

APE<sub>x</sub>



## Deliverable

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### D4.4 – State of the art report on EAC-CPF and recommendations for implementation in Archives Portal Europe Version 1 (1 July 2013)

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## ANNEXES – Overview

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- Annex 12    The schema of apeEAC-CPF

## 1. Introduction

APE<sub>x</sub> Work Package (WP) 4 is the work package that defines the use of standards for the Archives Portal Europe combined with technical recommendations for the implementation in the tools of the Archives Portal Europe. In August 2012 the EAG standard (Encoded Archival Guide) was renewed and enhanced (EAG 2012, see D4.1 State of the art report on EAG and recommendations for implementation in the Archives Portal Europe); the implementation of this standard and the relevant functionalities are currently ongoing in the tools of the Archives Portal Europe: the Data Preparation Tool (DPT), the dashboard and the portal itself.

D4.4 State of the art report on EAC-CPF (Encoded Archival Context - Corporate Bodies, Persons, and Families) and recommendations for implementation in the Archives Portal Europe is the second standard deliverable WP 4 was asked to prepare for the project. The development of this report will be an ongoing task through the project lifetime thus at least one further version may be expected. Nevertheless at this stage of the investigations and discussions all required aims have been reached! The experience gained through working with the first two standards, Encoded Archival Description (EAD) in the APEnet project and EAG in the APE<sub>x</sub> project has shown that the provision of a report does not mean that the work on the standards and their development for the portal is finished. After having published the reports, the project partners start to work with these results. The standards have to be implemented in the tools and the project begins to test with real data. In the next step the results of the work on these standards - as presented in national and international (standard) organisations - will be broadly discussed. At this stage a lot of feedback can be expected. This feedback together with the effects it has on our work on standards shall be included in this document and presented to the archival world for further development after the APE<sub>x</sub> project ends.

This report is the result of the work of all partners of the APE<sub>x</sub> project, as they all have provided us with the information about the use of EAC-CPF in their institutions. The apeEAC-CPF profile has been built by comparing and combining the EAC-CPF profiles used in the constituent institutions.

A large percentage of the report details the work of the six task groups which have been established to work effectively on the constituent tasks that needed to be mastered:

### Task group 1: Identifiers: What to identify and how

In this task group the participants were Germany (coordinator), Sweden, Estonia, Finland and France.

### Task group 2: Creating the profile, schema and example files

In this task group the participants were Sweden (coordinator), Germany, France, Greece and Spain.

### Task group 3: Functionalities and technical recommendations

In this task group the participants were Greece (coordinator), Germany, The Netherlands, France, Italy, Croatia and Malta. For design issues Sweden (WP7) and

for special technical questions the WP leaders of WP 3, WP 5 and WP 6 were consulted.

#### Task group 4: Extracting apeEAC-CPF files from apeEAD

Germany performed this task consulting Daniel Pitti of the Social Networks and Archival Context project (Virginia, USA) whenever required.

#### Task group 5: Extracting apeEAC-CPF files from databases

Work on this task co-ordinated by Germany with the collaboration of Malta, Sweden, Estonia, Croatia, Spain, Hungary, Ireland and Italy.

#### Task group 6: EAC-CPF projects world wide

The information about the EAC-CPF projects world-wide was collected through a survey sent out to all Country Managers.

The close cooperation we had with WP 2 (Interoperability with Europeana) was necessary to further enhance the chances that our work might interest the Europeana network. This would lead to the proposal to integrate EAC-CPF files when delivering data to Europeana (see D2.3 APE<sub>x</sub> EAC-CPF - EDM conversion tool: central/local, planned for Month 30, ie August 2014) thus enabling the users of Europeana to search information in a broader range of types of data and facilitate access to data about the contexts of cooperative bodies, persons and families in their searches.

Following is a short resume of the structure of this report:

First the development of the apeEAC-CPF profile will be described and the methods and the outcomes for the Archives Portal Europe highlighted. This chapter contains several attachments which show the profile and offer the schema for internal use in the Archives Portal Europe and reuse by institutions. Then the elements and attributes used in the apeEAC-CPF profile are explained in their encoded and descriptive versions constitutively (chapter 3). In relation to this chapter 4 will describe the use of identifiers in the context of apeEAC-CPF in some more detail.

As there are several ways of getting EAC-CPF data into the portal, each way will be described in the following chapters. Chapter 5 describes the apeEAC-CPF database export, chapter 6 outlines extracting ape EAC-CPF from apeEAD and EAG 2012 as currently used in the Archives Portal Europe, whilst chapter 7 deals with creating EAC-CPF files manually. During the writing up of this deliverable a web application to create apeEAC-CPF was developed and this shall be available within the APE tools shortly, probably in the dashboard first.

In chapter 8 the recommended functionalities concerning apeEAC-CPF in the Archives Portal Europe are described and illustrated in various mock-ups. Further “added value” for the user represented by being able to search for and within EAC-CPF data is presented.

Chapter 9 lists other projects using EAC-CPF.

As a conclusion to this report, the next steps of the project’s apeEAC-CPF work are listed in chapter 10.



## 2. Developing an EAC-CPF profile for the Archives Portal Europe

The development of the EAC-CPF profile for the Archives Portal Europe started by setting some conditions. The main condition, in contrary to the APE<sub>x</sub> project's work on EAG for which a new version has been discussed and established, has been that the profile, called apeEAC-CPF, would form a specific Archives Portal Europe subset of the general EAC-CPF schema maintained by the Society of American Archivists (SAA) in partnership with the Berlin State Library. This ensures that all apeEAC-CPF files will be valid according to this schema and therefore could also be used in other contexts such as national portals. Apart from that any changes or additions to the schema required by APE<sub>x</sub>, should be discussed with the Technical Subcommittee on EAC-CPF (TS-EAC) prior to being applied. It is envisaged that for apeEAC-CPF the whole EAC-CPF schema shall be shortened and all elements and attributes not necessarily to be used in the Archives Portal Europe shall be cancelled and some definitions refined.

### 2.1 Comparison of profiles of partner institutions

To get as much EAC-CPF profiles and example files as possible, the WP 4 leader asked all WP members plus APE<sub>x</sub> contact persons from all 28 partner countries for their experiences with EAC-CPF and for example files. As EAC-CPF is not used within all partner institutions only eight countries could already send their institution-internal profiles or example files: Belgium, Croatia, France, Iceland, Italy, Portugal, Spain and Sweden. At the same time the whole EAC-CPF schema was translated from xsd schema file to an excel sheet to show all allowed elements and attributes in a hierarchical order.

The WP 4 EAC-CPF core group transferred the example files from eight countries in the created schema table to compare the usage of elements and attributes. All elements and attributes, used by at least one of the partners in their files were listed. Following that the occurrences of the elements and attributes used were counted and all elements found being used more than four times (meaning that more than half of the partners providing feedback are actively using this element or attribute), were highlighted.

#### 2.1.1 Discussed elements and attributes

Only a few elements and attributes did not appear in the apeEAC-CPF schema draft. Unused elements and attributes were not listed. All other elements and attributes were discussed by the core group.

##### 2.1.1.1 Usage of elements and attributes

Elements which were not used by our partners and were discussed to be excluded from the apeEAC-CPF profile:

<span> and <list>: Exclude these elements as they are used for formatting, not for encoding content. They are used by very few partners.

<objectBinWrap>: This element is used for base64-encoded binary representation of a resource. As very few partners use it and we could not find a good example to use it within the Archives Portal Europe, thus it is recommended that this element be excluded.

<objectXMLWrap>: This element is used for incorporating XML elements from any XML namespace. As relations to other resources shall be given in the relations part of the apeEAC-CPF file, there is no other use for this element seen within the Archives Portal Europe, thus it is recommended that this element be excluded.

<citation>: This element shall only be used to link information with @href attribute. The element shall be free of any content and shall not content @xml:lang (language declaring attribute).

Wrapper elements: The usage of singular and plural wrapper elements expands the profile. To slim down the profile it is suggested to use all elements within their plural wrapper, even if they appear only once.

Attributes which were not used by our partners and therefore were discussed to be excluded from the apeEAC-CPF profile:

@xml:base: Exclude this attribute from all elements besides <eac-cpf> and <alternativeSet>. In the context of the Archives Portal Europe it would be sufficient that a base URI can be specified in the root element <eac-cpf> (applicable to all its sub elements) and in the <alternativeSet> element (in case that would differ from the general one in <eac-cpf>).

@xml:id: Exclude this attribute. The attribute gives an identifier for the element, not for the content. It was decided that within the Archives Portal Europe it won't be necessary to ensure that each element can be addressed, independently from its content.

@xml:lang: Exclude this attribute from all wrapper elements and other elements without content. The language can be specified directly with the element that contains content and therefore would be available for multilingual usage. It was especially discussed within the EAC-CPF core group if we need to specify the language of date elements (<date> <dateRange>). Finally it was decided to not exclude @xml:lang from date elements.

@notAfter and @notBefore: It was discussed if it is necessary to keep these attributes within the element <date>, as these dates cannot be filled automatically. But within WP 4 some useful examples for the use of these attributes were found and it was decided to keep these attributes.

#### 2.1.1.2 Usage of terms and vocabularies

Some of the elements and attributes can be filled with defined values or a limited set of terms to specify the elements semantically or to limit their content. Both can be used to enhance the portal's functionality. Attributes and values can be reused from our partners but need to be translated into English.

Following attributes may contain defined values:

//nameEntry @localtype: eg authorized, preferred

//nameEntry/part @localtype: eg firstname, surname, title, prefix  
//placeEntry @localtype: eg birth, death, private-residence, business-residence  
//adress @localtype: visitors address, postal address  
//addressline @localtype: eg firstdem, secondem, postalcode, localentity, street

The element term (used as subelement in various contexts) may contain content from ontologies, vocabularies, dictionaries or word lists. The attribute @vocabularySource within the element <term> can then refer to according authority files.

## 2.2 First feedback: think pool, discussions, mails

### 2.2.1. The apeEAC-CPF think pool

An apeEAC-CPF think pool made up of WP 4 members and other partners took place on the 26<sup>th</sup> and 27<sup>th</sup> of February 2013 at the Federal Archives of Germany in Berlin, Germany. Around 20 persons attended the think pool, among whom were core group members and APE<sub>x</sub> partners from France, Germany, Ireland, Italy, The Netherlands, Poland, Spain and Sweden. Additionally Daniel Pitti from the SNAC (Social Networks and Archival Context) project at the University of Virginia, USA, was part of the think pool.

The think pool started with presentations about the use of EAC-CPF in the constituent institutions of the participants. The presentations were combined with some first ideas or recommendations on how EAC-CPF could be used within the Archives Portal Europe:

Kerstin Arnold, BA, Germany: Possible future functionalities in the Archives Portal Europe based on EAC-CPF

Karin Bredenberg, RA, Sweden: EAC beta and EAC-CPF at the Swedish National Archives

Javier Fernández Fernández, MECD, Spain: EAC-CPF and Authority records in Spanish Archives

Silke Jagodzinski, BA, Germany: The apeEAC-CPF profile: first draft

Anna Laszuk, NDAP, Poland: Elements of authority records and indexes in Polish archival rules and practice

Micheál O’Connaire, NAI, Ireland: Adlib Database

Claire Sibille de Grimouard, SIAF, France: EAC-CPF in France

Stefano Vitali, DGA, Italy: The use of EAC-CPF in Italy and the SAN Portal

Susanne Waidmann, BA, Germany: Ways to gather and create apeEAC-CPF files in the Archives Portal Europe

With input from these presentations the participants divided into two main discussion groups: one group about the profile draft, discussing the questions and elements, and one group about EAC-CPF functionalities in the Archives Portal Europe.

Finally Daniel Pitti, University of Virginia, USA presented the “Archival Identity Description and Control. Social Networks and Archival Context and a National Archival Cooperative Program”.

As a think pool wrap-up Daniel Pitti, Karin Bredenberg and the BA-WP 4 team discussed especially on the question how to identify EAC-CPF data, which functions could be implemented realistically within the project life time, which kind of cooperation could there be between the SNAC and the APE<sub>x</sub> projects and how the former draft profile has to be improved regarding the results of the think pool discussions.

### 2.2.2. First decisions

Whereas most of the questions concerning the profile draft could be answered, some other issues appeared during the creation of example files at a later date. These were discussed within task group 2 (see. 2.3).

Decisions reached during the think pool (see also chapter 2.1.1.1):

- exclusion of the element <multipleIdentities>, because multiple identities will not be used within one file in the context of the Archives Portal Europe
- exclusion of the elements <span>, <list>, <objectBinWrap>, <objectXMLWrap>
- exclusion of the attribute @xml:id
- @xml:base to be used only within the elements <eac-cpf> and <alternativeSet>
- @xml:lang to be used only in elements which contain content and within date elements
- @notAfter and @notBefore to be used
- in order to facilitate the technical implementation and to minimise the different encoding options that would be necessary to be taken into account all elements are to be used in their plural wrappers, even if they appear only once.

For following attributes and elements the task group 2 was supposed to collect values and vocabularies (see also chapter 2.1.1.2):

//nameEntry @localtype

//nameEntry/part @localtype

//placeEntry @localtype

//adress @localtype

//addressline @localtype

//function/term and //occupation/term

### 2.2.3. More discussions and decisions

It has turned out, that there is no multilingual ontology or vocabulary which is sufficient for the Archives Portal Europe requirements for the elements function and occupation. Therefore no authority file is recommended in the apeEAC-CPF specifications.

Additionally it resulted from additional discussions that the element <citation> must be used with content for the declaration of conventions. Therefore the proposal to use this element only to link information was refused.

## 2.3 Work of task group 2

For developing an EAC-CPF profile for the Archives Portal Europe a small task group was created. The chair of the group was Karin Bredenberg from RA (Sweden). The participants of the group were; Silke Jagodzinski, BA (Germany), Claire Sibille de Grimoüard, SIAF (France), Miguel Ángel Sánchez Alcázar, MECD (Spain), Aranzazu Lafuente Urien, MECD (Spain), Eleni Mamma, GSA (Greece) and Anastasia Kitsopoulou, GSA (Greece), further Kerstin Arnold and Susanne Waidmann (both BA, Germany).

The group used the draft of the profile discussed in Berlin in February 2013 as the starting point for their work. A Skype meeting was held where the group decided that the draft profile only needed small changes. The changes consisted of:

- making the profile more self explanatory and looking more like the already delivered results regarding EAD and EAG
- specific vocabularies for the attributes @localtype in the elements nameEntry, part and placeEntry and for the @cpfRelationType in the element cpfRelation should be developed
- providing examples as these are a useful help in creating your own EAC-CPF.

The Skype meeting resulted in these tasks for the group to handle:

- creating lists of controlled vocabularies for attributes regarding for example classifying names when using apeEAC-CPF profile (see chapter 2.1.1.2 and Annex 1: apeEAC-CPF - The EAC-CPF profile as used within the Archives Portal Europe ).
- finish a final draft of the apeEAC-CPF profile and provide (see Annexes 1 to 6 and 12)
  - Excel sheet with explanations of the apeEAC-CPF profile
  - schema
  - examples of apeEAC-CPF files.

The group has finished all the tasks in an excellent way.

## 2.4 Recommendations to the Technical Subcommittee on EAC-CPF (TS-EAC)

The work task group 2 carried out regarding the apeEAC-CPF profile resulted in comments and suggestions for the TS-EAC to discuss. Task group 2 found some inconsistencies between the Tag Library<sup>1</sup> and the XML-schema that need to be addressed but also some values that would aid in creating apeEAC-CPF documents.

WP 4 got a reply instantly from Anila Angjeli, co-chair of the TS-EAC. She thanked WP 4 for the helpful comments and noted, that any changes to the schema will be considered in compliance and in conjunction with the technical work done for EAD. Therefore the TS focused this year on the revision of the Tag Library. However as some of the changes, fixes and additions in the schema are without consequence on the coherence of both schemas, they should be made on EAC-CPF.

The general issue of partly unclear statements on optional and mandatory use and on repeatable and non repeatable use of certain elements in the Tag Library has already been discussed within the framework of the revision of the Tag Library, but our comments pointed out that an inconsistency still persists.

### 2.4.1. Issues to be clarified in the Tag Library

**<componentEntry>**: The EAC-CPF tag library states an occurrence of 0/\* for <componentEntry>, although describing this element as "<componentEntry> always occurs within <setComponent>"<sup>2</sup>.

**<p>** within <descriptiveNote>: Is mandatory according to the schema but not in the Tag Library.

**<nameEntry>**: Is mandatory within <identity> according to the Tag Library but not in the schema. <identity> contains <choice> which means you can have either <nameEntry> or <nameEntryParallel> as well as both together.

**<place>**: Is mandatory within <places>; however it is optional as singular element according to the schema but not in the Tag Library.

**<localDescription>**: Is mandatory within <localDescriptions>; however it is optional as singular element according to the schema but not in the Tag Library.

Using <dateRange> with a <toDate> not known: <toDate> is mandatory in the Tag Library (and the schema). When not having a <toDate> one solution used in the context of the Archives Portal Europe is to put 2099 as the year for the attribute @standardDate and to leave the element itself empty. Some advice on how to use <dateRange> when no <toDate> is known would be appreciated. Often when describing a <corporateBody> people want to use a <dateRange> instead of a <date> that should be the way to do it.

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<sup>1</sup> <http://www3.iath.virginia.edu/eac/cpf/tagLibrary/cpfTagLibrary.html> (last accessed: 21 June 2013).

<sup>2</sup> EAC-CPF Tag Library Draft: [www3.iath.virginia.edu/eac/cpf/tagLibrary/cpfTagLibrary.html#d1e1882](http://www3.iath.virginia.edu/eac/cpf/tagLibrary/cpfTagLibrary.html#d1e1882) (last accessed: 21 June 2013).

### 2.4.2 Other issues noted by WP 4 to the TS

In `<otherAgencyCode>` and `<localControl>` the TL states `@localType` as optional, but in the schema it's mandatory. The schema needs to be corrected.

Anila Angjeli answered that she cannot reconstruct the discussion in the TS about this issue in detail, but thinks it maybe was "to just oblige users mark the difference between the `<agencyCode>`, as the principal code of the institution/repository responsible for the current EAC-CPF instance, and an additional `<otherAgencyCode>`, meaning, to qualify the latter." She agreed "to discuss this with TS-EAD and SDT as well, for a consistent policy on this kind of data elements, and for the coherence of both schemas."<sup>3</sup>

`<term>` is repeatable according to the TL but not in the schema. The schema needs to be corrected.

`<citation>` within `<conventionDeclaration>`, `<localTypeDeclaration>`, `<localDescription>`, `<legalStatus>`, `<occupation>`, `<function>` and `<mandate>` [`m.simpleDescription`] is repeatable according to the TL but not in the schema. The schema needs to be corrected.

`<placeEntry>` within `<chronItem>`, `<cpfRelation>`, `<recourseRelation>`, and `<functionRelation>` [`m.relationBody`] is repeatable according to the TL but not in the schema. The schema needs to be corrected.

`<fromDate>` and `<toDate>` within `<dateRange>` are mandatory according to the TL but not in the schema. The schema needs to be corrected.

Anila Angjeli agreed to clarify and fix these issues.

`<placeEntry>` within `place` should be mandatory (otherwise there could be a place with no entry and still a valid file). The schema needs to be corrected.

This issue will be discussed with the TS-EAD and SDT, as well.

`<languageDeclaration>` should be repeatable. The EAG 2012 schema as well as the alpha EAD schema (revised version from March 2013) allow the repetition of `<languageDeclaration>` within a newly created `<languageDeclarations>` wrapper element.

This proposal has already been made within the TS-EAC.

All **text elements** with `xml:lang` should be repeatable for multilingualism of EAC-CPF files and to state different languages. The definition of the following elements needs to be changed to be repeatable:

`<placeRole>`

`<term>` (see above)

`<event>` in `<chronItem>`

This requirement will be fixed in the schema.

### 2.4.3 Additional values and defined content suggested by WP 4 to the TS

`<maintenanceStatus>`: "deletedMerged"

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<sup>3</sup> This and following citations of Anila Angjeli were sent by e-mail on 15 May 2013 to WP 4 lead, Susanne Waidmann.



<eventType>: “published”

Regarding the adding of values to the elements <maintenanceStatus> and <eventType> further discussion led to the conclusion that the value “deletedMerged” needs to be added in the element <maintenanceStatus> and the value “published” in element <publicationStatus>.

#### 2.4.4. Points suggested for the TS to consider

<localDescriptions> does not have a <descriptiveNote>, which is not corresponding to the other group elements.

The attribute @standardDate [m.data.standardDate] is defined with a maximum year of 2099. To add unknown or still existing years it could be helpful to use 2199.

Anila Angjeli agreed to discuss these points in the TS-EAC.

#### 2.4.5 Further questions raised during an EAC-CPF think pool meeting of APE<sub>x</sub>

The new TL recommends two different language codes for @xml:lang (IANA) and @languageCode (ISO 639-2). EAD (current & revised) and EAG 2012 use ISO 639-2b for language attributes.

In Anila Angjeli’s opinion - she is a long time member of the international committee for language coding (JAC ISO 639) - the IANA recommendation is “perfectly compliant with ISO 639-2. In this respect one might say that for IANA there are not two different codes. But ISO 639-2 - and others -1, -3 - are the basis of the W3C recommendation as supported by IANA. (In other terms ISO 639-2b might be one possible component part of a IANA language subtags, which also contains ISO 639-1 and ISO 639-3, as well as those for scripts and regions). Anyway this issue is a bit complicated and it will necessarily be re-discussed within the framework of the revision of EAD. And EAC-CPF will surely adopt the same policy.”

<otherRecordID>: The @localType attribute of <otherRecordId> can be used to identify the kind of institution or service responsible for each associated record identifier. The @xml:id attribute of <otherRecordId> serves to name specific elements in an EAC-CPF instance. Question: How to identify the archival institution that has created an alternative record?

Anila Angjeli states, that a discussion on identifiers had also been submitted to SDT last year. She concludes with “I think we should stress that issue again.”

<authorizedForm>/<alternativeForm>: <authorizedForm>, <alternativeForm> are designed to qualify the forms of the name contained in a <nameEntry> or the set of names contained in <nameEntryParallel>. This qualification currently obliges one to indicate the rule according to which a name is qualified as authorised, parallel, or alternative. “Authorised” and “Alternative” should qualify in a straightforward way each name, and not in combination with rules. It should also be made possible, in a separate statement, to indicate the institution responsible for the construction of each form of the name.

This issue has already been pointed out, and is a cause for confusion, and varying practices. The TS-EAC shall necessarily tackle with it very soon.



### 3. Encoding the descriptions

The following chapters will show how the apeEAC-CPF elements can be encoded. The elements are grouped in four chapters (“Root element”, “Control element”, “CPF-Description element” and “Attributes”) and they are listed in the very order in which they would appear within an apeEAC-CPF instance. Elements that can be used in various places are only described once at their first appearance.

For each element you will find the tag used, the element name (ie a human readable transliteration of the tag) and a brief description. All elements and attributes are part of EAC-CPF and can be found in the EAC-CPF Tag Library.

It is furthermore stated whether:

- an element is defined as mandatory or optional for its use in the Archives Portal Europe;
- it can be repeated in the Archives Portal Europe;
- it may contain text (#PCDATA).

In addition, there is an overview given of:

- all sub elements that an element can contain;
- all attributes that an element can contain;
- all elements in which an element can occur.

Similarly an overview of the attributes with:

- the data type (if specified);
- all elements in which an attribute can occur is given.

Examples of encoded information will be provided with each element in a future version of this deliverable.

#### 3.1 Root element

<b>&lt;eac-cpf&gt; - EAC-CPF</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	Yes	No
<b>Brief description:</b>		
This element is the root element.		
<b>Can contain following sub elements:</b>		
<control>		
<cpfDescription>		
<b>Can contain following attributes:</b>		
@xml:base		
@xml:lang		
<b>Can occur in following elements:</b>		
/		

### 3.2 Control element

<b>&lt;control&gt; - Control area</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	No
Brief description:		
Control element of the EAC-CPF file, contains the information necessary to manage the instance.		
Can contain following sub elements:		
<recordId> <maintenanceAgency> <maintenanceStatus> <maintenanceHistory> <publicationStatus> <languageDeclaration> <sources> <conventionDeclaration> <otherRecordId> <localControl> <localTypeDeclaration>		
Can contain following attributes:		
/		
Can occur in following elements:		
<eac-cpf>		

<b>&lt;recordId&gt; - Description identifier</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
The record identifier is the identifier of the description. This must be the unique identifier for a particular instance. It will be created automatically within APE creation and conversion processes. For imported (and converted) EAC-CPF instances, the identifier will be checked for uniqueness and format (note that the format for identifiers of EAC-CPF instances within the Archives Portal Europe yet has to be specified) and might be transferred to <otherRecordId> if not unique or not compliant with the identifier format of the APE. In this case, a unique and compliant identifier as (new) content for <recordId> will be created.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<control>		

<b>&lt;maintenanceAgency&gt; - Maintaining institution</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	No
Brief description:		
Institution or service responsible for the creation, maintenance, and/or dissemination of the EAC-CPF instance.		
Can contain following sub elements:		
<agencyCode> <otherAgencyCode>		

<agencyName>
<descriptiveNote>
Can contain following attributes:
/
Can occur in following elements:
<control>

<b>&lt;agencyCode&gt; - Institution identifier</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
Institution identifier that represents the institution or service responsible for the creation, maintenance and/or dissemination of the EAC-CPF instance. Content should be compliant with ISO 15511. It is highly recommended to use a registered ISIL code.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<maintenanceAgency>		

<b>&lt;otherAgencyCode&gt; - Other institution identifier</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
Alternate code representing the institution or service responsible for the creation, maintenance, and/or dissemination of the EAC-CPF instance.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<maintenanceAgency>		

<b>&lt;agencyName&gt; - Name of the agency(ies) responsible for the description</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
Name of the institution or service responsible for the creation, maintenance, and/or dissemination of the EAC-CPF instance. It is recommended to use the form of the agency name that is authorized by an appropriate national or international agency or service. Can contain the language in which the name of the agency is given (use xml:lang).		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang		
Can occur in following elements:		
<maintenanceAgency>		

<b>&lt;descriptiveNote&gt; - Descriptive note</b>		
Repeatable:	Mandatory:	May contain text:
No	No	No
Brief description:		
A generic element that provides additional information and specifications, in textual form, concerning the		

descriptive element in which it is contained.
Can contain following sub elements:
<p>
Can contain following attributes:
@xml:lang
Can occur in following elements:
<maintenanceAgency> <languageDeclaration> <conventionDeclaration> <source> <localTypeDeclaration> <identity> existDates> <place> <places> <localDescriptions> <localDescription> <legalStatus> <legalStatuses> <function> <functions> <occupation> <occupations> <mandate> <mandates> <languageUsed> <languagesUsed> <CpfRelation> <ResourceRelation> <FunctionRelation< <SetComponent>

<b>&lt;p&gt; - Paragraph</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
The <p> element is an important textual feature, which must be used as part of any general description within a <descriptiveNote> element. New paragraphs are used to code text content in different languages.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang		
Can occur in following elements:		
<descriptiveNote> <LocalDescription> <LegalStatus> <Functions> >Occupations> <Mandates> <structureOrGenealogy> <generalContext> <biogHist>		

<b>&lt;maintenanceStatus&gt; - Maintenance status</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		

Status of the current state of the maintenance: Can only be one of the following statuses: *new, cancelled, deleted, deletedReplaced, deletedMerged, deletedSplit, derived* or *revised*.

Can contain following sub elements:
/
Can contain following attributes:
/
Can occur in following elements:
<control>

<b>&lt;maintenanceHistory&gt; - Maintenance history</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	No
Brief description:		
Wrapper for the history of the creation and the maintenance of the EAC-CPF instance.		
Can contain following sub elements:		
<maintenanceEvent>		
Can contain following attributes:		
/		
Can occur in following elements:		
<control>		

<b>&lt;maintenanceEvent&gt; - Maintenance event</b>		
Repeatable:	Mandatory:	May contain text:
Yes	Yes	No
Brief description:		
Maintenance event is recording information about particular maintenance events in the history of the EAC-CPF instance.		
Can contain following sub elements:		
<agent>		
<agentType>		
<eventDateTime>		
<eventDescription>		
<eventType>		
Can contain following attributes:		
/		
Can occur in following elements:		
<maintenanceHistory>		

<b>&lt;agent&gt; - Agent responsible</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
The agent (human or machine) responsible for an event in the maintenance of the EAC instance.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang		
Can occur in following elements:		
<maintenanceEvent>		

<b>&lt;agentType&gt; - Type of the agent</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		

The type of the agent responsible for the maintenance event of the EAC-CPF instance. Can be *human* or *machine*.

Can contain following sub elements:
/
Can contain following attributes:
/
Can occur in following elements:
<maintenanceEvent>

<b>&lt;eventDateTime&gt; - Dates of creation, revision or deletion</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
Date and time of the maintenance event. This means the dates of creation, revision or deletion. The value of standardDateTime must be compliant with - ISO8601 representation of the date the event was created.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@standardDateTime		
Can occur in following elements:		
<maintenanceEvent>		

<b>&lt;eventDescription&gt; - Maintenance event description</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Description of the maintenance event.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang		
Can occur in following elements:		
<maintenanceEvent>		

<b>&lt;eventType&gt; - Type of event</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
Type of the event, can only be one of the following: <i>cancelled, created, deleted, derived, revised or updated</i> . It will be created automatically with the content depending on the actions done with an apeEAC-CPF instance: first creation = created, any further edition = revised, deactivated = deleted.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<maintenanceEvent>		

<b>&lt;publicationStatus&gt; - Publication status</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
The current publication status of the EAC-CPF instance. Can only be <i>in Process</i> or <i>approved</i> .		
Can contain following sub elements:		

/
Can contain following attributes:
/
Can occur in following elements:
<control>

<b>&lt;languageDeclaration&gt; - Language declaration</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A wrapper element for the declaration of the predominant language and script used in the EAC-CPF instance.		
Can contain following sub elements:		
<language> <script> <descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<languageDeclarations>		

<b>&lt;language&gt; - Language</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
The specification that gives the main language in which the EAC-CPF instance is written. Use the code ISO 639-2b of the language (mandatory)		
Can contain following sub elements:		
/		
Can contain following attributes:		
@languageCode @xml:lang		
Can occur in following elements:		
<languageDeclaration>		

<b>&lt;script&gt; - Script</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Script(s) of the language used in the description of the archival institution. Use the code (ISO 15924) of the script (mandatory)		
Can contain following sub elements:		
/		
Can contain following attributes:		
@scriptCode @xml:lang		
Can occur in following elements:		
<languageDeclaration>		

<b>&lt;sources&gt; - Sources</b>		
Repeatable:	Mandatory:	May contain text:
No	No	No
Brief description:		

A grouping elements used to record one or more sources consulted in creating the description.
Can contain following sub elements:
<source>
Can contain following attributes:
/
Can occur in following elements:
<control>

<b>&lt;source&gt; - Source</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element for identifying a particular source of evidence used in describing the CPF-entity		
Can contain following sub-elements:		
<sourceEntry>		
<descriptiveNote>		
Can contain following attributes:		
@lastDateTimeVerified		
@href		
@xlink:type		
@xlink:role		
@xlink: title		
Can occur in following elements:		
<sources>		

<b>&lt;sourceEntry&gt; - Source entry</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
A textual identification of a particular source of evidence used in describing the EAC-CPF instance		
Can contain following sub elements:		
/		
Can contain following attributes:		
@scriptCode		
@transliteration		
@xml:lang		
Can occur in following elements:		
<source>		

<b>&lt;conventionDeclaration&gt; - Convention declaration</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A declaration(s) of the convention(s) or rule(s) including authorised controlled vocabularies and thesauri, applied in creating the EAC-CPF instance.		
Can contain following sub elements:		
<abbreviation>		
<citation>		
<descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<control>		



<b>&lt;abbreviation&gt; - Rules and/or conventions used</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Abbreviation of the standard used to describe the institution. Contains an abbreviation or code for identifying a thesaurus, controlled vocabulary, or other standard used in formulating and compiling the EAC-CPF description.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<conventionDeclaration>		
<localTypeDeclaration>		

<b>&lt;citation&gt; - Full name of the rules and/or conventions used</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
Full extended name of the abbreviation of the standard used to describe the archival institution		
Can contain following sub elements:		
/		
Can contain following attributes:		
@lastDateTimeVerified		
@Xlink:type		
@href		
@xlink:role		
@xlink:title		
@xml:lang		
Can occur in following elements:		
<conventionDeclaration>		
<localTypeDeclaration>		
<place>		
<localDescription>		
<legalStatus>		
<function>		
<occupation>		
<mandate>		
<biogHist>		

<b>&lt;otherRecordId&gt; - Other description Identifier</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
Other Record Identifier: Alternative record identifiers that may be associated with the EAC-CPF instance.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<control>		

<b>&lt;localControl&gt; - Control of the level of details</b>		
Repeatable:	Mandatory:	May contain text:

Yes	No	No
Brief description:		
Any additional control entry necessary to accommodate local practise		
Can contain following sub elements:		
<date> <dateRange> <term>		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<control>		

<b>&lt;date&gt; - Single date</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
A single date of the control entry		
Can contain following sub elements:		
/		
Can contain following attributes:		
@standardDate @notAfter @notBefore @xml:lang		
Can occur in following elements:		
<dateSet> <localControl> <useDates> <resourceRelation> <place> <localDescription> <dateSet> <chronItem> <existDates> <legalStatus> <function> <occupation> <mandate> <CpfRelation> <FunctionRelation>		

<b>&lt;dateRange&gt; - Date range</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
The date range of the control entry.		
Can contain following sub elements:		
<fromDate> <toDate>		
Can contain following attributes:		
@standardDate @notAfter @notBefore @xml:lang		
Can occur in following elements:		

<dateSet>  
 <localControl>  
 <useDates>  
 <resourceRelation>  
 <existDates>  
 <place>  
 <localDescription>  
 <legalStatus>  
 <function>  
 <occupation>  
 <mandate>  
 <chronItem>  
 <CpfRelation>  
 <FunctionRelation>

**<fromDate> - From date**

Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
The start date in a date range		
Can contain following sub elements:		
/		
Can contain following attributes:		
@notAfter @notBefore @standardDate @xml:lang		
Can occur in following elements:		
<dateRange>		

**<toDate> - To date**

Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
The end date in a date range.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@notAfter @notBefore @standardDate @xml:lang		
Can occur in following elements:		
<dateRange>		

**<term> - Level of details**

Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
A generic element used to encode a descriptive term in accordance with local descriptive rules		
Can contain following sub elements:		
/		
Can contain following attributes:		
@lastDateTimeVerified @scriptCode		

@transliteration
@vocabularySource
@xml:lang
<b>Can occur in following elements:</b>
<localControl>
<Local Description>
<place>
<legalStatus>
<function>
<occupation>
<mandate>

<b>&lt;localTypeDeclaration&gt; - Local type declaration</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
Declares the local conventions and controlled vocabularies used within the @LocalType		
<b>Can contain following sub elements:</b>		
<citation>		
<abbreviation>		
<descriptiveNote>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<control>		

### 3.3 CPF description element

<b>&lt;cpfDescription&gt; - Corporate body, person or family description</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	Yes	No
<b>Brief description:</b>		
The element contains the description of one identity. Commonly, one CPF entity has one identity, but when it has more than one, multiple interrelated EAC-CPF instances are used.		
<b>Can contain following sub elements:</b>		
<identity>		
<description>		
<relation>		
<alternativeSet>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<eac-cpf>		

#### 3.3.1 Identity element

<b>&lt;identity&gt; - Identity</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	Yes	No

<b>Brief description:</b>
A wrapper element for the name or names related to the identity being described within the <cpfDescription>element in the EAC-CPF instance.
<b>Can contain following sub elements:</b>
<nameEntryParallel> <nameEntry> <entityId> <entityType> <descriptiveNote>
<b>Can contain following attributes:</b>
@identityType
<b>Can occur in following elements:</b>
<cpfDescription>

<b>&lt;nameEntryParallel&gt; - Name entry parallel</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
A wrapper element for two or more <nameEntry> elements that represent parallel forms of the name.		
<b>Can contain following sub elements:</b>		
<useDates> <authorizedForm> <alternativeForm> <nameEntry>		
<b>Can contain following attributes:</b>		
@localtype		
<b>Can occur in following elements:</b>		
<identity>		

<b>&lt;useDates&gt; - Date of use</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
A grouping element that facilitates the dates when the name or names were used by the entity being described.		
<b>Can contain following sub elements:</b>		
<date> <dateRange> <dateSet>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<nameEntryParallel> <nameEntry>		

<b>&lt;dateSet&gt; - Date set</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
A grouping element that facilitates complex date expressions by being able to combine single dates and date ranges, multiple single dates, or multiple date ranges.		
<b>Can contain following sub elements:</b>		
<date> <dateRange>		
<b>Can contain following attributes:</b>		

/
<b>Can occur in following elements:</b>
<useDates> <existDates> <place> <localDescription> <legalStatus> <function> <occupation> <mandate> >CpfRelation> <functionRelation> <resourceRelation>

<b>&lt;authorizedForm&gt; - Authorized form</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	Yes
<b>Brief description:</b>		
Authorised form of the name is to indicate that the set of parallel names recorded in separate <nameEntry> elements within <nameEntryParallel> are deemed as authorised access points.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<nameEntryParallel> <nameEntry>		

<b>&lt;alternativeForm&gt; - Alternative form</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	Yes
<b>Brief description:</b>		
Alternative form of the name is to indicate that the set of parallel names recorded in separate <nameEntry> elements within <nameEntryParallel> are deemed as variant forms of the name.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<nameEntryParallel> <nameEntry>		

<b>&lt;nameEntry&gt; - Name entry</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	Yes	No
<b>Brief description:</b>		
Containing a name entry for a corporate body, person, or family and to record a name by which the corporate body, the person, or the family described in the EAC-CPF instance is known. Each form of the name is recorded in a separate <nameEntry> element.		
<b>Can contain following sub elements:</b>		
<part> <preferredForm>		
<b>Can contain following attributes:</b>		
@xml:lang		
<b>Can occur in following elements:</b>		
<identity>		

<nameEntryParallel>

<b>&lt;part&gt; - Part</b>		
Repeatable:	Mandatory:	May contain text:
Yes	Yes	Yes
Brief description:		
Element used to distinguish components of the CPF entity's name		
Can contain following sub elements:		
/		
Can contain following attributes:		
@localType		
@xml:lang		
Can occur in following elements:		
<nameEntry>		

<b>&lt;preferredForm&gt; Preferred form</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
Preferred form of the name is to indicate which of the parallel names recorded within <nameEntryParallel>, is the preferred one for display purposes in a given context.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<nameEntry>		

<b>&lt;entityId&gt; - Entity identifier</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
Any formal identifier used to designate the CPF entity being described.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@localtype		
Can occur in following elements:		
<identity>		

<b>&lt;entityType&gt; - Entity type</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	Yes
Brief description:		
The type of CPF entity being described. Values available are: person, corporate body or family.		
Can contain following sub elements:		
/		
Can contain following attributes:		
/		
Can occur in following elements:		
<identity>		

### 3.3.2 Description element

<b>&lt;description&gt; - Description</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	No
Brief description:		
A wrapper element for all of the content elements comprising description of the CPF entity described in the EAC-CPF instance.		
Can contain following sub elements:		
<existDates> <places> <place> <localDescriptions> <localDescription> <legalStatuses> <legalStatus> <functions> <function> <occupations> <occupation> <mandates> <mandate> <languagesUsed> <languageUsed> <structureOrGenealogy> <generalContext> <biogHist>		
Can contain following attributes:		
/		
Can occur in following elements:		
<cpfDescription>		

<b>&lt;existDates&gt; - Dates of existence</b>		
Repeatable:	Mandatory:	May contain text:
No	Yes	No
Brief description:		
The dates of existence of the CPF entity being described, such as dates of establishment and dissolution for corporate bodies and dates of birth and death or floruit for persons.		
Can contain following sub elements:		
<date> <dateRange> <dateSet> <descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<description>		

<b>&lt;places&gt; - Places</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		



A grouping element used to bundle together individual <place> elements.
Can contain following sub elements:
<place> <descriptiveNote>
Can contain following attributes:
/
Can occur in following elements:
<description>

<b>&lt;place&gt; - Place</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element to identify the place or jurisdiction where the CPF entity was based, lived, or with which it had some other significant connection.		
Can contain following sub elements:		
<placeEntry> <placeRole> <date> <dateRange> <dateSet> <address> <citation> <descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<places>		

<b>&lt;placeEntry&gt; - Place entry</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
Place should be identified by the proper noun that commonly designates the place, natural feature, or political jurisdiction. It is recommended that place names be taken from authorized vocabularies.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@countryCode @latitude @localType @longitude @scriptCode @transliteration @vocabularySource @xml:lang		
Can occur in following elements:		
<place> <localDescription> <legalStatus> <function> <occupation> <mandate> <ChronItem> <CpfRelation> <functionRelation> <ResourceRelation>		

<b>&lt;placeRole&gt; - Place role</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
An element to identify the contextual role a place or jurisdiction encoded in <place > elements has in relation to the CPF entity.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@lastDateTimeVerified @scriptCode @transliteration @vocabularySource @xml:lang		
Can occur in following elements:		
<place>		

<b>&lt;address&gt; - Address</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
Wrapper element for any kind of addresses		
Can contain following sub elements:		
<addressLine>		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<place>		

<b>&lt;addressLine&gt; - Address line</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
One line of a postal or other address.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang @localType		
Can occur in following elements:		
<address>		

<b>&lt;localDescriptions&gt; - Local descriptions</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A grouping element used to bundle together the descriptive categories available in a local system.		
Can contain following sub elements:		
<localDescription> <descriptiveNote>		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<description>		

<b>&lt;localDescription&gt; - Local description</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
<b>Brief description:</b>		
An element to extend the list of description elements defined by ISAAR (CPF) and specified in the EAC-CPF schema.		
<b>Can contain following sub elements:</b>		
<term> <date> <dateRange> <dateSet> <placeEntry> <citation> <descriptiveNote>		
<b>Can contain following attributes:</b>		
@localType		
<b>Can occur in following elements:</b>		
<localDescriptions>		

<b>&lt;legalStatuses&gt; - Legal statuses</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
<b>Brief description:</b>		
A grouping element used to bundle together individual <legalStatus> elements.		
<b>Can contain following sub elements:</b>		
<legalStatus> <descriptiveNote>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<description>		

<b>&lt;legalStatus&gt; - Legal status</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
<b>Brief description:</b>		
An element to encode information about the legal status of a corporate body.		
<b>Can contain following sub elements:</b>		
<term> <date> <dateRange> <dateSet> <placeEntry> <citation> <descriptiveNote>		
<b>Can contain following attributes:</b>		
@localType		
<b>Can occur in following elements:</b>		
<legalStatuses>		

<b>&lt;functions&gt; -</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
A grouping element used to bundle together individual <function> elements.		
<b>Can contain following sub elements:</b>		
<function> <descriptiveNote>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<description>		

<b>&lt;function&gt; - Function</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
An element that provides information about a function, activity, role, or purpose performed or manifested by the CPF entity being described.		
<b>Can contain following sub elements:</b>		
<term> <placeEntry> <date> <dateRange> <dateSet> <citation> <descriptiveNote>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<functions>		

<b>&lt;occupations&gt; - Occupations</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
A grouping element used to bundle together individual <occupation> elements.		
<b>Can contain following sub elements:</b>		
<occupation> <descriptiveNote>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<description>		

<b>&lt;occupation&gt;</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
An element that provides information about the occupation of the CPF entity being described.		
<b>Can contain following sub elements:</b>		
<term> <date>		

<dateRange>
<dateSet>
<placeEntry>
<citation>
<descriptiveNote>
Can contain following attributes:
@localType
Can occur in following elements:
<occupations>

<b>&lt;mandates&gt; - Mandates</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A grouping element used to bundle together individual <mandate> elements.		
Can contain following sub elements:		
<mandate>		
<descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<description>		

<b>&lt;mandate&gt;</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
The source of authority or mandate for the corporate body in terms of its powers, functions, responsibilities or sphere of activities, such as a law, directive, or charter.		
Can contain following sub elements:		
<term>		
<date>		
<dateRange>		
<dateSet>		
<placeEntry>		
<citation>		
<descriptiveNote>		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<mandates>		

<b>&lt;languagesUsed&gt; - Languages used</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A grouping element used to bundle together individual <languageUsed> elements.		
Can contain following sub elements:		
<languageUsed>		
<descriptiveNote>		
Can contain following attributes:		
/		
Can occur in following elements:		
<description>		

<b>&lt;languageUsed&gt; - Language used</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
<b>Brief description:</b>		
An element used to indicate the language and script in which the CPF entity being described was creative or productive.		
<b>Can contain following sub elements:</b>		
<language> <script> <descriptiveNote>		
<b>Can contain following attributes:</b>		
@localType		
<b>Can occur in following elements:</b>		
<languagesUsed>		

<b>&lt;language&gt; - Language</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
<b>Brief description:</b>		
The specification of a particular language used in the creative work of the CPF entity being described.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
@languageCode @xml:lang		
<b>Can occur in following elements:</b>		
<languageUsed>		

<b>&lt;script&gt; - Script</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
<b>Brief description:</b>		
The specification of a particular script used in the creative work of the CPF entity being described. @scriptCode has to be compliant with ISO 15924.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
@scriptCode @xml:lang		
<b>Can occur in following elements:</b>		
<languageUsed>		

<b>&lt;structureOrGenealogy&gt; - Structure or genealogy</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
<b>Brief description:</b>		
A description of the internal administrative structure(s) of a corporate body or the genealogy of a family.		
<b>Can contain following sub elements:</b>		
<outline> <p>		
<b>Can contain following attributes:</b>		

/
Can occur in following elements:
<description>

<b>&lt;outline&gt; - Outline</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element to encode information in an outline format.		
Can contain following sub elements:		
<level>		
Can contain following attributes:		
/		
Can occur in following elements:		
<structureOrGenealogy>		
<generalContext>		

<b>&lt;level&gt; - Level</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element to indicate the hierarchical levels of information that comprise the outline.		
Can contain following sub elements:		
<level>		
<item>		
Can contain following attributes:		
@localType		
@xml:lang		
Can occur in following elements:		
<outline>		
<level>		

<b>&lt;item&gt; - Item</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
An element for general lists within descriptive elements and within levels in an outline		
Can contain following sub elements:		
/		
Can contain following attributes:		
@localType		
@xml:lang		
Can occur in following elements:		
<level>		

<b>&lt;generalContext&gt; - General context</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element that encodes information about the social, cultural, economic, political, and/or historical milieu in which the CPF entity being described existed.		
Can contain following sub elements:		

<outline>
<p>
Can contain following attributes:
/
Can occur in following elements:
<description>

<b>&lt;biogHist&gt;- Biographical or historical note</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A concise essay and/or chronology that provides biographical or historical information about the CPF entity.		
Can contain following sub elements:		
<abstract>		
<chronList>		
<p>		
<citation>		
Can contain following attributes:		
@localType		
Can occur in following elements:		
<description>		

<b>&lt;abstract&gt; - Abstract</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	Yes
Brief description:		
An element that contains a brief summary of the information contained within the <biogHist> as a whole.		
Can contain following sub elements:		
/		
Can contain following attributes:		
@xml:lang		
Can occur in following elements:		
<biogHist>		

<b>&lt;chronList&gt; - Chronological list</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A structured chronological list of events, dates, and (optionally) places that may be used within the <biogHist> element.		
Can contain following sub elements:		
<chronItem>		
Can contain following attributes:		
/		
Can occur in following elements:		
<biogHist>		

<b>&lt;chronItem&gt; Chronological item</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
A container element that keeps a date or a date range paired with an associated event and an optional place within a Chronology List <chronList>.		



<b>Can contain following sub elements:</b>
<date> <dateRange> <event> <placeEntry>
<b>Can contain following attributes:</b>
@localType @xml:lang
<b>Can occur in following elements:</b>
<chronList>

<b>&lt;event&gt; - Event</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	Yes
<b>Brief description:</b>		
An element used to encode an event associated with a date and, optionally, a place within a structured chronology.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
@localType @xml:lang		
<b>Can occur in following elements:</b>		
<chronItem>		

### 3.3.3 Relations element

<b>&lt;relations&gt; - Relations</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	No
<b>Brief description:</b>		
A wrapper element that groups together one or more relation elements, each of which encodes a specific relationship.		
<b>Can contain following sub elements:</b>		
<cpfRelation> <functionRelation> <resourceRelation>		
<b>Can contain following attributes:</b>		
/		
<b>Can occur in following elements:</b>		
<cpfDescription>		

<b>&lt;cpfRelation&gt; - CPF relation</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	No
<b>Brief description:</b>		
The <cpfRelation> element contains the description of a corporate body, person, or family related to the described CPF entity. Such related entities are typically described in another EAC-CPF instance.		
<b>Can contain following sub elements:</b>		
<relationEntry> <date> <dateRange>		

<dateSet> <placeEntry> <descriptiveNote>
<b>Can contain following attributes:</b>
@cpfRelationType @lastDateTimeVerified @xml:lang @xlink:type @xlink:href @xlink:arcrole @xlink:role @xlink:title
<b>Can occur in following elements:</b>
<relations>

<b>&lt;relationEntry&gt; - Relation entry</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	Yes
<b>Brief description:</b>		
A descriptive element of the relation. A descriptive element for relations that provides discursive text identifying a related CPF entity, a resource created by or otherwise related to the named CPF entity (eg, archival records), or the name of a related function.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
@localType ▫ values! @scriptCode @transliteration @xml:lang		
<b>Can occur in following elements:</b>		
<cpfRelation> <functionRelation> <resourceRelation>		

<b>&lt;functionRelation&gt; - Function relation</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	No	?
<b>Brief description:</b>		
An element designed to encode a relationship between a function and the CPF entity described in the EAC-CPF instance.		
<b>Can contain following sub elements:</b>		
<relationEntry> <descriptiveNote> <dateSet> <date> <dateRange> <placeEntry>		
<b>Can contain following attributes:</b>		
@functionRelationType - Can be one of: controls, owns, performs @lastDateTimeVerified @xlink:type @xlink:href @xlink:arcrole @xlink:role		

@xlink:title
@xml:lang
Can occur in following elements:
<relations>

<b>&lt;resourceRelation&gt; - Resource relation</b>		
Repeatable:	Mandatory:	May contain text:
Yes	No	No
Brief description:		
An element for encoding a relation between a resource and the CPF entity. Use <resourceRelation> to describe and to point to related resources like EAD files, image/audio/video files and other.		
Can contain following sub elements:		
<relationEntry> <descriptiveNote> <dateSet> <date> <dateRange> <placeEntry>		
Can contain following attributes:		
@resourceRelationType @lastDateTimeVerified @xlink:type @xlink:href @xlink:arcrole @xlink:role @xlink:title @xml:lang		
Can occur in following elements:		
<relations>		

### 3.3.4 Alternative set element

<b>&lt;alternativeSet&gt; - Alternative set</b>		
Repeatable:	Mandatory:	May contain text:
No	No	No
Brief description:		
A container element for two or more authority records derived from two or more authority systems, expressed within a single EAC-CPF instance.		
Can contain following sub elements:		
<setComponent>		
Can contain following attributes:		
@xml:lang @xml:base		
Can occur in following elements:		
<cpfDescription>		

<b>&lt;setComponent&gt; - Set component</b>		
Repeatable:	Mandatory:	May contain text:
Yes	Yes	No
Brief description:		
Provides a wrapper to contain an entire authority record, so that multiple records for the same identity		

from separate authority systems or in different languages, may be combined together within a single EAC-CPF instance.

<b>Can contain following sub elements:</b>
<componentEntry> <descriptiveNote>
<b>Can contain following attributes:</b>
@lastDateTimeVerified @xlink:type @xlink:href @xlink:role @xlink:title @xml:lang
<b>Can occur in following elements:</b>
<alternativeSet>

<b>&lt;componentEntry&gt; - Component entry</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
Yes	Yes	Yes
<b>Brief description:</b>		
To provide a textual note about the EAC-CPF instance that is being bundled together with other authority records for the same entity within an <alternativeSet> wrapper.		
<b>Can contain following sub elements:</b>		
/		
<b>Can contain following attributes:</b>		
@localType @xml:lang @scriptCode @transliteration		
<b>Can occur in following elements:</b>		
<setComponent>		

### 3.4 Attributes

<b>@countryCode</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The @countryCode attribute may be used to provide the ISO 3166-1 standard code designating the country placed named is a country, the code for that country. The values are to be taken from the list of ISO 3166-1 Codes for the Representation of Names of Countries. The list can be downloaded from the website of ISO 3166 Maintenance Agency <a href="http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm">http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm</a>		
<b>Data type:</b>		
ISO 3166-1		
<b>Can occur in following elements:</b>		
<placeEntry> <address>		

<b>@functionRelationType</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes

<b>Brief description:</b>		
The type of relation that the entity being described has to the related function. The value designates the type of relation that the entity being described has to the related function. If the type of relation is more specific than one of the values given below, @xlink attributes may be used in addition to @functionRelationType.		
<b>Data type:</b>		
"controls" or "owns" or "performs"		
<b>Can occur in following elements:</b>		
<functionRelation>		

<b>@identityType</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
May be useful for processing when multiple identities are described in the same instance. Though optional, it is recommended that it is used when multiple identities are described in the same EAC-CPF instance using <multipleIdentities>. It will enable processors to distinguish between the description of a person and one or more personae.		
<b>Data type:</b>		
"given" or "acquired"		
<b>Can occur in following elements:</b>		
<identity>		

<b>@languageCode</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The Language Code is used to provide the ISO 639-2 standard code representing the language of the EAC-CPF instance. The values are to be taken from the list of ISO 639-2 Codes for the representation of Names of Languages. The list can be downloaded from the website of the Library of Congress which is the registration agency of the standard ( <a href="http://www.loc.gov/standards/iso639-2/langhome.html">http://www.loc.gov/standards/iso639-2/langhome.html</a> ).		
<b>Data type:</b>		
ISO 639-2		
<b>Can occur in following elements:</b>		
<language>		

<b>@lastDateTimeVerified</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The value of the attribute provides the last date or last date and time when a related (or linked) object was verified. Verification may include link resolution as well as verification of the version of the linked object.		
<b>Data type:</b>		
Union of the XML Schema Datatypes date, gYear, gYearMonth, and dateTime. The following are all valid patterns: 2009-12-31, 2009, 2009-12, 2009-12-31T23:59:59		
<b>Can occur in following elements:</b>		
<citation> <cpfRelation> <functionRelation> <resourceRelation> <setComponent>		

<term>

<b>@latitude</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The value of the attribute is the geographic latitude of the place named. @latitude should be used in conjunction with @longitude and @altitude.		
<b>Data type:</b>		
NMTOKEN		
<b>Can occur in following elements:</b>		
<place>		

<b>@localType</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
Used to make the semantics of the element more specific or to provide semantic specificity to elements that are semantically weak. Value should be an absolute URI. The @localType is broadly available on many descriptive and a few control elements. It is intended to provide a means to narrow the semantics of some elements or provide semantics for elements that are primarily structural or that are semantically weak. The value of the @localType must conform to W3C Schema Part 2: Datatypes, anyURI. To facilitate exchange of EAC-CPF instances, it is highly recommend that the URI is absolute and resolvable to a local resource that describes the semantic scope and use of the value.		
<b>Data type:</b>		
Usually anyURI In constituent apeEAC-CPF elements the values for the @localType have been fixed:		
<nameEntryParallel>: authorized, alternative, preferred, abbreviation, other (Use the @localType to specify the status of the parallel names)		
<nameEntry>: authorized, alternative, preferred, abbreviation, other (Use the @localType to specify the status of the name as authorized, alternative, preferred or abbreviated name)		
<nameEntry><part>: corpname, famname, persname, surname, firstname, birthname, title, prefix, suffix, alias, patronymic, legalform		
Use the @localType to specify the names components:		
corpname = name of a corporate body		
famname = name of a family		
persname = name of a person		
surname = last name of a person		
firstname = given/first name of a person		
birthname = name at birth of a person or family		
title = academic title		
prefix = aristocratic title		
suffix = follows a person's full name, additional information about the person		
alias = any other name		
patronym = component of a name based on the name of a male ancestor		
legalform = name of the legal form of a corporate body		
famname = name of a family		
persname = name of a person		
surname = last name of a person		

firstname = given/first name of a person  
 birthname = name at birth of a person or family  
 title = academic title  
 prefix = aristocratic title  
 suffix = follows a person's full name, additional information about the person  
 alias = any other name  
 patronym = component of a name based on the name of a male ancestor  
 legalform = name of the legal form of a corporate body

<placeEntry>: birth, foundation, private-residence, business-residence, death, suppression, other.  
 Use the @localType to specify the type (role) of places:

birth = place of birth (person)  
     foundation = place of foundation (body)  
     private-residence = place of living (person, family)  
     business-residence = place of work / business (person, family, body)  
     death = place of death (person)  
     suppression = place of suppression (body)  
     other = other places, please specify in <placeRole>

<address>: visitors address, postal address, other (use the @localType to specify the type of addresses)

<addressLine>: firstdem, secondem, postalcode, localentity, street, other.  
 Use the @localType to specify the type of the address lines:

<relationEntry>: title, id, agencyCode, agencyName  
 "title" = title of the related resource/name of the related (EAC-CPF) entity  
 "id" = ID of the related resource / description  
 "agencyCode" = ID of the institution/organisation/agency responsible  
 "agencyName" = name of the institution/organisation/agency responsible

**Can occur in following elements:**

<otherAgencyCode>  
 <otherRecordId>  
 <localControl>  
 <nameEntryParallel>  
 <nameEntry>  
 <part>  
 <placeEntry>  
 <address>  
 <addressLine>  
 <relationEntry>  
 <entityId>  
 <localDescription>  
 <legalStatus>  
 <function>  
 <occupation>  
 <mandate>  
 <languageUsed>  
 <level>  
 <item>  
 <bioghist>  
 <chronItem>  
 <event>  
 <componentEntry>

**@longitude**

Repeatable:	Mandatory:	May contain text:
No	No	Yes

<b>Brief description:</b>		
The value of the attribute is the geographic longitude of the place named. @longitude should be used in conjunction with @latitude and @altitude.		
<b>Data type:</b>		
NMTOKEN		
<b>Can occur in following elements:</b>		
<place>		

<b>@notAfter</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The latest date possible for an uncertain date. For uncertain dates, used in conjunction with @standardDate, the value of @notAfter is the latest date possible. See also @notBefore.		
<b>Data type:</b>		
Union of the XML Schema Datatypes date, gYear, and gYearMonth. The following are all valid patterns: 2009-12-31, 2009, 2009-12.		
<b>Can occur in following elements:</b>		
<date> <fromDate> <toDate>		

<b>@notBefore</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The earliest date possible for an uncertain date. For uncertain dates, used in conjunction with @standardDate, the value of @notBefore is the earliest date possible. See also @notAfter.		
<b>Data type:</b>		
Union of the XML Schema Datatypes date, gYear, and gYearMonth. The following are all valid patterns: 2009-12-31, 2009, 2009-12.		
<b>Can occur in following elements:</b>		
<date> <fromDate> <toDate>		

<b>@resourceRelationType</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The value designates the type of relation that the entity described in the EAC-CPF instance has to the resource. If the nature of the relation is more specific than one of the available values, the Xlink attributes may be used in addition to @resourceRelationType.		
<b>Data type:</b>		
"creatorOf" or "subjectOf" or "other"		
<b>Can occur in following elements:</b>		
<resourceRelation>		

<b>@scriptCode</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes



<b>Brief description:</b>
A standard four-letter code for the writing script used with a given language. The @scriptCode attribute is required for the <script> element, and is available on other elements where language designations may be used.
<b>Data type:</b>
ISO 15924 Code for the Representation of Names and Scripts
<b>Can occur in following elements:</b>
<script>

<b>@standardDate</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The value of @standardDate provides a standard form of the date expressed in <date>, <fromDate>, or <toDate> that can be used in computer processing, such as searching.		
<b>Data type:</b>		
Union of the XML Schema Datatypes date, gYear, and gYearMonth. The following are all valid patterns: 2009-12-31, 2009, 2009-12.		
<b>Can occur in following elements:</b>		
<date> <fromDate> <toDate>		

<b>@standardDateTime</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
The value of @standardDateTime provides a standard form of the date or date and time expressed in the <eventDateTime> that can be used in computer processing. For example, using both the value in <eventType> and @standardDateTime, all EAC-CPF instances "revised" on a particular date can be identified.		
<b>Data type:</b>		
Union of the XML Schema Datatypes date, gYear, and gYearMonth. The following are all valid patterns: 2009-12-31, 2009, 2009-12.		
<b>Can occur in following elements:</b>		
<eventDateTime>		

<b>@transliteration</b>		
<b>Repeatable:</b>	<b>Mandatory:</b>	<b>May contain text:</b>
No	No	Yes
<b>Brief description:</b>		
A value designating the transliteration scheme used in representing converting one script into another script. The conventions or rules that prescribe a method for converting one script into another script.		
<b>Data type:</b>		
NMTOKEN		
<b>Can occur in following elements:</b>		
<sourceEntry> <term> <placeEntry> <placeRole> <relationEntry> <componentEntry>		

<b>@vocabularySource</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
A value designating the source of the vocabulary from which terms are derived. The controlled vocabulary used to derive terms for the <term>, <placeEntry>, and <placeRole> elements. Controlled vocabularies should be declared in the <conventionDeclaration> element within <control>.		
Data type:		
anyURI		
Can occur in following elements:		
<term> <placeEntry> <placeRole>		

<b>@xlink:arcrole</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
URI defining the purpose of the link. An absolute URI that describes the nature of the relation between the entity being described in the EAC-CPF instance and a remote resource (<cpfRelation>, <resourceRelation>, or <functionRelation>) or the nature of the relation between the EAC-CPF instance description (or component of description) and the remote resource (<citation>, <setComponent>, and<source>). The value of the attribute should indicate the direction of the relation. It is recommended that the direction of the relation be from local resource to remote resource.		
Data type:		
string		
Can occur in following elements:		
<cpfRelation> <resourceRelation> <functionRelation> <citation> <setComponent> <source>		

<b>@xlink:href</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Contains a URI, possibly relative, pointing to the related resource. The address for a remote resource. The @xlink:href takes the form of a Uniform Resource Identifier (URI). While it is permissible to use a relative URI, and an absolute URI is recommended.		
Data type:		
anyURI		
Can occur in following elements:		
<source> <citation> <cpfRelation> <functionRelation> <resourceRelation> <setComponent>		

<b>@xlink:role</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Identifies the type or nature of the remote resource with an absolute URI.		
Data type:		
string		
Can occur in following elements:		
<source> <citation> <cpfRelation> <functionRelation> <resourceRelation> <setComponent>		

<b>@xlink:title</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
Information that may be used as a viewable caption for the remote resource that indicates the name or type of the linked remote source.		
Data type:		
string		
Can occur in following elements:		
<source> <citation> <cpfRelation> <functionRelation> <resourceRelation> <setComponent>		

<b>@xlink:type</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
Brief description:		
A fixed value that identifies an XLINK compliant element of a particular type. While the attribute is optional in instances validated against the W3C Schema version of EAC-CPF, the Relax NG version of EAC-CPF requires it. To support exchange of EAC-CPF instances, it is recommended that the @xlink:type be present in the instance whenever any of the other XLINK attributes are used.		
Data type:		
Fixed value: "simple"		
Can occur in following elements:		
<source> <citation> <cpfRelation> <functionRelation> <resourceRelation> <setComponent>		

<b>@xml:base</b>		
Repeatable:	Mandatory:	May contain text:

No	No	Yes
<b>Brief description:</b>		
Used to specify a base URI other than the base URI of the EAC-CPF instance. @xml:base is used to specify the base URI other than the base URI of the EAC-CPF instance, for the purpose of resolving any relative URIs used with elements that contain one or more descendants that use an attribute of type anyURI. @xml:base makes it possible to declare an absolute base URI to facilitate the use of relative URIs on the descendants.		
<b>Data type:</b>		
NMOKEN		
<b>Can occur in following elements:</b>		
<eac-cpf> <alternativeSet>		

<b>@xml:lang</b>		
Repeatable:	Mandatory:	May contain text:
No	No	Yes
<b>Brief description:</b>		
The @xml:lang may occur on any element intended to contain natural language content whenever information about the language of the content of this element and its children are needed. @xml:lang should be used when the language of the element differs from the Language Code declared in the @languageCode attribute on the element <language> in the control section. The values in the list are taken from ISO 639-2 Codes for the Representation of Names of Languages. The list can be downloaded from the website of the Library of Congress which is the registration agency of the standard ( <a href="http://www.loc.gov/standards/iso639-2/langhome.html">http://www.loc.gov/standards/iso639-2/langhome.html</a> ).		
<b>Data type:</b>		
ISO 639-2 Codes for the Representation of Names of Languages		
<b>Can occur in following elements:</b>		
<eac-cpf> <agencyName> <p> <agent> <eventDescription> <language> <script> <sourceEntry> <date> <fromDate> <toDate> <term> <citation> <part> <placeEntry> <placeRole> <addressLine> <level> <item> <abstract> <chronItem> <event> <cpfRelation> <relationEntry> <functionRelation> <resourceRelation> <alternativeSet> <setComponent> <componentEntry>		

## 4 Identifiers in EAC-CPF

With EAC-CPF we are introducing one of the main entities in the Semantic Web and Linked Data discussion - persons (in their many forms of single persons, persons forming a family, persons acting as staff of a corporate body) - to the Archives Portal Europe. This not only provides an additional access point to the archival information, it also allows linking to outside resources on the web in order to draw in descriptions, images, links and relations not (yet) included in the archival material itself. Access to these resources enhances the user experience when searching and researching on the Archives Portal Europe. To build these links, one must be able to name and identify the entities that shall be linked. Therefore the following chapter will concentrate on two main aspects: identifiers for internal links within the system of the Archives Portal Europe and identifiers for external references to other resources.

### 4.1 Identifiers in apeEAC-CPF

The apeEAC-CPF schema as defined within this State of the Art report, includes two elements that allow to identify:

- the EAC-CPF instance that includes the description of a person, family or corporate body;
- the person, family or corporate body that is described within an EAC-CPF instance.

#### 4.1.2 Identifying the EAC-CPF instance

As a first quick survey among the APE<sub>x</sub> partners has shown, only a few of them use identifying systems for persons and/or corporate bodies, and as implementing an international standardised identifying system such as the International Standard Name Identifier (ISNI)<sup>4</sup> would most likely have required “buying” these identifiers, the discussions within APE<sub>x</sub> WP 4 have led to the conclusion that instead of identifying the entity described, the Archives Portal Europe will concentrate on identifying the EAC-CPF instance that provides this description<sup>5</sup>.

This will be done with the element of <recordId>, that will include the unique (persistent) identifier for this EAC-CPF instance within the system of the Archives Portal Europe. With <recordId> being the only identifying element, that

1. is mandatory and
2. not repeatable

this has been an obvious choice. As <recordId> will thereby carry an identifier specifically meant for the use within the Archives Portal Europe - and for the use of exchanging data between the Archives Portal Europe as a central system and other portals and projects

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<sup>4</sup> See: <http://www.isni.org/> (last accessed: 21 June 2013).

<sup>5</sup> The SNAC project, whose coordinator Daniel Pitti acted as advisor for the APE<sub>x</sub> EAC-CPF core group, also identifies the EAC-CPF instances that provide the descriptions instead of identifying the entities described.

such as Europeana - the format of this identifier will not require affiliation with a certain institution as for example the identifiers of finding aids do. It could be an option to include an abbreviation like “APE” within the identifier to signify its origin and main use. Other than that it is recommended to use an automatically created system-internal identifier (alphanumeric, no semantics attached) or to follow an existing standard or identifying system such as Handle<sup>6</sup>, OpenURL<sup>7</sup> or ARK (Archival Resource Key)<sup>8</sup>. The structure of these identifiers shall be discussed further with the technical team of the APE<sub>x</sub> project and with WP 6, the Web 2.0 and Usability work package, to ensure usability within the APE<sub>x</sub> systems and to enable the identifiers to be reused for semantic web issues.

In case, existing EAC-CPF instances are delivered to the Archives Portal Europe and are converted to apeEAC-CPF, this conversion would ensure, that the original <recordId> in the content provider’s system is kept by transforming it to <otherRecordId> with the localType=“converted”. As <otherRecordId> is repeatable, it would in parallel be possible to also include existing <otherRecordId> elements from the original files, which might be useful for the question of re-directing to content providers’ systems.

For files exported from local systems to the Archives Portal Europe, there’d be a check on the <recordId> in these exports being unique and compliant to the identifiers’ format as chosen for the Archives Portal Europe. When both these requirements are met, the identifier as delivered in <recordId> would be kept. When the test on one of these requirements should be failing, the same principle would apply to these files as to the ones being converted - the original <recordId> would be moved to <otherRecordId> and an identifier for the use in the Archives Portal Europe would be created as new content for <recordId>.

Within the Archives Portal Europe the <recordId> for an EAC-CPF instance would be the main anchor for all possible links between the different types of XML files forming the data model of the portal, ie the content of <recordId> (equalling the identifier of the EAC-CPF instance) would need to be included accordingly in related elements and attributes of the other standards in order to activate the links.

Element in EAC-CPF	Element/attribute in...
<recordId>	...EAD <archdesc><did> respectively <c><did> <ul style="list-style-type: none"> <li>• &lt;origination&gt;&lt;corpname@authfilenumber&gt;</li> <li>• &lt;origination&gt;&lt;persname@authfilenumber&gt;</li> <li>• &lt;origination&gt;&lt;famname@authfilenumber&gt;</li> <li>• &lt;origination&gt;&lt;name@authfilenumber&gt;</li> </ul>
<recordId>	...EAD <archdesc> respectively <c> <ul style="list-style-type: none"> <li>• &lt;controlaccess&gt;&lt;corpname@authfilenumber&gt; &gt;</li> <li>• &lt;controlaccess&gt;&lt;persname@authfilenumber&gt; &gt;</li> <li>• &lt;controlaccess&gt;&lt;famname@authfilenumber&gt; &gt;</li> </ul>

<sup>6</sup> See: <http://www.handle.net/> (last accessed: 21 June 2013).

<sup>7</sup> See: <http://www.oclc.org/research/activities/openurl.html> (last accessed: 21 June 2013).

<sup>8</sup> See: <https://confluence.ucop.edu/display/Curation/ARK> (last accessed: 1 July 2013).

	<ul style="list-style-type: none"> <li>• &lt;controlaccess&gt;&lt;name@authfilenumber&gt;</li> </ul>
<recordId>	...EAG <ul style="list-style-type: none"> <li>• &lt;resourceRelation resourceRelationType="creatorOf"&gt; &lt;relationEntry localType="id"&gt;</li> </ul>
<recordId>	...EAC-CPF <ul style="list-style-type: none"> <li>• &lt;cpfRelation cpfRelationType="[...]"&gt; &lt;relationEntry localType="id"&gt;</li> </ul>

#### 4.1.3 Identifying the entity described in EAC-CPF

When it comes to identifying the entity, that is the person, corporate body or family, described within an EAC-CPF instance, the Archives Portal Europe's implementation will fall back on existing identifying systems outside its own system. This can either be national authority files (or something similar) as eg the Integrated Authority File (Gemeinsame Normdatei, GND) at the German National Library<sup>9</sup> or international systems like VIAF (Virtual International Authority File)<sup>10</sup>, ISNI or Dbpedia. Through such a system it will be possible to

- draw information into the Archives Portal Europe, that would otherwise not be available in this central infrastructure;
- use these external references to provide the user with an additional system of their own for inclusion in her/his (re)search.

To record this information, the optional element <entityId> will be used in apeEAC-CPF, where the attribute @localType would furthermore allow the content provider to specify the identifying system used. As <entityId> is defined as repeatable, it will also be possible to include identifiers for the entity coming from different identifying systems, eg the national authority file, plus international identifications.

For the content providers of the Archives Portal Europe, it will be possible to provide this information already within their original EAC-CPF files or to add this information during creation (and later on editing) with the Archives Portal Europe's tools. In the context of the APE<sub>x</sub> WP 6 tasks and activities on Web 2.0 functionalities and for example the option of tagging, it could also be an option to allow users of the Archives Portal Europe's frontend to add such identifying information. This information then also could be fed back into the original systems of the content providers if wanted for enhancement of their local information.

<sup>9</sup> See: [http://www.dnb.de/EN/Standardisierung/GND/gnd\\_node.html](http://www.dnb.de/EN/Standardisierung/GND/gnd_node.html) (last accessed: 1 July 2013).

<sup>10</sup> See: <http://viaf.org/> (last accessed: 21 June 2013).

## 5 apeEAC-CPF data base export

### 5.1 Current practise in EAC-CPF export

An overview of current practise on EAC-CPF exports from local databases made by WP 4 has shown that most partner archives can arrange for ISAAR(CPF) compliant datasets that are the primary, though not necessarily the only source for the export of apeEAC-CPF files to the Archives Portal Europe. However, only a minority of archives reported that they already have implemented tools enabling export of data in an EAC-CPF compliant form.

Many national archives reported they are developing tools for EAC-CPF export, or are planning to do so in near future. The APE<sub>x</sub> project itself is in a way a stimulus to speed up this process, and will surely contribute to improved (re)usability of authority data on national and European levels.

### 5.2 Source of data for export

The EAC-CPF standard is designed for export and exchange of ISAAR(CPF) compliant records and it seems to be logical that corresponding datasets from local databases would be the source for an according (ape)EAC-CPF export.

ISAAR(CPF) is an outgrowth of the concept of authority control where the main purpose of authority records is to improve quality and reliability of catalogues. In archival databases, information on corporate bodies, persons and families is not always linked to catalogue entries on the archival materials, ie they can be objects of description for themselves. Information on the same person or corporate body can, therefore, be scattered around multiple roles (creator, records owner, acquisition source, simple access point). Some of these roles are more likely to produce more detailed and richer information, but smaller numbers of records, while some could produce larger numbers of more simple records.

Information on corporate bodies, persons and families is stored not only in ISAAR(CPF) records, but often also, or only, in finding aids. In some cases, it could be comfortable to create EAC-CPF files from EAD files (see chapter 6).

### 5.3 Scope of export

Finding aids published on the Archives Portal Europe contain a lot of information on records creators. apeEAC-CPF data on the portal would create an added value especially if more information and/or more possibilities for searching and browsing are offered. It is therefore desirable to encourage publishing of EAC-CPF records regardless of whether there is any corresponding archival descriptive unit (yet) published on the Archives Portal Europe.

In order to make apeEAC-CPF information on portal more useful, it is therefore desirable to encourage a practise to export apeEAC-CPF records either with corresponding finding



aids or in their own rights, or to add relationships if corresponding records are already published.

## 5.4 Technical aspects of export

Technical aspects of an apeEAC-CPF export will depend on the database management systems, software tools and programming languages used in local information systems.

Local systems will need some upgrade, eg additional scripts, to be able to export apeEAC-CPF files. It is recommended to consider the opportunity to upgrade systems in a way that would enable systematic management of the export, not only simple conversion.

One option that could be recommended is to create apeEAC-CPF versions for every authority record, reflecting the latest version of a record, and to implement a dedicated EAC-CPF repository and some procedures for refreshing exported records after the source version has been changed. The implementation of anOAI-PMH repository could be recommended. In correspondence to what has been specified above (see chapter 4) on identifiers, additional identifiers of the entities described in apeEAC-CPF files (eg coming from international identifying systems) shall be made reusable by local systems, especially those which are currently enhancing their databases regarding EAC-CPF and could use the same identifier system.

## 5.5 Relationships and links

An important aspect of EAC-CPF is the possibility to define multiple relationships of different kinds which enable users to browse and discover information in an efficient way. Without relationships and links, standards like ISAAR(CPF) would have much less sense.

## 5.6 Local controlled vocabularies

It is possible that local systems use some controlled lists of values or vocabularies in order to support navigation or specific search refinements. An example could be a thesaurus or a simple list of functions supporting search and browsing. When exported in a system that doesn't use the same vocabulary, these data lose important properties.

It therefore needs to be ensured that the Archives Portal Europe allows to integrate existing vocabularies to rebuild the according functionalities also within the central system. The question of how to integrate possibly several vocabularies on the same topic being provided by different content providers and coming from different countries and languages will be discussed further on in relation to WP 6 and their activities around a semantic resources management system.

## 6 Extracting from EAD / EAG

### 6.1 Create apeEAC-CPF from ape data (apeEAD and EAG 2012)

#### 6.1.1 Create apeEAC-CPF automatically from apeEAD

**Goal:** Create apeEAC-CPF from apeEAD data which is already published in the portal. This is an internal process, which will be started automatically

- after implementation of apeEAC-CPF in the portal with the whole Archives Portal Europe data stock;
- at defined regular intervals.

**Requirements:** The automatic extraction of apeEAC-CPF files from apeEAD files will be conducted by the Archives Portal Europe system and will not be an option that can be started manually by content providers.

The parsed elements of the apeEAD file must be sufficient to define the apeEAC-CPF entity type. Therefore only specified name elements (`//corpname`, `//persname`, `//famname`) can be used for creating an instance. To ensure creating apeEAC-CPF instances only for creators of archival material and to avoid doubled names as much as possible, the name information will be extracted from `<origination>` sub elements, only. In this context, it also needs to be ensured to copy only apeEAD elements from one `archdesc-` or `c-`level to apeEAC-CPF `<cpfDescription>` sub elements and to the relations part and to avoid mixing different levels from the apeEAD files.

In order to avoid doubled files, new apeEAC-CPF should be created only from newly published and updated apeEAD files. In order to avoid apeEAC-CPF files without relations, as when for example apeEAD files were deleted by content provider, all apeEAC-CPF files need to be checked for IDs of deleted references in the element `<relationEntry @localType="id">`. Therefore the portal's back-end should produce documentation, such as a log file for newly published, updated and deleted apeEAD files.

#### Steps:

- parse apeEAD for elements `//origination/corpname`, `//origination/persname`, `//origination/famname`
- automatic creation of apeEAC-CPF files, containing
  - name entry

- link to the apeEAD level as resource relation in the apeEAC-CPF
- link to digital objects as resource relation in the apeEAC-CPF
- automatically check for duplicates of derived apeEAC-CPF files (see 5.2.2 below)

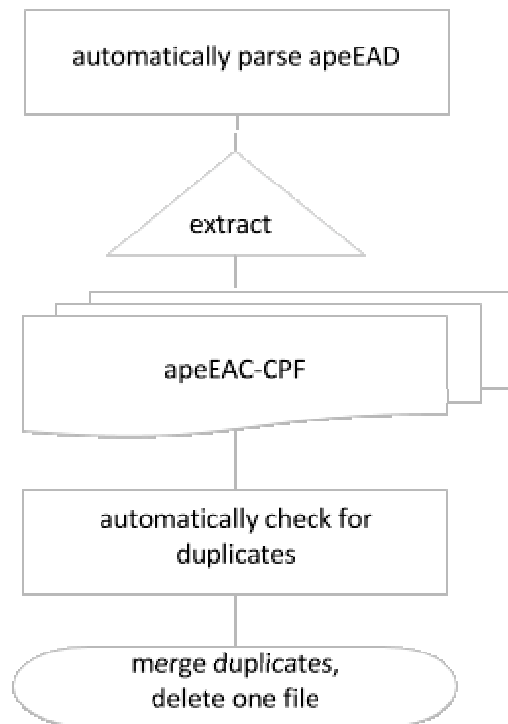


Figure 1

apeEAD elements for creating instance	corresponding apeEAC-CPF element
<origination> <corpname>  @authfilenumber	<entityType>corporateBody</entityType> <nameEntry> <part @localType="corpname"> <entityID @localType="imported">
<origination> <persname>  @authfilenumber	<entityType>person</entityType> <nameEntry> <part @localType="persname"> <entityID @localType="imported">
<origination> <famname>  @authfilenumber	<entityType>family</entityType> <nameEntry> <part @localType="famname"> <entityID @localType="imported">
apeEAD elements for conversion/copying	corresponding apeEAC-CPF element
<language> <language @langcode="" @scriptcode="">	<languageDeclaration> <language languageCode=""> <script scriptCode=""/>
elements to reference from apeEAD file to apeEAC-CPF file	corresponding apeEAC-CPF element
<eadid>	<resourceRelation @resourceRelationType="creatorOf"> <relationEntry @localType="id">

<publisher>	<resourceRelation > <relationEntry @localType="agencyName">
<eadid @mainagencycode >	<resourceRelation resourceRelationType="creatorOf"> <relationEntry @localType="agencyCode">
<titlestmt> <titleproper>	<resourceRelation resourceRelationType="creatorOf"> <relationEntry @localType="title">
<did> <unittitle>	<resourceRelation resourceRelationType="creatorOf"> <relationEntry @localType="title">
<bioghist> <dao @xlink:href @xlink:title>	<resourceRelation @xlink: href @resourceRelationType="subjectOf" @xlink:arcrole="image"> <relationEntry @localType="title">
<otherfindaid> <head> <extref @xlink:href @xlink:title <sup>11</sup>	<resourceRelation <relationEntry @localType="title" @resourceRelationType="other"> @xlink: href> <relationEntry @localType="title">
<c level="file" > <dao @href @title>  <unitid type="call number">	<resourceRelation @resourceRelationType="creatorOf" @xlink:title @xlink:href> <relationEntry @localType="id">

### 6.1.2 Create apeEAC-CPF automatically from EAG 2012

**Goal:** Create apeEAC-CPF from EAG 2012 data which is already published in the portal. This process can be started

- anytime by the content provider using own EAG 2012 file(s)

**Requirements:** Extracting from EAG 2012 creates apeEAC-CPF files about corporate bodies. Each EAG 2012 file, no matter how many repositories are described, generates one apeEAC-CPF file.

#### Steps:

- parse EAG 2012 for elements //autform and //parform
- creation of apeEAC-CPF files
- link the EAG 2012 as resource relation in the apeEAC-CPF

<sup>11</sup> Use value from //otherfindaid @xlink:title in case there is no information in //otherfindaid/head.

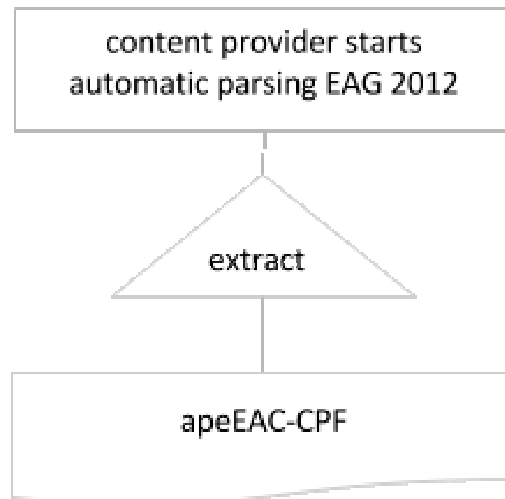


Figure 2

EAG 2012 elements for creating instance	corresponding apeEAC-CPF element
<identity> <autform> and <parform>	<entityType>corporateBody</entityType> <nameEntryParallel @localType="authorized"> <nameEntry> <part @localType="corpname" @xml:lang>
EAG 2012 elements for conversion/copying	corresponding apeEAC-CPF element
<maintenanceAgency> <agencyCode> <agencyName>	<maintenanceAgency> <agencyCode> <agencyName>
<languageDeclarations> <languageDeclaration> <language @xml:lang @languageCode> <script @xml:lang @scriptCode>	<languageDeclaration> <language languageCode="">  <script scriptCode=""/>  <descriptiveNote> <p> <sup>12</sup>
<conventionDeclaration>	<conventionDeclaration>
<repositorid @countrycode>	<place> <placeEntry @localType="business-residence" @countryCode/>
<repositoryName>	<localDescriptions @localType="eag"> <localDescription @localType="repository"> <term>Bundesarchiv Koblenz</term>
<repositoryType>	<function> <term>
<repositorhist> <descriptiveNote>	<bioghist> <p @xml:lang>

<sup>12</sup> apeEAC-CPF does not allow multiple <languageDeclaration> or <language> elements. In case the EAG 2012 file contains multiple <eag:languageDeclaration> elements, copy the first one to <apeEAC-CPF:languageDeclaration> and copy the following content in <p>.

<p @xml:lang>	
<repositorfound> <date @standardDate>	<existDates> <dateRange> <fromDate @standardDate>
<repositorup> <date @standardDate>	<existDates> <dateRange> <toDate @standardDate>
<adminhierarchy> <adminunit @xml:lang>	<structureOrGenealogy> <p @xml:lang>
<holdings> <descriptiveNote> <p @xml:lang>	<generalContext> <p @xml:lang>
<holdings> <dateSet> / <date @standardDate> / <dateRange>	<localDescription localType="date"> <dateSet> / <date @standardDate> / <dateRange>
<holdings> <extent>	<localDescription localType="extent"> <term>... linearmetre</term>
<b>elements to reference from EAG 2012 file to apeEAC-CPF file</b>	
<recordId>	<resourceRelation> <relationEntry @localType="id">
<agencyName>	<resourceRelation> <relationEntry @localType="agencyName">
<agencyCode>	<resourceRelation> <relationEntry @localType="agencyCode">
<autform>	<resourceRelation> <relationEntry @localType="title">
<resourceRelation>	<resourceRelation>

### 6.1.3 Create apeEAC-CPF semi-automatically from apeEAD

**Goal:** Create apeEAC-CPF from apeEAD data which is already published in the portal. This process can be started manually by content providers after the import of new or update of existing data in the portal.

**Requirements:** Content providers will have the possibility to create apeEAC-CPF files semi-automatically. They would have to enter some additional information to the selection of apeEAD files and the elements.

The apeEAC-CPF entity type must be defined by the user manually. In each case the dates of existence of the entity needs to be entered manually by the user. There are some default apeEAD elements which will be used for extraction. Additionally, the user can define other elements which will be transferred as long as they have a correspondent apeEAC-CPF element.

As in the automatic extraction it is to be ensured to copy only apeEAD elements from one archdesc- or c-level to apeEAC-CPF sub elements of <cpfDescription>. Elements from apeEAD files <eadheader> can be used to identify the maintenance agency within the relation elements.

**Steps:**

- content provider selects apeEAD file(s) for apeEAC-CPF creation in the dashboard's content manager section
- via dialogue the content provider selects
  - apeEAD level(s), which will be parsed for elements:
    - fonds level: //archdesc
    - subfonds level within a collection: //c @level="fonds"
    - classification level: //c @level="series/subseries"
    - file/item level: //c @level="file/item"
  - apeEAD elements, which contain the EAC-CPF name entry
    - from title: //unittitle
    - from origination: //origination, //corpname, //persname, //famname, //name
    - from control access headings: //corpname, //persname, //famname, //name
  - apeEAD elements, which contain other information
    - about biography or history: //bioghist
    - digital object within the biography or history
    - about other finding aids: //otherfindaid
    - digital object within the archival description (same level as selected before)
- content provider defines the apeEAC-CPF entity type (corporate body, person or family)
- content provider defines dates of existence of the CPF
- creation of apeEAC-CPF file
  - automatically created link to the apeEAD as resource relation in the apeEAC-CPF
- content provider can go on to edit the apeEAC-CPF file with creation form (see chapter 7 below)
- content provider can start an automatic check for relations between the derived apeEAC-CPF entity and apeEAD finding aids and other apeEAC-CPF entities in the whole data stock (recommended by the Archives Portal Europe)

- automatically created link to the related apeEAD or apeEAC-CPF (for the automatic check see 6.2.2 and 6.2.4 below)
- content provider can manually confirm the links (recommended by the Archives Portal Europe); missing confirmation is stated in the dashboard’s content manager

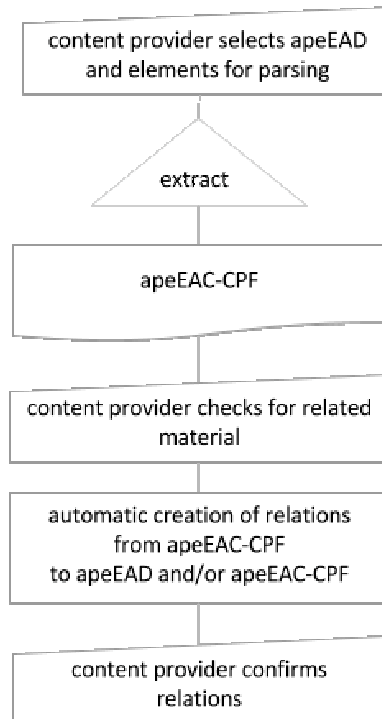


Figure 3

default apeEAD elements for creating instance	corresponding apeEAC-CPF element
<eadID @mainagencycode>	<agencyCode>
<publisher>	<agencyName>
<language> <language langcode="" scriptcode="">	<languageDeclaration> <language languageCode=""> <script scriptCode="" />
<publisher>	<resourceRelation > <relationEntry @localType="agencyName">
<eadid @mainagencycode >	<resourceRelation @resourceRelationType="creatorOf"> <relationEntry @localType="agencyCode">
apeEAD elements for user’s selection for creating instance	corresponding apeEAC-CPF element
<archdesc> / <c @level=" ">	
<unittitle>	<entityType>definedbyuser</entityType> <nameEntry> <part @localType="name">
<origination>	<entityType>definedbyuser</entityType> <nameEntry> <part @localType="name">
<corpname>	<entityType>corporateBody</entityType>



	<nameEntry> <part @localType="corpname">
<persname>	<entityType>person</entityType> <nameEntry> <part @localType="persname">
<famname>	<entityType>family</entityType> <nameEntry> <part @localType="famname">
<name>	<entityType>definedbyuser</entityType> <nameEntry> <part @localType="name">
<b>apeEAD elements for user's selection for other information</b>	<b>corresponding apeEAC-CPF element</b>
<bioghist> <sup>13</sup> <head> <p> <list> <sup>14</sup> <item> <table> <head> <tbody> <row> <entry>	<bioghist> <abstract> <p>  <p>  <p>  <p>
<bioghist> <dao @xlink:href @xlink:title>	<resourceRelation @xlink: href @resourceRelationType="subjectOf" @xlink:arcrole="image"> <relationEntry @localType="title">
<otherfindaid> <head> <extref @xlink:href @xlink:title <sup>15</sup>	<resourceRelation <relationEntry @localType="title" @resourceRelationType="other"> @xlink: href> <relationEntry @localType="title">
<c level="file" > <dao @href @title>  <unitid type="call number">	<resourceRelation @resourceRelationType="creatorOf" @xlink:title @xlink:href> <relationEntry @localType="id">
	<b>apeEAC-CPF elements which will be defined by users manually</b>
	<entityType>
	<existDates> <date> / <dateRange> / <dateSet>

<sup>13</sup> Can be copied when <corpname>, <persname> and <famname> are child elements of <origination>. Can be copied from each c-level.

<sup>14</sup> The <list> and the <table> element of <bioghist> cannot be converted to <chronList> because <chronItem> needs one <date> (or <dateRange>) element and one <event> element. As the <item> within <list> is not classified as date or event, the conversion uses <p>.

<sup>15</sup> Use value from //otherfindaid @xlink:title in case there is not information in //otherfindaid/head.

## 6.2 Link apeEAD and apeEAC-CPF to apeEAC-CPF with name matching

### 6.2.1 Relations management within the Archives Portal Europe

As shown above, relations between files referring to the same corporate body, person or family should be established. They might be created manually or automatically. For this reason further technical and organisational research has to be done for the decision on **how to link files** within the portal.

#### 6.2.1.1 Enhance apeEAC-CPF files

The most sophisticated solution is to enhance apeEAC-CPF files within the element `<cpfRelation>`. As the Archives Portal Europe's policy states not to change the files of the content providers, only automatically (within the portal's system) created files (Archives Portal Europe files) can be used for this solution. The check has to be started with Archives Portal Europe files first. Therefore Archives Portal Europe files need a specific attribute to be easily identified, eg file name.

If the comparison of elements results an identical entity in 2 (or more) files the following relations will be created

Archives Portal Europe file 1	=	file 2 from content provider A	cpfRelation in file 1, referring file 2 (see example) automatically created Archives Portal Europe file with cpfRelation to both files all information will be copied in one of both files, the other one will be deleted feedback to content provider A: check for duplicates
file 1 from content provider A	=	file 2 content provider B	
Archives Portal Europe file	=	Archives Portal Europe file	
file 1 from content provider A	=	file 2 content provider A	

If a cpf relation will be created between two files and the non Archives Portal Europe file contains a legal ID within the element `<entityId>`:

- copy the content of `<entityId>` to the element `<entityId>` of the Archives Portal Europe file
- copy the content of `<agencyCode>` to the element `<otherAgencyCode>` of the Archives Portal Europe file

#### Example:

```
<cpfRelation cpfRelationType="identity" xlink:href="automatically_created_link_to_EAC-CPF_file">
```

```
<relationEntry @localType="agencyName">eac:agencyName</relationEntry>
```

```
<relationEntry @localType="agencyCode">eac:agencyCode</relationEntry>
<relationEntry localType="id">eac:recordId</relationEntry>
<relationEntry localType="title">eac:nameEntry</relationEntry>
<descriptiveNote>16
```

<p>Probably the same entities. The relation was created automatically and was not manually approved yet.</p>
</descriptiveNote>
</cpfRelation>

elements to reference fom apeEAC-CPF to apeEAC-CPF	
<recordId>	<resourceRelation> <relationEntry @localType="id">
<agencyName>	<resourceRelation> <relationEntry @localType="agencyName">
<agencyCode>	<resourceRelation> <relationEntry @localType="agencyCode">
<nameEntry> <part>	<resourceRelation> <relationEntry @localType="title">

### 6.2.1.2 Link database

Considering the enormous volume of data being discussed a more practical solution, which can be produced with automatically created apeEAD-CPF files, would be an external linking of files. The link between apeEAC-CPF files, no matter if they are Archives Portal Europe files or others, can be stored outside the EAC-CPF files in a table or database within the portal’s back-end. Only the link itself and the type of link, ie “automatically created” and “approved” / “not approved”, would need to be saved.

### 6.2.2. Automatically link apeEAC-CPF instances with each other

Goal: Link apeEAC-CPF files with each other and avoid duplicates:

- link identical apeEAC-CPF entities from different content providers

---

<sup>16</sup> This note must be deleted, when a content provider approves the relation. In case the content provider disapproves the relation, <cpfRelation> and all child elements need to be deleted.

- check for duplicates: identical apeEAC-CPF entities from same content provider
- check for duplicates of automatically created apeEAC-CPF files

This process can be started

- automatically, after automatic creation of apeEAC-CPF files
- by the content providers after import of apeEAC-CPF files

**Requirements:** We need to distinguish between automatically created apeEAC-CPF files and imported apeEAC-CPF files. Archives Portal Europe created files can be enhanced with relations whereas imported files can only refer to but not be enhanced with information without the content provider's consent. Therefore the links need to be established either within an automatically created apeEAC-CPF file, if existing, or within a database.

The compliance of the apeEAC-CPF elements can be more or less clear. As the content providers will not be able to approve each automatically created relation between the files, the quality of the reference as regards content should be noted. Content providers will have the possibility to approve or reject relations to their own files.

#### Steps:

- parse the defined elements of all or selected apeEAC-CPF files and compare with each other for the same content step by step
  - first compare with Archives Portal Europe files
  - second compare with non Archives Portal Europe files
- depending on the compliance of the single elements, the apeEAC-CPF files will be linked if coming from different content providers
  - if the content of all elements is identical and from the same maintenance agency a feedback will be sent to the content provider, because the files might be duplicates
  - if the content of all elements is identical and the files were created automatically by the system, the files will be merged into one file
- a link can be approved or rejected by content providers, but as long as nothing was stated, the non-checked status has to be displayed with the link

**Compare apeEAC-CPF elements** with the condition that the specific element has the same content in 2 files is true:

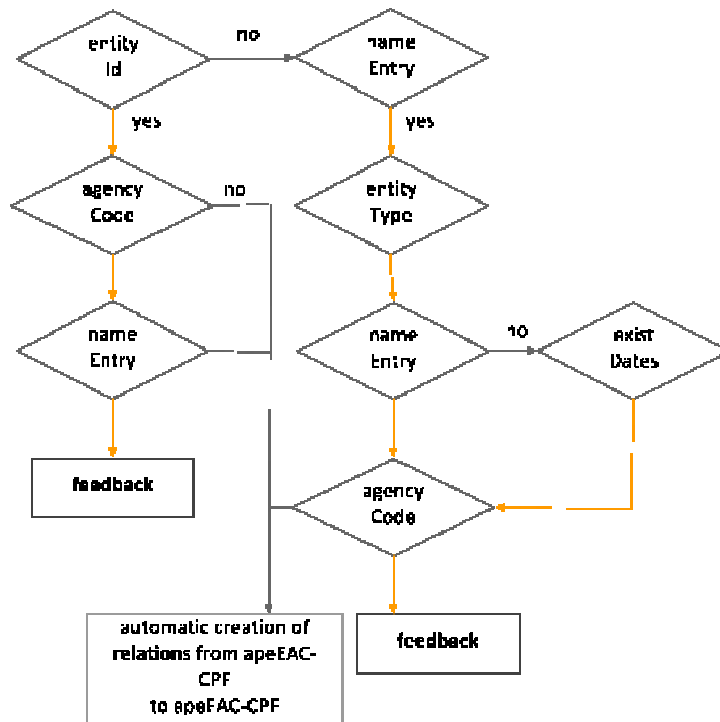


Figure 4

### <entityId>

The entity ID can be a legal ID (eg ISNI code) or a local ID to identify the entity. In the best case, the ID status is noted in the @localType attribute and can be compared, as well.

Assuming that local IDs will not be identical within Europe and that legal IDs indeed refer to the same entity, apeEAC-CPF files with same content in <entityId> can be linked. The compliance of other elements is irrelevant in this case.

### <agencyCode>

Files with the same entity ID however have to be checked for the same maintenance agency. If it is the same agency, other elements have to be checked to see, if it is a duplicate. If it is not the same agency, a link will be created.

### <nameEntry>

If compared files do not have the same entity ID, they should be checked for same name entries. Files with same name entries do not necessarily encode the same entity.

A name entry can consist of different parts. They are either separated within the element <part> or, more probable, within one element <part> and separated by blanks and maybe other punctuation marks. In all cases, each name part has to be separated and compared.

The more name entry parts are identical the bigger are chances that this is the same entity.

To link files with same name the entity type and one more element must be identical. It could be a second name entry or, if for example there is only one name entry, the existence date range.

#### <entityType>

Comparing the entity type is an additional, non urgent, necessary check and useful only in case of same name entries. Having same name entries but different entity types will deny identical apeEAC-CPF entities.

If a name entry and an entity type are identical, a second name entry must be compared.

#### <existDates>

If there is no second name entry, the mandatory element <existDates> with all child elements will be compared.

Files with same name entries may have the same existing dates, which is a strong argument for an identical entity.

An additional check for an identical agency name will show, if there could be a duplicated file or only same entities. Should the same name(s), entity type and maybe same dates of existence come from the same content provider, the file would most probably be a duplicated file.

### 6.2.3 Manually link apeEAC-CPF instances with each other

**Goal:** Link own apeEAC-CPF files with each other:

- link own files with each other
- link own files with automatically created apeEAC-CPF files
- link own files with files from other content providers

This activity can be started any time by the content providers themselves.

**Requirements:** As long as the Archives Portal Europe does not allow user collaboration concerning the archival descriptive content, the link between apeEAC-CPF files can be created manually only by content providers. As the quality of the relation is approved by the content provider, there is no need to note this.

**Steps:**

- select an own apeEAC-CPF file and start the editor/creation form in the dashboard
- add a new <cpfRelation> with the button “Add new relation” and create the relation by entering name, identifier, link, type of relation and the description

### 6.2.4 Automatically link apeEAC-CPF to apeEAD

**Goal:** Link apeEAC-CPF files to apeEAD files

This process can be started

- after creation and/or import of apeEAC-CPF files
- after import and/or update of apeEAD files

**Requirements:** We need to distinguish between automatically created apeEAC-CPF files and imported apeEAC-CPF files. Archives Portal Europe’s created files can be enhanced with relations whereas imported files can only be referred but not enhanced with information without the consent of the content provider.

To compare names from apeEAC-CPF files with text of apeEAD files a list of names must be produced. This list should be created automatically by the Archives Portal Europe after each automatic extraction of apeEAC-CPF files (see 6.1 above) and after each creation and/or import from data providers.

**Steps:**

- parse all apeEAC-CPF files and elements //nameEntry/part and create a list of names; cut out academic titles and other titles to be defined name affixes
- compare the entries of the name list with text in the defined elements of apeEAD files
- if a name can be found in the text, link both files
- a link can be approved or rejected by content providers, but as long as nothing was stated, the non-checked status has to be displayed with the link

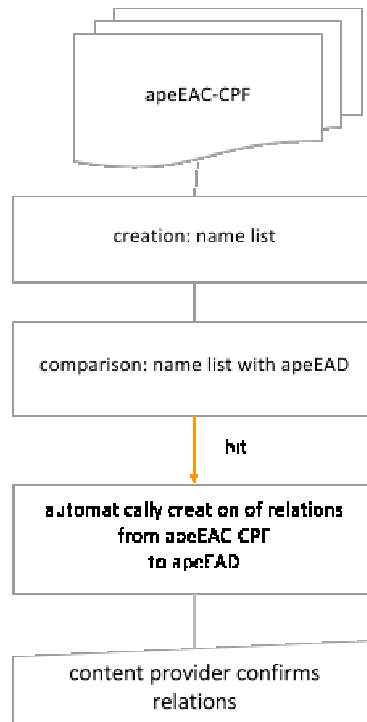


Figure 5

The following apeEAD elements would be searched for names:

```
//titleproper
//subtitle
//unittitle
//origination and all sub elements
//bioghist: all sub elements
//otherfindaid: all sub elements
//scopecontent: all sub elements
//controllaccess: all sub elements
```

Same as with some of the processing described above it is to be ensured to copy only apeEAD elements from one archdesc or c-level to apeEAC-CPF <cpfDescription> sub elements.

### 6.2.5 Manually link apeEAC-CPF to apeEAD

**Goal:** Link own apeEAC-CPF files to own apeEAD files.

This activity can be started any time by the content providers themselves.



**Requirements:** As long as the Archives Portal Europe does not allow user collaboration concerning the archival description content, the link from apeEAC-CPF files to apeEAD files can be created manually only by content providers. As the quality of the relation is approved by the content provider, there is no need to note it anywhere.

**Steps:**

- select an own apeEAC-CPF file and start the editor/creation form in the Dashboard
- add a new resource relation with the button “Add new resource relation” and create the relation by entering title, identifier, link, type of relation and the description

## 7 Creating EAC-CPF files manually<sup>17</sup>

It will also be possible for the user to manually create and edit EAC-CPF files via a simple web form. The form is currently under development as a stand-alone web application and is planned to be included into later versions of both the dashboard and DPT.

The user interface of the form will be similar to the one already known for EAG creation and editing, meaning there will be multiple tabs for each aspect of the EAC-CPF file.

### 7.1 Start tab

The first tab with the title "Start" will be used to determine if either a new file will be created or an existing file will be edited. In case of the creation of a new file, the tab will also hold a radio selection button with the choices of "Corporate body", "Person", and "Family".

Do you want

to create a new EAC-CPF instance?       to load an existing one for editing?

Please specify, if you want to describe:

a person       a corporate body       a family

Figure 6

### 7.2 Identity tab

Next in line will be the "Identity" tab. It will hold all basic information about the described entity, ie any full or partial names. Users will be able to enter the name itself, the language used, which form of the name is provided (authorised, preferred, alternative, abbreviation, other), and the component of that name. All of these fields, except the language, will be mandatory.

At least one instance of this nameset has to be provided. If the entity has further names and/or different forms of a name which can be used in parallel, the user can add any number of instances they need via a click on the "+" button in the lower left corner of the section.

If any identifiers have been attached to the entity, these will be found in this tab too. Examples for that would be ... Fields for additional identifiers can always be added via the "+" button.

---

<sup>17</sup> The development of the creation form is based on annex 13.

Name(s)

Full name or part of name\*:  Select a language: <sup>o</sup> Form of the name\*: Component of the name\*: 

Identifier(s)

Identifier of the person:  Type of the identifier: 

Figure 7

### 7.3 Description tab

The next tab, "Description", will provide further information on the given entity, if available. This may include any date or dates of existence as well as places, functions, occupations, genealogies, and biographies associated with the entity. While the form will initially show only one set of fields for each of the aforementioned subsections, these can also be added if necessary, again via the "+" button in the lower left corner of a section. The six subsections will be briefly described below.

The first of the subsections is about the dates of existence. Users will be able to select if they want to add a single date or a date range via a radio button. Depending on the selection, a click on the "+" button on the right-hand side will add the respective set of fields. While a full set of fields including day, month and year will be available for each date, only the one for year is mandatory.

The "Places" subsection holds all places associated with an entity, eg the living or working places of a person. Each place description contains fields for a general name of the described place, the language used for the description, a link to a controlled vocabulary used for places if available, the country of the place, address details, the role the place had for the entity, and any associated dates with this role. All of these fields are optional; the "address details" and date fields can be added if necessary.

The "Functions" and "Occupations" subsections gather all functions, eg the titles of a person, and occupations of an entity. Both sets of descriptions are roughly similar in content and consist of fields for: a general name of the described function or occupation; the language used for the description; a link to a controlled vocabulary used for the respective group of entries, if available; a large text area for a detailed description; and place and date fields. If necessary, any place or date fields can be added.

Finally, the "Genealogy" and "Biography" subsections each consist of a large text area and a language combo box. If there are multiple genealogies and/or biographies available, for example from different sources or in different languages, use the "+" button to add the respective section.

Date(s) of existence\*

Add  a single date or a date range

Figure 8

or

Date(s) of existence\*

Add  a single date

or a date range

+

from:     
DD MM YYYY(\*)

to:     
DD MM YYYY(\*)

Figure 9

Place:

Select a language:

Link to controlled vocabulary used for places:

Country:

Address details:

Component:

+

Role of the place:

Add  a single date

or a date range

+

+

Figure 10

Function:

Select a language:

Link to controlled vocabulary used for functions:

Description of the function:

Place:

Country:

+

Add  a single date

or a date range

+

+

Occupation:

Select a language:

Link to controlled vocabulary used for occupations:

Description of the occupation:

Place:

Country:

+

Add  a single date

or a date range

+

+

Figure 11

Genealogy

Description:

Select a language:

Biography

Description:

Select a language:

Figure 12

### 7.4 Relations tab

The "Relations" tab will hold all information on relations between the described entity and other persons, corporate bodies, families or other resources. There are two subsections, with the resource relations being separated from the other relations. However, both subsections consist of the same set of fields. Initially only a button named "Add new relation" and two fields for the name and the identifier of the organisation responsible for the description of the related entry can be found in each of the subsections.

In order to add a relation, the user needs to click on the button. This will create fields for: the name of the related entity; the language used for its description; one of its identifiers if available; a web link where further information could be found; the type of relation to the entity; a large text area for a detailed description. All fields of the set are optional; however, if either the name or a web link for a relation is provided, the type of relation becomes mandatory as well.

Relations

Relations to other persons and corporate bodies

Name:  Select a language:

Identifier:

Link:  Type of relation\*:

Description of the relation:

---

Organisation responsible for the description of the related entity

Name:  Identifier:

Figure 13

Relations to resources

Add new resource relation

Title:  Select a language:

Identifier:

Link:  Type of relation\*:

Description of the relation:

Organisation responsible for the related resource

Name:  Identifier:

Figure 14

### 7.5 Control tab

The last tab is entitled "Control" and holds all administrative data needed for the EAC-CPF file. It includes fields for the ID of the entity used in the APE, the person or institution responsible for the description, the identifier of the institution responsible for the description, a field (additional fields can be created) for local identifiers of the description, and dropdown boxes for the used languages and scripts.

The field for the entity ID will not be editable and is for information purposes only. Furthermore, the identifier of the institution responsible for the description will be pre-filled with the value from either the connected Dashboard account or the DPT, although this field will remain editable.

ID used in the APE:

Person/institution responsible for the description:

Identifier of institution responsible for the description:

Local identifier for the description:

---

Used languages and scripts for the description:

Select a language:  Select a script:

Figure 15

## 8. Functionalities

8.1 Access to the apeEAC-CPF data: a new section on corporate bodies, persons and families

### 8.1.1 Options to access apeEAC-CPF content

There shall be at least three options to access apeEAC-CPF content for users: directly via a new section in the header menu of the Archives Portal Europe, through archival or institutional descriptions or through the search.

a) Through **new section**: An additional tab for “Persons/Entities”<sup>18</sup> can lead to the apeEAC-CPF content directly (see figure 16).



Figure 16 - Mock-up for the start page of Archives Portal Europe with “Persons&Entities” section (menu) and “Search only in information about persons/entities” search function selection.

b) Through **institutional or archival descriptions**: Within the Archives Portal Europe published finding aids are encoded in apeEAD, while described institutions are encoded in EAG 2012. As far as corporate bodies, persons or families are named in defined elements of those data (eg <corpname> or <persname> as sub elements of <origination> in apeEAD), they can be linked to the apeEAC-CPF content. For details see chapter 8.2.

<sup>18</sup> Note that the name of this section will be subject to the further discussions on implementing apeEAC-CPF.



c) Through **search**: Searching for corporate bodies, persons or families can become an additional option in the search box of the simple search and there also could be advanced search options specified for the new section on these entities. Additional checkboxes for the simple search may be included with the default setting being an activated checkbox (ie a simple full text search across all content in the Archives Portal Europe). The user needs to unclick the checkbox to refine the search in advance (eg on only archival material or only descriptions of persons and corporate bodies). For details see chapter 8.3.

### 8.1.2 Various ways to access apeEAC-CPF content in the new tab “Persons&Entities”

It is envisaged that frequent visitors and researchers would prefer to use the search options to access the information they require directly. On the other hand, it is likely that casual visitors would be fond of a more visual and casual approach to the data. As suggested during meetings of task group 3, the data could be represented in an alphabetical index (ie alphabetical list of names), by places and countries, and in a timeline. It may be also useful for the users to browse top or recent search terms by other users. These features can be implemented simultaneously (see figure 17).

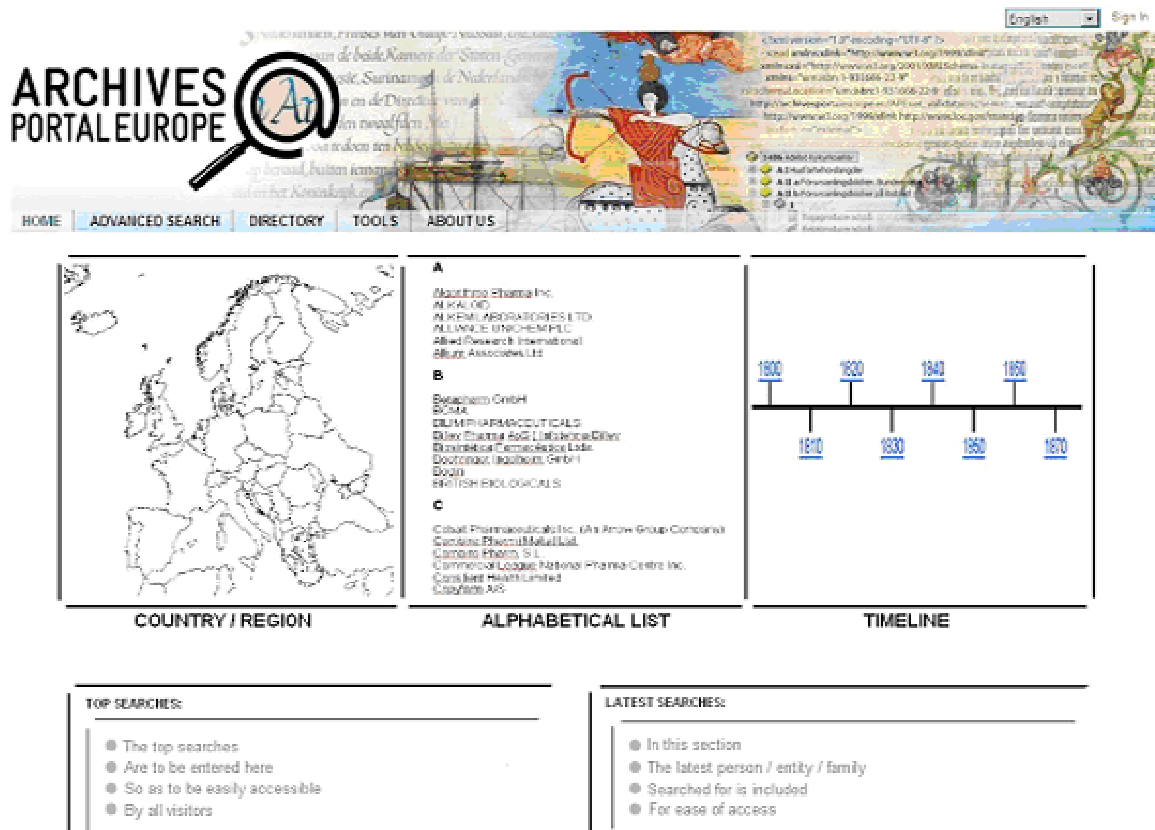


Figure 17 - Mock-up for the home page of apeEAC-CPF section in the Archives Portal Europe.



### 8.1.2.1 Alphabetical list of names for corporate bodies, persons and families

An alphabetical index is one of the most intuitive ways to access a list of names. Due to the multilingualism of the Archives Portal Europe, different types of alphabets will be offered combined with the website's language selection. The names will be sorted alphabetically for their name entries. As a name entry in apeEAC-CPF consists of at least one part, a sequence of all <part> elements within one <nameEntry> wrapper has to be defined.



Figure 18 - Mock-up for the alphabetical index of apeEAC-CPF content in the Archives Portal Europe.



Figure 19 - Mock-up for the alphabetical index changing in accordance to the language used for the portal's user interface.

### 8.1.2.2 Access via map

Users will have the possibility to choose a location or country, to which a corporate body, person or family is related to. This can be a place of birth or death for persons, or the business residence for corporate bodies. This approach is useful, when the users know only place names, but not the concrete names of the entities themselves. The users can select a country on the map and several clicks will lead them to a specific place to look for.

This functionality strongly depends on the quality of apeEAC-CPF data delivered by the content providers, because place information is not mandatory. It is encoded within the <place> element, and access to locations is only possible through this information. In the best case when the accompanying attributes for the longitude and latitude are filled, the users are able to access to a geographical point directly on a map. Another option would be the link to an authority file, which can be given in the attribute @vocabularySource of the element <placeEntry>.

When selecting the place or country, the user is presented with a clickable map as seen in figure 20.

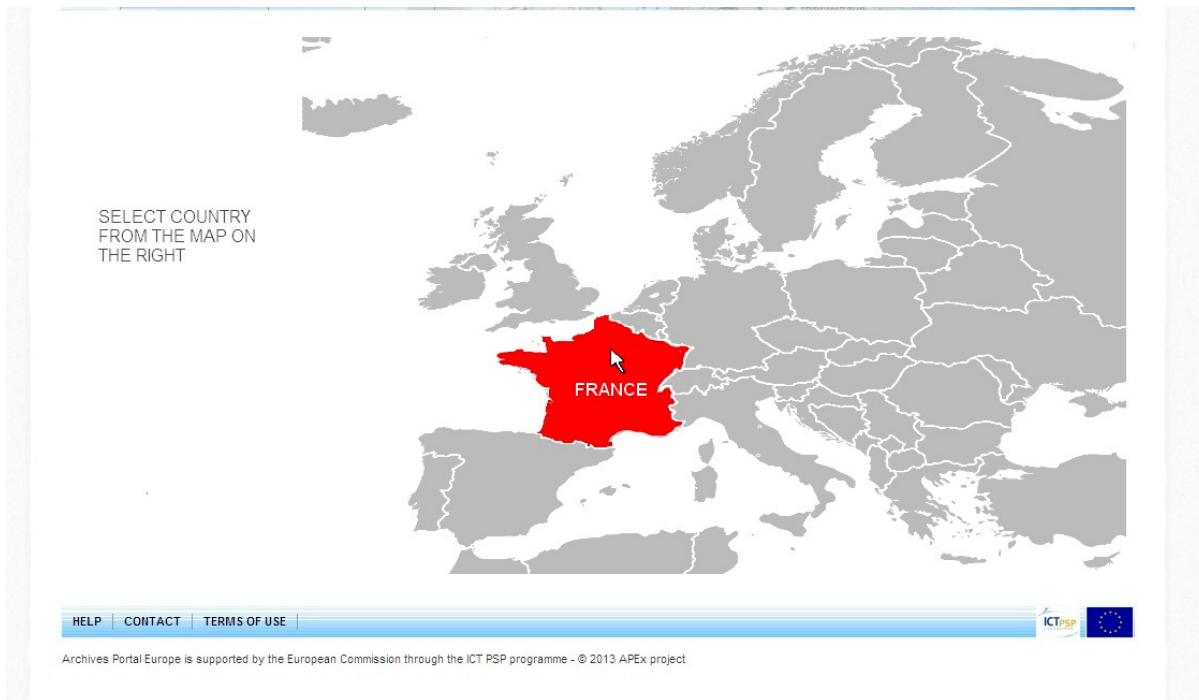


Figure 20 - Mock-up for the second screen after choosing country/region to access apeEAC-CPF content in the Archives Portal Europe.

#### 8.1.2.3 Access via timeline

A timeline can be used as an access to apeEAC-CPF information, when the user wants to browse the EAC-CPF entities chronologically.

In order to not overwhelm the user with a timeline full of events right from the start, the timeline could be presented in several steps: firstly by centuries, secondly by decades, and thirdly by years, that is narrowing down on the date range of most interest step by step and allowing the number of events shown for this date range to increase accordingly. Should there be too much data regarding a year, further refinement would be required by months, weeks and days.

Information for the timeline can at a minimum be taken from the mandatory apeEAC-CPF element <existDates>. At least one date has to be entered here but in most cases a time span is to be expected. The user has an option to find a corporate body, person or family with the date of birth / foundation or the date of death / suppression. An entity has to be named by the timeline for its specific existing time span, as well. This means, for example selecting the year 1894 will show all entities, which existed in this year.

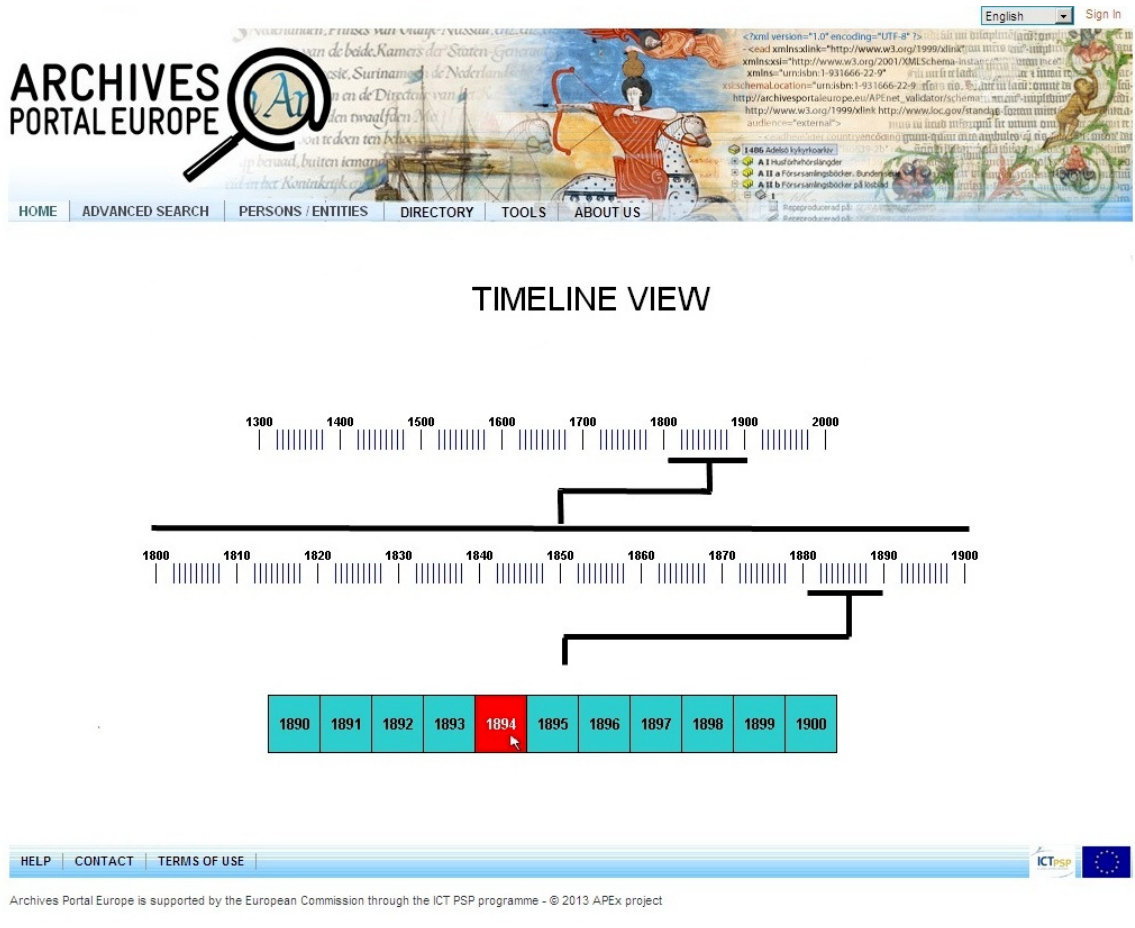


Figure 21 - Mock-up for the timeline to access apeEAC-CPF content in the Archives Portal Europe.

## 8.2 Information on persons, families and corporate bodies in institutional or archival descriptions

While the previous chapters described how to access apeEAC-CPF information in its own right, this chapter explores how it could be displayed in the context of the whole framework of the Archives Portal Europe. In particular, the chapter specifies the implementations of the hyperlinks from the “Directory” section (EAG 2012) to the descriptions of apeEAC-CPF, and - even more important - the hyperlinks from the presentation of the archival materials (apeEAD) to apeEAC-CPF.

### 8.2.1 In the context of the “Directory” of the Archives Portal Europe

Similar to the link between the description of an archival institution within the “Directory” and its holdings guide (or other related archival resources), it would be recommended to not link to each EAC-CPF instance individually, but to link to an overview of descriptions of persons, corporate bodies and families that either have created the materials maintained by the archival institution, or are mentioned within the archival materials. This could be done by grouping the descriptions of persons, families,

and corporate bodies (see figure 22), or by including one link which combines all the information (see figure 23).

For the time being, a realistic option for the content providers is to link EAG information to their own presentations of EAC-CPF information. The links to the corresponding data within the Archives Portal Europe would later be enabled, once the separate section for descriptions of persons, corporate bodies and families is set up.

**Gemeentearchief Schiedam**

**CONTACT DETAILS (SEE MORE)**

Visitors Address: Stadslerf 1 (3e verdieping) , 3112 DZ Schiedam  
 Country: Nederland  
 E-mail address: [contact@schiedam.nl](mailto:contact@schiedam.nl)  
 Webpage: <http://www.schiedam.nl/gemeentearchief>  
 Telephone: +31 (0)10 219 11 11  
 Type of Archive: Municipal archives  
 Role of the Archive:

**ACCESS & SERVICE INFORMATION (SEE MORE)**

Opening hours: dinsdag t/m donderdag: 09:00-17:00 uur  
 Access conditions: Accessible to the public  
 Searchroom: 20 places

**ARCHIVES & HOLDINGS DESCRIPTION (SEE MORE)**

Extent of holdings: 4.340 m

**OTHER INFORMATION (SEE MORE)**

Related resource: [Archievenoverzicht Gemeentearchief Schiedam](#)  
 Archiefvormers: personen  
 Archiefvormers: rechtspersonen  
 Archiefvormers: families

Last update: 21.05.2013

Figure 22: Description of an archival institution including links to related resources describing persons, corporate bodies and families separately.



The screenshot displays the Archives Portal Europe interface. On the left is a directory tree with categories for various countries, including the Netherlands. The selected item is 'Gemeentearchief Schiedam'. The main content area on the right provides detailed information for this institution, organized into sections: CONTACT DETAILS, ACCESS & SERVICE INFORMATION, ARCHIVES & HOLDINGS DESCRIPTION, and OTHER INFORMATION. Each section includes specific data points and links to further information.

Gemeentearchief Schiedam	
<b>CONTACT DETAILS (SEE MORE)</b>	
Visitors Address:	Stadserrf 1 (3e verdieping) , 3112 DZ Schiedam
Country:	Nederland
E-mail address:	<a href="mailto:contact@schiedam.nl">contact@schiedam.nl</a>
Webpage:	<a href="http://www.schiedam.nl/gemeentearchief">http://www.schiedam.nl/gemeentearchief</a>
Telephone:	+31 (0)10 219 11 11
Type of Archive:	Municipal archives
Role of the Archive:	
<b>ACCESS &amp; SERVICE INFORMATION (SEE MORE)</b>	
Opening hours:	dinsdag t/m donderdag: 09:00-17:00 uur
Access conditions:	Accessible to the public
Searchroom:	20 places
<b>ARCHIVES &amp; HOLDINGS DESCRIPTION (SEE MORE)</b>	
Extent of holdings:	4.340 m
<b>OTHER INFORMATION (SEE MORE)</b>	
Related resource	<a href="#">Archievenoverzicht Gemeentearchief Schiedam</a> <a href="#">Informatie over archiefvormer</a>
Last update	21.05.2013

Figure 23: Description of an archival institution including one link to related descriptions of records creators.

Within the EAG 2012 files, the link would be set in the element <resourceRelation xlink:href="[Link]"> with the option to furthermore include the title and/or the ID of the related resource in the element <relationEntry> and to describe the relation within the element <descriptiveNote><p>.

## 8.2.2 In the context of presenting archival materials on the Archives Portal Europe

Within the archival materials, there are several parts, that could be functioning as the links to the descriptions of persons, corporate bodies and families:

- **Records creators:**

Within the holdings guide of an institution, fonds and collections are often differentiated from each other by their records creators; the names of the person, corporate body or family that created and/or maintained the materials which are grouped within archival fonds or collections, would sometimes form the names of the archival fonds or collections as well, sometimes be mentioned as one descriptive and identifying aspect of it. The same principle applies to finding aids, the more detailed descriptions of fonds and collections, providing the archival records grouped therein within a hierarchical structure. One could expect the names of the records creators as part of the overall descriptive information on the highest level within a finding aid, but sometimes also as the finding aid's title. Furthermore, the approach of inheriting information within a finding aid from one level to another also allows for providing more specific information on lower descriptive levels in addition to what has already been provided on higher levels. By this, it would be possible to eg name the Department of Agriculture as a records creator on the highest level, but to specify different sub-departments on the lower levels, and - theoretically - it is even possible to mention specific persons of those departments, eg Ministers or State Secretaries. In this case, the element <origination> would be used for encoding in apeEAD with

its sub elements <persname>, <corpname>, <famname> and <name> allowing for linking options via the attribute @authfilenumber<sup>19</sup>.

- **Persons, corporate bodies and families mentioned in the materials:**  
Archival descriptions can include names of persons, corporate bodies and families that are mentioned in, or somehow relevant to the archival material in various elements of apeEAD. Some of the most obvious elements are the title of an archival record (<unittitle>), the description of its scope and content (<scopecontent>), and indexing entries, ie including the entries to controlled vocabularies (<controlaccess>). In order to have specific anchors for the first two elements, it may be necessary to extend the possibilities of apeEAD encoding by allowing elements such as <persname>, <corpname> and <famname> as sub elements of <unittitle> and <scopecontent><p>, <scopecontent><list><item> and <scopecontent><table><tgroup><tbody><row><entry>.

One way of showing an existing link (option 1), would be to directly make the name as included in the archival description clickable.

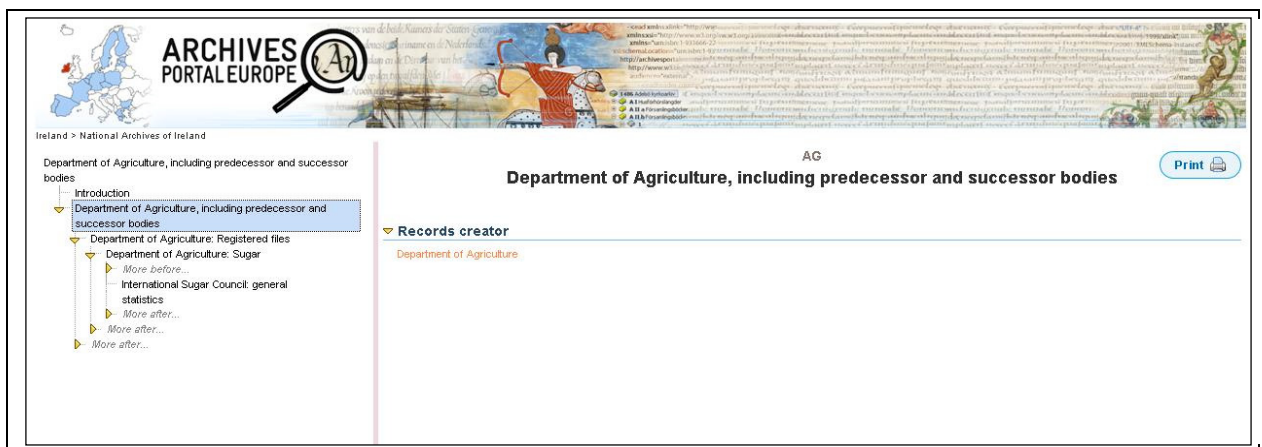


Figure 24: Link to description of the records creator (option 1)

<sup>19</sup> Note, that @authfilenumber might be changed to @identifier within a revised version of EAD (to be expected in 2014). Should apeEAD be adapted accordingly, this will need to be taken into account.

Another way (option 2) would be to indicate existing additional information by eg a “See more...” link.

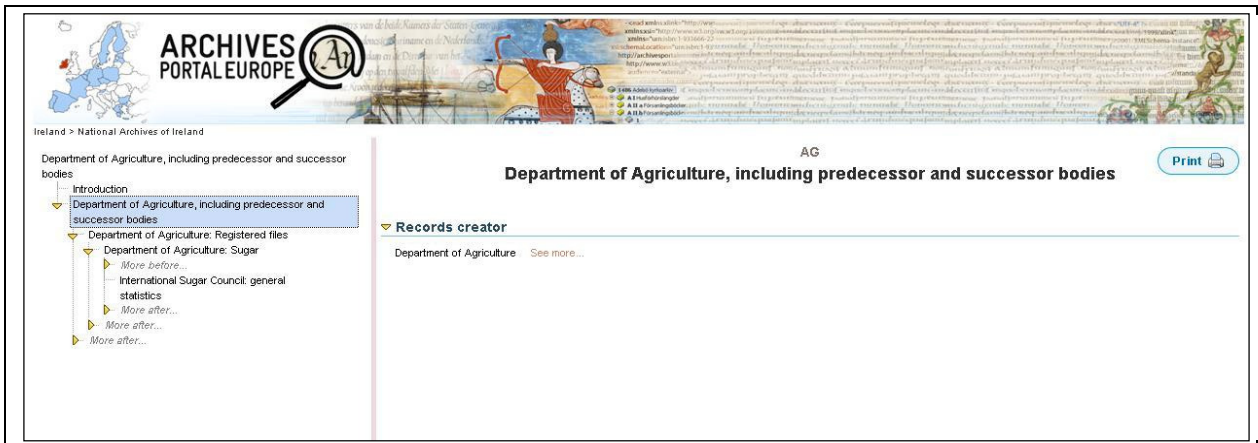


Figure 25: Link to description of the records creator (option 2)



Figure 26: Link to description of a person whose name is listed as a related index entry (option 2)

However, the latter could only work when the name of the person, corporate body or family is used as “standing free”, that is in the cases of <origination> or <controlaccess> (see figure 26), while it would be difficult to include it smoothly when the name is a part of longer descriptive texts (see figure 27). Therefore and in order to be consistent throughout the display as a whole, option 1 would be preferred.



Netlands > Nationaal Archief

Inventaris van het archief van Anthonie Heinsius, raadpensionaris van Holland en West-Friesland, (1682) 1689-1720

Introduction

- Antonie Heinsius, raadpensionaris van Holland en West-Friesland, (1682) 1689-1720
  - More before...
  - HEINSIUS ALS RAADPENSIONARIS VAN HOLLAND, 1689-1720
    - Algemeen.
      - More before...
      - Briefwisseling met.
        - More before...
        - John Churchill, hertog van Marlborough:
          - More after...
          - More after...
          - More after...

3.01.19 - 2.1.4.2 Print

**John Churchill, hertog van Marlborough:**

**Other descriptive information**

De originele brieven van Marlborough aan Heinsius zijn in 1945 geschonken aan Winston S. Churchill en vervangen door fotokopieën. De originelen worden nu bewaard in de British Library, Londen, Add.Mss. 71.135-71.143

1 - 10 / 25	
3.01.19 - 70	Ingekomen brieven, uit Dieren en Engeland.
3.01.19 - 71	Ingekomen brieven, uit Engeland, 's-Gravenhage en het leger te velde.
3.01.19 - 72	Uitgaande brieven.
3.01.19 - 73	Ingekomen brieven, uit Engeland, 's-Gravenhage en het leger te velde.
3.01.19 - 74	Uitgaande brieven.
3.01.19 - 75	Ingekomen brieven, uit Engeland, 's-Gravenhage en het leger te velde in Zuid-Duitsland en de Zuidelijke Nederlanden.
3.01.19 - 76	Uitgaande brieven.
3.01.19 - 77	Ingekomen brieven, uit Engeland, 's-Gravenhage, het leger te velde in de Zuidelijke Nederlanden, Frankfurt en Hannover.
3.01.19 - 78	Uitgaande brieven.
3.01.19 - 79	Ingekomen brieven, uit Engeland, 's-Gravenhage en het leger te velde in de Zuidelijke Nederlanden.

Figure 27: Link to description of a person whose name is mentioned as part of the title or the scope and content of an archival record (option 2)

In general, all these links would lead to the descriptions of the specific persons, corporate bodies and families either in the content providers' own systems (if existing), or within the new section of EAC-CPF within the Archives Portal Europe.

In the case where the link leads to another section of the Archives Portal Europe, it is worth investigating to include a short preview of further information as a pop-up directly within the second display for finding aids and holdings guides (see figure 28). Such a pop-up may also provide the images of the person, family, or the building where a corporate body is (or has been) located in case they are available in the apeEAC-CPF files.

Portugal > Arquivo Nacional da Torre do Tombo

Arquivo Salazar

- Introduction
- Arquivo Salazar
  - More before...
  - Correspondência Oficial
    - More before...
    - Presidência do Conselho
      - More before...
      - Presidência do Conselho - Diversos
        - More before...
        - Presidência do Conselho - Diversos - PC-36
          - More before...
          - Apreciação de John F. Kennedy sobre o Prof. Doutor A. de Oliveira Salazar.
            - More after...
            - More after...
            - More after...

PT/TT/23

**Apreciação de John F. Kennedy sobre o Prof. Doutor A. de Oliveira Salazar.**

1954

Print

**General remarks**

PT/TT/AOS/D-M29/S/23

**Processing information**

2008-02-01Fjoerinha

**Conditions governing access**

Documentação pública nos termos do ponto 1, do artigo 1º, do Decreto-Lei nº 33, de 31 de Janeiro de 1985, móveis que o integram, coisa domínial única, constituindo propriedade do Estado. O Decreto-Lei nº 77, de 18 de Salazar só devia ser permitida após a realização de trabalhos que garantissem o tratamento e a sua totalidade do seu antigo titular. No entanto, o Decreto-Lei nº 33, de 31 de Janeiro de 1985, ao assumir que a referida p 1981, radicava unicamente na necessidade de salvaguardar o tratamento e conservação dos documentos, Fascista, que havia sido criada pelo Decreto-Lei nº 110, de 26 de Maio de 1978, acessesse livremente a todos os seus membros ou de pessoal devidamente credenciado pela mesma entidade. Ainda segundo o Decreto-Lei Negro do Fascismo em Portugal quaisquer documentos que constassem do Arquivo de Salazar, desde que consignar a transferência do Arquivo de Salazar para a Torre do Tombo, o Decreto-Lei nº 279, de 9 de Agosto ao já estipulado no Decreto-Lei nº 77, de 18 de Abril de 1981. Porém, o artº 3º, do Decreto-Lei nº 279 de 19 decorrido o prazo de 25 anos sobre a morte de Salazar, mediante a apresentação de requerimento pelo inte O requerimento devia ser autorizado pelo membro do Governo responsável pela área da Cultura, após parecer da Biblioteca Nacional, enquanto o bem arquivístico se encontrasse nesta instituição. A partir de 1993, o acesso ao Arquivo de Salazar passou a reger-se pelo disposto no artigo 47º, do Decreto-Lei nº 16, de 23 de Janeiro de 1993, tendo sido considerado que, em matéria de comunicabilidade de bens arquivísticos, este Decreto-Lei não prejudicava o estabelecido no artigo 3º, do Decreto-Lei nº 279, de 9 de Agosto de 1991. A partir de 27 de Julho de 1995, cumprido o prazo de vinte e cinco anos sobre a morte de Salazar, a restrição para o acesso que a lei impunha, o Arquivo ficou aberto à consulta pública.

**Other descriptive information**

Registo migrado a partir do sistema CALM em 2009-02-09. CALM:Cota Actual Arquivo Salazar, PC-36 cx: 617, pt. 23CALM: Autor: Abarros

**António de Oliveira Salazar**  
28 April 1889 – 27 July 1970

**Biography**

António de Oliveira Salazar was a Portuguese professor and politician who served as the Prime Minister of Portugal from 1932 to 1968. He also served as acting President of the Republic briefly in 1951. He founded...

See more

Figure 28: Preview of a person's description including an image (option 2)<sup>20</sup>

## 8.3 Searching in EAC-CPF data

### 8.3.1 Simple search

The *simple* search is the first “consulting point” of the user with the Archives Portal Europe. That is actually situated at the top right section of the “Home page” of the portal. It functions like a full text search. A search box and some predefined refining options of search and display in the form of eligible check-boxes are provided. These options are a mix of common type search criteria and data provided mainly by apeEAD records.

<sup>20</sup> Information on António de Oliveira Salazar taken from Wikipedia, see [http://en.wikipedia.org/wiki/Ant%C3%B3nio\\_de\\_Oliveira\\_Salazar](http://en.wikipedia.org/wiki/Ant%C3%B3nio_de_Oliveira_Salazar), (last accessed: 20 June 2013); Image from WikiCommons, see [en.wikipedia.org/wiki/File:Antonio\\_Salazar-1.jpg](http://en.wikipedia.org/wiki/File:Antonio_Salazar-1.jpg), (last accessed: 20 June 2013), source: <http://salazarditadura.blogspot.de/2010/12/que-acontecimentos-condziram-formacao.html> (last accessed: 20 June 2013), Public Domain.



## Welcome to the Archives Portal Europe

The Archives Portal Europe provides access to information on archival material from different European countries as well as information on archival institutions throughout the continent. Within the next years, this installation will develop both technically and in terms of content addition and we welcome your feedback which can be sent using the [contact form](#).

Archival material
  Archival institutions
  Creators
  View result(s) in context
  Match at least one word
  Only material with digital objects

You can search in 24516980 descriptive units linked to more than 40290342 digital objects from 104 institutions.

Figure 29: Current home page of the Archives Portal Europe with simple search.

So far, this kind of simple search possibilities concentrated on the archival material and were derived from the functionalities of the established and adapted international standard EAD and their common profile for the use within the Archives Portal Europe (apeEAD).

But with the implementation of another yet related archival standard in the form of EAC-CPF (Encoded Archival Context - Corporate Bodies, Person, Families), this common and simple search format seems not capable of managing all different kinds of information to be expected or even could be considered as misleading the end users of the portal.

The reason is that the more information is to be managed and looked up, the more refining options even in a “*Simple search*” level should be projected. Another reason is that the user of the Archives Portal Europe should not be discouraged by a big amount of search results that may occur with no refining criteria beforehand, considering that s/he may look for something that can be precised in an earlier stage to avoid that.

To solve this problem in the most effective way, the “*Simple search*” section should be redesigned in a clear and **perceptible** way for the user, as the term itself states.

The end user should be given the possibility already at the “*Home page*” to locate the search tools that the portal provides her/him with. The form of a search box and some predefined refining options of search and display in the form of eligible check-boxes could be still maintained but at the same time enriched with some additional check-boxes to specify which part of content to search in (ie Archival material, Archival institutions and/or Creators).

The naming of the new check-boxes is not randomly chosen. Each one of them connects to a standard implemented within the Archives Portal Europe (apeEAD = “Archival material”, EAG 2012 = “Archival institutions”, apeEAC-CPF = “Creators”). However, the names themselves can be discussed during the actual implementation process and should be chosen in a way that helps the user to immediately understand how s/he should lead his/her search. After, determining the search criteria, the user is directed to the search results page (see figure 33 in chapter 8.4) where more refining options are available. The basic structure is still the same to the current portal search result display (1st display).

Alternatively, however not preferred, the “Home page” of the Archives Portal Europe can stay the same as it is now. The user enters the search term in the search box as usual, does the necessary refinements but immediately, after clicking on the “Search” button, s/he is redirected to a new screen with the option to further choose amongst the available results. The refining options this time are also grouped by category connected accordingly to a standard implemented within the Archives Portal Europe (apeEAD = “Archival material”, EAG 2012 = “Archival institutions”, apeEAC-CPF = “Creators”). After having chosen between these three, the user is then directed to the search page results (see figure 33 in chapter 8.4) where more refining options are available. The basic structure is still the same to the current Portal search result display (1st display).

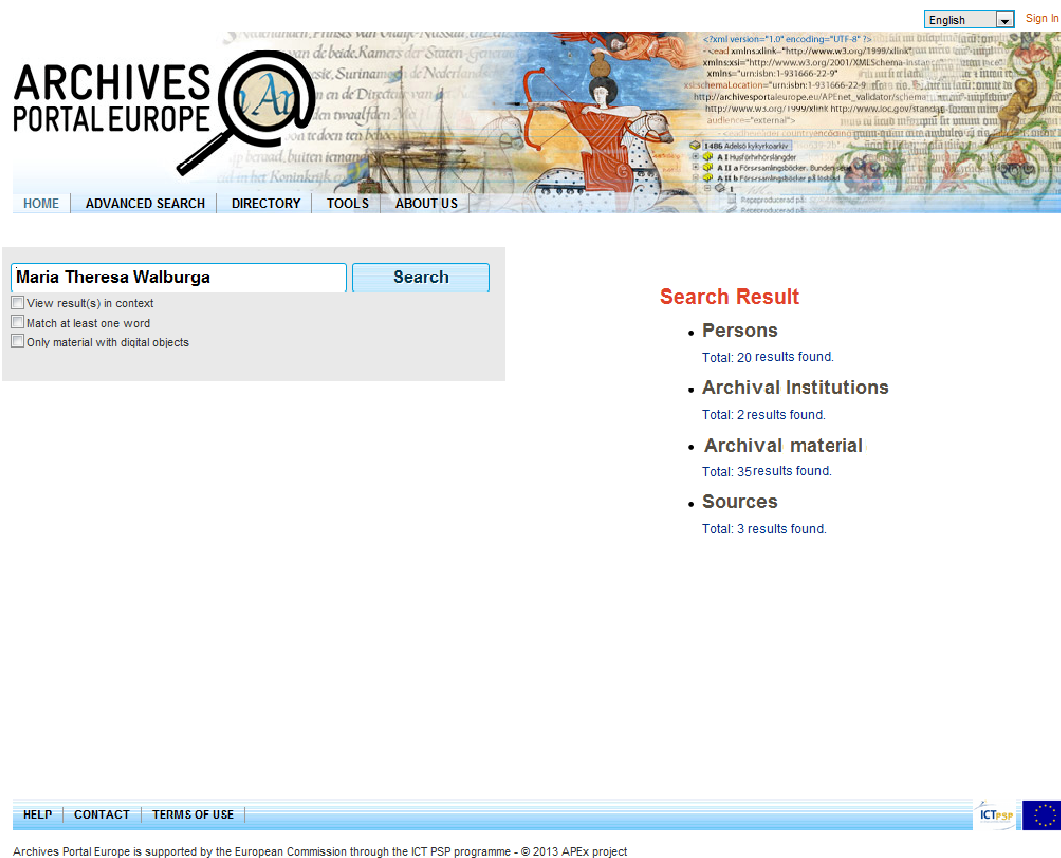


Figure 30: New intermediate search results page with grouping after simple search

### 8.3.2 Advanced search

The use of the advanced search interface on the Archives Portal Europe is closely connected with simple search and refinement options on the list of results. Simple search sends back a form which is in fact an advanced search form for the display of search results, where the users can refine their search. The refinements by countries and archival institutions substitute one of two sections of the advanced search form. The refinements by types of finding aids and by time span partly substitute the options on the second section of the form. The restriction of the search to one of three descriptive

elements (title, content summary, and reference code) is the only option of the advanced search which is not available as a refinement on the list of results for simple search.

The advanced search options are always available above the list of results, and it seems to be advisable to continue with this approach. However, the search forms with more options are not always suitable to be a 'header' for the lists of results. Such a header should leave enough space on the screen for the top of the list to be visible with some few first items.

The advanced search functionalities of EAC-CPF contained information will highly depend on the approach to the advanced search on the portal in general, and on the bigger issue of integrated or separated search on different resources (ie simultaneous or separated search of EAD and EAC-CPF contained information).

#### 8.3.2.1 General approach to advanced search

Currently, we do not have comprehensive information on the use of the advanced search options. It is assumed that the general public would probably prefer the simple search (with refinements). Most searches will end with refinements and browsing from the list of results through respective finding aids and related entities. The advanced search is an option when a user is not satisfied with the refinements of simple search results, but is still motivated to search for the objects or topics he has in mind. The use of the advanced search is also more likely to happen if the user's question is more specific, and if he already has some specific information on the objects of interest.

Expert users are more likely to find it useful to start the search with a complex or very specific question. One of the issues to be discussed is whether the search should or can be used to support archivists in managing their authority files, defining new relationships or reusing information from authority records created by other institutions.

It seems to be advisable to enable the users to construct more personalised queries, eg by combining more search terms and selecting multiple data elements for search.



### 8.3.2.2 Authority records as objects of search

In the catalogues of archives, libraries and other institutions using the concept of authority control, authority records are usually not the objects of search, but rather a tool that should make the search for something else (records, books etc.) more reliable. Lists of search results contain descriptive records, but usually not the authority records.

When authority records appear as items on a list of search results, they are used as information resources on their own. The main issue here is to decide whether to search authority records separately or simultaneously with other types of resources.

### 8.3.2.3 Integrated and/or separated search of different types of resources?

On the advanced search form, as it is now, the users can select one of three types of resources (named 'documents') or all of them. In fact, the entities that are searched for and represented on the list of results are always of the same type: descriptive records standing for archival units of description in terms of ISAD(G), ie documents and various aggregations of documents, which are encoded in apeEAD in the portal. It is not possible to specify the functionalities of advanced EAC-CPF search before having decided whether integrated or separated search of various types of resources should be followed in general.

Therefore, WP 4 TG 3 has discussed the following options:

#### A) Separated search for any (significant) type of resources.

The users have to select what to search. It would be possible to select either EAD or EAG or EAC-CPF or any other type, not many or all types of resources simultaneously. Selection can be enabled eg by:

- different search boxes on the start page for simple search > separated forms for advanced search (see chapter 8.3.1)
- one search box on the start page for simple search, with radio buttons or tabs for resource types available for search > separated forms for advanced search
- separated search form for EAC-CPF (simple and advanced search) > separated forms for advanced search

#### **Pros:**

easy to implement  
forms and functionalities corresponding to relevant standards

#### **Cons:**

can be unfriendly for the users outside professional archival community  
The users will often get partial information (e.g. only EAC-CPF contained information on person A, not information on the same person in EAD files)  
The users will have to repeat their questions in order to be sure there is something (or nothing) relevant on the portal

#### B) Integrated search, separated display of results.

On the start page there is one simple search box for all resources searchable on the Archives Portal Europe. The users may be given the possibility to select all types or one specific type using tabs (eg as in Gallica <http://gallica.bnf.fr>), or to select any combination of types, using check boxes (eg as on <http://www.nsk.hr/en/>). Another option is to execute the simple search always on all searchable resources, and to reserve the possibility to select a combination of resource types for the advanced search (eg as in NARA's online catalogue <http://www.archives.gov/research/arc/>). In this option, results are displayed separately, according to the type of resources. This can be done by displaying results in groups eg as in NARA's or Bibliothèque nationale de France's lists of results, or on different tabs.

As for the advanced search in this search scenario, it seems to be appropriate to have one advanced search form for all types of resources, with the possibility to constrain the search on a subset of types.

**Pros:**

more user oriented (users are interested in topics, people, events, places, not in EAD or EAC)  
one search for all searchable content

**Cons:**

display of, and working with, lists of results more demanding  
distinction between the groups of results may be opaque or not relevant for users

### C) Integrated search across all searchable resources, integrated display of results

In this option, there will be one search box for simple search, with or without the possibility to confine the search on a type of resources (eg tabs like All | Archival descriptions | Authority files | Other resources).

There will be one advanced search form for all types of resources. The advanced search will send back the same display form as the simple search, enabling further refinements.

In this option, the list of results would contain the items from different types of resources or 'standards' displayed in the same way. An example of this approach can be found at the portal of die Deutsche Nationalbibliothek (<http://www.dnb.de>).

**Pros:**

more user oriented (users are interested in topics, people, events, places, not in EAD or EAC)  
one search and one display for all searchable content

**Cons:**

display of, and working with, lists of results more demanding  
users may be confused about the nature of items on the list of results

### 8.3.2.4 Advanced search form

Here are described two versions of the advanced search form: one that is suitable to stay on the screen as a ‘header’ of the list of results, and the other one that should be displayed separately from the results.

#### Version A) Search form with display of results

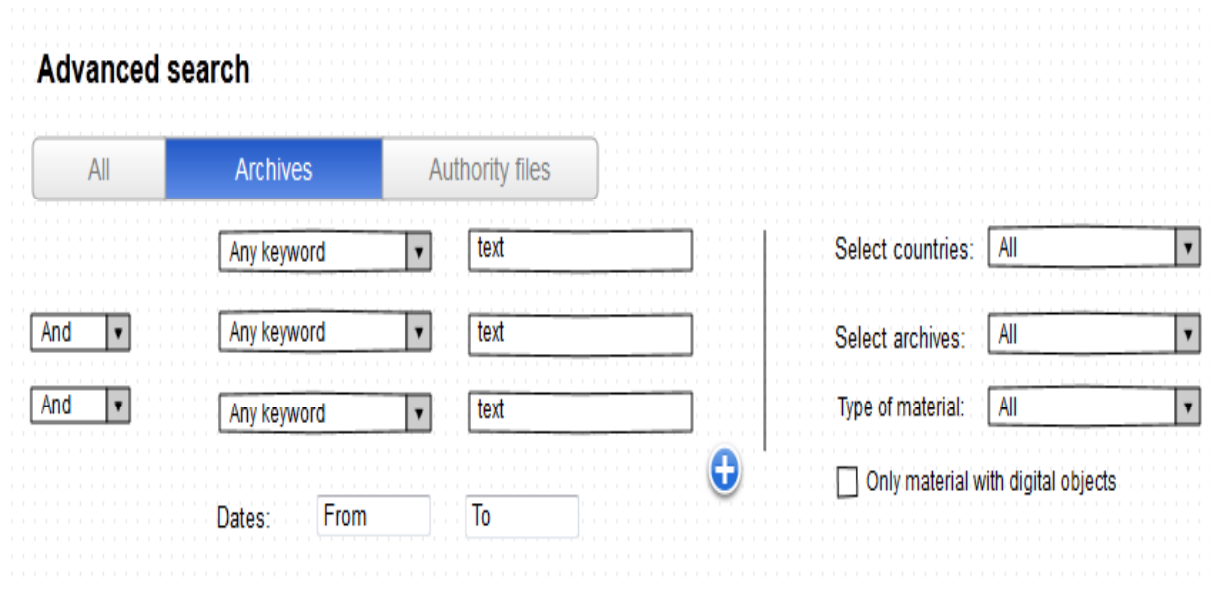


Figure 31: Mock-up for an advanced search form version A within the Archives Portal Europe.

Tabs enable the users to constrain the search (all searchable resources, archival descriptions or authority files). ‘All’ is selected by default. It has been outside the scope of TG 3, but other resources could be added (eg website). Terminology of the searchable resources should be discussed further: *archives* or *archival descriptions* or *records*.

Two combo boxes in the first column are used to select operators. Values are: AND, OR, NOT.

Combo boxes in the middle enable the selection of data elements. What values should be available depends on which tab is selected.

When ‘All’ is selected, the values could be: any keyword, title, name, place, description, subject, reference code, and other codes.

When ‘Archives’ is selected, the values (as variation and expansion of the current advanced search options) could be: any keyword, title, creator, other author/contributor, place, record type, description, subject, language of material, language of description, digital object type, published after, level of description, reference code, fonds/collection ID, and other codes.



When “Authority records” is selected, the values could be: any keyword, all names, authorised form of name, other forms of name, type of record, place, description, function, occupation, mandate, related with, published after, reference code, other codes.

Some of the proposed values would lead to searches in multiple descriptive elements.

The ‘Add’ (or ‘+’) icon can be used to add another row, but may be omitted since queries with more than three terms are not very probable.

*Select countries* and *Select archives* boxes are a suggestion to replace the tree view navigation and selection of archival institutions in order to keep the top of the list of results always visible on the search/display form. Tree view navigation may be offered as an option.

*Type of material* box could contain values such as textual records, photographs, moving pictures etc.

### Version B) Search form without display of results

**Advanced search**

	<input type="text" value="Any keyword"/>	<input type="text" value="text"/>	<input type="text" value="any of these words"/>
<input type="button" value="And"/>	<input type="text" value="Any keyword"/>	<input type="text" value="text"/>	<input type="text" value="all of these words"/>
<input type="button" value="And"/>	<input type="text" value="Any keyword"/>	<input type="text" value="text"/>	<input type="text" value="exact word or phrase"/>

---

**Data sources**

archival descriptions  
  authority records  
  web pages  
  other resources  
 only material with digital objects

---

**Dates**

From (yyyy/mm/dd)   From    To (yyyy/mm/dd):   To

---

**Select countries:/archives**

+ Belgium

Archives

+ Estonia

**Select type of material:**

Cartographic material

Data files

Moving pictures

Photographs

Sound recordings

Textual records

Anything else

---

**Subjects**

+ Theme 1

Subject 1

+ Theme 2

Figure 32: Mock-up for a advanced search form version B within the Archives Portal Europe.

This type of an advanced search form enables the users to add additional features: occupations, functions, nationalities etc. It would be interesting to see what data elements are usually present in EAC-CPF files, or can be added in the process of publishing on the Archives Portal Europe, in order to see what search options make more sense.

Both forms described here imply the possibility of simultaneous search of archival descriptions and authority files. If the form does not support simultaneous search, some modification will be necessary. In version A of the advanced search form *Type of material* and *Only materials...* elements could be replaced by check boxes like *Persons*, *Corporate bodies*, etc. In version B *Data source* section could be replaced by these check boxes, *Select type of material* section could be removed, *Subjects* section could be replaced by function/occupation.

## 8.4 Display apeEAC-CPF data

### 8.4.1 Display and refinement options of search results

The basic structure of the EAC-CPF search results page is the same as for EAD search results (figure 33).

On the top pagination is seen. On the left side, there are refinement options, while sorting options are on the top of the search results in the middle pane. On the right hand side, a preview can be displayed when the user moves the mouse over a search result. If an image is available, it is included in the preview as well as some headline information from the EAC-CPF record.

WP 4 should be able to come up with the basic elements for the refinement. However, the choice of refinement depends on the data quality too. The mock-up below includes Place, Birth date, Death date, Occupation, Subject and Event, but some element names such as Birth date, Death date, Occupation are not appropriate for corporate bodies and families (eg dates are to be called the Date of establishment and Date of dissolution for corporate bodies), therefore, labelling should be reconsidered in order to be neutral for both persons and groups.

Whether we go for a single refinement or multiple refinement (currently the latter is applied for the portal to search EAD) would be subject of our discussion.

Sorting options are similar to refinement options, but mostly depending on the information displayed in the search result. Probably they should include date (of birth, death, establishment, dissolution), alphabetical order (of authorised names), occupation, and subject.

Search results: 1 - 10 / 5009      Results per page: 10      << < 1 2 3 4 5 6 7 > >>

Selected criteria:

**Place**

- Netherlands (4916)
- Germany (34)
- Sweden (28)
- Belgium (22)
- Ireland (5)
- Portugal (2)
- Estonia (1)
- Latvia (1)

**Birth Date**

- 1422 (4916)
- 1489 (34)
- 1523 (28)
- 1564 (22)
- 1588 (5)
- 1601 (2)
- 1633 (1)
- 1722 (1)

**Death Date**

- 1488 (4916)
- 1536 (34)
- 1555 (28)
- 1599 (22)
- 1623 (5)
- 1667 (2)
- 1755 (1)
- 1783 (1)

**Occupation**

- Politician (4916)
- Writer (34)
- Reformer (28)
- Philosopher (22)
- Farmer (5)
- Musician (2)
- Soldier (1)
- Engineer (1)

**Subject**

- War (4916)
- Refroma(34)
- Election(28)
- Communi(22)
- Transp(5)
- Census (2)
- Church (1)
- Trade (1)

**Event**

- Peace of Westphalia (1648)
- Eight years war (1568-1648)
- Fall of Constantinople (1453)
- French Revolution (1789-1792)
- Battle of Lepanto (1571)
- Construction of Iron Bridge (1775)
- Ming Dynasty (1368-1644)
- Lewis and Clark Expedition (1804-1806)

Sorting your search:

Relevance | Date | Name | Country | Occupation | Subject

**Janne d'Arc (c. 1412 - 1431)**

Country: France  
Occupation: Tell me what!  
Subject: Hundred years war

**Joan of Arc**

Country: Medieval France  
Occupation: Peasant  
Subject: Hundred Years War

**Mehmed II - Sultan Mehmed the Conqueror**

Country: Turkey  
Occupation: Sultan  
Subject: War; Ottoman Dynasty; Mosque; Constantinople

**William Shakespeare (bap 1564 - 1616)**

Country: England  
Occupation: Writer  
Subject: Literature; Poem; Playwriter; Theatre; London; Stradford-upon-Avon

**William Shakespear (explorer) (1878-1915)**

Country: England  
Occupation: Civil servant  
Subject: Bombay; Isle of Man; Saudi Arabia

**Vereenigde Oost-Indische Compagnie (VOC)**


Country: Netherlands  
Occupation: Compagnie  
Subject: Overzeese handel; Republiek der Zeven Verenigde Nederlanden

**Dutch East India Company (1602 - 1798)**

Country: Netherlands  
Occupation: Company  
Subject: Trade; Batavia; Amsterdam; ship

**Maria Theresa Walburga Amalia Christina (13 September 1745 - 18 August 1765)**

Country: Habsburg dominions  
Occupation: Ruler  
Subject: Charles VI; Austria; Maria Antonia;



**Maria Theresa Walburga Amalia Christina (1717 - 1780)**  
She was the sovereign of Austria, Hungary, Croatia, Bohemia, Mantua, Milan, Lodomeria and Galicia, the Austrian Netherlands and Parma.

[View Record](#)


Figure 33: Mock-up for refinement and sorting options for apeEAC-CPF search results

## 8.4.2 Display of apeEAC-CPF entities in text form

When a name of one of the above-mentioned access options is clicked, a new window will open to show the full apeEAC-CPF record. Figure 34 shows how an apeEAC-CPF record could look like in text form. Again it is up to the WP members to decide what information should be displayed, but the example provides the name (authorised form), birth and death dates, alternative forms of names, identifiers, gender, countries, occupations, and bibliographical history. “Related finding aids” and “Other related entities” parts are expandable by clicking the arrow, as you can see in SNAC project<sup>21</sup>. In this section, the user can jump from EAC-CPF to EAC-CPF, or from EAC-CPF to EAD, or from EAC-CPF to EAG. The number of results are indicated in parentheses. The type of link should be clearly stated (associatedWith, creatorOf, etc) as well as the quality of the link (eg approved by content provider, automatically created relation). If possible in future, it would be great to see more relationships such as fatherOf, diedIn, participatedIn, etc), depending on the data quality and definitions of vocabularies. These information can be better displayed in a graphic form (figure 34). This part can be big if there are multiple

<sup>21</sup> <http://socialarchive.iath.virginia.edu/xtf/search> (last accessed: 20 June 2013).

complex relationships. External links include the links to Wikipedia, VIAF, Geonames<sup>22</sup>, or other vocabularies including AAT<sup>23</sup>, as far as matching is successful. Images are of added value to be included as a link from Wikipedia and alike. We can think of what is useful for the users by looking at Wikipedia<sup>24</sup>, Dbpedia<sup>25</sup> or Freebase<sup>26</sup> entries of Maria Theresa.

 <p><b>Maria Theresa Walburga Amalia Christina</b> (1717 - 1780)</p>	
<p><b>Birth Date:</b> <b>Death Date:</b> <b>Alternative forms of names</b></p> <p><b>Identifier:</b> <b>Gender:</b> <b>Countries:</b> <b>Occupations:</b> <b>Biographical History:</b></p> <p><b>Subjects:</b></p>	<p>1717-05-13 1780-11-29 (Aged 63) Marie-Thérèse d'Autriche (Français) 마리아 테레지아 (한국어) Marie Terezie (Česky) ABCD1234 Female Austria, Hungary... Empress, Queen Empress consort of the Holy Roman Empire; Queen consort of Germany (13 September 1745 - 18 August 1765) Queen of Hungary and Croatia; Archduchess of Austria (20 October 1740 - 29 November 1780) Queen of Bohemia (20 October 1740 - 1741, 1743 - 29 November 1780) Spouse is Francis I, Holy Roman Emperor Habsburg, Emperor Charles VI, St. Stephen's Cathedral, Seven Years' War, Roman Catholic monarchs</p>
<p><b>Related Finding Aids (3)</b></p> <ul style="list-style-type: none"> <li>- Letters of Maria Theresa (CreatorOf)</li> <li>- Map of the empire (CreatedOf)</li> <li>- Autopsy law in Graz (CreatedOf)</li> </ul>	
<p><b>Other Related entities</b></p> <p>&gt;<b>Places (3)</b></p> <ul style="list-style-type: none"> <li>- Vienna (was born in)(was dies in)</li> <li>- Hungary (relaetd to)</li> </ul> <p>&gt;<b>People (2)</b></p> <ul style="list-style-type: none"> <li>- Maria Josepha of Bavaria (associated with)</li> <li>- Emperor (associated with)</li> </ul> <p>&gt;<b>Events (2)</b></p> <p>&gt;<b>Resources (5)</b></p> <p>&gt;<b>External Links (2)</b></p>	

Information by Nationaal Archief. Netherlands updated on 2013-09-08

<sup>22</sup> See: <http://www.geonames.org/> (last accessed: 1 July 2013).

<sup>23</sup> See Art and Architecture Thesaurus Online at <http://www.getty.edu/research/tools/vocabularies/aat/> (last accessed: 1 July 2013).

<sup>24</sup> Article about Maria Theresa in English Wikipedia: [http://en.wikipedia.org/wiki/Maria\\_Theresa](http://en.wikipedia.org/wiki/Maria_Theresa) (last accessed: 20 June 2013).

<sup>25</sup> Entry of Maria Theresa in Dbpedia: [http://dbpedia.org/page/Maria\\_Theresa](http://dbpedia.org/page/Maria_Theresa) (last accessed: 20 June 2013).

<sup>26</sup> Entry of Maria Theresa in Freebase: <http://www.freebase.com/m/0czh6?props> (last accessed: 20 June 2013).

Figure 34: *Mock-up for the apeEAC-CPF entity display (“3rd display”) at the Archives Portal Europe.*

### 8.4.3 Display of apeEAC-CPF entities in graphic form

Various solutions for a graphical presentation of the relations between corporate bodies, persons and families appeared during the discussions in TG 3. For example, the portal for the archives of Bologna<sup>27</sup>, Italy, shows the several relations of the politician Guiseppe Tanari with other persons, corporate bodies, events and places. Each class of the terms is represented with another colour. The type of relation is described, as well. Links to current EAD and EAG content could be presented in this form, too, since the layout allows multiple connections to the same data.

Imitating the Italian example, figure 35 represents the way to navigate the data network of Maria Theresa with graph-balloon based visualisation in the Archives Portal Europe. All related entities are shown as balloons and different colours are used for different types of entities (eg orange for place, green for person/corporate body, purple for archival material). Properties are shown between the two entities, demonstrating the type of relation (eg associatedWith). The types of relation would also need to be included in the discussions of TG 2 as there should be according default values defined for the relations elements. The user can explore the data network by clicking the balloons. When one balloon is clicked, it will be centred and new related entities are shown around it. For instance, if Seven Years’ War is clicked in figure 35, it will move to the central position and the user sees new entities such as “Prussia” and “Treaty of Saint Petersburg” as well as “Maria Theresa”. When the user clicks a plus sign in the centred data (“Maria Theresa” in figure 35), figure 34 will pop up. As figure 35 is just a navigation interface and is not an EAC-CPF display per se, basically we have two options. One is to make a pop-up as mentioned above. The other is to show figure 34 as the main navigation display and figure 35 on a right-side pane. If archival material is clicked (purple balloon), the user goes to a 2nd display page (figure 34).

The question of this visualisation is what to do with other data types than EAC-CPF. Together with the WP 6 proposals might be discussed.

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<sup>27</sup> Presentation of the entity “Guiseppe Tanari” within the portal “Una città per gli archivi”: [http://www.cittadegliarchivi.it/ontology/tanari-giuseppe#/involved\\_in:allargamento-del-mercato-di-mezzo/linked:abbattimento-della-cinta-muraria/linked:abbattimento-delle-torri/quoted:it-cpa-au0004-0000691](http://www.cittadegliarchivi.it/ontology/tanari-giuseppe#/involved_in:allargamento-del-mercato-di-mezzo/linked:abbattimento-della-cinta-muraria/linked:abbattimento-delle-torri/quoted:it-cpa-au0004-0000691) (last accessed: 11 June 2013).

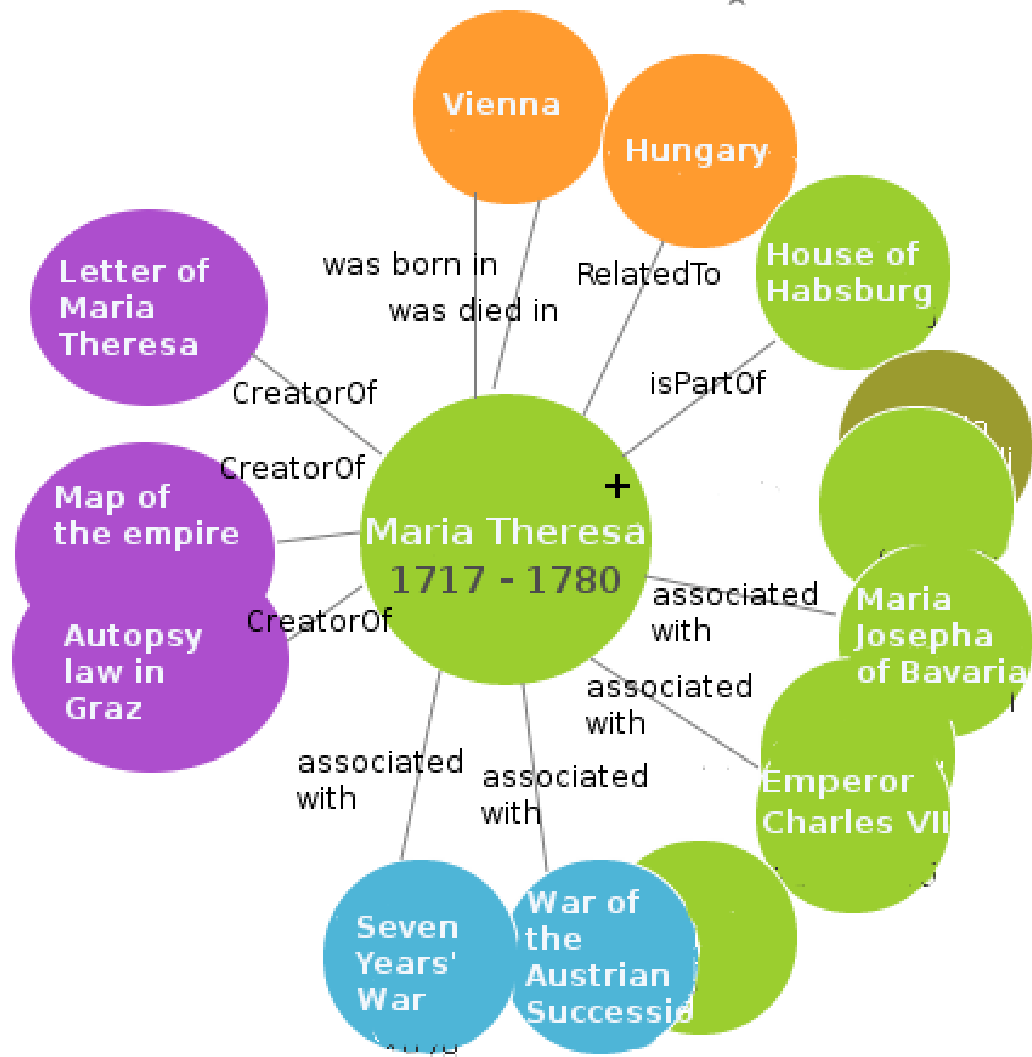


Figure 35: Mock-up for display of entities in graphic form

## 9. Other projects using EAC-CPF

In a joint survey all Country Managers of the Archives Portal Europe network have been asked to inform us about EAC-CPF projects in their countries. The following projects have been returned:

Country	Project name	Project link
Belgium	Zoeken in het Rijksarchief in België	<a href="http://search.arch.be/">http://search.arch.be/</a>
Croatia	ARHINET Croatia	<a href="http://arhinet.arhiv.hr/">http://arhinet.arhiv.hr/</a>
France	ICA-AtoM	<a href="https://www.ica-atom.org/aaf/;actor/browse">https://www.ica-atom.org/aaf/;actor/browse</a>
Italy	SAN Portal	<a href="http://san.beniculturali.it/web/san/home;jsessionid=CE7253F5B7F68F55D9657311CB2C10A2.sanapp01_portal">http://san.beniculturali.it/web/san/home;jsessionid=CE7253F5B7F68F55D9657311CB2C10A2.sanapp01_portal</a>
	SAN Portal fonds, creators and custodians database	<a href="http://san.beniculturali.it/web/san/ricerca-negli-archivi">http://san.beniculturali.it/web/san/ricerca-negli-archivi</a>
Portugal	Ficheiro Nacional de Autoridades Arquivísticas (FNAA)	<a href="http://autoridades.arquivos.pt/simpleSearch.do">http://autoridades.arquivos.pt/simpleSearch.do</a>
Spain	Censo-Guía	<a href="http://censoarchivos.mcu.es/CensoGuia/portada.htm">http://censoarchivos.mcu.es/CensoGuia/portada.htm</a>
Sweden	Nationell Arkivdatabas (NAD)	<a href="http://www.nad.riksarkivet.se/">http://www.nad.riksarkivet.se/</a>
Switzerland	Archives de la Ville de Genève	<a href="http://w3public.ville-ge.ch/seg/xmlarchives.nsf/ID/5C4857B61176AE2CC12573280043ECA2">http://w3public.ville-ge.ch/seg/xmlarchives.nsf/ID/5C4857B61176AE2CC12573280043ECA2</a>
	Basel Mission Archives	<a href="http://www.bmarchives.org/about">http://www.bmarchives.org/about</a>
	Archives de l'Etat du Valais	<a href="http://www.vsa-aas.org/fileadmin/user_upload/texte/ag_n_und_s/isaar/EAC_applique_archives_electroniques_Valais.pdf">http://www.vsa-aas.org/fileadmin/user_upload/texte/ag_n_und_s/isaar/EAC_applique_archives_electroniques_Valais.pdf</a>
	Staatsarchiv St. Gallen	<a href="http://scope.staatsarchiv.sg.ch/detail.aspx?ID=80669">http://scope.staatsarchiv.sg.ch/detail.aspx?ID=80669</a>



Further projects listed at <http://eac.staatsbibliothek-berlin.de>

Country	Project name	Project link
Australia	National Library of Australia Find and connect Australia	<a href="https://wiki.nla.gov.au/display/peau/EAC">https://wiki.nla.gov.au/display/peau/EAC</a> <a href="http://www.findandconnect.gov.au/">http://www.findandconnect.gov.au/</a>
France	ETANOT	<a href="http://chan.archivesnationales.culture.gouv.fr/sdx-222-chan-etanot/etanot/index.xsp">http://chan.archivesnationales.culture.gouv.fr/sdx-222-chan-etanot/etanot/index.xsp</a>
Italy	SiAsfi (Sistema Informatico Archivio di Stato di Firenze) xDams (Digital Archives and Memory Storage)	<a href="http://www.archiviodistato.firenze.it/siasfi/index3.html">http://www.archiviodistato.firenze.it/siasfi/index3.html</a> <a href="http://www.xdams.org">http://www.xdams.org</a>
Portugal	DigitArq	<a href="http://digitarq.pt/">http://digitarq.pt/</a>
USA	SNAC. The Social Networks and Archival Context Project	<a href="http://socialarchive.iath.virginia.edu/">http://socialarchive.iath.virginia.edu/</a>
UK / Portugal	LEADERS	<a href="http://leaders.sourceforge.net/documentation/index.html">http://leaders.sourceforge.net/documentation/index.html</a>

Furthermore, Europeana is dealing currently with options how to use EAC-CPF within [www.europeana.eu](http://www.europeana.eu).

For the further developments and work on apeEAC-CPF these projects are to be contacted and possibilities of cooperation are to be proofed.



## 10. Next steps

### 10.1 Phase of gathering feedback

The draft of the D4.4 “State of the art report on EAC-CPF and recommendations for implementation in Archives Portal Europe” has been presented to 20 participants of WPs 2, 4 and 6 during the joint WP meeting in Dublin the day the APE<sub>x</sub> conference started (26 June 2013). Furthermore, the profile and some planned functionalities have been presented in two presentations to an audience of more than 100 APE<sub>x</sub> conference participants (27 June 2013):

Karin Bredenberg, RA, Sweden: “Records creators: use of EAC-CPF in the Archives Portal Europe”

Susanne Waidmann, BA, Germany: “The Archives Portal Europe - the adventure of presenting multicultural and multilingual information on archival material, its creators and their repositories in just one tool”

Both groups of audiences have been informed that the report will be published at <http://www.apex-project.eu/index.php/outcomes/standards> and have been asked to send in their feedback on the ideas illustrated therein.

Two members of WP 4 will participate in August at the TS-EAC meeting in New Orleans. There especially the changes of the EAC-CPF schema as recommended by WP 4 will be discussed and further feedback is expected.

The feedback gathered will be brought into a meeting with WP 3 and WP 4 members in autumn in Madrid: here the deliverable will be presented, the recommendations for implementations discussed and the feature issues will be jointly added to the APE<sub>x</sub> feature and bug tracking system “Redmine”. By this it will be ensured that archivist ideas and technical realisations are understandable for technical as nontechnical project team members. Thus the implementation process will be smoothed and accelerated. The implementation will start after this meeting. At the same time a first updated version of this deliverable will be sent to the European Commission and will be uploaded on the project website.

### 10.2 Investigating use of EAC-CPF files within Europeana

WP 2 and WP 4 will jointly investigate how EAC-CPF files could be used in Europeana and how this would relate to the apeEAC-CPF profile as defined in this deliverable. Including descriptive information on persons and corporate bodies, who have created or are mentioned in the archival material will not only prove an interesting challenge in the further development of the Archives Portal Europe, but it will also allow for including this information when delivering data to Europeana, where agents are one of the main classes of the EDM (<edm:agent>) and their Linked Open Data (LOD) approach. The tasks planned for WP 2 therefore already include the development of an apeEAC-CPF to EDM conversion that will be made available during the third year of the APE<sub>x</sub> project based on the implementations of EAC-CPF in the Archives Portal Europe as recommended by this report.

At the joint WP 2, 4 and 6 meeting in Dublin (26 June 2013) also one representative of the Europeana Ingestion Team dealing with their provider's data took part. It was decided that a close exchange on EAC-CPF issues in the following months shall be managed via APE<sub>x</sub> WP2.