI Guidelines. The project prefers custom tuning encoding over using `@tuning.standard`.

Key Signature

In the E-LAUTE edition, we specify the written key signature only in CMN *editions*, using the `<keySig>` element inside a `<staffDef>` (see The Key and Clefs). In notehead notations, the written key signature is not included.

Staff Lines and Notation Type

Because of the vertical organization in German lute tablature (see Vertical Alignment), it is necessary to encode a number of lines inside the `<staffDef>`. These lines are conceptual rather than visual in German lute tablature: they do not represent the courses, but horizontal "strands". Note that this means that when the `@notationtype` is changed from GLT into FLT/ILT or vice versa, the semantics of the `@lines` attribute changes, and its value must be adapted accordingly.

Structure and Layout

We divide the music on two levels: the meter grid is the division on the level of the `<measure>` element, which is kept the same in the *transcription* and the *edition* (see Meter Grid). The division of the semantic units is on the level of `<section>` element (parent element of `<measure>`) and is only encoded in *transcriptions* (see Semantic Units).

Meter Grid

Bar Numbers and Bar Lines

In *transcriptions*, we attempt to get as close as possible to the sources. Early music sources do not contain bar numbers, so in order to hide them, we need to add the attribute `@mnum.visible="false"` to `<scoreDef>` in every *transcription*. In *editions*, however, this is not the case, and the measure number is automatically being displayed on every fifth measure by default.

Some sources do not show a consistent meter, and some use vertical lines identical to bar lines for a different purpose: to divide the piece into semantic units rather than meter units. Nevertheless, we keep the *transcriptions* and *editions* metrically aligned by setting both in the same meter grid: a superimposed metrical structure as we interpret it. This allows easier comparison of the *transcription* and *edition* and also facilitates automated processing. To learn more about this see the Main Conventions Document.

If the source does not show bar lines, they remain hidden in the *transcription*. To do that, we add an attribute `@right="invis"` to each `<measure>` element, following data.BARRENDITION.

```
<measure n="1" right="invis">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="4">
            [...]
            </tabGrp>
      </layer>
      </staff>
</measure>
```

Bar lines are sometimes encoded as separate elements when editorial markup is used in *transcriptions* (see Rendering of the Bar Lines as well as Deletions and Original Corrections and Damage and Unclear Reading).

In *editions*, however, both tablature and CMN bar lines are always visible, and `<measure>` elements do not contain additional attributes relating to bar lines in this context.

Handling Measures of Deviating Length

The metrical grid is fundamentally determined by the source itself. For measures of deviating length, meter changes, or indications of semantic units using vertical lines (see Sections), the meter grid structure is taken from the original source in both *transcriptions* and *editions*. In *editions*, consistent meter changes are indicated with a new time signature, enclosed in square brackets.

```
<section n="1">
      <measure n="1">
         <staff n="1">
             [...]
         </staff>
      </measure>
</section>
<section n="2">
      <scoreDef n="1">
         <staffGrp>
             <staffDef n="1">
             <meterSig count="4" unit="4" enclose="brack"/>
             </staffDef>
         </staffGrp>
      </scoreDef>
      <measure n="7">
         <staff n="1">
             [...]
         </staff>
      </measure>
</section>
```

In *transcriptions*, however, time signatures are not added if not present in the original source. Instead, measures of deviating length are marked with the additional attributes `@metcon="i"` (when incomplete) or `@metcon="o"` (when overfull) on `<staff>` (see att.meterConformance). This is only applied when a regular meter can be perceived and the metrical grid is recognisable, even in the absence of bar lines. However, for pieces without bar lines and no regular meter, the `@metcon` specifications are not necessary.

```
<measure n="7">
      <staff n="1" metcon="o">
      <layer n="1">
             <tabGrp dur="4">
                [...]
             </tabGrp>
      </layer>
      </staff>
</measure>
```

Only measures that should not be counted, like pickup measures (additionally marked with an attribute `@type="pickup"`) or the ending part of measures that are split for the sake of faithful rendering of the original system beginnings (see System and Page Beginnings), are marked with `@metcon="false"` in `<measure>`. The first measure of

the piece, even if notated as complete, with rests at the beginning, can be interpreted as a pickup measure in *editions* and thus numbered with 0 (`@n="0"`). The attribute `@metcon="false"` is not necessary in *transcriptions*, whereas the `@type="pickup"` should be included in *editions*. Regardless of whether the measures are of a regular or irregular length, the meter grid will always retain the same structure and numbering in both *transcriptions* and *editions*.

```
<measure n="0" type="pickup" metcon="false">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="4">
               [...]
            </tabGrp>
      </layer>
      </staff>
</measure>
```

System and Page Beginnings

These two layout parameters are handled differently in transcriptions and editions. In *transcriptions* we also encode the actual system beginnings as they appear in the sources. To do so, we use the `<choice>` element, and encode both the original appearance (`<orig>`) as well as the regulation (`<reg>`), needed for clean musical content and measure counting. The original appearance (`<orig>`) reproduces the exact appearance of the source and thus may divide one `<measure>` into two parts (two sibling `<measure>` elements) where the new system beginning (`<sb/>`) takes place. The `<sb/>` should be placed between the sibling elements. The number (attribute `@n`) of such a divided measure remains the same, but the extension 'a' or 'b' is added for each sibling, as well as an additional attribute `@metcon="false"`. If there is no line visible at the system end in the original, this is also encoded with an attribute `@right="invis"` in the first part of the divided measure, holding the extension 'a'. The regulation (`<reg>`) contains the full (and only) `<measure>` holding one number (attribute `@n`) without any extensions and without additional attributes to bar line visibility. The `<sb/>` of the regulation should be encoded either before the opening tag of the `<measure>` element (if the content in the first part of the split measure is less than half of the measure), or after its closing tag (if the content in the first part of the split measure is more than half of the measure).

```
<choice>
      <orig>
         <measure n="15a" metcon="false" right="invis">
            <staff n="1">
            <layer n="1">
                  <tabGrp dur="2">
                        [...]
                  </tabGrp>
            </layer>
```

```
            </staff>
         </measure>
      <sb/>
         <measure n="15b" metcon="false">
            <staff n="1">
            <layer n="1">
                  <tabGrp dur="4">
                        [...]
                  </tabGrp>
            </layer>
            </staff>
         </measure>
      </orig>
      <reg>
      <sb/>
         <measure n="15">
            <staff n="1">
            <layer n="1">
                  <tabGrp dur="2">
                        [...]
                  </tabGrp>
            </layer>
            </staff>
         </measure>
      </reg>
</choice>
```

In *editions*, `<sb/>` should be placed after an appropriate number of measures, depending on the meter and rhythm. The layout of editions does not reflect the layout of the sources. It is therefore the responsibility of the editor to produce an appropriate and readable layout. The same applies for the `<pb/>`.

On the other hand, the `<pb/>` element in the *transcription* plays a greater role, since it always provides a reference to the corresponding facsimile page of the source (see Referencing Page Beginnings to Facsimile Pages).

Referencing Page Beginnings to Facsimile Pages

In *transcriptions*, at the beginning of a new folio, page, or printing layer (in the source), a `<pb/>` element with a reference to that folio, page or printing layer number as well as a reference to its facsimile is added. This is encoded on two levels — technical and visual.

The technical reference will record two pieces of information in each `<pb/>` element:

- the number of the folio, page or printing layer, which will be recorded with an attribute `@n` (`@n="9r"` for the folio, `@n="23"` for the page and `@n="aiij"` for the printing layer number) — if known, the folio number is always preferred over the others, and the page number is preferred over the printing layer number;
- a reference to a specific `<surface>` element (encoded within `<facsimile>`) as a value of the attribute `@facs`.

The <facsimile> element is defined as the first child element of <music>. It contains one or more <surface> elements for each facsimile page. The attribute @facs in the <pb/> element points to a <surface> element that contains a <graphic> holding a reference to an image of a facsimile page of a specific folio in the IIIF manifest (with the full path URI in the @target). A <facsimile> element with a reference to only one facsimile page looks like this:

```
<music>
      <facsimile>
         <surface xml:id="IDno1" n="1">
            <graphic target="[URI of the facsimile page].jpg"/>
         </surface>
      </facsimile>
      <body>
         <mdiv>
            <score>
               <scoreDef>
                  [...]
                  <section n="1">
                        <pb facs="#IDno1" n="3r"/>
                        <measure n="1">
                           [...]
                        </measure>
                  </section>
            </score>
         </mdiv>
      </body>
</music>
```

Every <pb/> element in *transcriptions* contains one reference to the corresponding <surface> element. This is because the literal transcription mirrors the original system and page beginnings of the source (facsimile).

References to the corresponding <surface> elements are handled differently in *editions*. This is covered in the chapter Facsimile References.

Referencing Page Beginnings within the Score

A (textual) reference to a folio or page number that is displayed in the score (i.e., in the transcription or edition), is encoded at the bottom of the first <measure> element after the new page beginning (<pb/>).

Folio or page number references are encoded as simple <dir> elements with a textual content: a folio number in the format <dir>fol. 9r</dir>, a page number in the format <dir>23</dir>, or a printing layer number in the format <dir>aiij</dir>. Required attributes of <dir> for folio and page number references are @staff="1", @tstamp="1", @place="above" and @type="ref".

```
<measure>
 [...]
</measure>
<pb/>
<measure n="15">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="2">
               [...]
            </tabGrp>
      </layer>
      </staff>
      <dir staff="1" tstamp="1" place="above" type="ref">
      <rend fontstyle="normal" fontsize="xx-small">fol. 3r</rend>
      </dir>
</measure>
```

The `<pb/>` element is always encoded at the beginning of the score, right after the first `<section>` element and before the first `<measure>` element.

Sections

Semantic Units

Vertical lines in tablature sources that are similar to bar lines, but do not divide the music into metrical units, are treated as dividing points between two musical units. For this reason, in *transcriptions* we enclose the segments between such vertical lines within the element `<section>`. In such cases there is always a vertical line to indicate the division of the section. Therefore, the attribute `@right="invis"` is not added to the last `<measure>` element of the `<section>`.

```
<section n="1">
      <measure n="1" right="invis">
          [...]
      </measure>
      <measure n="2" right="invis">
          [...]
      </measure>
      [...]
      <measure n="8">
          [...]
      </measure>
</section>
<section n="2">
      <measure n="9" right="invis">
          [...]
      </measure>
      <measure n="10" right="invis">
          [...]
      </measure>
      [...]
      <measure n="17">
          [...]
      </measure>
</section>
```

Facsimile References

The `<section>` element has another role in *editions*. It is used to mark parts that belong to different folios or pages of the source. All `<measure>` elements that appear on the same original folio or page are enclosed in a `<section>` element containing a `@facs` attribute that references the ID of the corresponding `<surface>` element previously defined in `<facsimile>`.

The following example shows an encoding of the edition on two (layout) pages. The musical content, however, is inscribed on only one folio:

```
<music>
   <facsimile>
      <surface xml:id="IDno1">
            <graphic target="[URI of the facsimile page].jpg"/>
      </surface>
   </facsimile>
   <body>
      <mdiv n="1">
            <score>
            <scoreDef>
                  [...]
            </scoreDef>
            <section facs="#IDno1" n="3r">
                  <pb/>
                  <measure n="1">
                        [...]
                  </measure>
                  <measure n="2">
                        [...]
                  </measure>
                  [...]
                  <measure n="20">
                        [...]
                  </measure>
                  <pb/>
                  <measure n="21">
                        [...]
                  </measure>
                  [...]
            </section>
         </score>
      </mdiv>
   </body>
</music>
```

In special cases sections can be nested. When adding measures that are located on another facsimile page, another child element `<section>` is added to the parent `<section>`, containing only the added measures, which are additionally enclosed in a `<add>` tag. The `<add>` element contains a reference to the responsible editor (`@resp`)

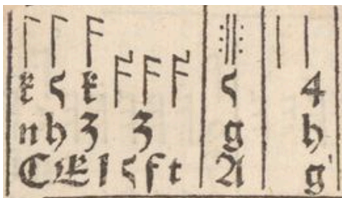
and in some cases an annotation, while `<section>` contains a reference to the corresponding facsimile folio or page.

```
<music>
   <facsimile>
      <surface xml:id="IDno1">
            <graphic target="[URI of the facsimile page].jpg"/>
      </surface>
      <surface xml:id="IDno2">
            <graphic target="[URI of the facsimile page].jpg"/>
      </surface>
   </facsimile>
   <body>
      <mdiv n="1">
            <score>
            <scoreDef>
                  [...]
            </scoreDef>
            <section facs="#IDno1" n="3r">
                  <pb/>
                  <measure n="1">
                        [...]
                  </measure>
                  <measure n="2">
                        [...]
                  </measure>
                  [...]
                  <sb/>
                  <measure n="5">
                        [...]
                  </measure>
                  [...]
               <add>
                        <section facs="#IDno2" n="21v">
                        <measure n="19">
                              [...]
                        </measure>
                        </section>
                        <add>
                        <measure n="20">
                              [...]
                        </measure>
                        <pb/>
                        [...]
                        <measure n="38" right="end">
                              [...]
                        </measure>
                        [...]
            </section>
         </score>
      </mdiv>
   </body>
</music>
```

For more information and facsimile references in *transcriptions*, see Referencing Page Beginnings to Facsimile Pages.

Repeat Signs

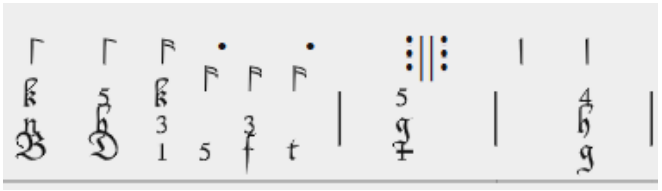
Repeat signs are treated differently. In *transcriptions*, the repeat signs are always encoded as `<dir>` elements because of possible ambiguous positioning or surplus of symbols. In *editions*, however, we use modern symbols for repeat signs, and encode them accordingly on the `<measure>` element following data.BARRENDITION.



Judenkünig II, A-Wn MS47356-8°, fol. 27r

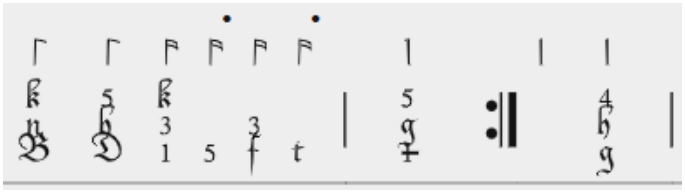
The example above is encoded as follows:

- transcription



```
<measure n="14">
      [...]
</measure>
<measure n="15">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="1">
            <note tab.course="1" tab.fret="0"/>
            <note tab.course="4" tab.fret="2"/>
            <note tab.course="6" tab.fret="0"/>
            </tabGrp>
      </layer>
      </staff>
      <dir staff="1" tstamp="1" place="above" type="rpt">
      <rend fontstyle="normal" fontsize="smaller">𝄇</rend>
      </dir>
</measure>
<measure n="16">
      [...]
</measure>
```

- edition



```
<measure n="14">
      [...]
</measure>
<measure n="15" right="rptend">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="1">
            <tabDurSym/>
            <note tab.course="1" tab.fret="0"/>
            <note tab.course="4" tab.fret="2"/>
            <note tab.course="6" tab.fret="0"/>
            </tabGrp>
      </layer>
      </staff>
</measure>
<measure n="16">
      [...]
</measure>
```

See Rendering of the Repeat Signs for a detailed explanation and examples of usage in *transcriptions*. For *editions* see Repetition.

True-to-Original (Diplomatic) Transcriptions

Shared Features

Special Visual Elements

Common Symbol Sets and Variant Symbols

Our default set of tablature symbols is based on the symbol set found in Hans Newsidler's prints (see Default Symbol Set). Where other sources diverge in their use of symbols, such differences were explicitly noted. Currently, encoding and rendering symbols deviating from our default set (variant symbols) is planned using the `<symbolTable>`.

The common sets of variant symbols are captured externally and will be linked via XPath in the `@select` attribute on `<symbolDef>` within the `<symbolTable>` of each file, enabling reuse without duplication. Multiple `<symbolTable>` elements can be included (or referred to) in a document to distinguish between symbols for rhythm, fretboard, and performance. This system simplifies symbol management and promotes efficient, consistent encoding. The approach is currently under implementation.

The deviating symbols can also be encoded per file (locally). When necessary, attributes from the att.extSym class, which links MEI features to externally-defined glyphs, such as those from SMuFL, are applied.

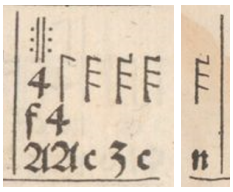
Rendering of Bar Lines

In some cases in *transcription*, bar lines need to be encoded separately so that they can be enclosed in one of the editorial markup elements (e.g. as explained in Additions and Deletions or Damage and Unclear Reading). This is done using the `<barLine>` element, placed anywhere within the `<layout>` element.

Rendering of Repeat Signs

In *transcriptions* repeat signs are always recorded as `<dir>` elements at the bottom of a `<measure>` (see Repeat Signs above). Required attributes for repeat signs are `@staff`, `@tstamp`, `@place` and `@type="rpt"`. Inside the `<dir>` element, one of the symbols from the list below is encoded, additionally enclosed in the `<rend>` element with `@fontstyle="normal"` and `@fontsize="smaller"` attributes. In *transcriptions*, we distinguish between the following types of repeat signs:

- with one dot: `·||·`
- with two dots: `:||:`
- with three dots: `⁝||⁝`



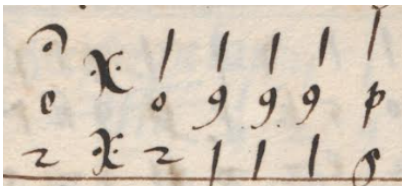
Judenkünig II, A-Wn MS47356-8°, fol. 34r

The example above is encoded as follows:

```
<measure n="13">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="2">
               <note tab.course="2" tab.fret="0"/>
               <note tab.course="5" tab.fret="2"/>
               <note tab.course="6" tab.fret="0"/>
            </tabGrp>
            [...]
            <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
               <note xml:id="IDno1" tab.course="3" tab.fret="0"/>
            </tabGrp>
            <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
                <note tab.course="3" tab.fret="1"/>
```

```
            </tabGrp>
            <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
                <note xml:id="IDno2" tab.course="3" tab.fret="3"/>
            </tabGrp>
      </layer>
      </staff>
      <fing type="right 1" startid="#IDno1"><rend>.</rend></fing>
      <fing type="right 1" startid="#IDno2"><rend>.</rend></fing>
      <dir staff="1" tstamp="1" place="above" type="rpt">
         <rend fontstyle="normal" fontsize="smaller">:||:</rend>
      </dir>
 </measure>
```

Some sources contain multiple repeat signs where a single sign would seem to suffice. The meaning of these signs is ambiguous, which is why they are encoded as close as possible to the original.



A-Wn Cod. 9704, 13v–14r

The example above is encoded as follows:

```
 <measure left="invis" metcon="false" n="3b">
      <staff n="1">
         <layer n="1">
            <annot plist="#IDno1 #IDno2" resp="projectstaff-IDno">two repeat signs are placed
on top of each other</annot>
            <tabGrp xml:id="IDno3" dur="1">
               <note tab.course="2" tab.fret="3"/>
               <note tab.course="4" tab.fret="0"/>
            </tabGrp>
            <tabGrp dur="2">
            <tabDurSym/>
               <note tab.course="2" tab.fret="3"/>
               <note tab.course="4" tab.fret="0"/>
            </tabGrp>
         </layer>
      </staff>
      <dir xml:id="IDno1" place="above" staff="1" tstamp="3" type="rpt">
         <rend fontstyle="normal" fontsize="smaller">·||·</rend>
      </dir>
      <dir xml:id="IDno2" place="within" staff="1" tstamp="3" type="rpt">
         <rend fontstyle="normal" fontsize="smaller">·||·</rend>
```

```
      </dir>
      <fermata startid="#IDno3"/>
</measure>
<measure left="invis" n="4">
      <staff n="1">
         <layer n="1">
            <tabGrp dur="2">
            <tabDurSym/>
               <note tab.course="1" tab.fret="5"/>
               <note tab.course="5" tab.fret="0"/>
            </tabGrp>
            [...]
         </layer>
      </staff>
</measure>
```

Additions and Deletions

In the *transcriptions*, crossed-out symbols and crossed-out complete measures or sections are recorded, if recognisable, and identified and marked as such with a `<del>` element. Crossed out complete measures are not included in the measure count and therefore have the extension '-del' added to their measure number (attribute `@n`). The number of the following measure is the same number, but without the extension.

In *transcriptions*, only deletions and additions by scribes are recorded. Smaller adaptations by editors that are necessary for the encoding (like `@dur` of the `<tabGrp>`), occur only in cases of omissions and unclear readings (see Damage and Unclear Reading). Each `<add>` or `<del>` element is given an attribute `@resp="#[ID of the historical person as defined in the header]"`, which refers to a specific scribe as recorded in `<meiHead>`. Please note that this project always uses the `@resp` attribute in combination with the `<respStmt>` element in `<sourceDesc>`. The `@hand` attribute, which is combined with elements of the MEI.frbr module, is not used.

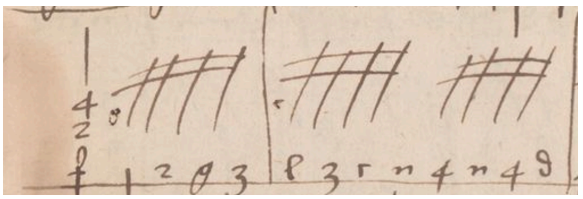
```
<del resp="#persons-IDno">
      <note tab.course="4" tab.fret="5"/>
</del>
```

The visualisation of deletions will be specified on the level of the project using customized style sheets (CSS), there is no need to specify the visualisation with an attribute `@rend`.

Additions

Some sources contain later additions of certain tablature elements. These are always enclosed in `<add>` elements. Depending on whether they have been added by the same scribe, or whether the editor is unsure whether they really are later additions, the `<add>` element will contain `@resp` or `@cert`. Person names as well as the table with IDs of historical persons and scribes are found in Source Description. In *transcriptions*, only

additions from scribes are encoded. If the scribe is unknown, like in the following example, `resp="persons-anon"` is used.



A-Wn Mus.Hs. 18688, fol. 11r, line 4

```
<measure n="42">
      <staff n="1">
         <layer n="1">
             <tabGrp dur="2">
             <tabDurSym/>
                <note tab.course="2" tab.fret="0"/>
                <note tab.course="4" tab.fret="0"/>
                <note tab.course="5" tab.fret="2"/>
             </tabGrp>
             <beam>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <add resp="#persons-anon">
                           <note tab.course="4" tab.fret="2"/>
                    </add>
                    <note tab.course="5" tab.fret="0"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="4" tab.fret="0"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="4" tab.fret="2"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="3" tab.fret="0"/>
                </tabGrp>
             </beam>
         </layer>
      </staff>
</measure>
```

Not only some musical elements, but also short textual instructions that were added later in the tablature, are recorded as `<dir>` elements and additionally enclosed in `<add>`. The reference of responsibility is added here as well.

Deletions and Original Corrections

If the original symbol remains recognisable after being corrected by the scribe, it is recorded under the `<del>` element with `rend="superimpose"` and `resp="#[ID of the historical person as defined in the header]"` attributes. The corrected symbol is encoded regularly, without being additionally enclosed in any markup

element. It is important that the original and corrected symbols are at the same vertical position — this is specified using the (same) `@tab.line` attribute.

```
<tabGrp dur="2">
      <tabDurSym/>
      <note tab.course="1" tab.fret="0"/>
      <del resp="#persons-IDno" rend="superimpose">
         <note tab.course="6" tab.fret="0" tab.line="1"/>
      </del>
      <note tab.course="5" tab.fret="0" tab.line="1"/>
</tabGrp>
```

Damage and Unclear Reading

Where any kind of symbol or indication is missing or is unrecognisable due to damage in the original, this information is supplied in later edited versions. In the *transcription*, these elements are enclosed in `<damage>` or, in some cases, `<unclear>` elements, according to the following project-specific recommendations:

- If a specific symbol is not legible due to damage to the source (water damage, symbols are cut out), the symbol is enclosed in the `<damage>` element. The attribute `@agent` follows the project-specific vocabulary and identifies the cause of the damage.
- If a specific symbol that would be expected (such as rhythm sign or other performance-related indicator) is omitted in the original, and there are no traces of damage, these elements are enclosed inside of `<unclear>` element. An attribute `@reason` follows the project-specific vocabulary and classifies the uncertainty. Additionally, our editors provide a further explanation using `<annot>` as well as, in some cases, the certainty level (using `@cert`).

Damage

The following encoding example shows a situation in which a damaged note symbol occurs, while the rhythm symbol is still readable. Here we enclose an "empty" element `<note>` in `<damage>`:

```
<measure n="1">
      <staff n="1">
         <layer n="1">
             <tabGrp dur="2">
                <tabDurSym/>
                <damage>
                    <note/>
                </damage>
                </tabGrp>
             <tabGrp dur="4">
                [...]
             </tabGrp>
         </layer>
```

```
      </staff>
</measure>
```

In the following example, neither the note nor the rhythm symbol are recognisable due to damage. In these situations, where the rhythm symbol is missing, the duration value (`@dur`) of `<tabGrp>` is always the assumed one, that is used in the edition. Here we enclose the entire `<tabGrp>` in `<damage>`:

```
<measure n="1">
      <staff n="1">
      <layer n="1">
            <tabGrp dur="2">
               [...]
            </tabGrp>
            <damage>
            <tabGrp dur="4">
                  <tabDurSym/>
                  <note/>
            </tabGrp>
            </damage>
      </layer>
      </staff>
</measure>
```

Below is shown a situation where the rhythm symbol is damaged, but the note symbols are recognisable. We combine the `<unclear>` with `@reason="omitted_rhythm_sign"` and `<damage>` elements to specify the assumed duration of `<tabGrp>`. Additionally, we add the attribute `@visible="false"` to `<tabDurSym>` to keep the transcription true to original.

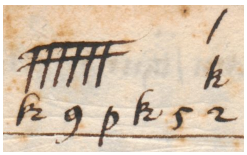
```
<measure n="1">
      <staff n="1">
         <layer n="1">
            <tabGrp dur="2">
               [...]
            </tabGrp>
            <unclear reason="omitted_rhythm_sign">
               <tabGrp dur="2">
                  <damage>
                        <tabDurSym visible="false"/>
                  </damage>
                  <note tab.course="1" tab.fret="0"/>
               </tabGrp>
            </unclear>
         </layer>
      </staff>
</measure>
```

The project uses the following descriptive values for `@agent` in `<damage>`: see List of Controlled Vocabularies.

Unclear Reading

The following example shows usage of the `<unclear>` element, caused by the ambiguous number of rhythm symbols in a `<beam>` that does not correspond with the number of note symbols.

The `<beam>` element contains as many `<tabGrp>` elements as there are flags. The last `<tabGrp>` contains only a `<tabDurSym>` and is enclosed in `<unclear>`. An additional `@reason="unclear positioning"` and `<annot>` as a first sibling element of `<unclear>` (encoded in the top of their parent element) is provided by the editors here.



A-Wn Cod. 9704, fol. 13v, line 1

```
<measure left="invis" n="3">
      <staff n="1">
         <layer n="1">
             <tabGrp dur="4">
                <tabDurSym/>
                <note tab.course="1" tab.fret="0"/>
                <note tab.course="5" tab.fret="3"/>
             </tabGrp>
             <beam>
                <annot plist="#IDno1">additional explanation, if necessary</annot>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="1" tab.fret="2"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="1" tab.fret="5"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="1" tab.fret="3"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="1" tab.fret="2"/>
                </tabGrp>
                <tabGrp dur="8">
                    <tabDurSym/>
                    <note tab.course="1" tab.fret="0"/>
                </tabGrp>
                <unclear xml:id="IDno1">
                    <tabGrp dur="8">
                           <tabDurSym/>
                    </tabGrp>
                </unclear>
             </beam>
         </layer>
      </staff>
</measure>
```

The project uses the following descriptive values for `@reason` in `<unclear>`: see List of Controlled Vocabularies.

Marginalia

Marginalia are encoded in separate files and then added to the main file by using `@target` with the value of `[data.URI]#[ID of the corresponding measure element]` on an empty `<measure>` element, regardless how many measures a marginalium contains. In *editions*, these parts are already part of the entire (edited) file and are marked correspondingly with an ID in `@xml:id` (see Marginalia and Ossia Variants). The `@n` of the added empty `<measure>` element corresponds to the edition. Additional attributes required for the rendering of these links are `xlink:show="other"` and `xlink:actuate="onRequest"`.

```
<measure n="7" target="D-Mbs_Mus.ms._1511c_n04_2r_enc_dipl_ILT.mei#m4lfuhj" xlink:show="other"
xlink:actuate="onRequest"/>
```

Tablature-Specific Elements

Note and Rest Symbols

Note symbols are encoded as `<note>` elements and can be individually customized as described in Common Symbol Sets and Variant Symbols. They are always enclosed in a `<tabGrp>`, which represents a tablature "chord" (a group of vertically stacked tablature notes played simultaneously, cf. `<chord>`) — also if they are the only note symbol in that chord.

```
<tabGrp dur="2">
      <note tab.course="1" tab.fret="0"/>
</tabGrp>
```

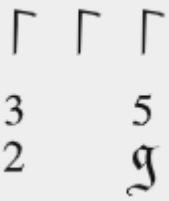
If individual note symbols are not recognizable, the `<unclear>` element, containing an empty `<note>` element, is encoded as a sibling element of all other (recognizable) `<note>`s of the `<tabGrp>`.

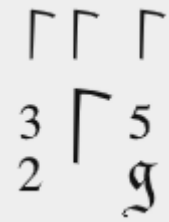
```
<tabGrp dur="2">
      <note tab.course="1" tab.fret="0"/>
      <unclear>
         <note/>
      </unclear>
</tabGrp>
```

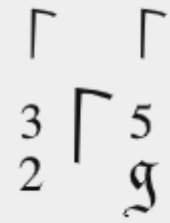
In notehead notation, the exact number of rhythm flags is represented, using the element <space> to represent a <tabGrp> that contains only a <tabDurSym>. Please note that <space> is not used in tablature.

In tablature encodings, a <tabGrp> that contains only a <tabDurSym> represents a rest in most cases. However, it also may indicate that the duration of a previous note is extended. In some cases, rest symbols are provided using specific symbols (like an inverted 'T' sign) or simply using (additional) rhythm flags within the "staff". In both of these cases an actual <rest> element is encoded and its symbol specified.

This table shows the most common cases found in our sources:

`<tabGrp dur="4">`
`<tabDurSym/>`
`<rest glyph.auth="smufl" glyph.num="U+EBA8" glyph.name="luteDurationHalf"/>`
`</tabGrp>`
	

`<tabGrp dur="4">`
`<tabDurSym/>`
`<rest glyph.auth="smufl" glyph.num="U+EBA8" glyph.name="luteDurationHalf"/>`
`</tabGrp>`
	

`<tabGrp dur="4">`
`<rest glyph.auth="smufl" glyph.num="U+EBA8" glyph.name="luteDurationHalf"/>`
`</tabGrp>`
	

`<tabGrp dur="4">`
`<tabDurSym/>`
`<rest glyph.auth="smufl" glyph.num="U+EE1D" glyph.name="organGermanBuxheimerSemibrevisRest"/>`
`</tabGrp>`
	
	(not yet supported by Verovio)

`<tabGrp dur="4">`
`<tabDurSym/>`
`<rest glyph.auth="smufl" glyph.num="U+EE1E" glyph.name="organGermanBuxheimerMinimaRest"/>`
`</tabGrp>`
	
	(not yet supported by Verovio)

Rhythm Signs

Rhythm signs are encoded following the original source. Where present, the rhythm sign is captured as a `<tabDurSym>` within the `<tabGrp>` element. Where the rhythm sign is absent, the `<tabDurSym>` element is not recorded. If a `<tabGrp>` has no `<tabDurSym>`, i.e. there is no rhythm sign, its duration (attribute `@dur`) is equal to the duration last specified.

If it is unclear above which group of note symbols (`<tabGrp>`) a rhythm sign is placed, the `<tabDurSym>` is enclosed in an `<unclear>` element with an attribute `@reason="unclear positioning"`. The placement of the `<tabDurSym>` to the `<tabGrp>` with specific `<note>` elements is decided corresponding to the edition.

If the source is damaged and only the rhythm sign is recognizable, the entire `<tabGrp>` is enclosed in a `<damage>` element, containing only `<tabDurSym>` and no notes.

```
<damage>
      <tabGrp>
         <tabDurSym/>
      </tabGrp>
</damage>
```

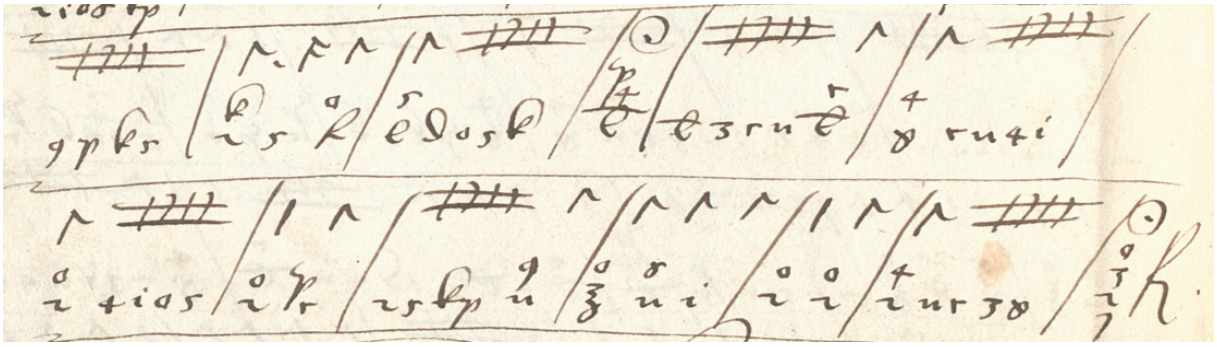
Conversely, if the rhythm sign is omitted for whatever reason, but the note symbols are visible, the entire `<tabGrp>` is always enclosed in an `<unclear>` element with an attribute `@reason="omitted in the original"`. The `<tabDurSym>` element is excluded here (if omitted) or enclosed in `<damage>` (as explained in Damage), but the duration (attribute `@dur` in the `<tabGrp>`) is the same as decided in the edition.

```
<unclear reason="omitted in the original">
      <tabGrp dur="4">
         <note tab.course="6" tab.fret="0"/>
      </tabGrp>
</unclear>
```

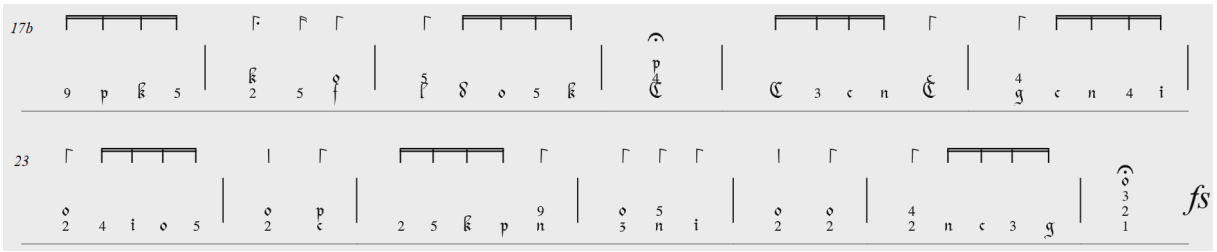
This is only done in special cases where information about the rhythm is missing due to damage or an absent rhythm symbol. In tablature, the absence of a rhythm symbol typically means that the previous rhythm remains valid. The encoding explained above is only applied when this cannot be determined.

Brevis Fermata

The majority of sources use the fermata sign for brevis rhythm sign. These signs do have a twofold meaning, representing both endurance (to let ring) and duration of the note. In *transcriptions*, these signs are always encoded as `<fermata>` elements. In these cases, the `<tabDurSym>` for the corresponding `<tabGrp>` or, in notehead notation, the `<dir>` for the corresponding `<chord>` (see The Notehead Notation), representing a rhythm sign, is omitted in the encoding.



D-Mbs Mus.ms. 1512, fol. 10v, last two lines



D-Mbs Mus.ms. 1512, fol. 10v, last two lines (transcription)

Fingerings

In the current schema (MEI 5.1), left-hand (LH) and right-hand (RH) fingerings for lute tablature have not yet been fully modeled. Until this is resolved, we use `<fing>` with textual content, as used for keyboard music, e.g. '.'. Additionally, the attribute `@type` is added to specify the playing hand and playing finger. The value `@type="right 1"` indicates the index finger of the right hand. The recommended encoding of each fingering symbol is shown in the following table:

`<fing type="left 1" startid="#[ID of the note]">`
`  <rend fontsize="x-small">1</rend>`
`</fing>`
	1st (index finger) LH

`<fing type="left 2" startid="#[ID of the note]">`
`  <rend fontsize="x-small">2</rend>`
`</fing>`
	2nd (middle finger) LH

`<fing type="left 3" startid="#[ID of the note]">`
`  <rend fontsize="x-small">3</rend>`
`</fing>`
	3rd (ring finger) LH

`<fing type="left 4" startid="#[ID of the note]">`
`  <rend fontsize="x-small">4</rend>`
`</fing>`
	4th (pinky finger) LH

`<fing type="right t" startid="#[ID of the note]">`
`  <rend>|</rend>`
`</fing>`
	thumb RH

`<fing type="right 1" startid="#[ID of the note]">`
`  <rend>.</rend>`
`</fing>`
	1st (index finger) RH

`<fing type="right 2" startid="#[ID of the note]">`
`  <rend>..</rend>`
`</fing>`
	2nd (middle finger) RH

`<fing type="right 3" startid="#[ID of the note]">`
`  <rend>...</rend>`
`</fing>`
	3rd (ring finger) RH

After the conversion from Fronimo file to MEI file, luteconv currently records only an empty `<fing>` element. To make the fingering symbols visible, the editors need to manually complete the child element `<rend>` as shown in the table above. The `@type` in `<fing>` element is added automatically during the conversion with luteconv.

Special cases like written out 'index' or other symbols for fingerings are encoded according to the standard set of fingerings (see table above). Deviations are marked in the metadata of each piece (inside of an `<meiHead>`).

As rhythm signs in GLT can also contain fingering information (a hook or "Häkchen"), this information must be encoded separately in the `<fing>` element. If there are unclear fingering marks on the rhythm signs, only the `<fing>` element is enclosed in `<unclear>`. If a fingering mark is clearly added by mistake, it is encoded but enclosed into `<sic>`. Correspondingly, if fingering marks have been corrected or deleted by the scribe themselves, this should be encoded as explained in Additions and Deletions.

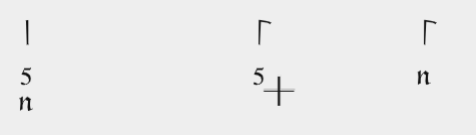
Other Special Characters

The following special characters, which are primarily performance-oriented, are not yet included in the MEI.stringtab module. Project members are working closely with the MEI community and the MEI Tablature Interest Group to create proposals for schema extensions. This process is rather slow because each case requires critical review, discussion and evaluation. However, some of these characters are indispensable for our review process. For this reason, we use (`<dir>`) for elements or characters that are not yet implemented in the MEI.stringtab schema, until we are able to replace them with official MEI elements. To trace the alternative encoding, we use a controlled vocabulary for the `@type` of each `<dir>` (see Appendix).

Hold Signs

Hold or tenuto signs are recorded as `<dir>+</dir>` elements at the bottom of a `<measure>`. Required attributes for repeat signs are `@staff`, `@tstamp`, `@place` and `@type="hold"`.

```
<dir staff="1" tstamp="2" place="within" type="hold">
      <rend fontsize="x-small">+</rend>
</dir>
```

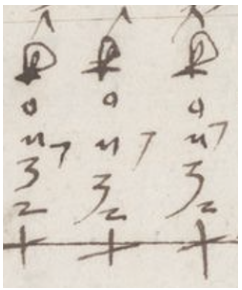


Where it is clearly traceable to which note a hold sign belongs, an attribute `@follows` containing an ID of that note can be added to `<dir>`.

```
<measure n="1">
      <staff n="1">
         <layer n="1">
            <tabGrp dur="2">
               <tabDurSym/>
               <note tab.course="1" tab.fret="0"/>
               <note xml:id="IDno1" tab.course="3" tab.fret="3"/>
            </tabGrp>
            <tabGrp dur="4">
               <tabDurSym/>
               <note tab.course="1" tab.fret="0"/>
            </tabGrp>
            <tabGrp dur="4">
               <tabDurSym/>
               <note tab.course="3" tab.fret="3"/>
            </tabGrp>
         </layer>
      </staff>
      <dir place="within" staff="1" tstamp="3" type="hold" follows="#IDno1">
         <rend fontsize="x-small">+</rend>
      </dir>
</measure>
```

Split Course Symbol

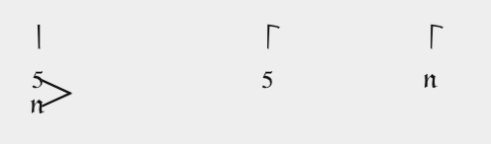
Some sources contain a special symbol indicating that two notes should be played on a single course (string pair). In the example below, one string of the course should be played at the third fret ('n'), while the other should be played as an open string ('3').



A-Wn Mus.Hs. 41950, fol. 2v

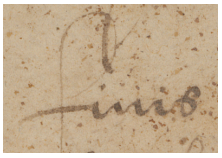
A symbol for the split course sign is recorded as a `<dir>></dir>` element at the bottom of a `<measure>`. Required attributes for the split course symbol are `@staff`, `@tstamp`, `@place` and `@type="split_course"`.

```
<dir staff="1" tstamp="2" place="within" type="split_course">
      <rend fontsize="x-small">&gt;</rend>
</dir>
```



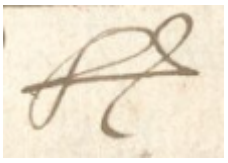
Finis

Some sources use a 'finis' at the end of the piece, either as a whole word or as an abbreviation. In *transcriptions*, these are encoded as `<dir>` elements, requiring a `@tstamp` attribute that points to the beat that comes immediately after the last beat in the measure. This means that if the piece is in 4/4 time signature, the timestamp for 'finis' will be the fifth beat (`tstamp="5"`). Another required attribute is `@type="finis"`.



finis in PL-Kj Mus.ms. 40154, fol. 7r

```
<dir staff="1" tstamp="[last timestamp + 1]" place="within" type="finis">finis</dir>
```



FS in D-Mbs Mus.ms. 1512

```
<dir staff="1" tstamp="[last timestamp + 1]" place="within"
type="finis">f<supplied>ini</supplied>s</dir>
```

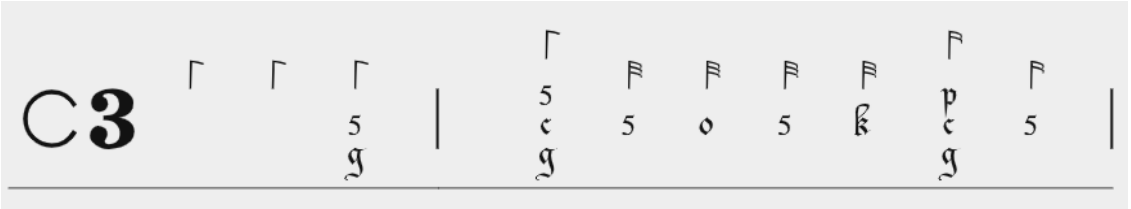
Under Construction

Most of the time spent on the transcription process is devoted to evaluating the meaning and importance of the variety of lines and symbols mostly found in German tablature. Examples include the split line found in A-Wn Cod. 9704, or connecting lines, found in Italian tablature. These are still being discussed in terms of the best way to record them in the encoding, both as an alternative and an official encoding.

Vertical Alignment

To manage the vertical alignment of notes into conceptual horizontal strands, we use the `@tab.align` attribute on `<staffDef>`, which aligns notes to the top (default) or bottom of the tablature "staff". The @lines attribute specifies the number of conceptual horizontal strands, counted from bottom (1) to top, while `@tab.anchorline` specifies a particular `@line` as the starting position when alignment specified by `@tab.align` (top or bottom) does not apply. For detailed explanation see 7.2.2 Vertical Organisation in German Lute Tablature.

Here, the order of the notes in a `<tabGrp>` is significant — the first encoded note is the top symbol drawn in the chord, while the last encoded note that is a child of `<tabGrp>` is the bottom symbol in the chord. For complex cases, the `@tab.line` attribute, corresponding to the appropriate `@line`, is used on individual `<note>`s when the vertical position of these notes deviates from the default. The attribute `@tab.line` can be used on `<tabDurSym>` equally.



```
<measure n="0" type="pickup">
      <staff n="1">
         <layer n="1">
            <tabGrp dur="4">
               <tabDurSym tab.line="3"/>
            </tabGrp>
            <tabGrp dur="4">
               <tabDurSym tab.line="3"/>
            </tabGrp>
            <tabGrp dur="4">
               <tabDurSym tab.line="3"/>
               <note tab.course="1" tab.fret="0"/>
               <note tab.course="4" tab.fret="2"/>
            </tabGrp>
         </layer>
      </staff>
</measure>
<measure n="1">
      <staff n="1">
         <layer n="1">
            <tabGrp dur="4">
               <tabDurSym/>
               <note tab.course="1" tab.fret="0"/>
               <note tab.course="3" tab.fret="1"/>
               <note tab.course="4" tab.fret="2"/>
            </tabGrp>
            <tabGrp dur="16">
```

```
            <tabDurSym tab.line="3"/>
            <note tab.course="1" tab.fret="0" tab.line="2"/>
         </tabGrp>
         <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
            <note tab.course="2" tab.fret="3" tab.line="2"/>
         </tabGrp>
         <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
            <note tab.course="1" tab.fret="0" tab.line="2"/>
         </tabGrp>
         <tabGrp dur="16">
            <tabDurSym tab.line="3"/>
            <note tab.course="1" tab.fret="2" tab.line="2"/>
         </tabGrp>
         <tabGrp dur="8">
            <tabDurSym/>
            <note tab.course="1" tab.fret="3"/>
            <note tab.course="3" tab.fret="1"/>
            <note tab.course="4" tab.fret="2"/>
         </tabGrp>
         <tabGrp dur="8">
            <tabDurSym tab.line="3"/>
            <note tab.course="1" tab.fret="0" tab.line="2"/>
         </tabGrp>
      </layer>
   </staff>
</measure>
```

To capture potential information on voice-leading, layers can be defined with `@layer` on `<note>`, optionally associated with `<layerDef>` within `<staffDef>`. The layers are defined using `<layerDef>` on `<staffDef>` (see 7.2.2 Vertical Organisation in German Lute Tablature).

The Notehead Notation

The following section describes the initial version of notehead notation that has been produced in our first published sources. A newer version with adapted structure of the code is being discussed and reviewed with our cooperation partners and the wider MEI Community.

Staff Definition of Notehead Notation

The notehead notation or true-to-original transcription in Common Western Music Notation (see General Remarks) is automatically generated with transcriber module of abtab — a toolbox for processing and analysing music in lute tablature (project customization is called using `abtab transcriber -c dlaute`). The pitch spelling depends on the tuning set in the `<staffDef>` of the diplomatic tablature encoding. The music is notated in one staff with octave treble clef (guitar notation).

Notes, Rests and Spaces

In this transcription, `<tabGrp>` corresponds to `<chord>`, preserving the logical structure of the tablature encoding. Although the duration of each `<chord>` is recorded, this is not visually presented within the staff — each note head is filled-in and stems are omitted. The corresponding attributes, `@head.fill` and `@stem.visible="false"`, are automatically added to the encoding as in the example below.

```
<tabGrp dur="16">
      <note tab.course="1" tab.fret="0"/>
</tabGrp>
```

```
<chord dur="16" stem.visible="false">
      <note pname="a" oct="4" head.fill="solid"/>
</chord>
```

Rests, however, when specifically encoded in the diplomatic tablature transcriptions, are rendered with the usual CMN rest symbols within the staff. In cases where a `<tabGrp>` contains only a `<tabDurSym>`, a `<space>` is transcribed.

Accidentals

In this transcription, accidentals are notated on every note (atonal approach). The `<keySig>` within the `<staffDef>` is omitted.

Substitute of Rhythm Signs

Rhythm signs, if present in the original, are encoded as `<symbol>`s enclosed in `<dir>`s, and are placed above notes, rests or spaces, providing a visual representation of duration as in tablature sources.

```
<dir place="above" startid="#note">
      <symbol glyph.auth="smufl" glyph.name="luteDuration8th"/>
</dir>
```

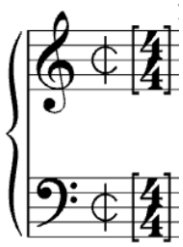
Specific Conventions for the Editions

Shared Features

Layout

Mensuration, Meter and Time Signatures

In ed_CMN, the historical mensuration sign (if present) is shown, followed by the modern time signature in square brackets.



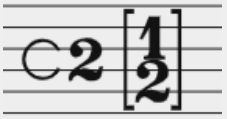
Rhythmically incorrectly notated passages are corrected and standardised (see also Meter Grid). Meter changes are always indicated by new time signatures in square brackets — regardless of whether they are present in the original. This is encoded by adding a `<scoreDef>` element containing either both `<mensur>` or just a `<meterSig>` between two measures.

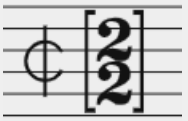
```
<measure>
      [...]
</measure>
      <scoreDef>
         <meterSig count="3" unit="4" enclose="brack"/>
      </scoreDef>
<measure n="14">
      [...]
</measure>
```

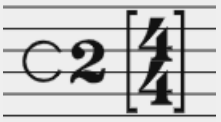
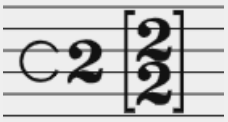
When using an automatically generated template for CMN edition (abtab module polyphonic transcriber) every meter change will always be marked in the encoding as a beginning of a new `<section>`, regardless if the `<mensur>` or `<meterSig>` is present in the initial encoding (input file). If `<meterSig>` is not present, editors complete these manually. Please refer to Handling Measures of Deviating Length and Generated Template for Edition in CMN for further information.

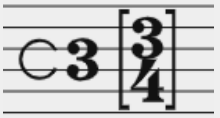
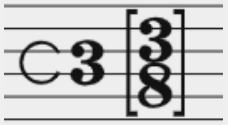
The following encodings are adjusted to the main conventions:

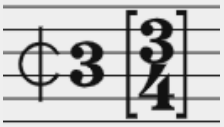
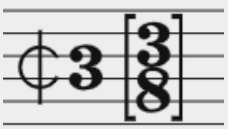
encoding	visualisation
`<mensur sign="O" dot="true"/>` `<meterSig count="3" unit="4" enclose="brack"/>`	
`<mensur sign="O" dot="false"/>` `<meterSig count="2" unit="4" enclose="brack"/>`	
`<mensur sign="C" dot="false"/>` `<meterSig count="2" unit="4" enclose="brack"/>`	

`<mensur sign="C" dot="false" num="2"/>` `<meterSig count="1" unit="2" enclose="brack"/>`	
`<mensur sign="O" dot="false" slash="1"/>` `<meterSig count="2" unit="4" enclose="brack"/>`	

`<mensur sign="C" dot="false" slash="1"/>`
`<meterSig count="4" unit="4" enclose="brack"/>`
 	
or
 	
`<mensur sign="C" dot="false" slash="1"/>`
`<meterSig count="2" unit="2" enclose="brack"/>`
	
	or
	 

`<mensur sign="C" dot="false" num="2"/>`
`<meterSig count="4" unit="4" enclose="brack"/>`
 	
or
 	
`<mensur sign="C" dot="false" num="2"/>`
`<meterSig count="2" unit="2" enclose="brack"/>`
	
	or
	 

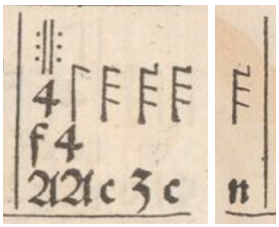
`<mensur sign="C" dot="false" num="3"/>`
`<meterSig count="3" unit="4" enclose="brack"/>`
 	
or
 	
`<mensur sign="C" dot="false" num="3"/>`
`<meterSig count="3" unit="8" enclose="brack"/>`
	
	or
	 

`<mensur sign="C" dot="false" slash="1" num="3"/>`
`<meterSig count="3" unit="4" enclose="brack"/>`
 	
or
 	
`<mensur sign="C" dot="false" slash="1" num="3"/>`
`<meterSig count="3" unit="8" enclose="brack"/>`
	
	or
	 

Repetition

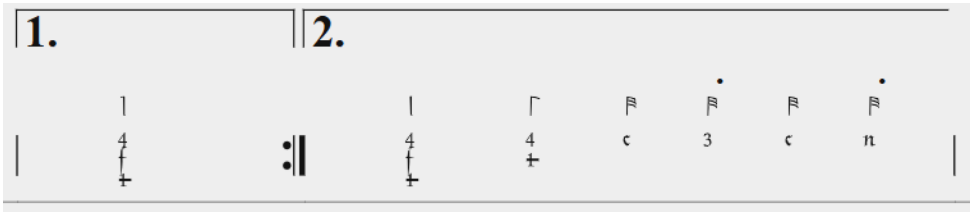
In both tablature and CMN *editions* we use modern repeat signs and resolve ambiguous positioning and surplus repeat signs. Repeat signs in the middle of the measure like in the example below are divided in two endings (i.e., prima volta and secunda volta).

Each `<ending>` element gets its sequence number in format '1.' or '2.' An additional attribute `@lendsym="none"` is added if the second ending continues with music. This is not done if the second ending is also the end of the piece. In the case of a repeat sign in the middle of a measure, the number (attribute `@n`) of both parts of the split measure remains the same, but the extension 'a' or 'b' is added to each.



Judenkünig II, A-Wn MS47356-8°, fol. 34r

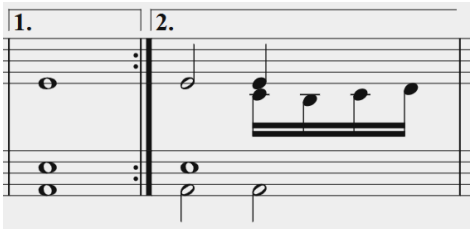
The example above is edited and encoded as follows:




```
<ending n="1.">
      <measure n="13a" right="rptend">
      <staff n="1">
            <layer n="1">
            <tabGrp dur="1">
                  <tabDurSym/>
                  <note tab.course="2" tab.fret="0"/>
                  <note tab.course="5" tab.fret="2"/>
                  <note tab.course="6" tab.fret="0"/>
            </tabGrp>
            </layer>
      </staff>
      </measure>
</ending>
<ending n="2." lendsym="none">
      <measure n="13b">
      <staff n="1">
            <layer n="1">
            <tabGrp dur="2">
                  <tabDurSym/>
                  <note tab.course="2" tab.fret="0"/>
                  <note tab.course="5" tab.fret="2"/>
```

```
                    <note tab.course="6" tab.fret="0"/>
            </tabGrp>
            [...]
            </layer>
      </staff>
      [...]
      </measure>
</ending>
```

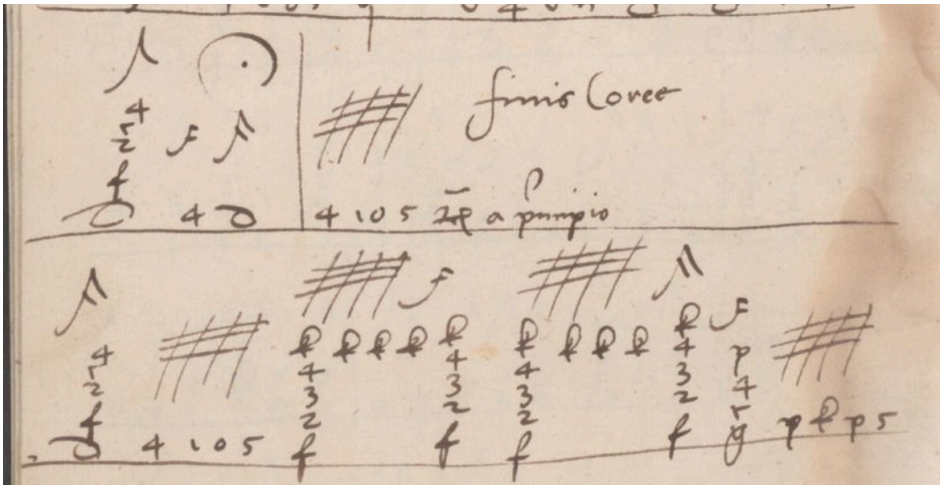
The same applies to CMN editions:




```
<ending n="1.">
      <measure right="rptend" n="13a">
         <staff n="1">
            <layer n="1">
               <note dur="1" oct="4" pname="e" stem.dir="up"/>
            </layer>
      </staff>
      <staff n="2">
            <layer n="5">
               <note dur="1" oct="3" pname="e" stem.dir="up"/>
            </layer>
            <layer n="6">
               <note dur="1" oct="2" pname="a" stem.dir="down"/>
            </layer>
         </staff>
      </measure>
</ending>
<ending n="2." lendsym="none">
      <measure n="13b">
         <staff n="1">
            <layer n="1">
               <note dur="2" oct="4" pname="e" stem.dir="up"/>
               <note dur="4" oct="4" pname="e" stem.dir="up"/>
            </layer>
            <layer n="2">
               <space dur="2"/>
            <beam>
                <note dur="16" oct="4" pname="c" stem.dir="down"/>
                <note dur="16" oct="3" pname="b" stem.dir="down"/>
                <note dur="16" oct="4" pname="c" stem.dir="down"/>
                <note dur="16" oct="4" pname="d" stem.dir="down"/>
            </beam>
            </layer>
         </staff>
      <staff n="2">
            <layer n="5">
               <note dur="1" oct="3" pname="e" stem.dir="up"/>
            </layer>
            <layer n="6">
```

```
                <note dur="2" oct="2" pname="a" stem.dir="down"/>
                <note dur="2" oct="2" pname="a" stem.dir="down"/>
            </layer>
         </staff>
      </measure>
</ending>
```

In rare cases, sources provide written repeat marks, like '(tre) a principio' in the example below. These cases are encoded as `<repeatMark>`s, following MEI conventions for encoding of modern equivalents, but replacing the default rendering by manually typing in these remarks as they appear in the original.



A-Wn Mus.Hs. 18688, fol. 18v

```
<repeatMark staff="1" tstamp="3" func="daCapo" >a principio</repeatMark>
```

Corrections, Additions and Supplements

Obvious errors, such as mistakes made by scribes or print errors are recorded and corrected only in *editions*. The original symbol is recorded under the `<sic>` element and the correction under the `<corr>` element, according to the editor's changes. Both elements are then enclosed in the `<choice>` element with an attribute `@resp="#[ID of the project staff member as specified in the header]"`. The editor's explanation can be added as `<annot>` within the `<choice>` element, but it is not required. For this, we use 'Describe' in mei-friend's Annotation Tools. The whole encoding process for encoding corrections is assisted by 'Add alternative encoding' in mei-friend's Markup Tools.

```
<choice resp="#projectstaff-IDno">
      <sic>
         <note tab.course="6" tab.fret="0"/>
      </sic>
      <corr>
         <note tab.course="5" tab.fret="0"/>
      </corr>
</choice>
```

When encoding editorial interventions, doubtful corrections can be indicated using the `@cert` attribute — this is intended only for marking uncertainties. If found necessary, a clarifying annotation (`<annot>`) can be added to describe what is uncertain.

```
<choice resp="#projectstaff-IDno" cert="medium">
      <annot resp="#projectstaff-IDno">Open 6th course makes harmonically no sense</annot>
      <sic>
         <note tab.course="6" tab.fret="0"/>
      </sic>
      <corr>
         <note tab.course="5" tab.fret="0"/>
      </corr>
</choice>
```

Even in cases where correction involves only removing an obvious mistake, both the `<sic>` and `<corr>` elements should be used. For example, when an incorrect fingering is placed, a `<fing>` element is encoded within a `<sic>` element, and enclosed together with an empty `<corr>` element in a `<choice>`.

```
<choice resp="#projectstaff-IDno">
      <annot resp="#projectstaff-IDno">Nothing to play, rhythm flag represents a rest</annot>
      <sic>
         <fing type="left 1" startid="#[ID of the tabGrp]">
             <rend fontsize="x-small">1</rend>
         </fing>
      </sic>
      <corr/>
</choice>
```

When applying corrections to elements such as `<meterSig>`, `<mensur>` or `<keySig>`, the entire `<scoreDef>` should be placed inside a `<choice>` element. This ensures the full structural context is preserved for such editorial changes.

Supplements of Damaged or Missing Parts

In cases where the source material is damaged or when content is clearly missing — for example, if the number of notes is incomplete or a passage is visibly fragmented — the missing content is reconstructed by the editors and encoded using the `<supplied>` element. This element must include a `@resp` attribute to indicate who provided the supplied material, as well as a `@cert` attribute to express the level of certainty regarding the reconstruction.

```
<supplied resp="#projectstaff-IDno" cert="medium">
      <note tab.course="6" tab.fret="0"/>
</supplied>
```

Editorial Interventions

Elements that are not strictly necessary for the musical functionality — such as optional fingerings — should be marked using the `<add>` element. This distinction helps clarify that the added content supplements, but does not alter, the functional interpretation of the encoded music. Additionally, this element should include a `@resp` attribute to indicate who provided the interpretation.

```
<add resp="#projectstaff-IDno">
      <fing startid="#[ID of the note]" type="right 1"><rend>.</rend></fing>
      <fing startid="#[ID of the note]" type="right 1"><rend>.</rend></fing>
</add>
```

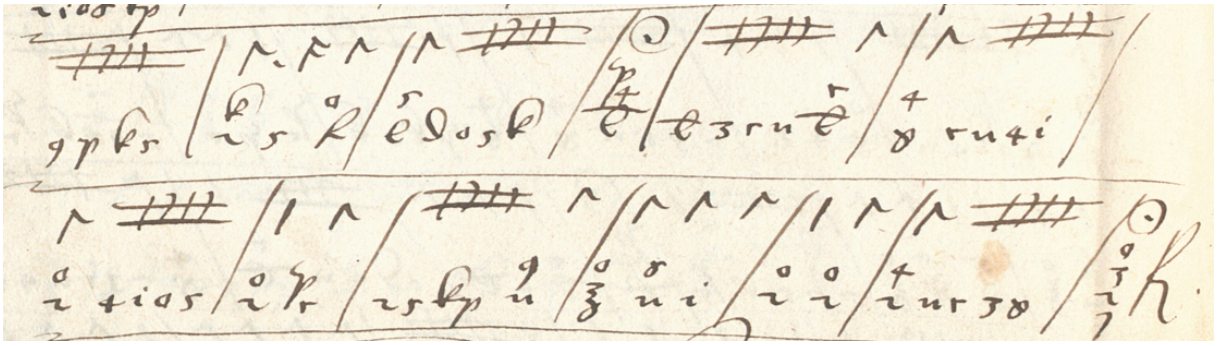
Marginalia and Ossia Variants

The `<add>` element is used to encode both marginalia and ossia variants. In the case of marginalia, a `<section>` element may also be included within `<add>` to reference a specific folio, if necessary (see Sections). In both cases, the `@resp` attribute is required: it should point either to the project staff member responsible (for ossia variants) or to the identified scribe (for marginalia). In some cases, editors may provide multiple ossia variants. These are planned to be encoded using the `<app>` element. The precise implementation and rendering of such cases are currently under discussion in collaboration with project partners.

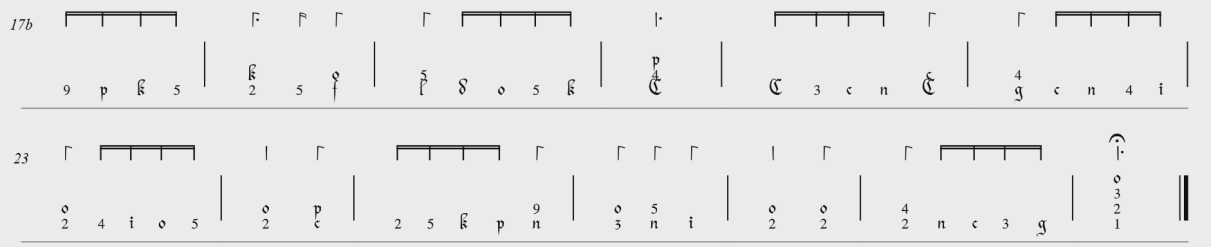
Special Characters and Performance Signs

Fermate

Unlike in transcriptions, in *editions* fermate representing a brevis are uniformly transcribed as rhythm symbols, encoded as a `<tabDurSym>` inside a `<tabGrp>` with the corresponding brevis `@dur` value. Only fermate at the end of a piece or larger section are additionally encoded as `<fermata>` elements.



D-Mbs Mus.ms. 1512, fol. 10v, last two lines



D-Mbs Mus.ms. 1512, fol. 10v, last two lines (tablature edition)

End Markers

End markers such as 'finis', 'fs' and 'ende' are not adopted in *editions*. Instead, closing bar lines are used and supplemented where necessary. These are encoded with the attribute `right="end"` on the last `<measure>`.

Tablature Editions

Default Symbol Set

The default set of tablature symbols is based on the symbol set found in Hans Newsidler's prints (earliest source from 1536), chosen for its consistency and the volume of surviving sources. Where possible, the symbols were matched with the SMuFL German Renaissance lute tablature set, though this set is currently incomplete — lacking symbols for open courses and certain frets. Analysis of the Newsidler's sources enabled the completion of the missing glyphs and the construction of the default symbol set, which was proposed to SMuFL in this document. This ensures a uniform interpretation of tablature symbols across the edition.

Where other sources diverge in their use of symbols, such differences were explicitly noted. Currently, a rendering of these differences is planned with cooperation partners by using the `<symbolTable>`.

CMN Edition

CMN-Specific Layout

Grouping Staves

Musicological *editions* in CMN are notated on two staves, as usual for piano scores. Each staff is defined in `<staffDef>` and grouped into one `<staffGrp>`. An additional child element of the `<staffGrp>`, `<grpSym>`, provides information about the brace or bracket symbol. We use brace symbols in the project. An attribute `@bar.thru="true"` is also obligatory on a `<staffGrp>` that contains more than one `<staffDef>`.

The Key and Clefs

The `<keySig>` element is only to be defined in CMN editions. Together with `<clef>` (and potentially `<mensur>` or `<meterSig>`) it is a part of each `<staffDef>`, encoded as individual child elements.

```
<staffGrp>
      <grpSym symbol="brace"/>
      <staffGrp bar.thru="true">
         <staffDef lines="5" n="1">
             <clef line="2" shape="G"/>
             <keySig sig="1f"/>
             <mensur dot="false" sign="C" slash="1"/>
             <meterSig count="4" enclose="brack" unit="4"/>
         </staffDef>
         <staffDef lines="5" n="2">
             <clef line="4" shape="F"/>
             <keySig sig="1f"/>
             <mensur dot="false" sign="C" slash="1"/>
             <meterSig count="4" enclose="brack" unit="4"/>
         </staffDef>
      </staffGrp>
</staffGrp>
```

Please note that the key signature here is not to be understood in the context of modern CMN. It serves as a reading guide for users and does not specify the key signature of the piece. Depending on the tuning of an instrument, transcriptions of intabulations differ in key signatures. Editors preserve the characteristics of the original mode as much as possible — for example, in intabulations, where the original mode of the vocal model is evident.

Polyphony

Another parameter specific only to the CMN editions is the use of multiple `<layer>` elements. Each piece is transcribed according to the genre, as described in the main conventions. In cases of polyphonic transcription, the individual voices are placed in their own `<layer>` elements within the `<staff>`. The abtab polyphonic transcriber module does this automatically for the generated CMN edition templates; it is completed or corrected by the editors if necessary.

Generated Template for Edition in CMN

To avoid inconsistencies, we use the same template file for both tablature and CMN *editions*. To do this, we use a predefined custom specification of the transcriber module of abtab (called using `abtab transcriber -c plaute`). After the conversion, depending on the editor used (mei-friend or MuseScore), the files have to be checked and completed (see Mensuration, Meter and Time Signature) or corrected (see The Key and Clefs and Polyphony) manually, if necessary.

(July 2025)

Short citation:
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Appendix

List of Controlled Vocabularies

- `@reason` in `<unclear>`
    - overbinding
    - faded_ink
    - unclear_positioning
    - lost_folio
    - omitted_in_the_original
    - omitted_rhythm_sign
    - ambiguous_addition
    - illegible
    - smudged
    - unclear_print
    - unclear_interpretation
    - other
- `@agent` in `<damage>`
    - water
    - ink blot
    - cut off
    - crack
    - tear
- format for references (see System and Page Beginnings)
    - folio: `fol. 23v`
    - page: `23`
    - layout number: `aiij`
- `@rend` in `<del>`
    - will be the same for all elements
- `@type` of `<dir>`
    - ref (for folio, page and layout number references)
    - hold (for hold sign)
    - split_course (for shared grip symbol)
    - rpt (for repeat symbol)
- `@type` of `<measure>`
    - pickup (Auftakt)
- `@xml:id` for `<persName>` in `<respStmt>`
    - (like in meiHead Template)

meiHead Template

⚠️ When manually inserting the MEI header from the template, it is important not to overwrite the application information that has been generated automatically during the conversion and editing process.

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-model href="https://music-encoding.org/schema/5.1/mei-all.rng" type="application/xml"
schematypens="http://relaxng.org/ns/structure/1.0"?>
<?xml-model href="https://music-encoding.org/schema/5.1/mei-all.rng" type="application/xml"
schematypens="http://purl.oclc.org/dsdl/schematron"?>
<mei xmlns="http://www.music-encoding.org/ns/mei" meiversion="5.1">
       <meiHead>
       <!-- E-LAUTE meiHead template version 1.0 (2025-03-26)-->
          <fileDesc>
              <titleStmt>
                 <title type="main">
                      <!-- title as seen in the e-lautedb, eg. Elslein liebes Elslein (Elslein)-->
                      <titlePart type="subordinate">transcription<!-- OR edition --> in <abbr
                             expan="German Lute Tablature">GLT</abbr></titlePart>
                 </title>
                 <title type="original"><!-- original title, eg. Elslein liebes Elslein --></title>
                 <title type="normalized"><!-- normalized title, eg. Elslein --></title>
              <respStmt>
                      <!-- editorial team -->
                      <persName role="fronimoEditor"
                      auth.uri="https://e-laute.info/data/projectstaff/IDno" xml:id="projectstaff-IDno">
                         <foreName><!-- fore name --></foreName>
                         <famName><!-- family name --></famName>
                      </persName>
                      <persName role="musescoreEditor"
                      auth.uri="https://e-laute.info/data/projectstaff/IDno" xml:id="projectstaff-IDno">
                         <foreName><!-- fore name --><</foreName>
                         <famName><!-- family name --></famName>
                      </persName>
                      <persName role="meiEditor" auth.uri="https://e-laute.info/data/projectstaff/IDno"
                      xml:id="projectstaff-IDno">
                         <foreName><!-- fore name --></foreName>
                         <famName><!-- family name --></famName>
                      </persName>
                      <!-- meiHead modelers -->
                      <persName role="metadataContact"
                      auth.uri="https://e-laute.info/data/projectstaff/4" xml:id="projectstaff-4">
                         <foreName>Ilias</foreName>
                         <famName>Kyriazis</famName>
                      </persName>
                      <persName role="metadataContact"
                      auth.uri="https://e-laute.info/data/projectstaff/5" xml:id="projectstaff-5">
                         <foreName>Julia</foreName>
                         <famName>Jaklin</famName>
                      </persName>
                      <!-- E-LAUTE administration -->
                      <corpName role="provider" xml:id="elaute">
                         <ref target="https://doi.org/10.55776/I6019">
                              <abbr>E-LAUTE</abbr>
                              <expan>Electronic Linked Annotated Unified Tablature Edition</expan>
                         </ref>
                      </corpName>
                      <corpName role="funder" xml:id="weave">
                         <ref target="https://weave-research.net/">Weave</ref>
                      </corpName>
```

```
                    <corpName role="funder" xml:id="fwf">
                       <ref target="https://www.fwf.ac.at/">
                            <abbr>FWF</abbr>
                            <expan>Austrian Science Fund</expan>
                       </ref>
                    </corpName>
                    <corpName role="funder" xml:id="dfg">
                       <ref target="https://www.dfg.de/">
                            <abbr>DFG</abbr>
                            <expan>German Research Foundation</expan>
                       </ref>
                    </corpName>
                    <corpName role="funder" xml:id="snf">
                       <ref target="https://www.snf.ch/">
                            <abbr>SNF</abbr>
                            <expan>Swiss National Science Foundation</expan>
                       </ref>
                    </corpName>
                 </respStmt>
              </titleStmt>
              <editionStmt>
                 <edition n="1" resp="#projectstaff-x"><!-- A comment on the first edition, eg. First
edition. The symbols of the 6. course are displayed different than in the source --></edition>
                  <edition n="2" resp="#projectstaff-y"><!-- A comment on the second edition eg. Second
edition, revised--></edition>
              </editionStmt>
              <pubStmt>
                 <publisher>
                    <corpName>
                       <ref target="http://www.onb.ac.at">Austrian National Library</ref>
                    </corpName>
                    <address>
                       <street>Josefsplatz 1</street>
                       <postCode>1015</postCode>
                       <settlement>Vienna</settlement>
                       <country>Austria</country>
                    </address>
                 </publisher>
                 <date isodate="YYYY-MM-DD"><!-- date of the latest release / publication, formatted like
the iso-date YYYY-MM-DD --></date>
                 <pubPlace>
                    <ref target="http://www.geonames.org/2761369/">Vienna</ref>
                 </pubPlace>
                 <distributor>
                    <corpName>
                       <ref target="http://www.onb.ac.at">Austrian National Library</ref>
                    </corpName>
                    <address>
                       <street>Josefsplatz 1</street>
                       <postCode>1015</postCode>
                       <settlement>Vienna</settlement>
                       <country>Austria</country>
                    </address>
                 </distributor>
                 <availability>
                    <useRestrict>
                       <ref target="https://creativecommons.org/licenses/by-sa/4.0/">Distributed
                            under the Creative Commons Attribution-ShareAlike 4.0 International
                            license (CC BY-SA 4.0)</ref>
                    </useRestrict>
                 </availability>
                 <identifier type="PID">o:lau.<!-- e-laute-id of the piece--></identifier>
              </pubStmt>
              <sourceDesc>
                 <source>
                    <biblStruct>
```

```
                    <!-- Please choose the relevant part A (individual piece) or B (manuscript or print)
       and PLEASE REMOVE THIS COMMENT as well as the not-needed part. -->
                    <!-- A. individual piece -->
                       <analytic>
                            <title><!-- original title of the piece (from the db) --></title>
                            <respStmt>
                               <persName role="composer"
                                  auth.uri="https://e-laute.info/data/persons/a"
                                  xml:id="persons-a">
                                    <foreName><!-- fore name--></foreName>
                                    <famName><!-- family name--></famName>
                               </persName>
                               <persName role="intabulator"
                                  auth.uri="https://e-laute.info/data/persons/b"
                                  xml:id="persons-b">
                                    <foreName><!-- fore name--></foreName>
                                    <famName><!-- family name--></famName>
                               </persName>
                               <persName role="scribe"
                                  auth.uri="https://e-laute.info/data/persons/c"
                                  xml:id="persons-c">
                                    <foreName><!-- fore name--></foreName>
                                    <famName><!-- family name--></famName>
                               </persName>
                            </respStmt>
                            <biblScope><!-- db field "Fols. / p. new", eg. 24v OR 12 --></biblScope>
                            <identifier><!-- piece id from the db, eg. Jud_1523-2_n25 --></identifier>
                       </analytic>
                    <!-- REMOVE A until here if not needed and REMOVE THIS COMMENT IN ANY CASE -->
                    <!-- B. source (print or manuscript) -->
                        <monogr>
                            <title><!-- original title (from the db) , eg. 1.5.2.3. Ain schone kunstliche
vnderweisung --></title>
                            <identifier><!-- identifier of the source from the db, eg. Jud_1523-2
--></identifier>
                            <respStmt>
                               <persName role="composer"
                                  auth.uri="https://e-laute.info/data/persons/a"
                                  xml:id="persons-a">
                                    <foreName><!-- fore name--></foreName>
                                    <famName><!-- family name--></famName>
                               </persName>
                               <persName role="author"
                                  auth.uri="https://e-laute.info/data/persons/a"
                                  xml:id="persons-a">
                                    <foreName>
                                    <supplied><!-- fore name--></supplied>
                                    </foreName>
                                    <famName>
                                    <supplied><!-- family name--></supplied>
                                    </famName>
                               </persName>
                            </respStmt>
                            <imprint>
                               <pubPlace>
                                    <geogName auth.uri="https://e-laute.info/data/localisations/xx"
xml:id="localisations-xx"><!-- place of publication as in the db, eg. Wienn --></geogName>
                               </pubPlace>
                            <!-- we need <persName> inside of <publisher> in order to provide authority
data -->
                            <publisher>
                                   <persName auth.uri="https://e-laute.info/data/persons/yy"
                                      xml:id="persons-yy">
                                       <foreName><!-- fore name, eg. Hanns--></foreName>
                                      <famName><!-- family name, eg. Singryener--></famName>
                                   </persName>
```

```
                            </publisher>
                            <date isodate="YYYY"><!-- publication date according to db, eg.
1523--></date>
                            </imprint>
                        </monogr>
                    <!-- REMOVE B until here if not needed and REMOVE THIS COMMENT IN ANY CASE-->
                    </biblStruct>
                </source>
            </sourceDesc>
        </fileDesc>
            <encodingDesc>
                <appInfo>
                    <!-- mei-friend -->
                    <application enddate="2024-09-04T19:35:57" startdate="2024-05-03T09:37:44"
                        version="1.0.14p">
                        <name>mei-friend</name>
                        <p>First edit in mei-friend 1.0.14p, 9 September 2024.</p>
                    </application>
                    <!-- verovio -->
                    <application isodate="2024-05-03T09:00:00" version="v">
                        <name>Verovio</name>
                        <p>Transcoded from MusicXML with Verovio [version], 3 May 2024.</p>
                    </application>
                    <!-- musescore (to be added manually) -->
                    <application isodate="2024-05-03T09:00:00" version="v">
                        <name>MuseScore</name>
                        <p>Edit in MuseScore [version], 3 May 2024.</p>
                    </application>
                    <!-- luteconv -->
                    <application isodate="2024-04-03T09:00:00" version="v">
                        <name>Luteconv</name>
                        <p>Conversion in Luteconv [version], 3 April 2024.</p>
                    </application>
                    <!-- fronimo -->
                    <application isodate="2024-02-02T09:00:00" version="v">
                        <name>Fronimo</name>
                        <p>Typesetting in Fronimo [version], 2 Februar 2024.</p>
                    </application>
                </appInfo>
                <editorialDecl>
                    <p><!-- add a declaration that links to the editorial guidelines --></p>
                    <p><!-- description/comment on the edition, eg. Some bars and symbols are missing due to
damage. The missing content was reconstructed based on: Joan Ambrosio Dalza - Intabulatura de Lauto, Libro
Quarto (Venetia: Ottaviano Petrucci, 1508), fol. 47v-48r--></p>
                </editorialDecl>
            </encodingDesc>
            <revisionDesc>
                <change isodate="2025-02-10" n="1" resp="#person-x">
                    <changeDesc>
                        <p><!-- description of noteable changes, eg. 27r: reconstructed lost text (caused by
torn page) on the basis of Dalza (1508), 47v-48r "Calata ala spagnola"--></p>
                    </changeDesc>
                </change>
            </revisionDesc>
        </meiHead>
        <music></music>
</mei>
```

(July 2025)

Short citation:
Janjuš O., De Valk R. et al., 'Editorial Guidelines for MEI Editing in the E-LAUTE Project', in: *E-LAUTE*, https://edition.onb.ac.at/context:elaute, 20.7.2025