ARCHIVES PORTAL EUROPE

europeana
think culture

Fondly Collisions: Archival hierarchy and the Europeana Data Model

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ICTPSP

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Overview

- The Archives Portal Europe - Introduction
  - Projects and content
  - Standards and tools
- Europeana - Introduction
  - Content and ecosystem
- Europeana - Data models
  - From Europeana Semantic Elements (ESE) to the Europeana Data Model (EDM)
  - Semantic layer
  - Representing hierarchies

Overview

- An example
  - Representation in EDM
  - How to get there - conversion in the Archives Portal Europe's dashboard
  - From apeEAD to EDM - a comparison
- Remaining challenges
- Preview

The Archives Portal Europe

→ The projects behind

- APEnet (2009-2012) with 13 partners (incl. Europeana), extended to 19 partners until the end of the project
- APEx (2012-2015) with 29 partners, extended to currently 33 partners

→ After the projects: Archives Portal Europe Foundation to maintain and enhance the portal, its network and its position within the European (digital) cultural heritage environment

The Archives Portal Europe

→ The current status

- 30 countries represented, 27 providing content
- 683 institutions, 435 providing content
- more than 50M descriptive units in 335K+ EAD files, 2M linked with digital archival objects
- 1044 descriptions of records creators

The Archives Portal Europe

→ The use of standards - profiles for central use

- apeEAD for finding aids, holdings guides and source guides
- apeEAC-CPF (Encoded Archival Context - Corporate Bodies,
  Persons, and Families) for descriptions of records creators
- EAG 2012 (Encoded Archival Guide) - for descriptions of archival institutions and their services
- future addition: apeMETS (Metadata Encoding and Transmission Standard) and apeMETSRights for structured information on digital archival objects

The Archives Portal Europe

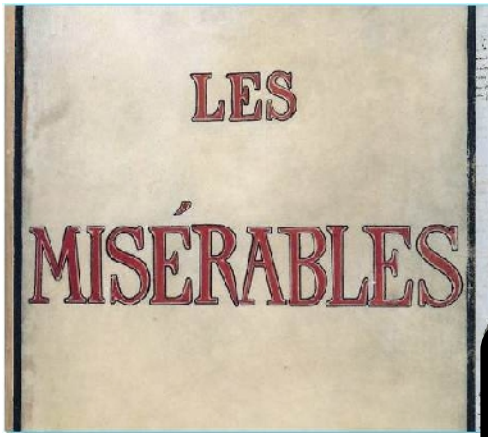
→ The use of standards - decentralised responsibility

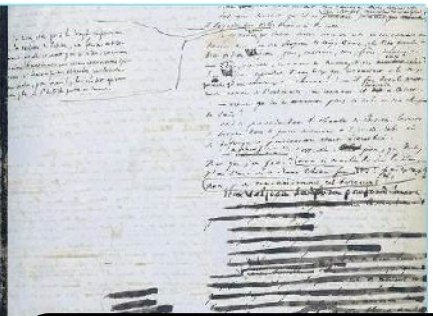
- local and central tools for conversion and validation of data
- local and central tools for creation/edition of data (especially EAG 2012 and apeEAC-CPF)
- central tool for delivery and processing within the Archives Portal Europe
- central tool for conversion and delivery to Europeana

Europeana.eu, Europe's cultural heritage portal

32M objects from 2,200 galleries, museums, archives and libraries

Text





Video

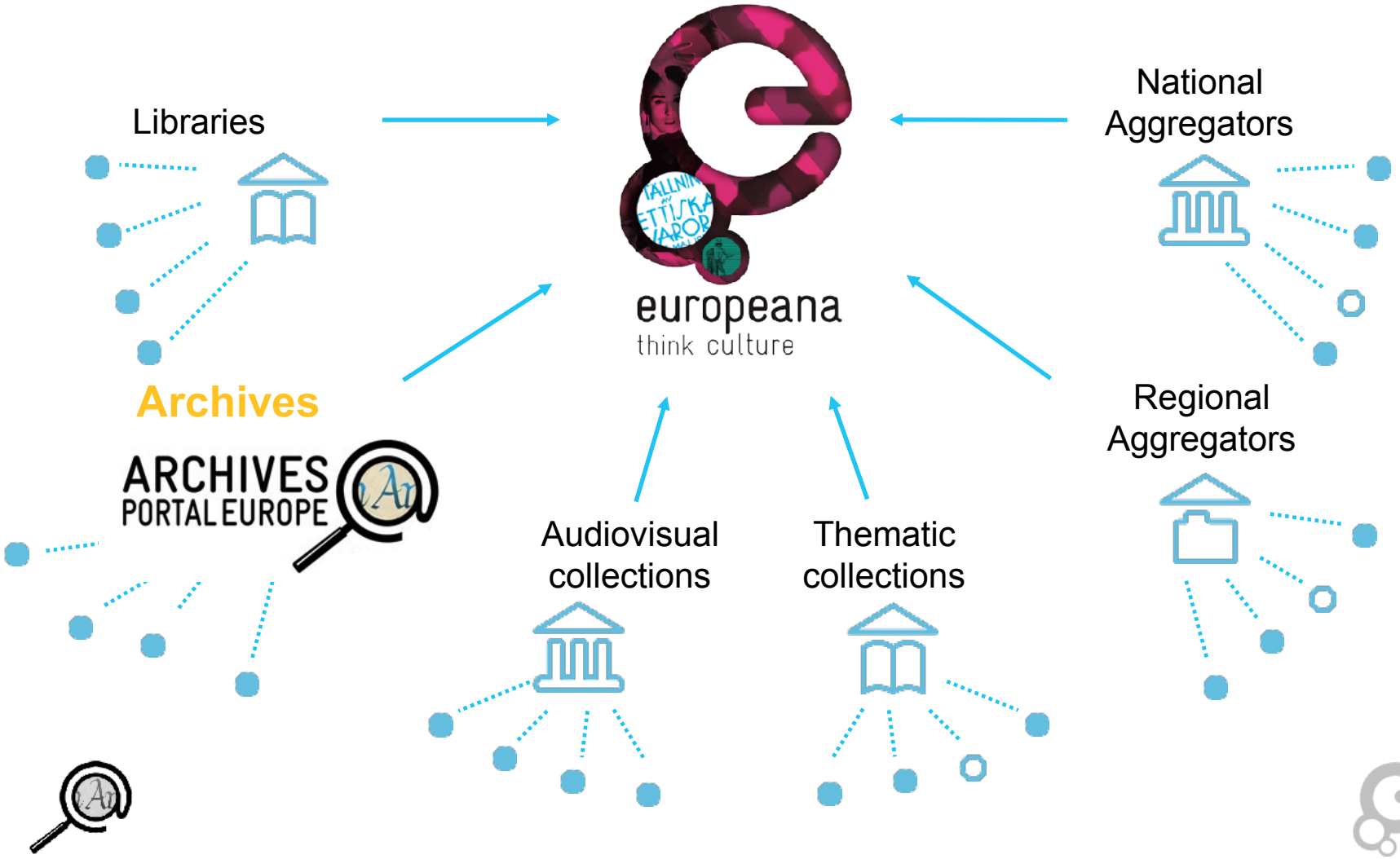
CC PUBLIC DOMAIN

Image

3D

Sound

Europeana and its ecosystem



Represent complex data structure: the challenge

→ Initial data model: Europeana Semantic Elements (ESE) and its difficult integration with EAD

→ **ESE**

- flat model based on Dublin Core
- item-centric model
- no links between cultural heritage objects (CHO) or between objects and contextual entities

→ **EAD**

- highly structured model
- hierarchy containing descriptions of digital and non-digital items/objects
- nested items/objects with references to contextual entities

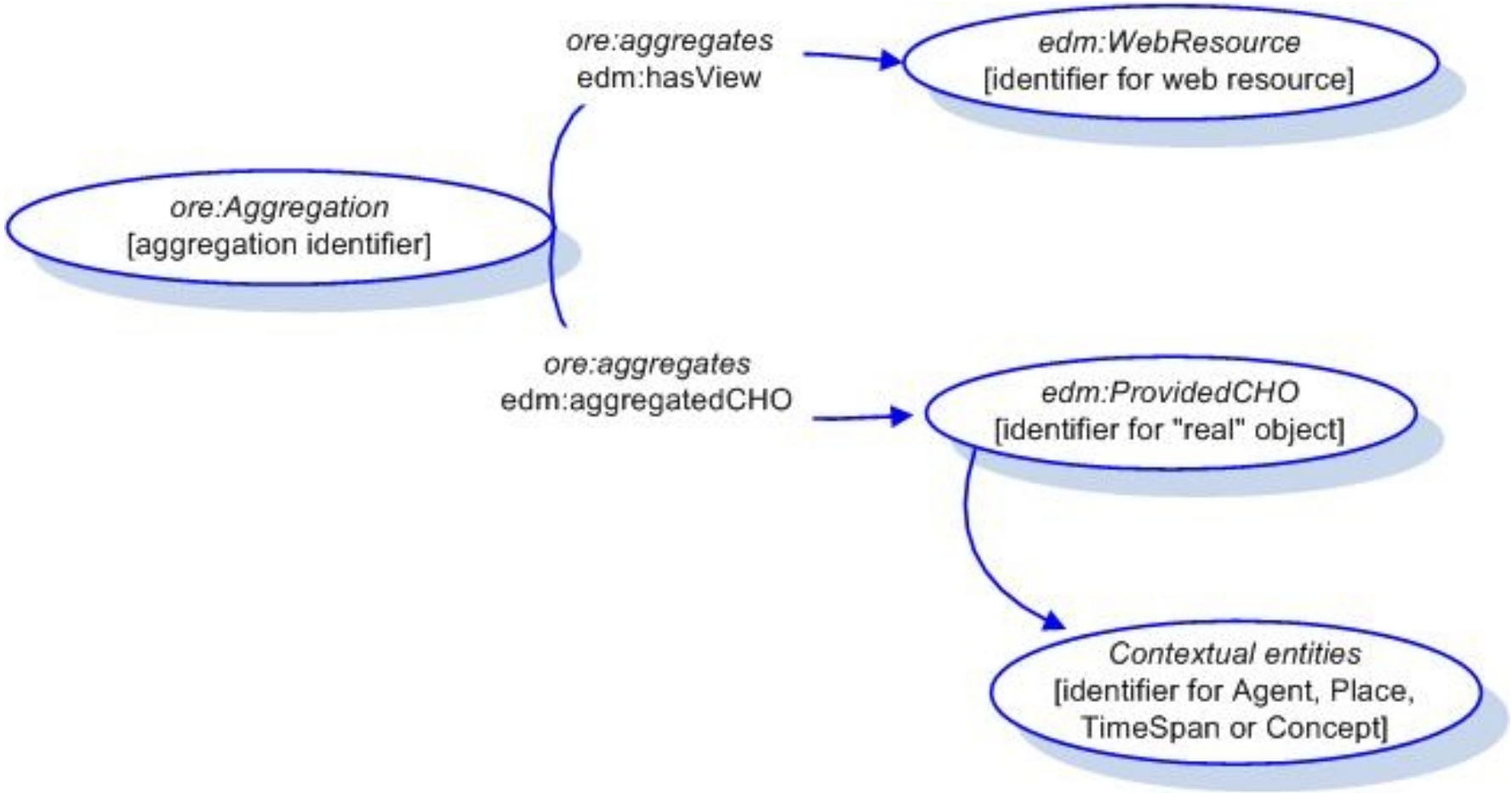
A new data framework: Europeana Data Model (EDM)

- A data model that re-uses several existing Semantic Web-based models

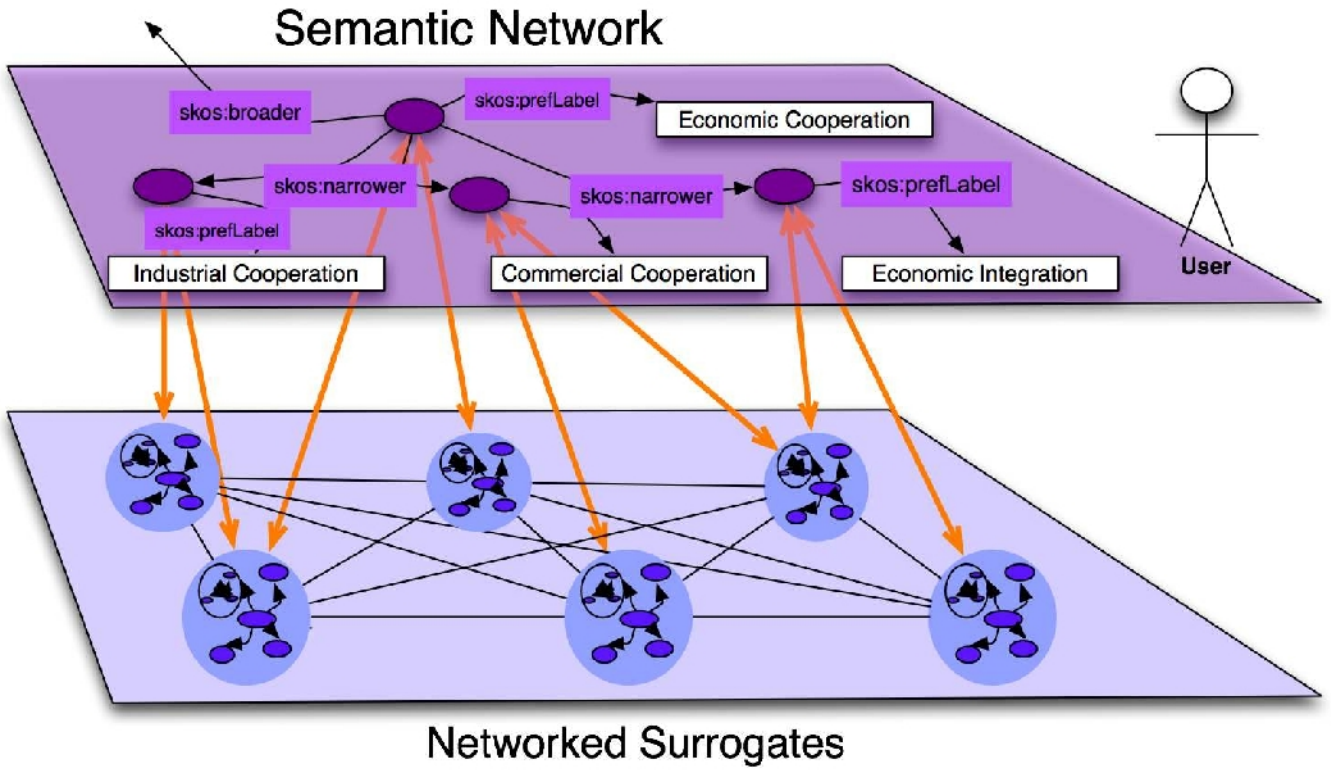
- Adopt Semantic Web representation principles (RDF)
  - Re-use and mix different vocabularies together
  - Preserve original data and still allow for interoperability

EDM basic pattern

- A data provider submits to Europeana a “bundle” of an object and its digital representation(s)



Connect Archives to the other domains



→ Create a “semantic layer” on top of cultural heritage objects

Representing hierarchies in EDM

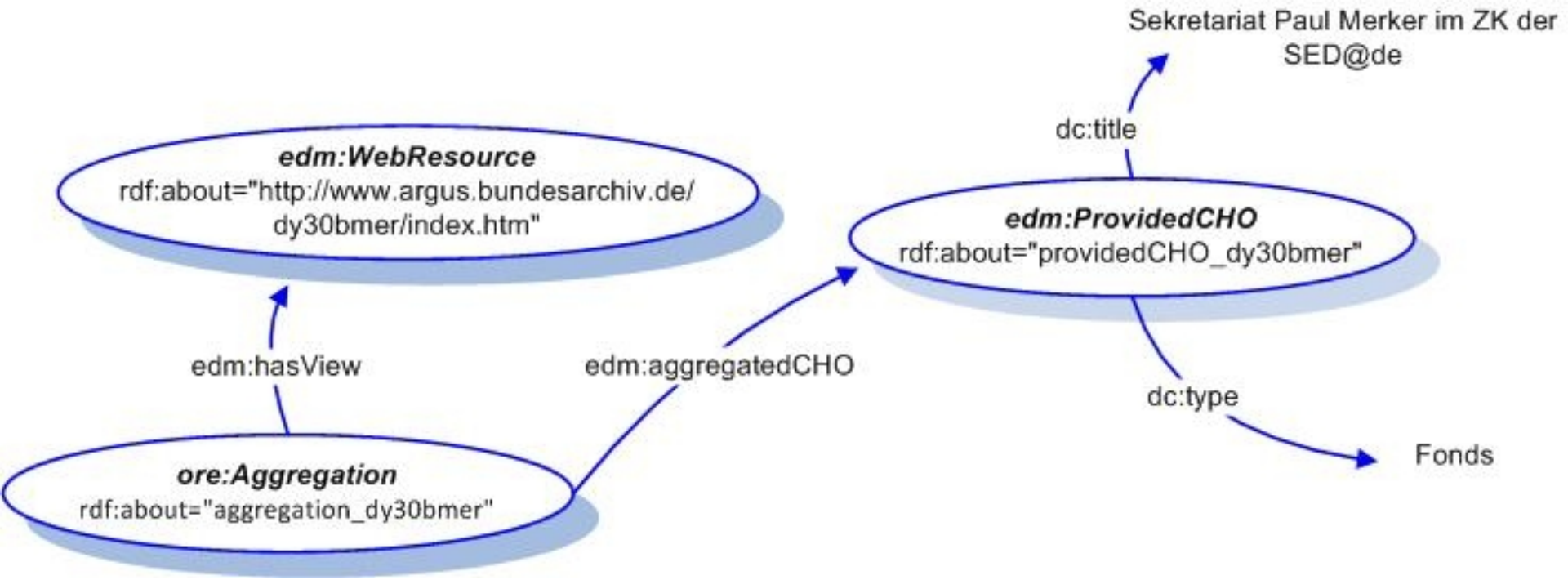
→ Hierarchies in EDM can be built at the level of

- ProvidedCHO
  - the hierarchy focuses on the description of the semantic structure of the object (fonds, series, subseries, file, item)
- WebResources (images, scans)
  - hierarchies of the digitised representations of a ProvidedCHO
- Contextual resources
  - hierarchies of “non-information resources” or contextual resources such as edm:Agent, edm:Place, edm:TimeSpan, edm:Concept, edm:Event

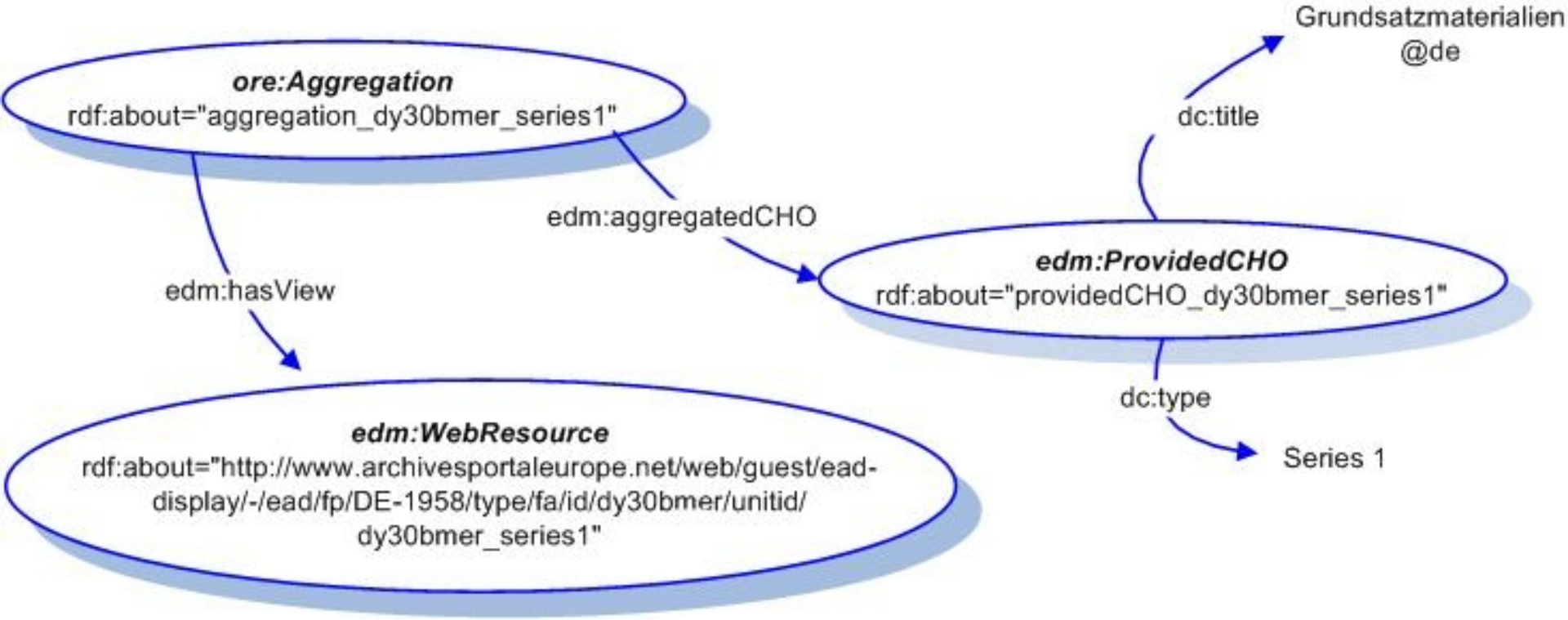
An example

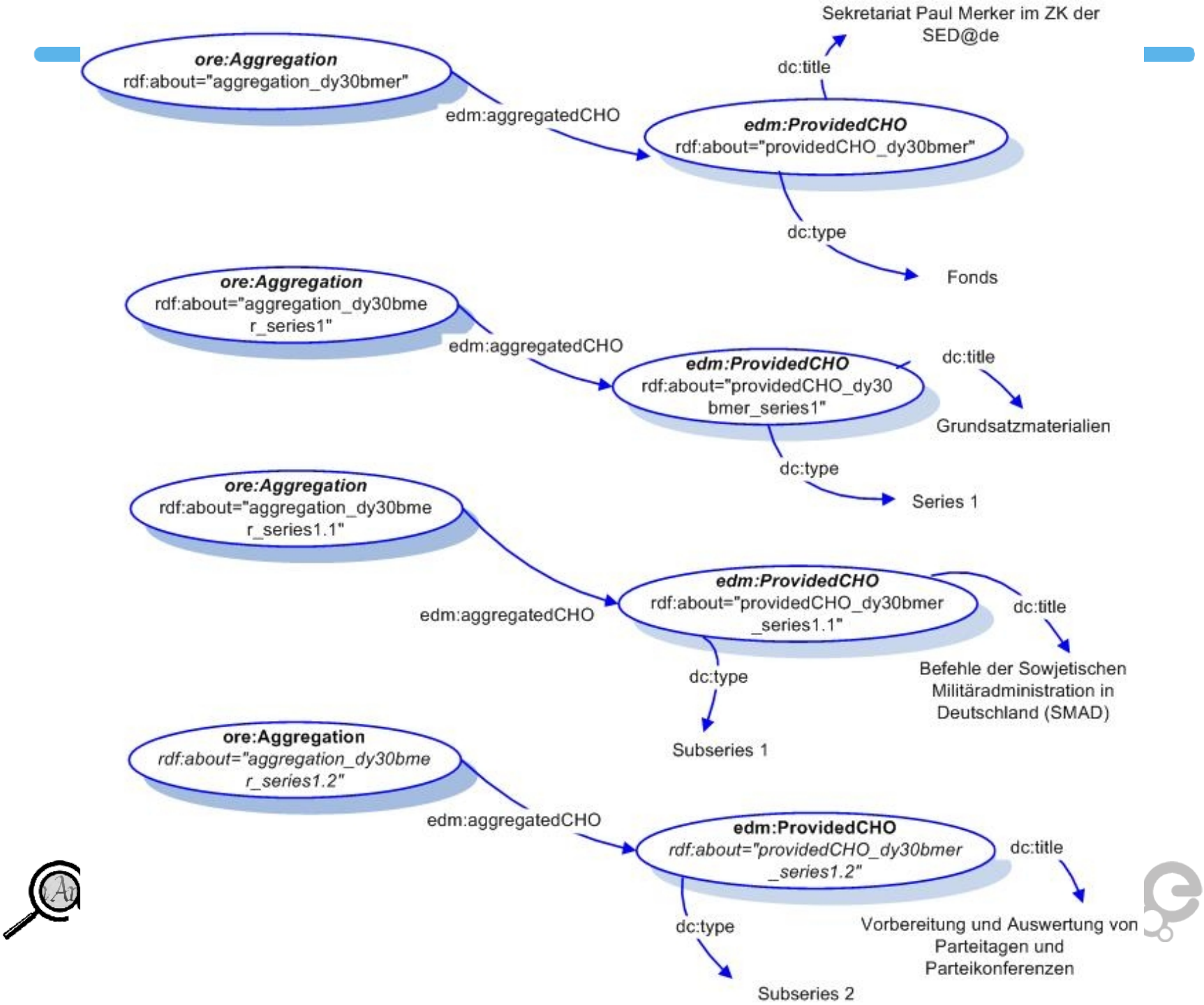
- Sekretariat Paul Merker im ZK der SED
  - DY 30 Sekretariat Paul Merker im ZK der SED
    - Grundsatzmaterialien
      - Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)
        - Befehle der SMAD
          - Befehle der SMAD
          - Befehle der SMAD
        - Durchführung des Befehls der SMAD Nr. 11 über die Demontage in der sowjetischen Besatzungszone
        - Durchführung der Befehle der SMAD Nr. 124 und 126 über die Sequestrierung, Konfiskation in der sowjetischen Besatzungszone
        - Durchführung des Befehls der SMAD Nr. 201 über die Entnazifizierung in der sowjetischen Besatzungszone
        - Gesetzentwürfe und Gesetze zur Überführung von Bodenschätzen und der Bergbauindustrie in Eigentum der Länder der sowjetischen Besatzungszone
        - Informationen über das Gesetz Nr. 45 des Alliierten Kontrollrates über Bauerngerichtsbarkeit, Bodenrecht
        - Vorbereitung und Auswertung von Parteitagen

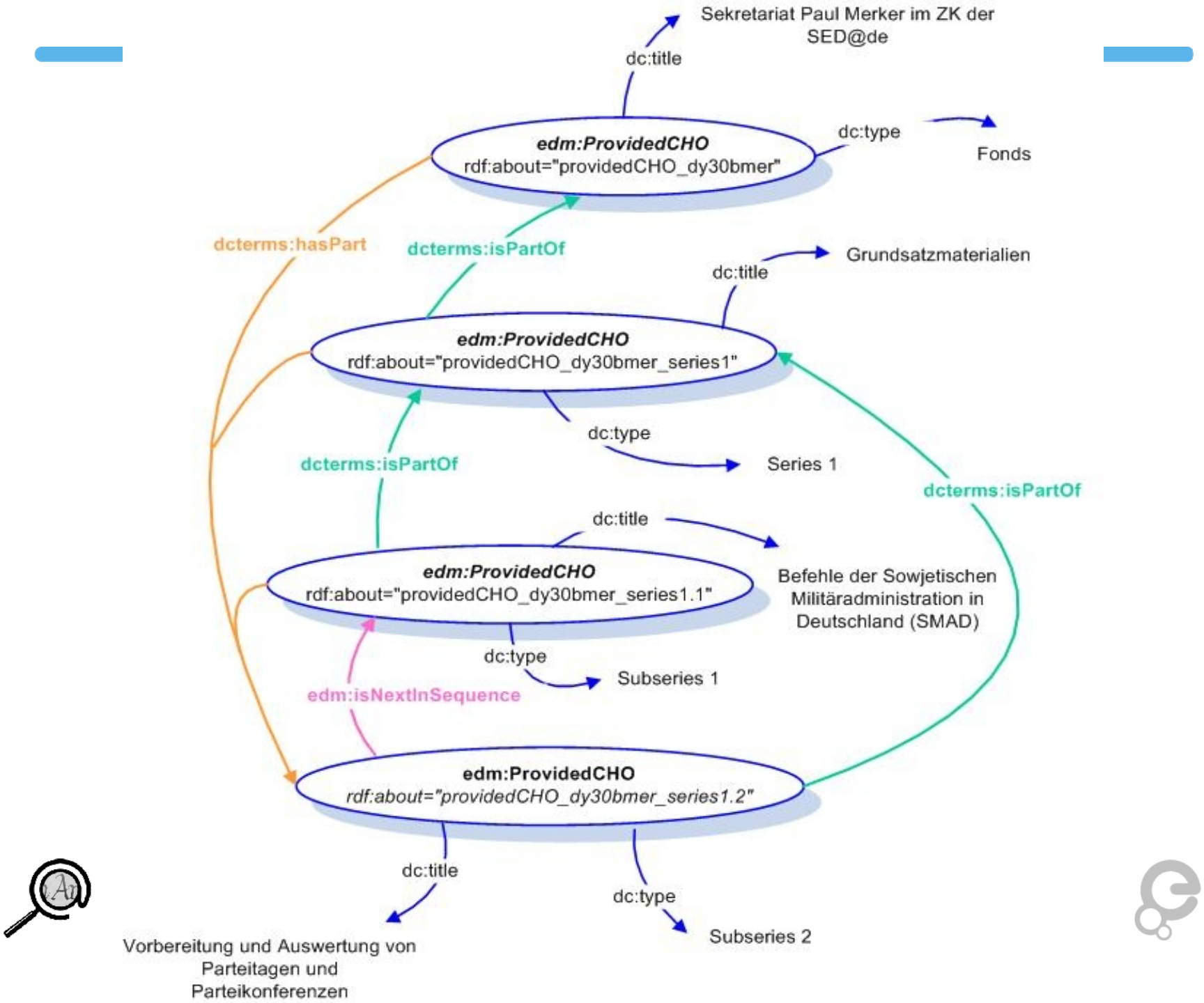
An example - representation in EDM



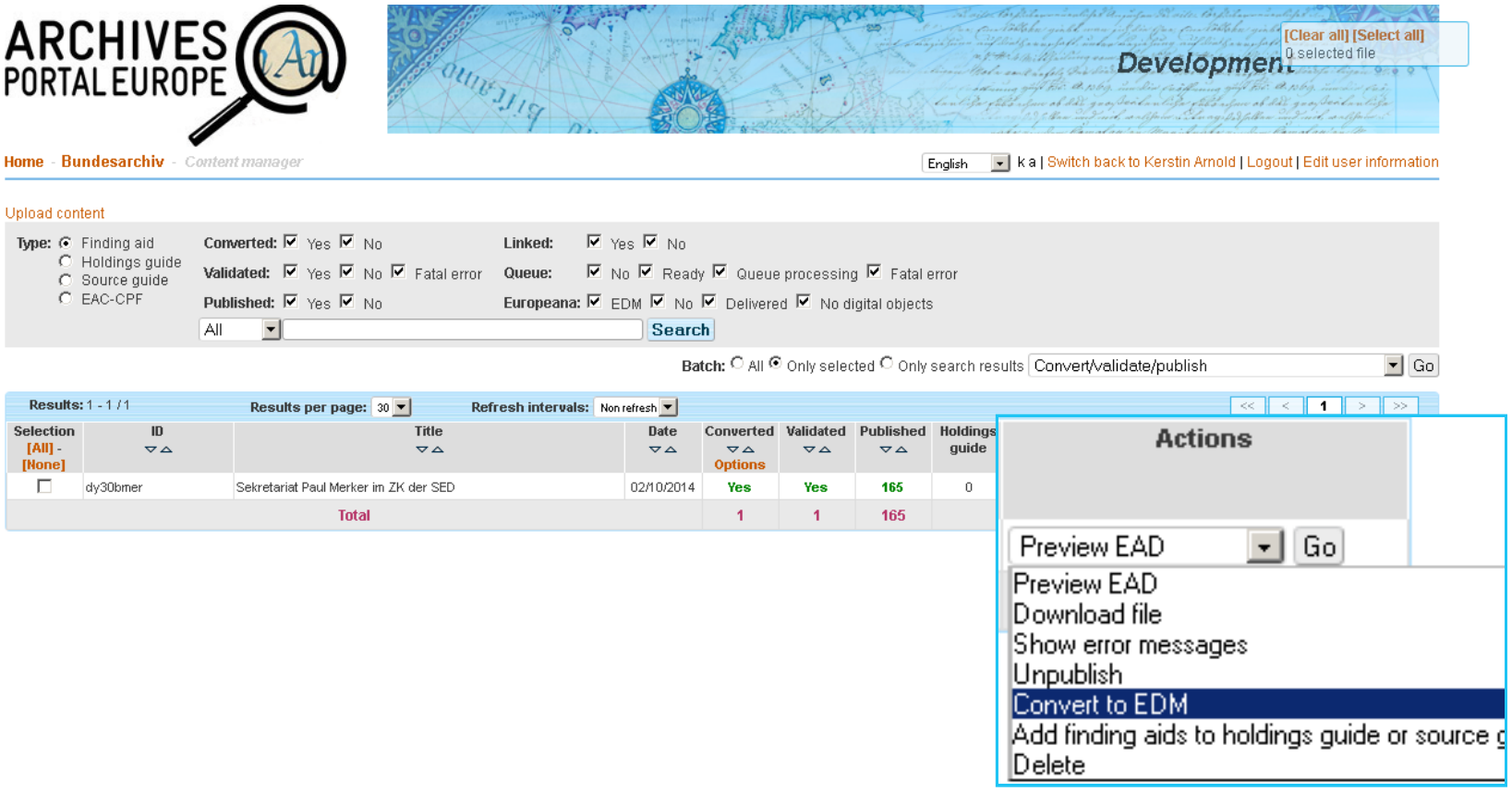
An example - representation in EDM



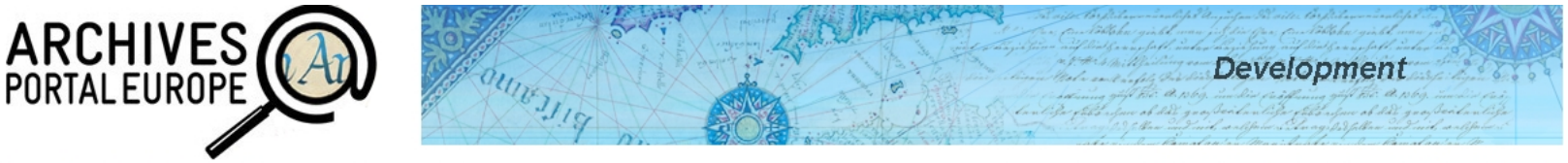

ore:Aggregation
rdf:about="aggregation_dy30bmer"
edm:aggregatedCHO
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer"
dc:title
Sekretariat Paul Merker im ZK der SED@de
dc:type
Fonds
ore:Aggregation
rdf:about="aggregation_dy30bmer_series1"
edm:aggregatedCHO
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1"
dc:title
Grundsatzmaterialien
dc:type
Series 1
ore:Aggregation
rdf:about="aggregation_dy30bmer_series1.1"
edm:aggregatedCHO
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.1"
dc:title
Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)
dc:type
Subseries 1
ore:Aggregation
rdf:about="aggregation_dy30bmer_series1.2"
edm:aggregatedCHO
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.2"
dc:title
Vorbereitung und Auswertung von Parteitagen und Parteikonferenzen
dc:type
Subseries 2


Sekretariat Paul Merker im ZK der SED@de
dc:title
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer"
dc:type
Fonds
dcterms:hasPart
dcterms:isPartOf
dc:title
Grundsatzmaterialien
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1"
dc:type
Series 1
dcterms:isPartOf
dcterms:isPartOf
dc:title
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.1"
Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)
dc:type
Subseries 1
edm:isNextInSequence
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.2"
dc:title
dc:type
Subseries 2
Vorbereitung und Auswertung von Parteitagen und Parteikonferenzen

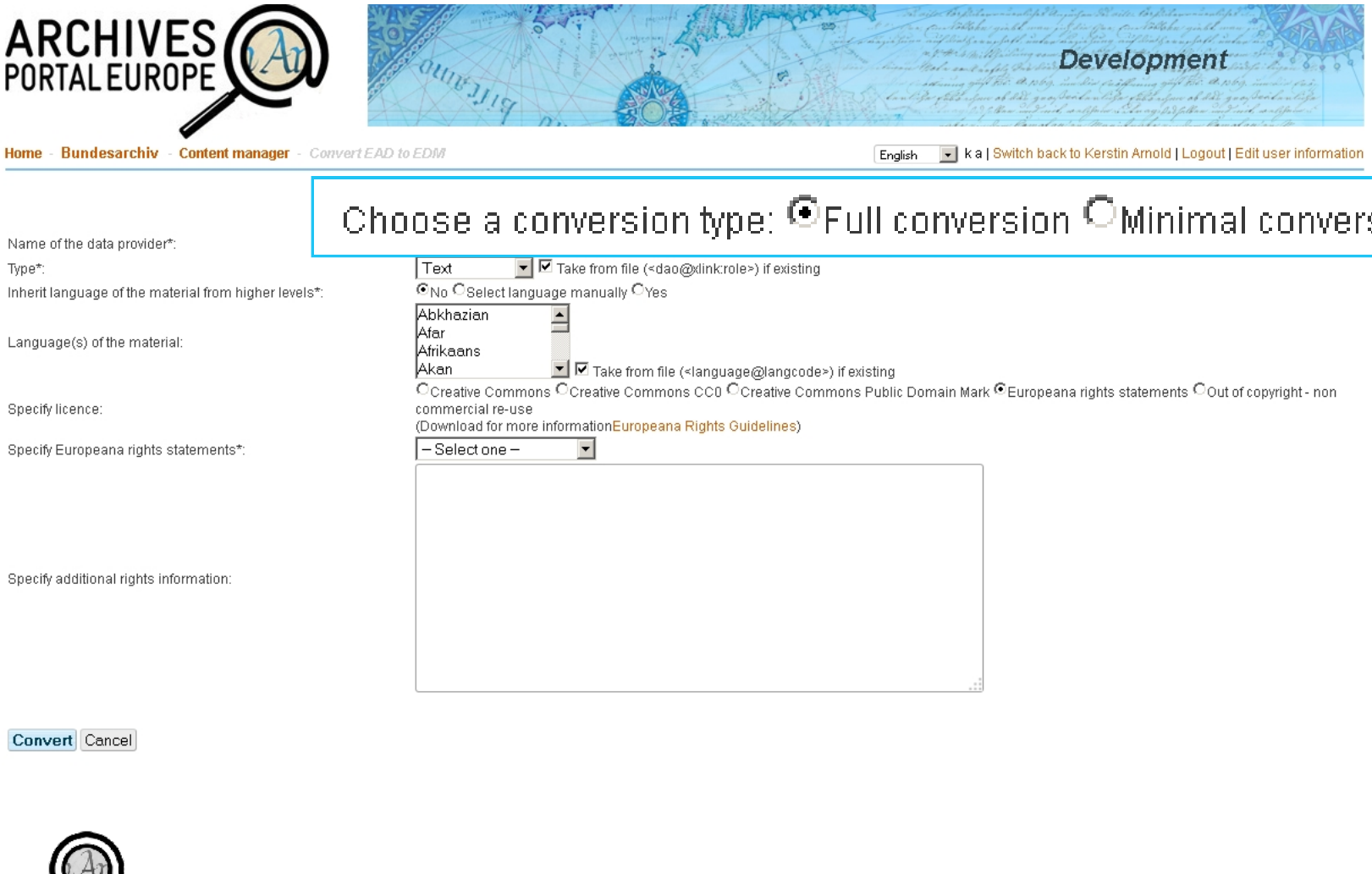
An example – Converting a finding aid to EDM



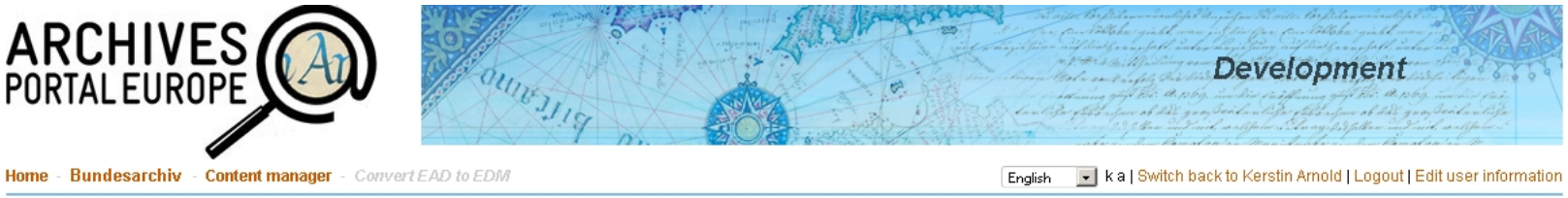
An example – Converting a finding aid to EDM



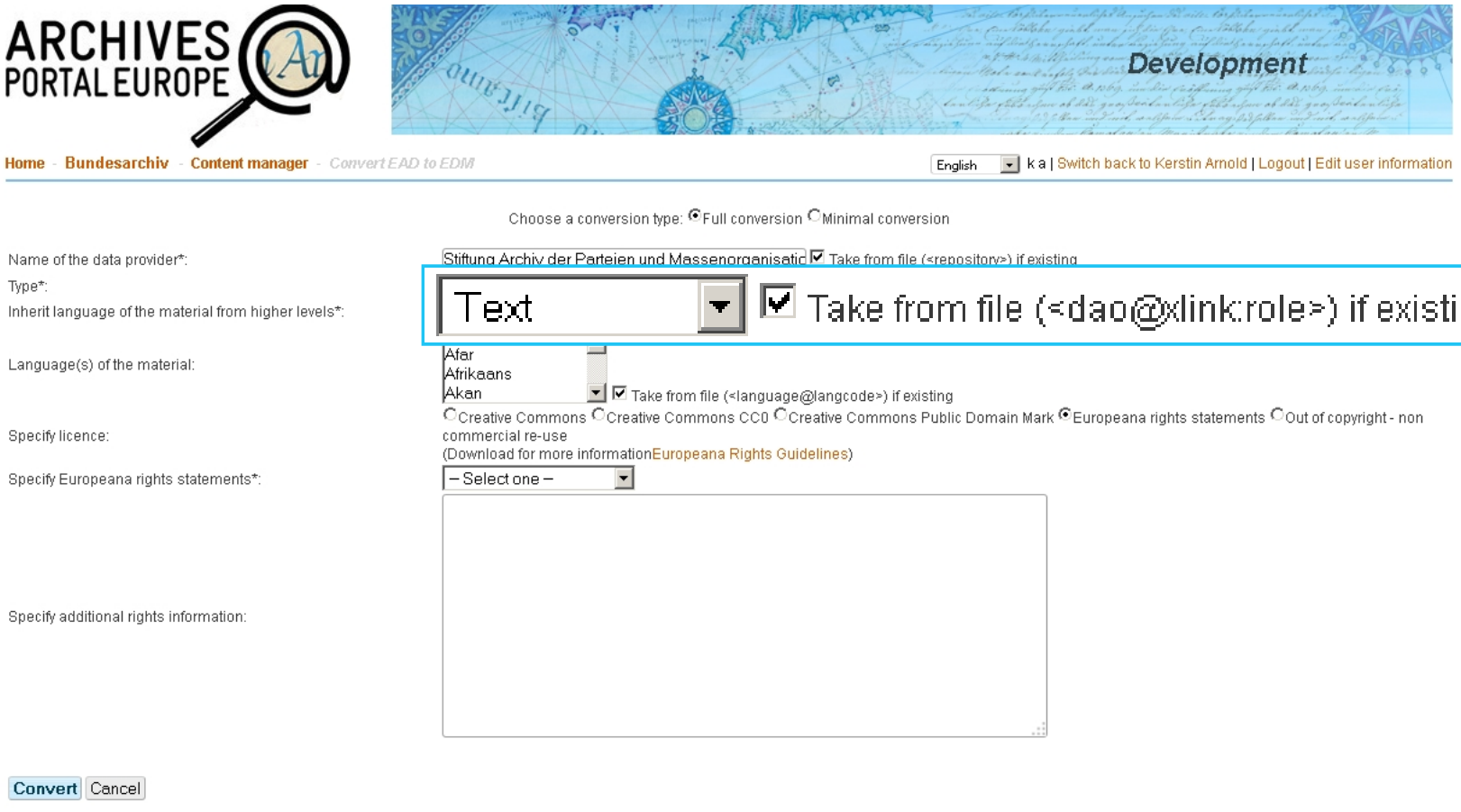
An example – Converting a finding aid to EDM



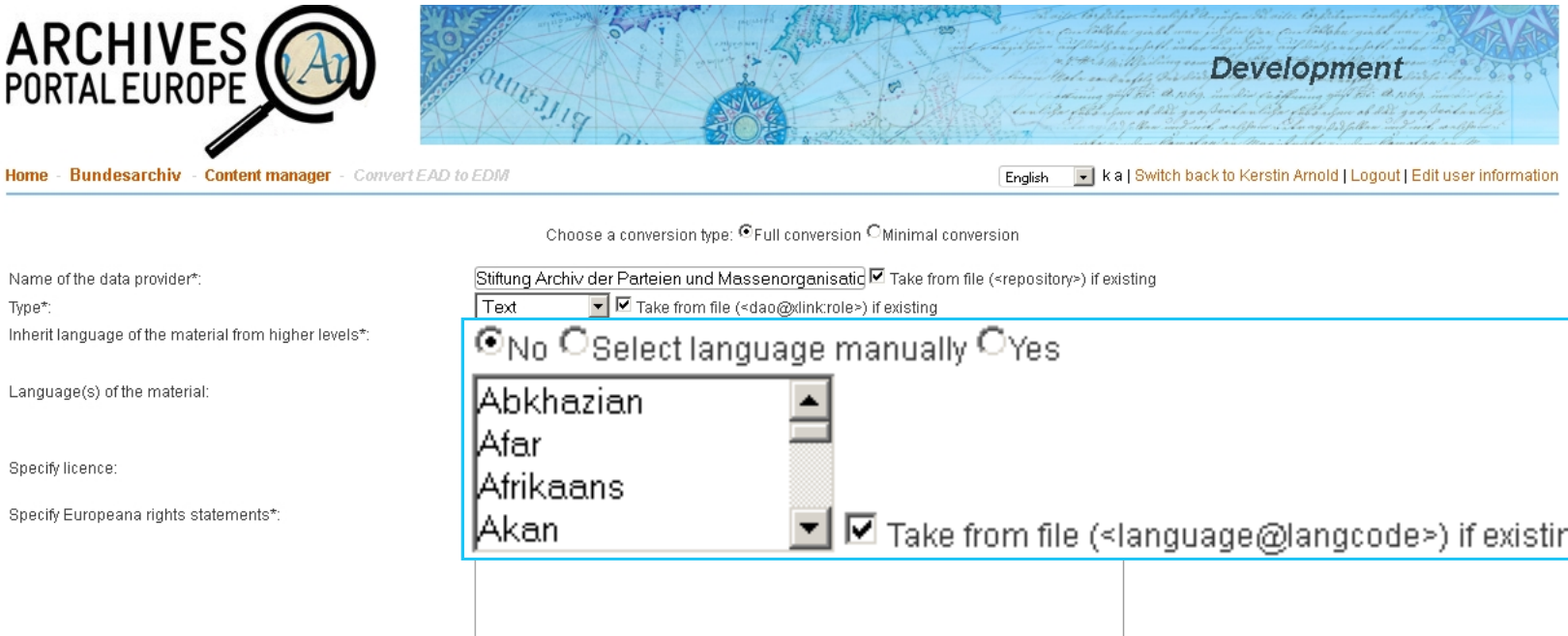
An example – Converting a finding aid to EDM



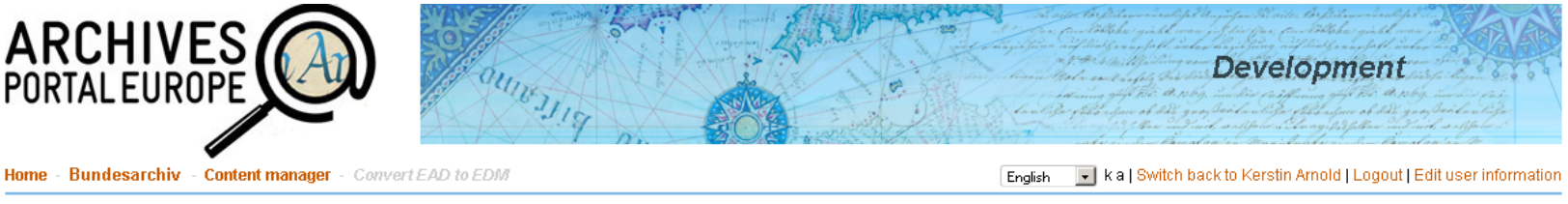
An example – Converting a finding aid to EDM



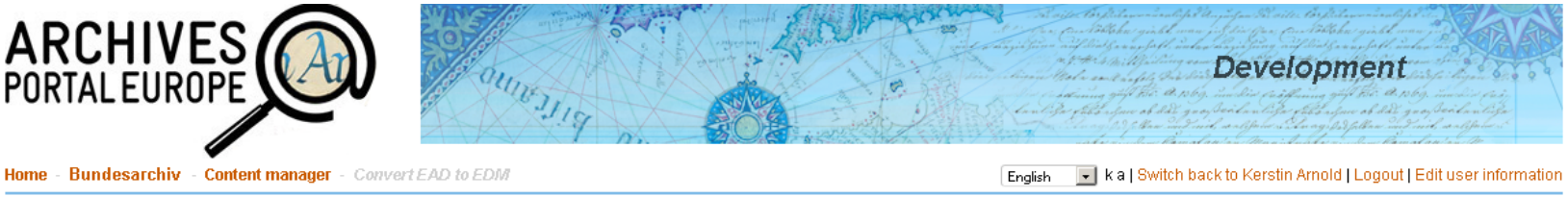
An example – Converting a finding aid to EDM



An example - Converting a finding aid to EDM



An example – Converting a finding aid to EDM

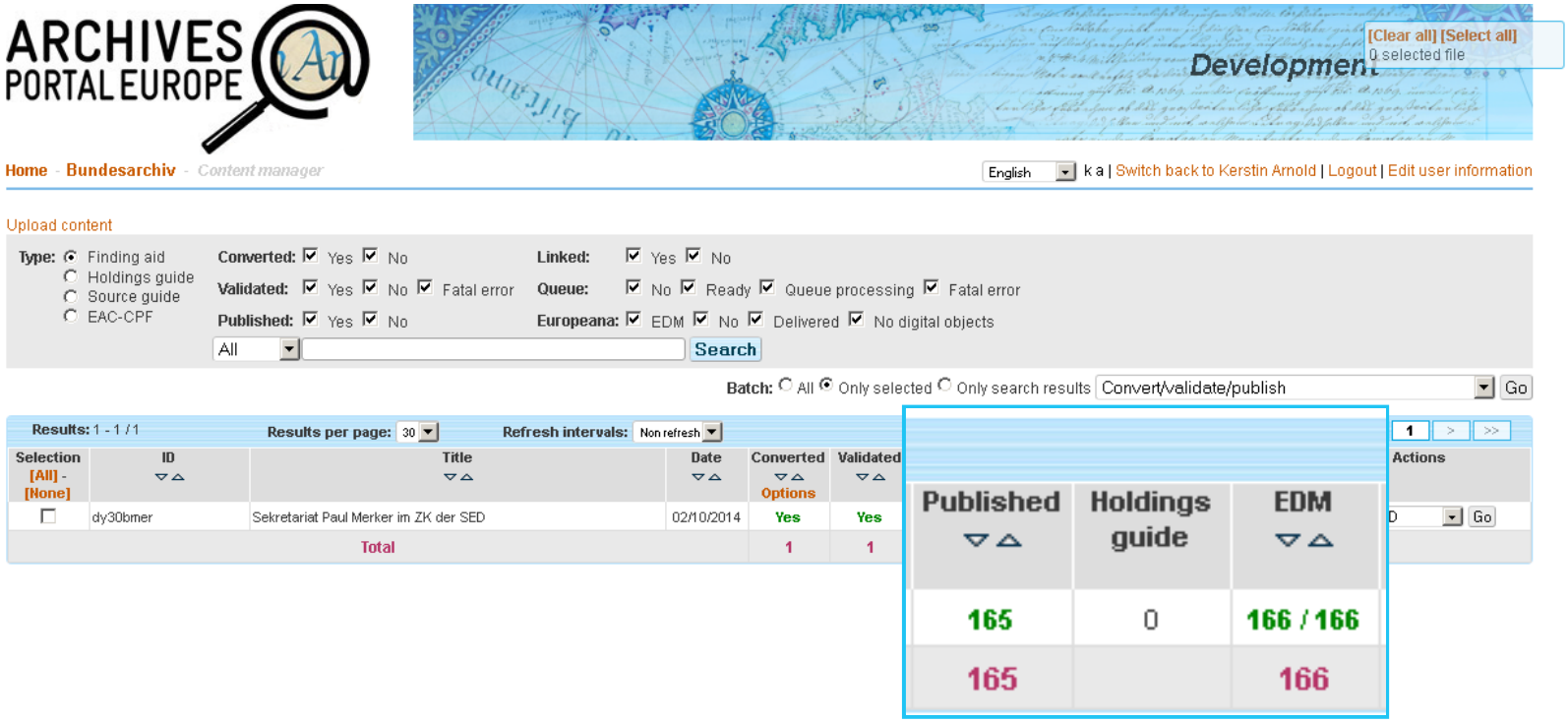


An example - Converting a finding aid to EDM

→ quick note on future extensions

- include apeEAC-CPF for conversion to edm:Agent
- use apeMETS/apeMETSRights for more detailed input on digital archival objects, their relations and their rights status

An example – Converting a finding aid to EDM



An example - apeEAD / fonds

```
<eadheader countryencoding="iso3166-1" dateencoding="iso8601" langencoding="iso639-2b"
           repositoryencoding="iso15511"
           scriptencoding="iso15924"
           relatedencoding="MARC21">
   <eadid identifier="DE-1958_dy30bmer" countrycode="DE" mainagencycode="DE-1958"
          url="http://www.argus.bundesarchiv.de/dy30bmer/index.htm">dy30bmer</eadid>
   <filedesc> [11 lines]
   <profiledesc> [2 lines]
   <revisiondesc>
      <change>
         <date/>
         <item>Converted_apeEAD_version_1.6.0.2</item>
      </change>
   </revisiondesc>
</eadheader>
<archdesc level="fonds" type="inventory" encodinganalog="3.1.4"
          relatedencoding="ISAD(G)v2">
   <did>
      <unitid encodinganalog="3.1.1" type="call number">DY 30</unitid>
      <unittitle encodinganalog="3.1.2">Sekretariat Paul Merker im ZK der SED </unittitle>
      <unitdate calendar="gregorian" era="ce" normal="1945/1950" encodinganalog="3.1.3">1945 - 1950</unitdate>
      <repository>Stiftung Archiv der Parteien und Massenorganisationen der DDR im Bundesarchiv</repository>
   </did>
   <scopecontent encodinganalog="summary"> [3 lines]
   <scopecontent encodinganalog="summary"> [11 lines]
```

An example - EDM / fonds

```
<ore:Aggregation rdf:about="aggregation_dy30bmer">
   <edm:aggregatedCHO rdf:resource="providedCHO_dy30bmer"/>
   <edm:dataProvider>Stiftung Archiv der Parteien und Massenorganisationen der DDR im
      Bundesarchiv</edm:dataProvider>
   <edm:isShownAt rdf:resource="http://www.argus.bundesarchiv.de/dy30bmer/index.htm"/>
   <edm:isShownBy
      rdf:resource="http://www.archivesportaleurope.net/Portal-theme/images/ape/icons/dao_types/europeana/text.png"/>
   <edm:provider>Archives Portal Europe</edm:provider>
   <edm:rights rdf:resource="http://creativecommons.org/publicdomain/zero/1.0/"/>
</ore:Aggregation>
<edm:ProvidedCHO rdf:about="providedCHO_dy30bmer">
   <dc:description>Kurzbeschreibung: - Überliefert sind u. a. Materialien der führenden [4 lines]
   <dc:description> Paul Merker (1894-1969), ehemals führender KPD-Funktionär, wurde 1946 nach [27 lines]
   <dc:identifier>DY 30</dc:identifier>
   <dc:language>de</dc:language>
   <dc:subject>Fonds</dc:subject>
   <dc:title>Sekretariat Paul Merker im ZK der SED</dc:title>
   <dc:type>Fonds</dc:type>
   <dcterms:temporal>1945 - 1950</dcterms:temporal>
   <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource rdf:about="http://www.argus.bundesarchiv.de/dy30bmer/index.htm">
   <dc:description>Fonds</dc:description>
   <edm:rights rdf:resource="http://creativecommons.org/publicdomain/zero/1.0/"/>
</edm:WebResource>
```

An example - EDM / fonds

```
<ore:Aggregation rdf:about="aggregation_dy30bmer">
   <edm:aggregatedCHO rdf:resource="providedCHO_dy30bmer"/>
   <edm:dataProvider>Stiftung Archiv der Parteien und Massenorganisationen der DDR im
      Bundesarchiv</edm:dataProvider>
   <edm:isShownAt rdf:resource="http://www.argus.bundesarchiv.de/dy30bmer/index.htm"/>
   <edm:isShownBy
      rdf:resource="http://www.archivesportaleurope.net/Portal-theme/images/ape/icons/dao_types/europeana/text.png"/>
   <edm:provider>Archives Portal Europe</edm:provider>
   <edm:rights rdf:resource="http://creativecommons.org/publicdomain/zero/1.0/"/>
</ore:Aggregation>
<edm:ProvidedCHO rdf:about="providedCHO_dy30bmer">
   <dc:description>Kurzbeschreibung: - Überliefert sind u. a. Materialien der führenden [4 lines]
   <dc:description> Paul Merker (1894-1969), ehemals führender KPD-Funktionär, wurde 1946 nach [27 lines]
   <dc:identifier>DY 30</dc:identifier>
   <dc:language>de</dc:language>
   <dc:subject>Fonds</dc:subject>
   <dc:title>Sekretariat Paul Merker im ZK der SED</dc:title>
   <dc:type>Fonds</dc:type>
   <dcterms:temporal>1945 - 1950</dcterms:temporal>
   <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource rdf:about="http://www.argus.bundesarchiv.de/dy30bmer/index.htm">
   <dc:description>Fonds</dc:description>
   <edm:rights rdf:resource="http://creativecommons.org/publicdomain/zero/1.0/"/>
</edm:WebResource>
```

An example - apeEAD / hierarchy

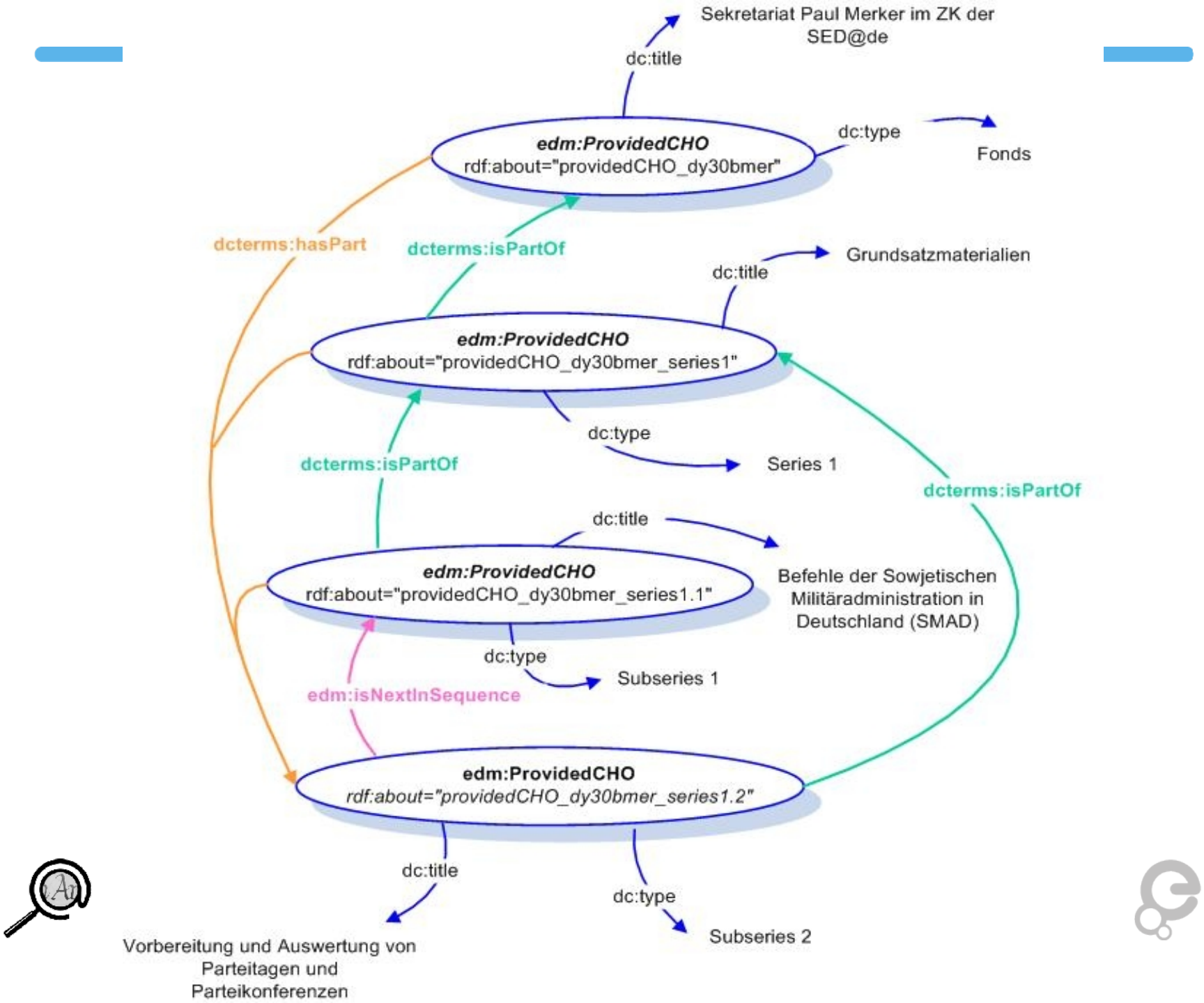
```
<c level="series" id="dle72" encodinganalog="3.1.4">
    <did>
        <unittitle encodinganalog="3.1.2">Grundsatzmaterialien</unittitle>
    </did>
    <c level="series" id="dle76" encodinganalog="3.1.4">
        <did>
            <unittitle encodinganalog="3.1.2">Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)</unittitle>
        </did>
        <c level="subseries" id="dle80" encodinganalog="3.1.4">
            <did>
                <unitid type="call number" encodinganalog="3.1.1">DY 30/IV 2/2.022/1 bis DY 30/IV 2/2.022/2</unitid>
                <unittitle encodinganalog="3.1.2">Befehle der SMAD</unittitle>
                <unitdate encodinganalog="3.1.3" era="ce" calendar="gregorian"
                          normal="1945-01-01/1949-12-31">1945 - 1949</unitdate>
                <origination encodinganalog="3.2.1" label="final">Sekretariat Paul Merker</origination>
            </did>
            <c level="file" id="DY_30_IV_2_2.022_1" encodinganalog="3.1.4">
                <did>
                    <unitid type="call number" encodinganalog="3.1.1">DY 30/IV 2/2.022/1</unitid>
                    <unittitle encodinganalog="3.1.2">Befehle der SMAD</unittitle>
                    <dao xlink:href="http://www.argus.bstu.bundesarchiv.de/dy30bmer/mets/dy30bmer_001/index.htm" xlink:title="Akte ans
                </did>
                <scopecontent encodinganalog="summary">
                    <p>Bd 1: 1945 - 1946</p>
                </scopecontent>
            </c>
            <c level="file" id="DY_30_IV_2_2.022_2" encodinganalog="3.1.4">
                <did>
                    <unitid type="call number" encodinganalog="3.1.1">DY 30/IV 2/2.022/2</unitid>
                    <unittitle encodinganalog="3.1.2">Befehle der SMAD</unittitle>
                    <dao xlink:href="http://www.argus.bstu.bundesarchiv.de/dy30bmer/mets/dy30bmer_002/index.htm" xlink:title="Akte ein
                         xlink:role="TEXT"/>
                </did>
```

An example - EDM / hierarchy (I)

```
<ore:Aggregation rdf:about="aggregation_dy30bmer"> [9 lines]
<edm:ProvidedCHO rdf:about="providedCHO_dy30bmer"> [41 lines]
<edm:WebResource rdf:about="http://www.argus.bundesarchiv.de/dy30bmer/index.htm"> [3 lines]
<ore:Aggregation rdf:about="aggregation_DY 30/IV 2/2.022/1"> [8 lines]
<edm:ProvidedCHO rdf:about="providedCHO_DY 30/IV 2/2.022/1">
   <dc:identifier>DY 30/IV 2/2.022/1</dc:identifier>
   <dc:type>File</dc:type>
   <dc:title>Befehle der SMAD</dc:title>
   <dc:creator>Sekretariat Paul Merker</dc:creator>
   <dc:description>Bd 1: 1945 - 1946</dc:description>
   <dc:language>de</dc:language>
   <dcterms:isPartOf rdf:resource="providedCHO_C50174112"/>
   <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource
   rdf:resource="http://www.argus.bstu.bundesarchiv.de/dy30bmer/mets/dy30bmer_001/index.htm">
   <dc:description>Akte ansehen</dc:description>
   <edm:rights rdf:resource="http://www.europeana.eu/rights/rr-f/"/>
</edm:WebResource>
<ore:Aggregation rdf:about="aggregation_DY 30/IV 2/2.022/2"> [8 lines]
<edm:ProvidedCHO rdf:about="providedCHO_DY 30/IV 2/2.022/2">
   <dc:identifier>DY 30/IV 2/2.022/2</dc:identifier>
   <dc:type>File</dc:type>
   <dc:title>Befehle der SMAD</dc:title>
   <dc:creator>Sekretariat Paul Merker</dc:creator>
   <dc:description>Bd 2: 1947 - 1949 Enthält u. a.: Befehle der SMAD der Länder und Provinzen der
      sowjetischen Besatzungszone; Informationen und Aktennotizen</dc:description>
   <dc:language>de</dc:language>
   <dcterms:isPartOf rdf:resource="providedCHO_C50174112"/>
   <edm:isNextInSequence rdf:resource="providedCHO_DY 30/IV 2/2.022/1"/>
   <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource
   rdf:resource="http://www.argus.bstu.bundesarchiv.de/dy30bmer/mets/dy30bmer_002/index.htm">
   <dc:description>Akte einsehen</dc:description>
   <edm:rights rdf:resource="http://www.europeana.eu/rights/rr-f/"/>
```

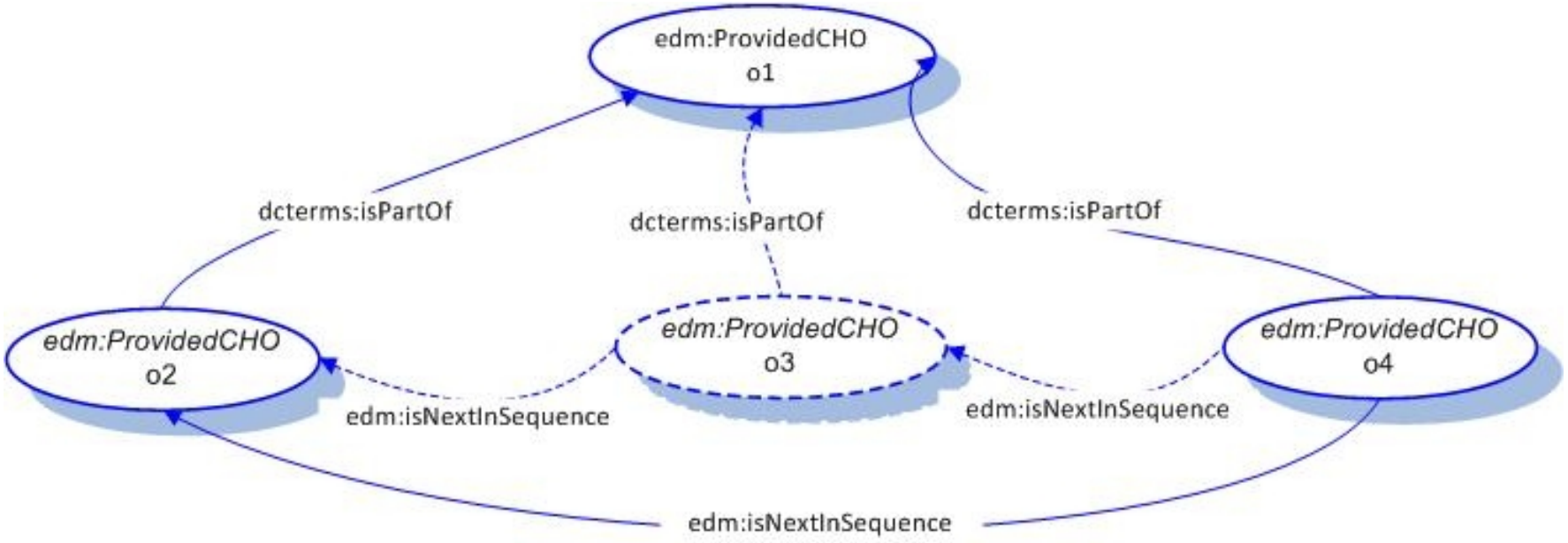
An example - EDM / hierarchy (II)

```
[...]
<ore:Aggregation rdf:about="aggregation_C50174112"> [9 lines]
<edm:ProvidedCHO rdf:about="providedCHO_C50174112">
    <dc:language>de</dc:language>
    <dc:subject>Series</dc:subject>
    <dc:title>Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)</dc:title>
    <dc:type>Series</dc:type>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/1 bis DY 30/IV 2/2.022/2"/>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/3"/>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/4"/>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/5"/>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/6"/>
    <dcterms:hasPart rdf:resource="providedCHO_DY 30/IV 2/2.022/7"/>
    <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource [4 lines]
[...]
<ore:Aggregation rdf:about="aggregation_C50174111"> [9 lines]
<edm:ProvidedCHO rdf:about="providedCHO_C50174111">
    <dc:language>de</dc:language>
    <dc:subject>Series</dc:subject>
    <dc:title>Grundsatzmaterialien</dc:title>
    <dc:type>Series</dc:type>
    <dcterms:hasPart rdf:resource="providedCHO_C50174112"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174121"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174124"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174135"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174139"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174157"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174161"/>
    <dcterms:hasPart rdf:resource="providedCHO_C50174165"/>
    <edm:type>TEXT</edm:type>
</edm:ProvidedCHO>
<edm:WebResource [4 lines]
```


Sekretariat Paul Merker im ZK der SED@de
dc:title
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer"
dc:type
Fonds
dcterms:hasPart
dcterms:isPartOf
dc:title
Grundsatzmaterialien
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1"
dc:type
Series 1
dcterms:isPartOf
dcterms:isPartOf
dc:title
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.1"
Befehle der Sowjetischen Militäradministration in Deutschland (SMAD)
dc:type
Subseries 1
edm:isNextInSequence
edm:ProvidedCHO
rdf:about="providedCHO_dy30bmer_series1.2"
dc:title
dc:type
Subseries 2
Vorbereitung und Auswertung von Parteitagen und Parteikonferenzen

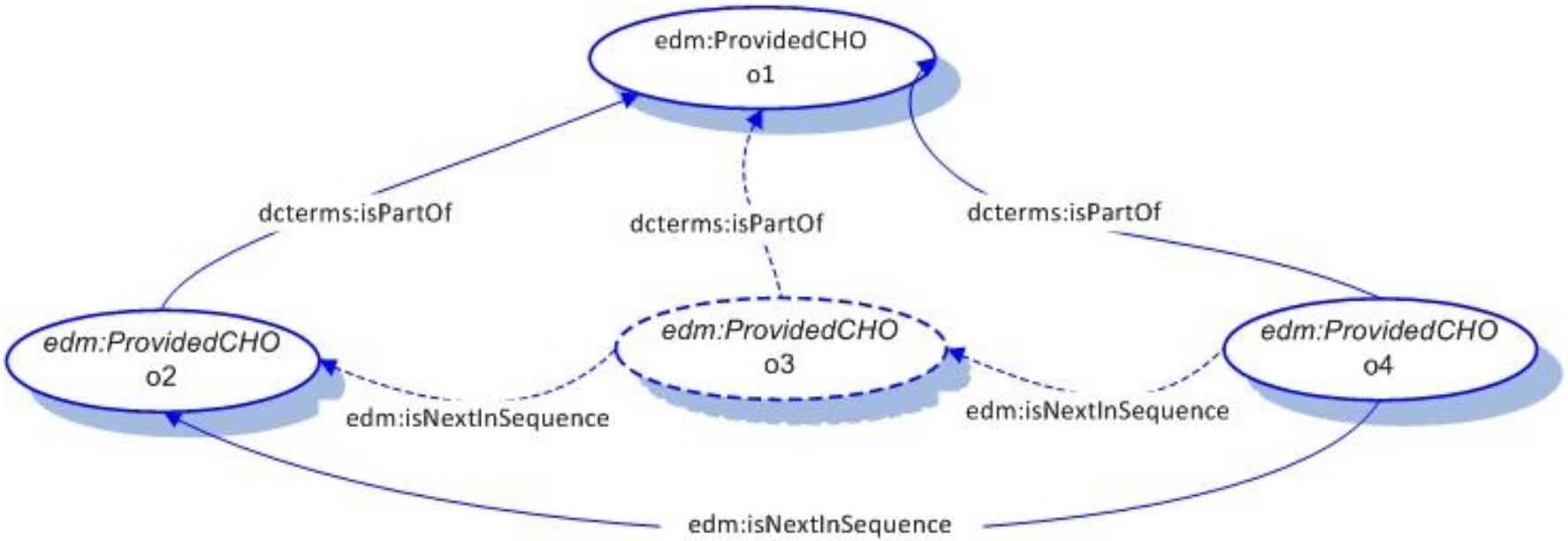
Some challenges remain

- Representing hierarchies with one level missing metadata
  - when a missing ProvidedCHO is an inner node (i.e. it has children) it could imply losing information about the context of the children CHOs.



Some challenges remain

- Representing hierarchies with one level missing a digital representation



Publishing data: for data consumers

- Hierarchical data are available via
  - data.europeana.eu, Europeana Linked Data pilot
  - Europeana API
  - Structured data for search engines (Schema.org markups)

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  - One of the challenges is to make developers understand a specific structure of the data.

Publishing data: for end-users

- Displaying hierarchical objects has been Europeana's biggest challenge!
  - Searching hierarchical objects
    - It should be possible
      - to make search queries on the objects contained in a hierarchy
      - to make search queries in all the levels of descriptions of an object
      - to search an object via information on its context
      - to allow a user to find the different objects of a hierarchy

Publishing data: for end-users

→ Presentation of the hierarchies

- A user should be able to grasp a complex object as a whole and understand the relationships between the different objects, of which the hierarchy is composed.

- An object should be always presented in context (digital representation and descriptive metadata if possible).

Preview!

Public Domain

- View larger image
- View all parts
- View item at The British Library
- Share
- Cite on Wikipedia
- Translate details

Miniature Representing The Power Of Rome, In 'The Abingdon Apocalypse'

DESCRIPTION

This Apocalypse manuscript contains the Latin text of the biblical book of Revelation, written on versos, with a commentary in French on the facing rectos, each with a miniature. The manuscript takes its name from two added inscriptions: one states that it was given to the Benedictine abbey of St. Mary, Abingdon, by a bishop of Salisbury; the other records that it was lent by the abbot and convent of Abingdon in 1362 to Joan, wife of King David II of Scotland.The image contains four compositions, each with a king and a bishop: three are in circles (representing cities) to the left , and one larger one is to the right. They represent the kingdoms of Assyria, Persia, Macedonia and Rome; the power of the first three has passed to the fourth.

FURTHER DETAILS

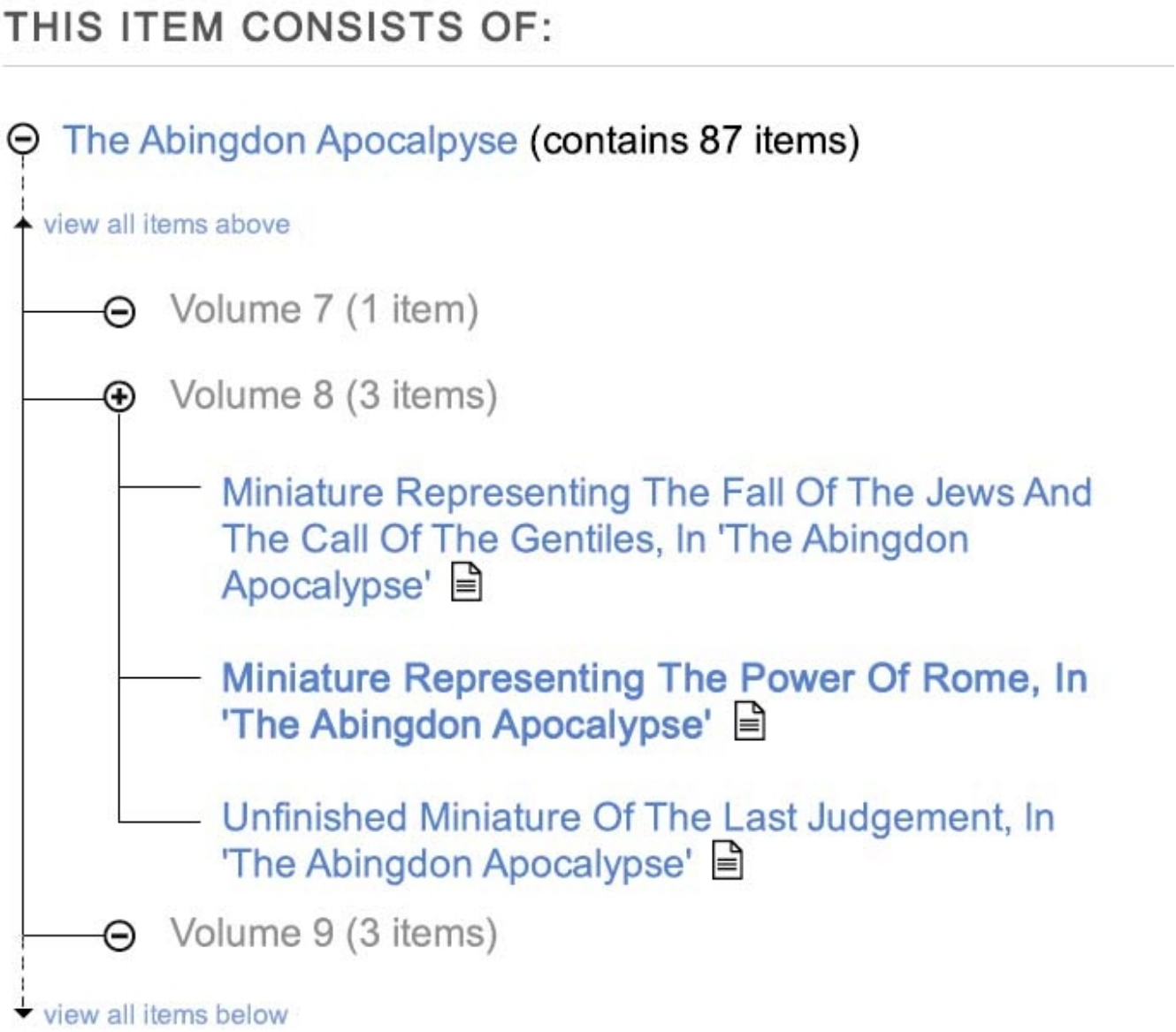
Geographic coverage: Abingdon (more info)

Date: [1270]

Date of creation: c. 1270-1275

Type: Stillimage (more info)

Preview!


THIS ITEM CONSISTS OF:
The Abingdon Apocalpyse (contains 87 items)
view all items above
Volume 7 (1 item)
Volume 8 (3 items)
Miniature Representing The Fall Of The Jews And The Call Of The Gentiles, In 'The Abingdon Apocalypse'
Miniature Representing The Power Of Rome, In 'The Abingdon Apocalypse'
Unfinished Miniature Of The Last Judgement, In 'The Abingdon Apocalypse'
Volume 9 (3 items)
view all items below

Thank you !

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8th October 2014, DCMI2014, Austin

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