

DELIVERABLE REPORT

Project Acronym: OpenUp!

Grant Agreement No: 270890

Project Title: Opening up the Natural History Heritage for Europeana

D02/D2.2.2 Harvesting and Transformation Component production version Part 2: Stylesheet

Revision: Doc02a - Final

Authors:

Astrid Höller AIT Forschungsgesellschaft mbH

Benda Odo AIT Forschungsgesellschaft mbH

Project co-funded by the European Commission within the ICT Policy Support Programme

Dissemination Level

P	Public	x
C	Confidential, only for members of the consortium and the Commission Services	

Revision History

Revision	Date	Author	Organisation	Description
01	13.5.2011	Walter Koch	AIT	The OpenUp! harvesting prototype component installed with the help of: Odo Benda (AIT), Gerda Koch (AIT), Bernd Sproger (AIT)
01a	20.5.2011	Walter Koch	AIT	Start of Harvesting tests with BGBM data
01b	8.6.2011	Walter Koch	AIT	Start of Harvesting tests with NHMW data
01c	30.6.2011	Walter Koch	AIT	Start of Harvesting tests with MfN data
02	2.8.2011	Walter Koch	AIT	Virtual machine with harvesting prototype for test established and provided for the Work package leader (test111.ait.co.at with GBIF-Harvester and metadata manager)
02a	19.8.2011	Walter Koch	AIT	Start of Harvesting tests with BGBM Herbar data (test111.ait.co.at:8080/hit). Start of tests for Europeana thumbnail generation
02b	24.9.2011		UT-NHM	Harvesting test by UT-NHM
03	20.11.2011	Walter Koch	AIT	Virtual Machine with: GBIF-Harvester (http://test117.ait.co.at:8080/hit/) OAI-Provider http://test117.ait.co.at/oai-provider/index.php?form=index&db=0 Pentaho with jobs and transformation is also installed. On this machine we harvested approx. 200.000 ABCD-units which have been transformed (1st draft) to ESE 3.4 (can be searched and inspected via the OAI-Provider)
Doc01	17.11.2011	Walter Koch, Astrid Höller, Odo Benda, Gerda Koch	AIT	Draft of documentation (Part 1 to 3)
Doc02	18.11.2011	Gerda Koch	AIT	Version 1 of documentation (Part 1 to 3), formatting for distribution
Doc02a	22.11.2011	Coordination Team	BGBM	Minor editing

Statement of Originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Recipient	Date	Version	Accepted YES/NO
TMG	Continuous	WebSite: http://open-up.eu/content/harvesting-and-transformation-component	
Work Package Leader	2.8.2011	Virtual machine with harvesting prototype	
BGBM	19.8.2011	Feedback and communication on Harvesting Tests with HERBAR	
Work Package Leader	20.11.2011	Virtual Machine with: GBIF-Harvester (http://test117.ait.co.at:8080/hit/) OAI-Provider http://test117.ait.co.at/oai-provider/index.php?form=index&db=0 Pentaho with jobs and transformation is also installed. On this machine we harvested appr. 200.000 ABCD-units which have been transformed (1st draft) to ESE 3.4 (can be searched and inspected via the OAI-Provider)	
Work Package Leader	18.11.2011	Doc02 (Part 1 to 3)	WP leader G. Malarky and the Technology Management Group have been constantly following the progress of this Deliverable. Unfortunately, Mr. Malarky is not available until the end of November for providing his final acceptance.
Project Coordinator	18.11.2011	Doc02a (Part 1 to 3)	YES

Table of Contents

1. Document overview	5
2. XSLT	5
2.1. Correct Style Sheet Declaration	5
2.2. <xsi:SchemaLocation>	6
2.3. <xsl:output>	6
2.4. <xsl:param>	6
2.5. <xsl:template>	6
2.6. <xsl:if>	7
2.7. <xsl:value-of>	7
2.8. <xsl:apply-templates>	7
2.9. <xsl:attribute>	7
2.10. <xsl:text>	7
2.11. <xsl:comment>	8
3. The Stylesheet.....	8

1. Document overview

The aim of this document is to give a summary of XSLT in order to describe the Stylesheet used in T.3.5., Transformation 3.5 Add constants ABCD to ESE (see D02 Part 3: The Pentaho Transformation Procedure). There the Stylesheet was filled in as constant value to transform one XML document into another.

The lines in the Stylesheet are numbered consecutively to make it easier following the description. In the Stylesheet elements, attributes etc. have different colours:

- elements are blue (for example `</xsl:if>`)
- attributes are orange (for example `match=`)
- comments are green and do not belong to the Stylesheet itself (for example `<!-- Start-->`)
- attribute values are brown with quotation marks (for example `"xsl prov oai abcd biocase"`)

2. XSLT¹

XSL stands for **EX**tensible **S**tylesheet **L**anguage and is a style sheet language for XML documents. XSLT stands for XSL **T**ransformation and is used to transform XML documents into other formats.

Thereby XSLT uses XPath² to navigate through elements and attributes in an XML document. In Transformation 3 one will work with XPath while defining the XPath Statement for "Get data from XML" steps (compare T.3.4 and T.3.19).

In the transformation process, XSLT uses XPath to define parts of the source document that should match one or more predefined templates. When a match is found, XSLT will transform the matching part of the source document into the result document.

2.1. Correct Style Sheet Declaration³

The root element that declares the document to be an XSL style sheet is `<xsl:stylesheet>` or `<xsl:transform>`.

Note: `<xsl:stylesheet>` and `<xsl:transform>` are completely synonymous and either can be used!

The correct way to declare an XSL style sheet according to the W3C XSLT Recommendation is:

```
<xsl:stylesheet version="1.0"  
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
```

or:

```
<xsl:transform version="1.0"  
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
```

¹ <http://www.w3schools.com/xsl/>

² <http://www.w3schools.com/xpath/>

³ http://www.w3schools.com/xsl/xsl_transformation.asp

To get access to the XSLT elements, attributes and features we must declare the XSLT namespace at the top of the document. The first line is like in every XML document (compare our Stylesheet, line 1 to 3). Line 4 to 11 contains different namespaces. XML Namespaces provide a method to avoid element name conflicts.⁴ When using prefixes in XML, a so-called namespace for the prefix must be defined. The namespace is defined by the **xmlns attribute** in the start tag of an element. The namespace declaration has the following syntax. `xmlns:prefix="URI"`.

2.2. <xsi:SchemaLocation>

On lines 12 to 15 schema locations are given. The schemaLocation attribute references an XML Schema document that has a target namespace⁵. In our Stylesheet the schemaLocation contains the ABCD and the ESE Schema.

A namespace URI is designated as an excluded namespace by using an **exclude-result-prefixes** attribute on an `xsl:stylesheet` element (see line 16). Please note that the tag of `xsl:stylesheet` ends here.

2.3. <xsl:output>⁶

The next element is `xsl:output` (line 18 to 19). The `<xsl:output>` element defines the format of the output document (lines 17 and 18).

Note: `<xsl:output>` is a top-level element, and must appear as a child node of `<xsl:stylesheet>` or `<xsl:transform>`.

2.4. <xsl:param>⁷

The `<xsl:param>` element (line 19) is used to declare a local or global parameter.

Note: The parameter is global if it is declared as a top-level element, and local if it is declared within a template. In our Stylesheet the global parameter is UnitID.

2.5. <xsl:template>⁸

An XSL style sheet consists of one or more set of rules that are called templates. A template contains rules to apply when a specified node is matched so the element is used to build templates.

The **match** attribute is used to associate a template with an XML element. The match attribute can also be used to define a template for the entire XML document. The value of the match attribute is an XPath expression (i.e. `match="/"` defines the whole document).

In our example this element is used to define erroneous records. Line 21 to 46 contain an `<xsl:template>` element with the attribute `match = "/"` (defining the whole document). In line 48 a new `<xsl:template>` is starting that continues to line 414 . This time it defines only "abcd:Unit".

⁴ http://www.w3schools.com/xml/xml_namespaces.asp

⁵ <http://msdn.microsoft.com/en-gb/library/ms256100%28v=vs.80%29.aspx>

⁶ http://www.w3schools.com/xsl/el_output.asp

⁷ http://www.w3schools.com/xsl/el_param.asp

⁸ http://www.w3schools.com/xsl/xsl_templates.asp

2.6. <xsl:if>

As you can see there is a child element of <xsl:template> called <xsl:if>. The <xsl:if> element is used to put a conditional test against the content of the XML file.⁹

The syntax is:

```
<xsl:if test="expression">  
  ...some output if the expression is true...  
</xsl:if>
```

The first <xsl:if> element is from line 22 to 30. Beneath a new <xsl:if> element is starting. This section defines if a record is incorrect and the reason for the invalid record too (compare line 25 to 29).

"_record_invalid=true" indicates that the record is not correct. This expression was used in T.3.9, too. Note that many "expressions" can be connected with AND or OR (like in our Stylesheet).

2.7. <xsl:value-of>¹⁰

The <xsl:value-of> element is used to extract the value of a selected node (for example UnitID in our stylesheet; line 27) and added to the output stream of the transformation.

2.8. <xsl:apply-templates>¹¹

The <xsl:apply-templates> element applies a template to the current element or to the current element's child nodes. In our example it is a child node of <xsl:if>.

If we add a **select** attribute to the <xsl:apply-templates> element it will process only the child element that matches the value of the attribute. We can use the select attribute to specify the order in which the child nodes are processed (compare line 31 to 36). After the select attribute we navigate with XPath through the Stylesheet.

2.9. <xsl:attribute>¹²

The <xsl:attribute> element is used to add attributes to elements.

Note: The <xsl:attribute> element replaces existing attributes with equivalent names.

In line 101 and 102 you can see this element with the attribute name="_record_invalid".

2.10. <xsl:text>¹³

The <xsl:text> element is used to write literal text to the output (compare for example line 117).

⁹ http://www.w3schools.com/xsl/xsl_if.asp

¹⁰ http://www.w3schools.com/xsl/xsl_value_of.asp

¹¹ http://www.w3schools.com/xsl/xsl_apply_templates.asp

¹² http://www.w3schools.com/xsl/el_attribute.asp

¹³ http://www.w3schools.com/xsl/el_text.asp

2.11. <xsl:comment>¹⁴

The <xsl:comment> element is used to create a comment node in the result tree. In line 689 this element is used to define “dc:contributor” more precisely.

3. The Stylesheet

On the next pages the complete Stylesheet needed for the Transformation in Pentaho is depicted.

¹⁴ http://www.w3schools.com/xsl/el_comment.asp


```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <xsl:stylesheet version="1.0"
3 xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
4   xmlns:prov="http://www.openarchives.org/OAI/2.0/provenance"
5   xmlns:oai="http://www.openarchives.org/OAI/2.0/"
6   xmlns:Europeana="http://www.europeana.eu/schemas/ese/"
7   xmlns:dc="http://purl.org/dc/elements/1.1/"
8   xmlns:dcterms="http://purl.org/dc/terms/"
9   xmlns:abcd="http://www.tdwg.org/schemas/abcd/2.06"
10  xmlns:biocase="http://www.biocase.org/schemas/protocol/1.3"
11  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
12  xsi:schemaLocation="http://www.tdwg.org/schemas/abcd/2.06
13 http://rs.tdwg.org/abcd/2.06/ABCD_2.06.xsd
14 http://www.europeana.eu/schemas/ese/
15 http://www.europeana.eu/schemas/ese/ESE-V3.4.xsd"
16   exclude-result-prefixes="xsl prov oai abcd biocase">
17   <xsl:output method="xml" version="1.0" encoding="utf-8" indent="yes" media-
18 type="text/xml"/>
19   <xsl:param name="UnitID" />
20   <!-- Start-->
21     <xsl:template match="/">
22       <xsl:if
23 test="count(//abcd:DataSets/abcd:DataSet/abcd:Units/abcd:Unit[abcd:UnitID=$UnitID]) = 0">
24         <Europeana:record _record_invalid="true"
25           _record_invalid_reason="There is no such Unit »{$UnitID}«.">
26           <dc:identifier><xsl:value-of select="$UnitID"></xsl:value-
27 of></dc:identifier>
28         </Europeana:record>
29       </xsl:if>
30       <xsl:if
31 test="count(//abcd:DataSets/abcd:DataSet/abcd:Units/abcd:Unit[abcd:UnitID=$UnitID]) = 1">
32         <xsl:apply-templates
33 select="//abcd:DataSets/abcd:DataSet/abcd:Units/abcd:Unit[abcd:UnitID=$UnitID]"/>
34       </xsl:if>
35       <xsl:if
36 test="count(//abcd:DataSets/abcd:DataSet/abcd:Units/abcd:Unit[abcd:UnitID=$UnitID]) >
37 1">
38         <Europeana:record _record_invalid="true"
39           _record_invalid_reason="The unit ID »{$UnitID}« is not unique.">
40           <dc:identifier><xsl:value-of select="$UnitID"></xsl:value-
41 of></dc:identifier>
42         </Europeana:record>
43       </xsl:if>
44     </xsl:template>
45
46     <xsl:template match="abcd:Unit">
47 <Europeana:record>
48   <xsl:if test="not(
49     abcd:Identifications/abcd:Identification/abcd:Result/abcd:TaxonIdentified/abcd:Scientific
50 Name/abcd:FullScientificNameString[../..../abcd:PreferredFlag='1']
51   or
52   abcd:SpecimenUnit/abcd:NomenclaturalTypeDesignations/abcd:NomenclaturalTypeDesignation/

```

```

53  abcd:TypifiedName/abcd:FullScientificNameString
54      or abcd:Notes
55      or abcd:SpecimenUnit/abcd:Preparations/abcd:Preparation/abcd:PreparationType
56      or abcd:Sex
57      or abcd:KindOfUnit
58      or abcd:Gathering/abcd:Notes
59      or abcd:Age
60      or abcd:SpecimenUnit/abcd:Marks/abcd:Mark/abcd:MarkText
61      ) or not(
62      abcd:RecordBasis
63      or abcd:Gathering/abcd:LocalityText
64      or abcd:Gathering/abcd:Country/abcd:Name
65      or abcd:Gathering/abcd:NamedAreas/abcd:NamedArea/abcd:AreaName
66      or abcd:Gathering/abcd:AreaDetail
67      or abcd:Gathering/abcd:Biotope/abcd:Text
68      or
69  abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinateMethod
70      or abcd:Gathering/abcd:Biotope/abcd:Name
71      or
72  abcd:Gathering/abcd:Stratigraphy/abcd:ChronostratigraphicTerms/abcd:ChronostratigraphicTer
73  m/abcd:Term
74      or abcd:Gathering/abcd:Aspect/abcd:Ordination
75      or abcd:Gathering/abcd:Aspect/abcd:Text
76      or
77  abcd:Gathering/abcd:NearNamedPlaces/abcd:NamedPlaceRelation/abcd:NearNamedPlace
78      or
79  abcd:Gathering/abcd:Stratigraphy/abcd:LithostratigraphicTerms/abcd:LithostratigraphicTerm/a
80  bcd:Term
81      or
82  abcd:Gathering/abcd:Stratigraphy/abcd:BiostratigraphicTerms/abcd:BiostratigraphicTerm/abcd:
83  Term
84      ) or not(
85      abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representation/abcd:Text
86      or
87  .././abcd:Metadata/abcd:Owners/abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representat
88  ion/abcd:Text
89      ) or not(
90      abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:ProductURI
91      or abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:FileURI
92      ) or not(
93      abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:IPRStatements/abcd:Lice
94  nses/abcd:License/abcd:URI
95      or .././abcd:Metadata//abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI
96      or abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI
97      )">
98      <xsl:attribute name="_record_invalid">true</xsl:attribute>
99      <xsl:attribute name="_record_invalid_reason">
100      <xsl:if test="not(
101      abcd:Identifications/abcd:Identification/abcd:Result/abcd:TaxonIdentified/abcd:Scientific
102  Name/abcd:FullScientificNameString[../././abcd:PreferredFlag='1']
103      or
104  abcd:SpecimenUnit/abcd:NomenclaturalTypeDesignations/abcd:NomenclaturalTypeDesignation/

```

```

105 abcd:TypifiedName/abcd:FullScientificNameString
106     or abcd:Notes
107     or abcd:SpecimenUnit/abcd:Preparations/abcd:Preparation/abcd:PreparationType
108     or abcd:Sex
109     or abcd:KindOfUnit
110     or abcd:Gathering/abcd:Notes
111     or abcd:Age
112     or abcd:SpecimenUnit/abcd:Marks/abcd:Mark/abcd:MarkText
113 )">
114         <xsl:text>Missing title or description. </xsl:text>
115     </xsl:if>
116     <xsl:if test="not(
117         abcd:RecordBasis
118         or abcd:Gathering/abcd:LocalityText
119         or abcd:Gathering/abcd:Country/abcd:Name
120         or abcd:Gathering/abcd:NamedAreas/abcd:NamedArea/abcd:AreaName
121         or abcd:Gathering/abcd:AreaDetail
122         or abcd:Gathering/abcd:Biotope/abcd:Text
123         or
124         abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinateMethod
125         or abcd:Gathering/abcd:Biotope/abcd:Name
126         or
127         abcd:Gathering/abcd:Stratigraphy/abcd:ChronostratigraphicTerms/abcd:ChronostratigraphicTer
128         m/abcd:Term
129         or abcd:Gathering/abcd:Aspect/abcd:Ordination
130         or abcd:Gathering/abcd:Aspect/abcd:Text
131         or
132         abcd:Gathering/abcd:NearNamedPlaces/abcd:NamedPlaceRelation/abcd:NearNamedPlace
133         or
134         abcd:Gathering/abcd:Stratigraphy/abcd:LithostratigraphicTerms/abcd:LithostratigraphicTerm/a
135         bcd:Term
136         or
137         abcd:Gathering/abcd:Stratigraphy/abcd:BiostratigraphicTerms/abcd:BiostratigraphicTerm/abcd:
138         Term
139     )">
140         <xsl:text>Missing Type or Spatial. </xsl:text>
141     </xsl:if>
142     <xsl:if test="not(
143         abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representation/abcd:Text
144         or
145         .././abcd:Metadata/abcd:Owners/abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representat
146         ion/abcd:Text
147     )">
148         <xsl:text>Missing data provider. </xsl:text>
149     </xsl:if>
150     <xsl:if test="not(
151         abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:ProductURI
152         or abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:FileURI
153     )">
154         <xsl:text>Missing isShownBy or isShownAt. </xsl:text>
155     </xsl:if>
156     <xsl:if test="not(

```

```

157         abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:IPRStatements/abcd:Lice
158 nses/abcd:License/abcd:URI
159         or ../../abcd:Metadata//abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI
160         or abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI
161     )">
162         <xsl:text>Missing license uri for rights. </xsl:text>
163     </xsl:if>
164 </xsl:attribute>
165 </xsl:if>
166
167 <!-- Title -->
168 <xsl:apply-templates
169 select="abcd:Identifications/abcd:Identification/abcd:Result/abcd:TaxonIdentified/abcd:Scientif
170 icName/abcd:FullScientificNameString[../../../abcd:PreferredFlag='1']"/>
171 <xsl:apply-templates
172 select="abcd:SpecimenUnit/abcd:NomenclaturalTypeDesignations/abcd:NomenclaturalTypeDesi
173 gnation/abcd:TypifiedName/abcd:FullScientificNameString"/>
174 <!-- Description -->
175 <xsl:apply-templates select="abcd:Notes"/>
176 <xsl:apply-templates
177 select="abcd:SpecimenUnit/abcd:Preparations/abcd:Preparation/abcd:PreparationType"/>
178 <xsl:apply-templates select="abcd:Sex"/>
179 <xsl:apply-templates select="abcd:KindOfUnit"/>
180 <xsl:apply-templates select="abcd:Gathering/abcd:Notes"/>
181 <xsl:apply-templates select="abcd:Age"/>
182 <xsl:apply-templates
183 select="abcd:SpecimenUnit/abcd:Marks/abcd:Mark/abcd:MarkText"/>
184
185
186 <!-- Type -->
187 <xsl:apply-templates select="abcd:RecordBasis"/>
188 <!-- Spatial -->
189 <xsl:apply-templates select="abcd:Gathering/abcd:LocalityText"/>
190 <!-- EDM <xsl:apply-templates
191 select="abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinatesLatLon
192 g/abcd:LatitudeDecimal"/> -->
193 <!-- EDM <xsl:apply-templates
194 select="abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinatesLatLon
195 g/abcd:LongitudeDecimal"/> -->
196 <!-- EDM <xsl:apply-templates
197 select="abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinatesLatLon
198 g/abcd:CoordinateErrorDistanceInMeters"/> -->
199 <!-- EDM <xsl:apply-templates
200 select="abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinatesLatLon
201 g/abcd:SpatialDatum"/> -->
202 <xsl:apply-templates select="abcd:Gathering/abcd:Country/abcd:Name"/>
203 <xsl:apply-templates
204 select="abcd:Gathering/abcd:NamedAreas/abcd:NamedArea/abcd:AreaName"/>
205 <!-- EDM <xsl:apply-templates
206 select="abcd:Gathering/abcd:Altitude/abcd:MeasurementOrFactAtomised"/> -->
207 <!-- EDM <xsl:apply-templates
208 select="abcd:Gathering/abcd:Depth/abcd:MeasurementOrFactAtomised"/> -->

```

```

209     <!-- EDM <xsl:apply-templates
210 select="abcd:Gathering/abcd:Height/abcd:MeasurementOrFactAtomised"/> -->
211     <xsl:apply-templates select="abcd:Gathering/abcd:AreaDetail"/>
212     <xsl:apply-templates select="abcd:Gathering/abcd:Biotope/abcd:Text"/>
213     <xsl:apply-templates
214 select="abcd:Gathering/abcd:SiteCoordinateSets/abcd:SiteCoordinates/abcd:CoordinateMethod
215 "/>
216     <xsl:apply-templates select="abcd:Gathering/abcd:Biotope/abcd:Name"/>
217     <xsl:apply-templates
218 select="abcd:Gathering/abcd:Stratigraphy/abcd:ChronostratigraphicTerms/abcd:Chronostratigr
219 aphicTerm/abcd:Term"/>
220     <xsl:apply-templates select="abcd:Gathering/abcd:Aspect/abcd:Ordination"/>
221     <xsl:apply-templates select="abcd:Gathering/abcd:Aspect/abcd:Text"/>
222     <xsl:apply-templates
223 select="abcd:Gathering/abcd:NearNamedPlaces/abcd:NamedPlaceRelation/abcd:NearNamedPla
224 ce"/>
225     <xsl:apply-templates
226 select="abcd:Gathering/abcd:Stratigraphy/abcd:LithostratigraphicTerms/abcd:Lithostratigraphic
227 Term/abcd:Term"/>
228     <xsl:apply-templates
229 select="abcd:Gathering/abcd:Stratigraphy/abcd:BiostratigraphicTerms/abcd:BiostratigraphicTer
230 m/abcd:Term"/>
231
232
233     <!-- europeana:dataprovder -->
234     <xsl:apply-templates
235 select="abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representation/abcd:Text"/>
236     <xsl:if
237 test="not(abcd:Owner/abcd:Organisation/abcd:Name/abcd:Representation/abcd:Text)">
238     <xsl:apply-templates
239 select="../..//abcd:Metadata/abcd:Owners/abcd:Owner/abcd:Organisation/abcd:Name/abcd:Rep
240 resentation/abcd:Text"/>
241     </xsl:if>
242     <!-- europeana:isShownAt -->
243     <xsl:apply-templates
244 select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:ProductURI"/>
245     <!-- europeana:isShownBy -->
246     <xsl:apply-templates
247 select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:FileURI"/>
248     <!-- europeana:rights -->
249     <xsl:apply-templates
250 select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:Licenses/abcd:License/a
251 bcd:URI"/>
252     <xsl:if
253 test="not(abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:Licenses/abcd:License
254 /abcd:URI)">
255     <xsl:apply-templates
256 select="abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI"/>
257         <xsl:if test="not(abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI)">
258         <xsl:apply-templates
259 select="../..//abcd:Metadata/abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:URI"/>
260         </xsl:if>

```

```

261     </xsl:if>
262
263     <!-- UID -->
264     <xsl:apply-templates select="abcd:SourceID"/>
265     <xsl:apply-templates select="abcd:SourceInstitutionID"/>
266     <xsl:apply-templates select="abcd:UnitID"/>
267     <!-- Identifier -->
268     <xsl:apply-templates select=".././abcd:DatasetGUID"/>
269     <xsl:apply-templates select="abcd:UnitGUID"/>
270     <!-- contributor -->
271     <xsl:apply-templates
272     select="abcd:Gathering/abcd:Agents/abcd:GatheringAgent/abcd:AgentText"/>
273     <xsl:apply-templates
274     select="abcd:Identifications/abcd:Identification/abcd:Identifiers/abcd:IdentifiersText[.././abcd:
275     PreferredFlag='1']"/>
276     <xsl:apply-templates
277     select="abcd:Gathering/abcd:Agents/abcd:GatheringAgent/abcd:Person/abcd:FullName"/>
278     <xsl:apply-templates
279     select="abcd:Gathering/abcd:Agents/abcd:GatheringAgentsText"/>
280     <xsl:apply-templates
281     select="abcd:Identifications/abcd:Identification/abcd:Identifiers/abcd:Identifier/abcd:PersonNa
282     me/abcd:FullName"/>
283     <xsl:apply-templates
284     select="abcd:Identifications/abcd:Identification/abcd:Date/abcd:ISODateTimeBegin"/>
285     <!-- date -->
286     <!-- EDM <xsl:apply-templates
287     select="abcd:Gathering/abcd:DateTime/abcd:DateText"/> -->
288     <!-- EDM <xsl:apply-templates
289     select="abcd:Gathering/abcd:DateTime/abcd:ISODateTimeBegin"/> -->
290     <!-- EDM <xsl:apply-templates
291     select="abcd:Gathering/abcd:DateTime/abcd:ISODateTimeEnd"/> -->
292     <xsl:apply-templates
293     select="abcd:Identifications/abcd:Identification/abcd:Date/abcd:DateText"/>
294     <!-- reation -->
295     <!-- EDM <xsl:apply-templates
296     select="abcd:Associations/abcd:UnitAssociation/abcd:AssociatedUnitID"/> -->
297     <!-- EDM <xsl:apply-templates
298     select="abcd:Associations/abcd:UnitAssociation/abcd:AssociatedUnitSourceInstitutionCode"/> -
299     ->
300     <!-- EDM <xsl:apply-templates
301     select="abcd:Associations/abcd:UnitAssociation/abcd:AssociatedUnitSourceName"/> -->
302     <!-- EDM <xsl:apply-templates
303     select="abcd:Associations/abcd:UnitAssociation/abcd:AssociationType"/> -->
304     <!-- EDM <xsl:apply-templates
305     select="abcd:Associations/abcd:UnitAssociation/abcd:Comment"/> -->
306     <!-- EDM <xsl:apply-templates
307     select="abcd:Assemblage/abcd:UnitAssemblage/abcd:AssemblageID"/> -->
308     <!-- EDM <xsl:apply-templates
309     select="abcd:Assemblage/abcd:UnitAssemblage/abcd:AssemblageName"/> -->
310
311     <!-- Concatenate
312     Statement.Text + Statement.Details + Statement.URI

```



```

313         for IPR-Declaration, Copyrights, Licenses, TermsOfUse, Disclaimer, Acknowledgements,
314         and Citations
315         [Priority: 1.MultimediaObject.IPRStatements, 2. Unit.IPRStatements and 3.
316         Dataset.Metadata.IPRStatements)
317         -->
318         <xsl:apply-templates
319         select="../../abcd:Metadata/abcd:IPRStatements/abcd:TermsOfUseStatements/abcd:TermsOfU
320         se/abcd:Text"/>
321         <xsl:apply-templates
322         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Copyrights/abcd:Copyright/abcd:Text"/
323         >
324         <xsl:apply-templates
325         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Disclaimers/abcd:Disclaimer/abcd:Text"/
326         >
327         <xsl:apply-templates
328         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Acknowledgements/abcd:Acknowledgem
329         ent/abcd:Text"/>
330         <xsl:apply-templates
331         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Copyrights/abcd:Copyright/abcd:URI"/>
332         <xsl:apply-templates
333         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Citations/abcd:Citation/abcd:Text"/>
334         <xsl:apply-templates
335         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Disclaimers/abcd:Disclaimer/abcd:URI"/
336         >
337         <xsl:apply-templates
338         select="../../abcd:Metadata/abcd:IPRStatements/abcd:IPRDeclarations/abcd:IPRDeclaration/ab
339         cd:Text"/>
340         <xsl:apply-templates
341         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:Text"/>
342         <xsl:apply-templates
343         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Acknowledgements/abcd:Acknowledgem
344         ent/abcd:Details"/>
345         <xsl:apply-templates
346         select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:Copyrights/abcd:Copyri
347         ght/abcd:Text"/>
348         <xsl:apply-templates
349         select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:IPR/abcd:TermsOfUseStatements/
350         abcd:TermsOfUse/abcd:Text"/>
351         <xsl:apply-templates
352         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Acknowledgements/abcd:Acknowledgem
353         ent/abcd:URI"/>
354         <xsl:apply-templates
355         select="../../abcd:Metadata/abcd:IPRStatements/abcd:IPRDeclarations/abcd:IPRDeclaration/ab
356         cd:URI"/>
357         <xsl:apply-templates
358         select="../../abcd:Metadata/abcd:IPRStatements/abcd:TermsOfUseStatements/abcd:TermsOfU
359         se/abcd:Details"/>
360         <xsl:apply-templates
361         select="../../abcd:Metadata/abcd:IPRStatements/abcd:Disclaimers/abcd:Disclaimer/abcd:Detail
362         s"/>
363         <xsl:apply-templates
364         select="../../abcd:Metadata/abcd:IPRStatements/abcd:TermsOfUseStatements/abcd:TermsOfU

```

```

365 se/abcd:URI"/>
366     <xsl:apply-templates
367 select="../../abcd:Metadata/abcd:IPRStatements/abcd:Citations/abcd:Citation/abcd:URI"/>
368     <xsl:apply-templates
369 select="../../abcd:Metadata/abcd:IPRStatements/abcd:Copyrights/abcd:Copyright/abcd:Details
370 "/>
371     <xsl:apply-templates
372 select="../../abcd:Metadata/abcd:IPRStatements/abcd:IPRDeclarations/abcd:IPRDeclaration/ab
373 cd:Details"/>
374     <xsl:apply-templates
375 select="../../abcd:Metadata/abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:Details"/>
376     <xsl:apply-templates
377 select="../../abcd:Metadata/abcd:IPRStatements/abcd:Citations/abcd:Citation/abcd:Details"/>
378     <xsl:apply-templates
379 select="abcd:IPRStatements/abcd:Copyrights/abcd:Copyright/abcd:Text"/>
380     <xsl:apply-templates
381 select="abcd:IPRStatements/abcd:Citations/abcd:Citation/abcd:Text"/>
382     <xsl:apply-templates select="abcd:IPRStatements/abcd:Licenses"/>
383     <xsl:apply-templates
384 select="abcd:IPRStatements/abcd:Licenses/abcd:License/abcd:Text"/>
385     <xsl:apply-templates
386 select="abcd:IPRStatements/abcd:TermsOfUseStatements/abcd:TermsOfUse/abcd:Text"/>
387     <!-- source -->
388     <xsl:apply-templates
389 select="../../abcd:Metadata/abcd:Description/abcd:Representation/abcd:Title"/>
390     <!-- provenance -->
391     <xsl:apply-templates
392 select="abcd:SpecimenUnit/abcd:History/abcd:PreviousUnitsText"/>
393     <!-- mapping > MIME Type to Europeana Types Vorschlag Güntsch -->
394     <!-- <xsl:apply-templates
395 select="abcd:MultiMediaObjects/abcd:MultiMediaObject/abcd:Format"/> -->
396
397 </europeana:record> <xsl:text>
398 </xsl:text>
399     </xsl:template>
400
401
402 <xsl:template
403 match="abcd:FullScientificNameString[parent::abcd:ScientificName/parent::abcd:TaxonIdentifi
404 ed/parent::abcd:Result/parent::abcd:Identification/parent::abcd:Identifications]">
405     <dc:title> <xsl:value-of select="."/> </dc:title>
406 </xsl:template>
407
408 <xsl:template
409 match="abcd:FullScientificNameString[parent::abcd:TypifiedName/parent::abcd:Nomenclatural
410 TypeDesignation/parent::abcd:NomenclaturalTypeDesignations/parent::abcd:SpecimenUnit]">
411     <dc:title> <xsl:value-of select="."/> <xsl:text> (Typus) </xsl:text> </dc:title>
412 </xsl:template>
413
414 <xsl:template match="abcd:Notes[parent::abcd:Unit]">
415     <dc:description> <xsl:value-of select="."/> </dc:description>
416 </xsl:template>

```



```

417
418 <xsl:template
419 match="abcd:PreparationType[parent::abcd:Preparation/parent::abcd:Preparations/parent::ab
420 cd:SpecimenUnit]">
421     <dc:description><xsl:value-of select="."/></dc:description>
422 </xsl:template>
423
424 <xsl:template match="abcd:Sex">
425     <dc:description><xsl:value-of select="."/><xsl:text>
426 (sex)</xsl:text></dc:description>
427 </xsl:template>
428
429 <xsl:template match="abcd:KindOfUnit">
430     <dc:description><xsl:value-of select="."/></dc:description>
431 </xsl:template>
432
433 <xsl:template match="abcd:Notes[parent::abcd:Gathering]">
434     <!-- TODO check what is usually used in this field! -->
435     <dc:description><xsl:value-of select="."/></dc:description>
436 </xsl:template>
437
438 <xsl:template match="abcd:Age">
439     <dc:description><xsl:value-of select="."/></dc:description>
440 </xsl:template>
441
442 <xsl:template
443 match="abcd:MarkText[parent::abcd:Mark/parent::abcd:Marks/parent::abcd:SpecimenUnit]">
444     <dc:description><xsl:value-of select="."/></dc:description>
445 </xsl:template>
446
447 <xsl:template match="abcd:RecordBasis">
448     <dc:type><xsl:value-of select="."/></dc:type>
449 </xsl:template>
450
451 <xsl:template match="abcd:LocalityText[parent::abcd:Gathering]">
452     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
453 </xsl:template>
454
455 <xsl:template
456 match="abcd:LatitudeDecimal[parent::abcd:CoordinatesLatLong/parent::abcd:SiteCoordinates/
457 parent::abcd:SiteCoordinateSets/parent::abcd:Gathering]">
458     <!-- TODO EDM
459 Preferred display sequence:
460 date, method, coordinates (lat+long), errordistance, accuracystatement (alternative if no
461 coordinates used: coordinatetext)
462     -->
463     <xsl:comment>EDM</xsl:comment>
464     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
465 </xsl:template>
466
467 <xsl:template
468 match="abcd:LongitudeDecimal[parent::abcd:CoordinatesLatLong/parent::abcd:SiteCoordinate

```

```

469 s/parent::abcd:SiteCoordinateSets/parent::abcd:Gathering]">
470     <xsl:comment>EDM</xsl:comment>
471     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
472 </xsl:template>
473
474 <xsl:template match="abcd:Name[parent::abcd:Country/parent::abcd:Gathering]">
475     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
476 </xsl:template>
477
478 <xsl:template
479 match="abcd:LowerValue[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Altitude/par
480 ent::abcd:Gathering]">
481     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
482 </xsl:template>
483
484 <xsl:template
485 match="abcd:AreaName[parent::abcd:NamedArea/parent::abcd:NamedAreas/parent::abcd:Ga
486 thering]">
487     <dcterms:spatial><xsl:value-of select="."/>
488     <xsl:if test="../abcd:AreaClas">
489         <xsl:text> [</xsl:text>
490         <xsl:value-of select="../abcd:AreaClass"></xsl:value-of>
491         <xsl:text>]</xsl:text>
492     </xsl:if>
493     </dcterms:spatial>
494 </xsl:template>
495
496 <xsl:template
497 match="abcd:CoordinateErrorDistanceInMeters[parent::abcd:CoordinatesLatLong/parent::abcd
498 :SiteCoordinates/parent::abcd:SiteCoordinateSets/parent::abcd:Gathering]">
499     <xsl:comment>EDM</xsl:comment>
500     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
501 </xsl:template>
502
503 <xsl:template
504 match="abcd:UpperValue[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Altitude/par
505 ent::abcd:Gathering]">
506     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
507 </xsl:template>
508
509 <xsl:template
510 match="abcd:UnitOfMeasurement[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Alti
511 tude/parent::abcd:Gathering]">
512     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
513 </xsl:template>
514
515 <xsl:template match="abcd:AreaDetail[parent::abcd:Gathering]">
516     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
517 </xsl:template>
518
519 <xsl:template match="abcd:Text[parent::abcd:Biotope/parent::abcd:Gathering]">
520     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>

```

```
521 </xsl:template>
522
523 <xsl:template
524 match="abcd:LowerValue[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Depth/pare
525 nt::abcd:Gathering]">
526     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
527 </xsl:template>
528
529 <xsl:template
530 match="abcd:CoordinateMethod[parent::abcd:SiteCoordinates/parent::abcd:SiteCoordinateSet
531 s/parent::abcd:Gathering]">
532     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
533 </xsl:template>
534
535 <xsl:template
536 match="abcd:SpatialDatum[parent::abcd:CoordinatesLatLong/parent::abcd:SiteCoordinates/pa
537 rent::abcd:SiteCoordinateSets/parent::abcd:Gathering]">
538     <xsl:comment>EDM</xsl:comment>
539     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
540 </xsl:template>
541
542 <xsl:template match="abcd:Name[parent::abcd:Biotope/parent::abcd:Gathering]">
543     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
544 </xsl:template>
545
546 <xsl:template
547 match="abcd:Term[parent::abcd:ChronostratigraphicTerm/parent::abcd:ChronostratigraphicTe
548 rms/parent::abcd:Stratigraphy/parent::abcd:Gathering]">
549     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
550 </xsl:template>
551
552 <xsl:template
553 match="abcd:UnitOfMeasurement[parent::abcd:MeasurementOrFactAtomised/parent::abcd:De
554 pth/parent::abcd:Gathering]">
555     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
556 </xsl:template>
557
558 <xsl:template match="abcd:Ordination[parent::abcd:Aspect/parent::abcd:Gathering]">
559     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
560 </xsl:template>
561
562 <xsl:template match="abcd:Text[parent::abcd:Aspect/parent::abcd:Gathering]">
563     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
564 </xsl:template>
565
566 <xsl:template
567 match="abcd:UnitOfMeasurement[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Hei
568 ght/parent::abcd:Gathering]">
569     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
570 </xsl:template>
571
572 <xsl:template
```

```

573 match="abcd:UpperValue[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Height/pare
574 nt::abcd:Gathering]">
575     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
576 </xsl:template>
577
578 <xsl:template
579 match="abcd:NearNamedPlace[parent::abcd:NamedPlaceRelation/parent::abcd:NearNamedPlac
580 es/parent::abcd:Gathering]">
581     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
582 </xsl:template>
583
584 <xsl:template
585 match="abcd:LowerValue[parent::abcd:MeasurementOrFactAtomised/parent::abcd:Height/pare
586 nt::abcd:Gathering]">
587     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
588 </xsl:template>
589
590 <xsl:template
591 match="abcd:accuracy[parent::abcd:LowerValue/parent::abcd:MeasurementOrFactAtomised/p
592 arent::abcd:Altitude/parent::abcd:Gathering]">
593     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
594 </xsl:template>
595
596 <xsl:template
597 match="abcd:accuracy[parent::abcd:UpperValue/parent::abcd:MeasurementOrFactAtomised/p
598 arent::abcd:Altitude/parent::abcd:Gathering]">
599     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
600 </xsl:template>
601
602 <xsl:template
603 match="abcd:Term[parent::abcd:LithostratigraphicTerm/parent::abcd:LithostratigraphicTerms/
604 parent::abcd:Stratigraphy/parent::abcd:Gathering]">
605     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
606 </xsl:template>
607
608 <xsl:template
609 match="abcd:Term[parent::abcd:BiostratigraphicTerm/parent::abcd:BiostratigraphicTerms/par
610 ent::abcd:Stratigraphy/parent::abcd:Gathering]">
611     <dcterms:spatial><xsl:value-of select="."/></dcterms:spatial>
612 </xsl:template>
613
614 <xsl:template
615 match="abcd:Text[parent::abcd:Representation/parent::abcd:Name/parent::abcd:Organisation
616 /parent::abcd:Owner/parent::abcd:Owners/parent::abcd:Metadata/parent::abcd:DataSet/pare
617 nt::abcd:DataSets]">
618     <europeana:dataprovder><xsl:value-of select="."/></europeana:dataprovder>
619 </xsl:template>
620
621 <xsl:template
622 match="abcd:Text[parent::abcd:Representation/parent::abcd:Name/parent::abcd:Organisation
623 /parent::abcd:Owner/parent::abcd:Unit]">
624     <europeana:dataprovder><xsl:value-of select="."/></europeana:dataprovder>

```

```

625 </xsl:template>
626
627 <xsl:template
628 match="abcd:ProductURI[parent::abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
629     <europeana:isShownAt><xsl:value-of select="."/></europeana:isShownAt>
630 </xsl:template>
631
632 <xsl:template
633 match="abcd:FileURI[parent::abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
634     <europeana:isShownBy><xsl:value-of select="."/></europeana:isShownBy>
635 </xsl:template>
636
637 <xsl:template
638 match="abcd:URI[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements/parent::abcd:IPR/parent::abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
639     <europeana:rights><xsl:value-of select="."/></europeana:rights>
640 </xsl:template>
641
642
643 <xsl:template match="abcd:SourceID">
644     <dc:identifier><xsl:value-of select="."/></dc:identifier>
645 </xsl:template>
646
647 <xsl:template match="abcd:SourceInstitutionID">
648     <dc:identifier><xsl:value-of select="."/></dc:identifier>
649 </xsl:template>
650
651 <xsl:template match="abcd:UnitID">
652     <dc:identifier><xsl:value-of select="."/></dc:identifier>
653 </xsl:template>
654
655 <xsl:template
656 match="abcd:AgentText[parent::abcd:GatheringAgent/parent::abcd:Agents/parent::abcd:Gathering]">
657     <dc:contributor><xsl:value-of select="."/></dc:contributor>
658 </xsl:template>
659
660
661 <xsl:template
662 match="abcd:IdentifiersText[parent::abcd:Identifiers/parent::abcd:Identification/parent::abcd:Identifications]">
663     <dc:contributor><xsl:comment>role="identifier"</xsl:comment><xsl:value-of
664     select="."/></dc:contributor>
665 </xsl:template>
666
667
668 <xsl:template
669 match="abcd:FullName[parent::abcd:Person/parent::abcd:GatheringAgent/parent::abcd:Agents/parent::abcd:Gathering]">
670     <dc:contributor><xsl:comment>role="collector"</xsl:comment><xsl:value-of
671     select="."/>
672     <xsl:if test="ancestor::abcd:Unit/abcd:CollectorsFieldNumber">
673         <xsl:text> (</xsl:text>
674         <xsl:value-of select="ancestor::abcd:Unit/abcd:CollectorsFieldNumber"/>
675         <xsl:text>)</xsl:text>
676

```

```

677     </xsl:if>
678     <xsl:if test="ancestor::abcd:Gathering/abcd:Code">
679         <xsl:text> (</xsl:text>
680         <xsl:value-of select="ancestor::abcd:Gathering/abcd:Code"/>
681         <xsl:text>)</xsl:text>
682     </xsl:if>
683     </dc:contributor>
684 </xsl:template>
685
686 <xsl:template
687 match="abcd:GatheringAgentsText[parent::abcd:Agents/parent::abcd:Gathering]">
688     <dc:contributor><xsl:comment>role="collector"</xsl:comment><xsl:value-of
689 select="."/></dc:contributor>
690 </xsl:template>
691
692 <xsl:template
693 match="abcd:FullName[parent::abcd:PersonName/parent::abcd:Identifier/parent::abcd:Identifi
694 ers/parent::abcd:Identification/parent::abcd:Identifications]">
695     <dc:contributor><xsl:comment>role="identifier"</xsl:comment><xsl:value-of
696 select="."/></dc:contributor>
697 </xsl:template>
698
699 <xsl:template match="abcd:CollectorsFieldNumber">
700     <dc:contributor><xsl:value-of select="."/></dc:contributor>
701 </xsl:template>
702
703 <xsl:template
704 match="abcd:ISODateTimeBegin[parent::abcd:Date/parent::abcd:Identification/parent::abcd:I
705 dentifications]">
706     <dc:contributor><xsl:value-of select="."/></dc:contributor>
707 </xsl:template>
708
709 <xsl:template match="abcd:Code[parent::abcd:Gathering]">
710     <dc:contributor><xsl:value-of select="."/></dc:contributor>
711 </xsl:template>
712
713 <xsl:template match="abcd:DateText[parent::abcd:DateTime/parent::abcd:Gathering]">
714     <xsl:comment>EDM</xsl:comment>
715     <dc:date><xsl:value-of select="."/></dc:date>
716 </xsl:template>
717
718 <xsl:template
719 match="abcd:ISODateTimeBegin[parent::abcd:DateTime/parent::abcd:Gathering]">
720     <xsl:comment>EDM</xsl:comment>
721     <dc:date><xsl:value-of select="."/></dc:date>
722 </xsl:template>
723
724 <xsl:template
725 match="abcd:ISODateTimeEnd[parent::abcd:DateTime/parent::abcd:Gathering]">
726     <xsl:comment>EDM</xsl:comment>
727     <dc:date><xsl:value-of select="."/></dc:date>
728 </xsl:template>

```



```

729
730 <xsl:template match="abcd:DatasetGUID[parent::abcd:DataSet/parent::abcd:DataSets]">
731     <dc:identifier><xsl:value-of select="."/></dc:identifier>
732 </xsl:template>
733
734 <xsl:template match="abcd:UnitGUID">
735     <dc:identifier><xsl:value-of select="."/></dc:identifier>
736 </xsl:template>
737
738 <xsl:template
739 match="abcd:AssociatedUnitID[parent::abcd:UnitAssociation/parent::abcd:Associations]">
740     <xsl:comment>EDM</xsl:comment>
741     <dc:relation><xsl:value-of select="."/></dc:relation>
742 </xsl:template>
743
744 <xsl:template
745 match="abcd:AssociatedUnitSourceInstitutionCode[parent::abcd:UnitAssociation/parent::abcd:
746 Associations]">
747     <xsl:comment>EDM</xsl:comment>
748     <dc:relation><xsl:value-of select="."/></dc:relation>
749 </xsl:template>
750
751 <xsl:template
752 match="abcd:AssociatedUnitSourceName[parent::abcd:UnitAssociation/parent::abcd:Associatio
753 ns]">
754     <xsl:comment>EDM</xsl:comment>
755     <dc:relation><xsl:value-of select="."/></dc:relation>
756 </xsl:template>
757
758 <xsl:template
759 match="abcd:AssociationType[parent::abcd:UnitAssociation/parent::abcd:Associations]">
760     <xsl:comment>EDM</xsl:comment>
761     <dc:relation><xsl:value-of select="."/></dc:relation>
762 </xsl:template>
763
764 <xsl:template
765 match="abcd:Comment[parent::abcd:UnitAssociation/parent::abcd:Associations]">
766     <xsl:comment>EDM</xsl:comment>
767     <dc:relation><xsl:value-of select="."/></dc:relation>
768 </xsl:template>
769
770 <xsl:template
771 match="abcd:AssemblageID[parent::abcd:UnitAssemblage/parent::abcd:Assemblage]">
772     <xsl:comment>EDM</xsl:comment>
773     <dc:relation><xsl:value-of select="."/></dc:relation>
774 </xsl:template>
775
776 <xsl:template
777 match="abcd:AssemblageName[parent::abcd:UnitAssemblage/parent::abcd:Assemblage]">
778     <xsl:comment>EDM</xsl:comment>
779     <dc:relation><xsl:value-of select="."/></dc:relation>
780 </xsl:template>

```

```

781
782 <xsl:template
783 match="abcd:Text[parent::abcd:TermsOfUse/parent::abcd:TermsOfUseStatements/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
784     <dc:rights><xsl:value-of select="."/></dc:rights>
785 </xsl:template>
786
787
788 <xsl:template
789 match="abcd:Text[parent::abcd:Copyright/parent::abcd:Copyrights/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
790     <dc:rights><xsl:value-of select="."/></dc:rights>
791 </xsl:template>
792
793
794 <xsl:template
795 match="abcd:Text[parent::abcd:Disclaimer/parent::abcd:Disclaimers/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
796     <dc:rights><xsl:value-of select="."/></dc:rights>
797 </xsl:template>
798
799
800 <xsl:template
801 match="abcd:Text[parent::abcd:Acknowledgement/parent::abcd:Acknowledgements/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
802     <dc:rights><xsl:value-of select="."/></dc:rights>
803 </xsl:template>
804
805
806 <xsl:template
807 match="abcd:URI[parent::abcd:Copyright/parent::abcd:Copyrights/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
808     <dc:rights><xsl:value-of select="."/></dc:rights>
809 </xsl:template>
810
811
812 <xsl:template
813 match="abcd:Text[parent::abcd:Citation/parent::abcd:Citations/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
814     <dc:rights><xsl:value-of select="."/></dc:rights>
815 </xsl:template>
816
817
818 <xsl:template
819 match="abcd:URI[parent::abcd:Disclaimer/parent::abcd:Disclaimers/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
820     <dc:rights><xsl:value-of select="."/></dc:rights>
821 </xsl:template>
822
823
824 <xsl:template
825 match="abcd:Text[parent::abcd:IPRDeclaration/parent::abcd:IPRDeclarations/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
826     <dc:rights><xsl:value-of select="."/></dc:rights>
827 </xsl:template>
828
829
830 <xsl:template
831 match="abcd:Text[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
832

```



```

833     <dc:rights><xsl:value-of select="."/></dc:rights>
834 </xsl:template>
835
836 <xsl:template
837 match="abcd:Details[parent::abcd:Acknowledgement/parent::abcd:Acknowledgements/parent:
838 :abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
839     <dc:rights><xsl:value-of select="."/></dc:rights>
840 </xsl:template>
841
842 <xsl:template
843 match="abcd:Text[parent::abcd:Copyright/parent::abcd:Copyrights/parent::abcd:IPR/parent::
844 abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
845     <dc:rights><xsl:value-of select="."/></dc:rights>
846 </xsl:template>
847
848 <xsl:template
849 match="abcd:Text[parent::abcd:TermsOfUse/parent::abcd:TermsOfUseStatements/parent::abc
850 d:IPR/parent::abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
851     <dc:rights><xsl:value-of select="."/></dc:rights>
852 </xsl:template>
853
854 <xsl:template
855 match="abcd:URI[parent::abcd:Acknowledgement/parent::abcd:Acknowledgements/parent::abc
856 cd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
857     <dc:rights><xsl:value-of select="."/></dc:rights>
858 </xsl:template>
859
860 <xsl:template
861 match="abcd:URI[parent::abcd:IPRDeclaration/parent::abcd:IPRDeclarations/parent::abcd:IPR
862 Statements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
863     <dc:rights><xsl:value-of select="."/></dc:rights>
864 </xsl:template>
865
866 <xsl:template
867 match="abcd:Details[parent::abcd:TermsOfUse/parent::abcd:TermsOfUseStatements/parent::
868 abcd:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
869     <dc:rights><xsl:value-of select="."/></dc:rights>
870 </xsl:template>
871
872 <xsl:template
873 match="abcd:Details[parent::abcd:Disclaimer/parent::abcd:Disclaimers/parent::abcd:IPRState
874 ments/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
875     <dc:rights><xsl:value-of select="."/></dc:rights>
876 </xsl:template>
877
878 <xsl:template
879 match="abcd:URI[parent::abcd:TermsOfUse/parent::abcd:TermsOfUseStatements/parent::abc
880 d:IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
881     <dc:rights><xsl:value-of select="."/></dc:rights>
882 </xsl:template>
883
884 <xsl:template

```

```

885 match="abcd:URI[parent::abcd:Citation/parent::abcd:Citations/parent::abcd:IPRStatements/p
886 arent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
887     <dc:rights><xsl:value-of select="."/></dc:rights>
888 </xsl:template>
889
890 <xsl:template
891 match="abcd:Details[parent::abcd:Copyright/parent::abcd:Copyrights/parent::abcd:IPRStatem
892 ents/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
893     <dc:rights><xsl:value-of select="."/></dc:rights>
894 </xsl:template>
895
896 <xsl:template
897 match="abcd:Details[parent::abcd:IPRDeclaration/parent::abcd:IPRDeclarations/parent::abcd:
898 IPRStatements/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
899     <dc:rights><xsl:value-of select="."/></dc:rights>
900 </xsl:template>
901
902 <xsl:template
903 match="abcd:Details[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements
904 /parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
905     <dc:rights><xsl:value-of select="."/></dc:rights>
906 </xsl:template>
907
908 <xsl:template
909 match="abcd:Details[parent::abcd:Citation/parent::abcd:Citations/parent::abcd:IPRStatement
910 s/parent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
911     <dc:rights><xsl:value-of select="."/></dc:rights>
912 </xsl:template>
913
914 <xsl:template
915 match="abcd:Text[parent::abcd:Copyright/parent::abcd:Copyrights/parent::abcd:IPRStatem
916 ts/parent::abcd:Unit]">
917     <dc:rights><xsl:value-of select="."/></dc:rights>
918 </xsl:template>
919
920 <xsl:template
921 match="abcd:Text[parent::abcd:Citation/parent::abcd:Citations/parent::abcd:IPRStatements/p
922 arent::abcd:Unit]">
923     <dc:rights><xsl:value-of select="."/></dc:rights>
924 </xsl:template>
925
926 <xsl:template match="abcd:Licenses[parent::abcd:IPRStatements]">
927     <dc:rights><xsl:value-of select="."/></dc:rights>
928 </xsl:template>
929
930 <xsl:template
931 match="abcd:Text[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements/p
932 arent::abcd:Unit]">
933     <dc:rights><xsl:value-of select="."/></dc:rights>
934 </xsl:template>
935
936 <xsl:template

```

```

937 match="abcd:Text[parent::abcd:TermsOfUse/parent::abcd:TermsOfUseStatements/parent::abc
938 d:IPRStatements/parent::abcd:Unit]">
939     <dc:rights><xsl:value-of select="."/></dc:rights>
940 </xsl:template>
941
942 <xsl:template
943 match="abcd:Title[parent::abcd:Representation/parent::abcd:Description/parent::abcd:Metada
944 ta/parent::abcd:DataSet/parent::abcd:DataSets]">
945     <dc:source><xsl:value-of select="."/></dc:source>
946 </xsl:template>
947
948 <xsl:template
949 match="abcd:PreviousUnitsText[parent::abcd:History/parent::abcd:SpecimenUnit]">
950     <dcterms:provenance><xsl:value-of select="."/></dcterms:provenance>
951 </xsl:template>
952
953 <xsl:template
954 match="abcd:Format[parent::abcd:MultiMediaObject/parent::abcd:MultiMediaObjects]">
955     <dc:type><xsl:value-of select="."/></dc:type>
956     <europeana:type><xsl:value-of select="."/></europeana:type>
957 </xsl:template>
958
959 <xsl:template
960 match="abcd:URI[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements/pa
961 rent::abcd:Metadata/parent::abcd:DataSet/parent::abcd:DataSets]">
962     <europeana:rights><xsl:value-of select="."/></europeana:rights>
963 </xsl:template>
964
965 <xsl:template
966 match="abcd:URI[parent::abcd:License/parent::abcd:Licenses/parent::abcd:IPRStatements/pa
967 rent::abcd:Unit]">
968     <europeana:rights><xsl:value-of select="."/></europeana:rights>
969 </xsl:template>
970
971 <xsl:template match="abcd:MeasurementOrFactAtomised">
972     <dc:spatial>
973     <xsl:if test="abcd:LowerValue">
974         <xsl:value-of select="abcd:LowerValue/text()"></xsl:value-of>
975         <xsl:if test="abcd:LowerValue/abcd:accuracy">
976             <xsl:text>±</xsl:text>
977             <xsl:value-of select="abcd:LowerValue/abcd:accuracy"></xsl:value-of>
978         </xsl:if>
979         <xsl:value-of select="abcd:UnitOfMeasurement"></xsl:value-of>
980     <xsl:if test="not(abcd:UnitOfMeasurement)">
981         <xsl:text>m</xsl:text>
982     </xsl:if>
983 </xsl:if>
984 <xsl:if test="abcd:LowerValue and abcd:UpperValue">
985     <xsl:text> - </xsl:text>
986 </xsl:if>
987 <xsl:if test="abcd:UpperValue">
988     <xsl:value-of select="abcd:UpperValue/text()"></xsl:value-of>

```



```
989     <xsl:if test="abcd:UpperValue/abcd:accuracy">
990     <xsl:text>±</xsl:text>
991     <xsl:value-of select="abcd:UpperValue/abcd:accuracy"></xsl:value-of>
992     </xsl:if>
993     <xsl:value-of select="abcd:UnitOfMeasurement"></xsl:value-of>
994     <xsl:if test="not(abcd:UnitOfMeasurement)">
995         <xsl:text>m</xsl:text>
996     </xsl:if>
997 </xsl:if>
998 </dc:spatial>
999 </xsl:template>
1000
1001 </xsl:stylesheet>
```