The missing link:

archivesportaleurope.eu

APEnet Project: The Final Report

On January 15th 2012 the Archives Portal Europe version 1.0 has been launched and the European citizens are thereby offered a virtual joint reading room that – for the first time – will allow comparing archival material from a variety of related activities, which until now have been separated by national boundaries. With this, the APEnet project has reached one of its main goals – making the diverse archival material of a big part of Europe easier to access and to use on-line for work, study and leisure.

And that will not only be for the European citizens, but for everyone interested in the past, present and future of this continent: cultural heritage institutions, the research community, students and also the ordinary public in support of their need to find and use digital information in their own language and in a wide diversity of European languages determined by the archival sources and resources themselves.

This Final Report explains what the portal offers, what can be found and searched therein, how we got to where we currently are and what challenges still are to be taken on…

European archives collaborating for accessibility

‹Project URL: http://www.apenet.eu/›

‹Portal http://www.archivesportaleurope.eu/›

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APEnet project

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*e*Content*plus*

[1] OJ L 79, 24.3.2005, p. 1.

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EXECUTIVE SUMMARY

AN ALL-EUROPEAN CHALLENGE

ARCHIVES PORTAL EUROPE – HOW IT STARTED

The origins of the Archives Portal Europe are not only to be found in the start of the APEnet project in January 2009, but point back to the very beginning of the new millennium, when the idea of an "Internet Gateway for documents and archives in Europe" manifested itself in the following major documents published on European level:

- the "Resolution on archives in the Member States" adopted by the Council of Ministers on 6th May 2003[1] stressing the importance of archives for the understanding of the history and culture of Europe and for the democratic functioning of society within the framework of the enlargement of the Union on 1st May 2004;
- the "Report on Archives in the enlarged European Union"[2] submitted by the Commission to the Council of Ministers in February 2005;
- the adoption of the "Council Recommendation on priority actions to increase cooperation in the field of archives in Europe"[3] of 14th November 2005;
- the "Commission Recommendation on the digitisation and online accessibility of cultural material and digital preservation" issued on the 24th August 2006[4] and
- the related "Council Conclusions on the Digitisation and Online Accessibility of Cultural Material, and Digital Preservation" of 13th November 2006[5] to endorse the strategic objectives and main elements of the EC Recommendation as well as the vision of a European Digital Library being a common multilingual access point to Europe's distributed digital cultural and scientific heritage.

In joining the APEnet project, the participating National Archives and State administrations of archives have taken on the challenge brought by this to the cultural

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2003:113:0002:0002:EN:PDF

[2] http://ec.europa.eu/transparency/archival_policy/docs/arch/reportarchives_en.pdf

[3] http://europa.eu/eur-lex/lex/LexUriServ/site/en/oj/2005/l_312/l_31220051129en00550056.pdf

[4] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:236:0028:0030:EN:PDF

[5] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:297:0001:0005:EN:PDF

heritage domain in general and to the archival domain in particular. Additionally to these institutions' dedication to the project and its product, the Archives Portal Europe, an important factor of APEnet's success so far has been its strong connection to the main pan-European archival organisations, namely the European Board of National Archivists (EBNA), the European Archives Group (EAG) and the European Branch of the International Council on Archives (EURBICA).

While EBNA has in a way been the founder of the portal through the stating of five priority actions for the European archival domain - among which the creation of an archival portal -, the EAG has played an important role as EBNA's counterpart within the European Commission. The active connection to the ICA (the International Council on Archives) furthermore has led to the establishment of the APEnet Liaison Group within EURBICA, that - by explicitly addressing non-EU Member States - has proven to be a major factor in the process of the Archives Portal Europe network evolving towards an inclusive future mainline activity for all European archival institutions.

The APEnet project comes to life and evolves

After nearly a decade of parallel and joint activities, a Consortium of twelve National Archives and the EDL Foundation, coordinated by the Ministry of Culture of Spain, has been created within the framework of the *e*Content*plus* programme supported by the European Commission. The Grant Agreement for the APEnet project was signed on 9th December 2008 and the project finally started on 15th January 2009 – as a challenge for all involved to create a sustainable and expanding network in order to offer the richest European archival data available via one joint access point and to become a major player in future activities with regard to preservation and online accessibility of the continent's (digital) archival heritage.

Networking worked, not only in terms of the constant awareness that the project has gained in the cultural heritage sector, but especially in terms of more national archival institutions joining the consortium during the project's lifetime. At the first APEnet General Assembly, held in Lund (Sweden) on 12th October 2009, the National Archives of Belgium and Ireland were approved as new partners, during the 2nd General Assembly, held in León (Spain) on 30th June 2010, the National Archives of Bulgaria, Estonia and the Czech Republic joined the network. Even the 4th and last General Assembly, held in Madrid (Spain) on 12th January 2012, could welcome the National Archives of Croatia and Hungary as partners 19 and 20.

The existing and the newly added bonds will be carried on to the follow-up project APEX, that will be co-ordinated by the Nationaal Archief (Netherlands) and that will especially aim at expanding the Archives Portal Europe network horizontally as well as

vertically by gathering more countries and more different types of archival institutions from these countries.

OBJECTIVES, GOALS AND RESULTS

APEnet's **first objective** has been to build an "Internet Gateway for Documents and Archives in Europe" as a common access point to European archival descriptions and digital collections. This requirement has been outlined and put in practice in form of the now available Archives Portal Europe version 1.0. Its users will be able to access:

- finding aids covering 14.5 million of digitised and not yet digitised documents;
- descriptive information on the individual documents and more than 63 million digital objects in total through these finding aids, and
- information about individual fonds and collections and the institutions that house them.

In order to meet this first goal, the project's **second objective** has consisted in developing a set of converting engines and plug-ins, based on an analysis of existing standards and applications in use by the participating partners. The Data Preparation Tool is available for download at the project website (www.apenet.eu, section "About APEnet > Developments") and the currently participating institutions have been granted a password protected, personalised account to the Archives Portal Europe's back-end, the dashboard, where they have full control over all single steps in data processing, managing and publication. In order to familiarise with the dashboard's functionalities beforehand, all partners furthermore do have access to the Content Checker, a test environment providing the same facilities (except for the OAI-PMH harvesting) as the productive system.

By compiling existing digital content of the participating partners and establishing the technical and organisational conditions for new content providers to join the network, APEnet also has, as its **third objective**, prepared the way for the possible participation of European archival institutions in the cross-domain portal of Europeana. The project has encouraged new institutions to participate by providing a number of dissemination activities like on-site presentations, conferences and workshops, as well as publication in different media. After the three-years-period of the APEnet project, three major partners – the Netherlands, Spain and Sweden – have signed the Europeana Data Exchange Agreement and have and will provide digitised archival data also via Europeana. By this, the Archives Portal Europe will become the seventh biggest provider within Europeana.

WHAT LIES AHEAD

The development of the Archives Portal Europe, the development of the tools related to this as well as the standardisation and other achievements of the APEnet project are important first steps in getting closer to reaching the aims defined by the EBNA about a decade ago. But they still remain first steps and there is still work to be done. The objective is and remains to give access to as much archival material of institutions holding archival content in EU Member States as possible, for as many users as possible, in the easiest possible way.

The project's long-term legacy will – by this – bring a better appreciation of the archival landscape and the archival heritage of Europe, closer contact between cultural heritage professionals and the general public, a more effective display of the common European cultural heritage through the international sharing of skills in cross-domain projects like Europeana, the wider use of archival resources and the more effective use of professional standards in order to better meet professionals' and users' expectations and needs. The follow-up project APEX will take on the challenge of all this and will aim at its most comprehensive and most sustainable implementation.

***

ABSTRACT

The following sections will present the product of the APEnet project, ie the Archives Portal Europe itself including its related functionalities and tools, while the annex will show in some more detail how the work has been done in order to finally be able to provide this important pillar in the trans-European archival infrastructure. The latter will also relate to the corresponding reports created within the single work packages of the APEnet project in order to have the most relevant aspects gathered and summarised in one common documentation. This will furthermore explain how deeply linked the different work package tasks finally have been and how all work packages have joined forces to successfully conform to the creation of the Archives Portal Europe.

THE ARCHIVES PORTAL EUROPE

WHAT TO SEE AT THE ARCHIVES PORTAL EUROPE – PRESENTATION OF ARCHIVAL CONTENT

Archival fonds and collections are ordered according to the provenance principle: they are kept in one place and their arrangement is organised by the (archival) institution or individual that produced the documents (unlike the thematic organisation often to be found in libraries). The papers and files etc reflect the way an administration functions and are ordered in different collections, fonds, series or subseries. The finding aids, holdings guides and source guides are the tools produced to help the user understand this original ordering and to enable her/him to find and understand what s/he is looking for in the archival material.

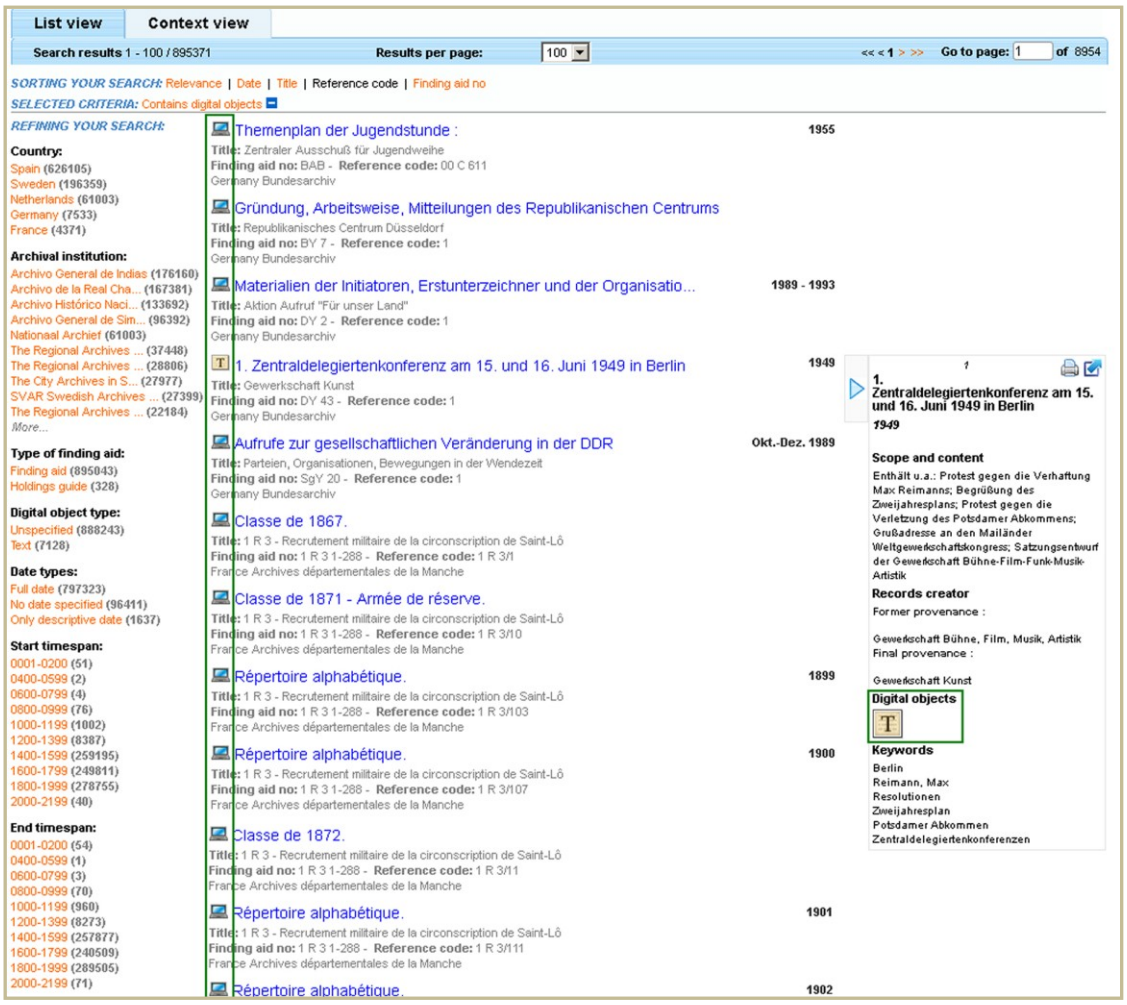
THE FINDING AIDS

Although archival institutions produce specific finding aids to suit their own collections and users and although the content of a finding aid may differ depending on the type of material it is describing, the finding aids to be found in most archival institutions follow common and general rules to facilitate access to the archival material itself. Usually, a finding aid places the documents in the context of their origin and their initial and current use by giving information such as:

- provenance, including historical, administrative or biographical information;
- acquisition and processing;
- organisation and arrangement, including interrelationships with other fonds or records;
- inventory of the series, subseries etc;
- scope and content, including extent and physical description;
- possible restrictions on use of or access to the documents due to archival law or data protection.

The finding aid thereby provides detailed, hierarchically-structured descriptions of the archival material itself and all the information required to order an archival document of special interest to you to consult it on-site. A certain number of finding aids furthermore includes links to digitisations of the archival material so that you can virtually browse through them via the Archives Portal Europe.

At the Archives Portal Europe, digitised material can – depending on the type of analogue material – be recognised within the finding aids and in the search results display by small icons symbolising textual material, images, sounds or videos. The preview within the search results display as well as the complete view of the finding aids may also contain thumbnails ie smaller representations of the digital object. Clicking an image type icon or a thumbnail will lead you to the full resolution of the digital object as displayed on the content provider's own website.



Different object types for digitised material indicated in the "List view" of search results

Different object types for digitised material indicated in the "Second display" with links to the digital objects at the content providers' websites

THE HOLDINGS GUIDES

Whereas the finding aid contains detailed information about one specific fonds or (sub)series, a holdings guide gives an overview of all archival collections kept by an institution. The holdings guide provides only high level descriptions for each fonds or collection such as title, summary, dates and extent, and refers the user to the more detailed finding aids where they exist.

Within the Archives Portal Europe, links to online finding aids accessible at the portal as well are indicated in the display of the holdings guide either by a small laptop icon or by text such as "Online finding aid" (or the corresponding term in the language of the content provider). Depending on the workflow of the constituent archival institutions, the holdings guides can be simple lists of the different fonds and collections, as well as a more elaborate, hierarchically-structured document. The latter can be following a chronological order (ie by era) or an administrative one (ie by provenance) or they can be a mix of both.

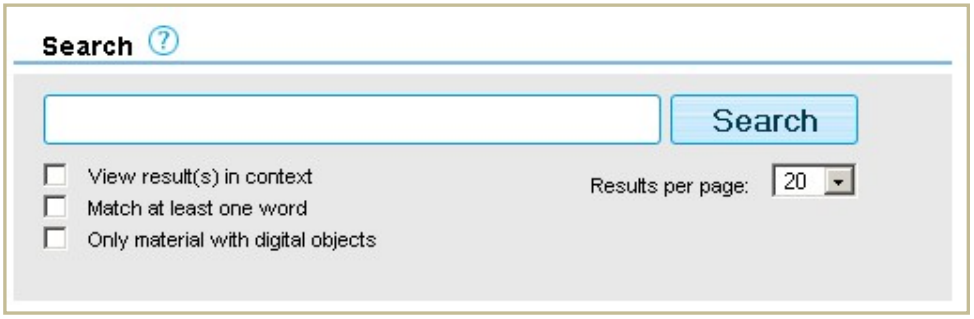
THE SOURCE GUIDES

The source guide is a particular form of finding aid. The objective is to track archival fonds and collections related to a specific topic either kept within one repository or dispersed between several institutions in one country or even in different countries and to gather their descriptions in order to facilitate research and access to the archives. The source guide presents the fonds, collections or items, and describes them by generally following the same rules as in a finding aid. It usually contains a short presentation of the particular institution(s) in addition to detailed administrative and historical presentations of the topic.

HOW TO EXPLORE THE ARCHIVES PORTAL EUROPE – SEARCHING AND PRESENTATION OF SEARCH RESULTS

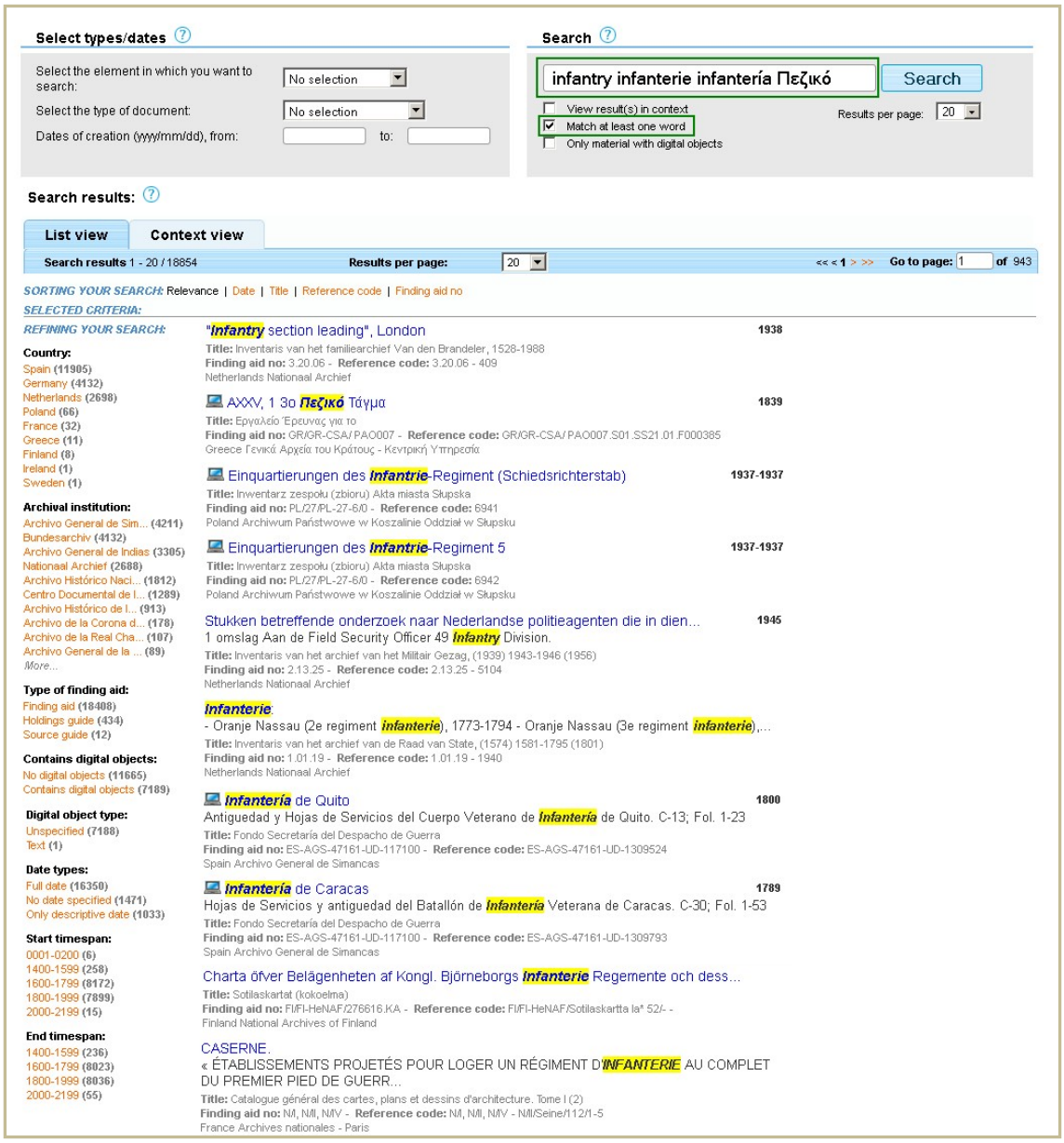
THE SIMPLE SEARCH

A simple full-text search can be initiated either at the homepage or within the section "Advanced search". To start a simple full-text search on the archival material provided within the Archives Portal Europe the user just would enter a search term in the empty box on the right, click the button "Search" and explore the outcomes of her/his search. In addition to entering a search term, one can also influence how the search is conducted by checking the boxes below the search field. It is, for instance, possible to concentrate your search on material with digital objects only. Equally, it is possible to design the search more flexibly when searching for several search terms at once, but allowing a wider range of search results by checking the box to "Match at least one word".



Simple search options at the "Advanced search section"

When using the option to "Match at least one word", the user will not only get results with all the search terms found, but additionally will be shown those results fitting only one of them. This functionality could be of particular help within a multilingual environment such as the Archives Portal Europe, since it allows to also enter the same search term in different languages or even different scripts.



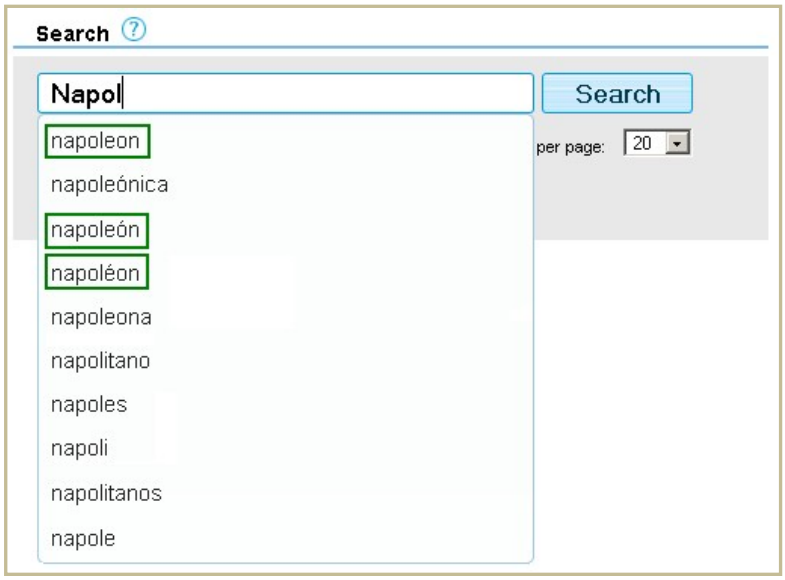
Using the "Match at least one word" functionality with multilingual search terms

Furthermore, the user can define how the search results of a simple search shall be displayed. Checking the box "View in context" will lead to the search results being shown in the "Context view" ie within a tree structure starting at the level of the countries and drilling down via the institutions to their holdings guides and finding aids and the hits found therein. Last, the simple search functionality within the "Advanced search" section, provides an option to select how many search results shall be displayed per page when looking at them in the "List view". The default setting is by 20 results per page which you could change to 10, 30, 50 or 100 hits per page. For details the presentation of search results see below.

AUTOCOMPLETION OF THE SEARCH TERM

When typing a search term (either for a simple search or in combination with any of the options in the "Advanced search" section), the Archives Portal Europe will provide the user with suggestions on how to complete the search term. These suggestions are based on the content currently indexed and therefore searchable at the Archives Portal Europe, so the terms provided by this functionality are most likely to increase between several portal visits due to existing content being updated or new content being added regularly.

The autocompletion of search terms is offered in form of a drop-down list of alternative terms expanding from the search box. The more characters are entered, the closer the suggested terms will probably get to the initally intended search term. The autocompletion is therefore an optional service to indicate similar and related terms that the user may wish to include in her/his research.



Autocompletion including different spellings when entering "Napol" to start a search for Napoleon Bonaparte

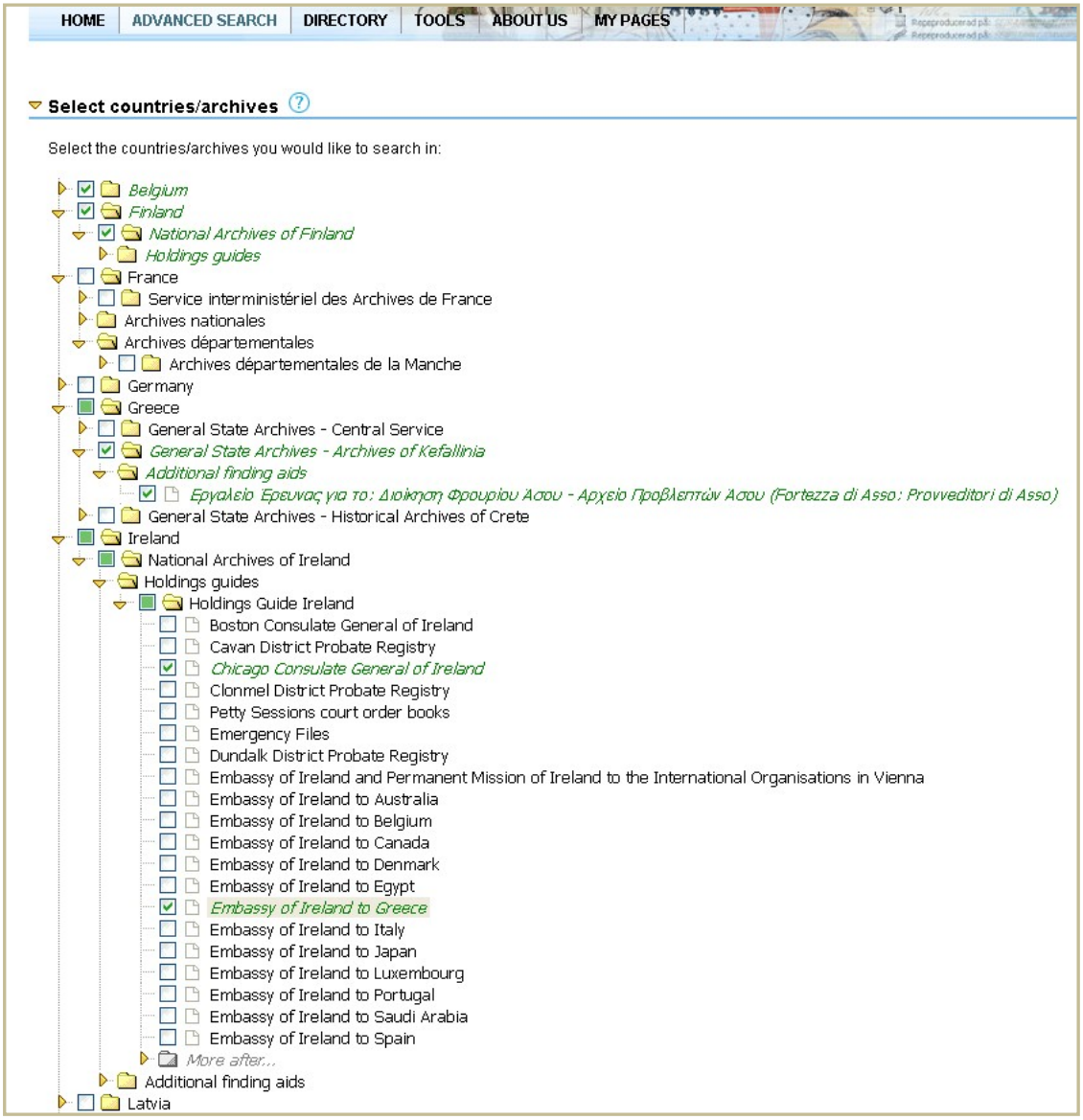
THE ADVANCED SEARCH – SELECTING COUNTRIES AND ARCHIVES

The "Advanced search" section of the Archives Portal Europe allows to combine the simple full-text search with different options of concentrating one's search on certain aspects. For example, the upper part of the page provides the possibility to either select certain institutions – and/or the countries where they are located – or to choose specific finding aids uploaded and indexed by these institutions.

The tree structure starts at country level and can be expanded – and collapsed – while browsing through it in order to get an overview of the content providers and their material. Beneath the country level, the constituent institutions are grouped and listed according to the country's administrative and/or regional structure. For most of the institutions there first will be its holdings guide, giving the titles of the archival fonds and collections in their context and hierarchical structure as well as including links to online finding aids that already are accessible within the Archives Portal Europe. In case no holdings guide exists yet for one institution or in case some finding aids are not yet included in the holdings guide, those documents are grouped as "Additional finding aids" in the tree.

Clicking the title of a holdings guide or a finding aid within the tree structure will open the complete view of this document in a second display. By this, the user can have a more detailed look before selecting a certain document for a search later on. To actively include one item from the tree structure in the search, the box on the left of the title of this item will need to be checked. This can be a single finding aid, a holdings guide with all finding aids linked therein, an institution with all its content or a whole country with all institutions participating.

Having selected an item, this will be recognisable by a green checkmark in the box next to it as well as the title of the selected item being printed in green and italic. The boxes next to all levels above the selected item will furthermore be marked in green in order to point to an active selection even when the tree structure has been collapsed again. De-selection of previously included items is done the same way and the users are free to mix selected countries, institutions, holdings guides and/or findings aids to best suit their (re)search topics and aims. It is also possible to conduct a search only by having selected one country or one institution and hitting the search button afterwards.



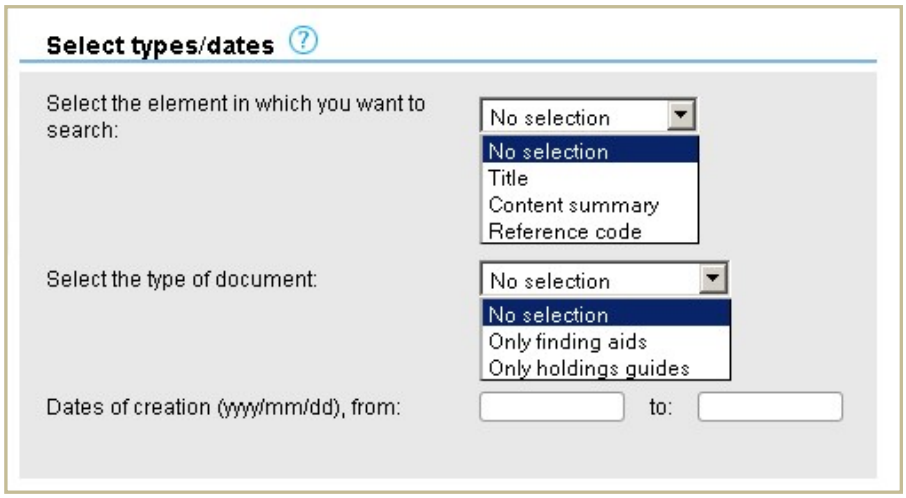
"Select countries/archives" in the Advanced search section with different levels selected

THE ADVANCED SEARCH – SELECTING TYPES AND DATES

The second part of the "Advanced search" section provides several options to concentrate the search on either:

- a certain element of the descriptions of the archival material such as the title, the content summary or the reference code;
- a certain type of document ie on "Only finding aids" or "Only holdings guides";
- a certain time span.

When selecting a specific element before searching, the search results will only include those hits where the search term has been found in the selected element. This can be advantageous in minimising the amount of possible search results when one already knows more about the topic of interest and is already sure of a certain range of possible terms to be used in this context. These terms would then be most likely to appear already in the title of the archival descriptions or – as enlargement of the title – within the content summary.



"Select types/dates" in the Advanced search section

Furthermore, this search option can be handy when already knowing the reference codes of those archival units of interest due to earlier findings either in an archival system or portal or for instance as a citation in secondary literature. By entering a concrete reference code as a search term and concentrating the search on the element "Reference code" only, one can pinpoint the corresponding archival description within the Archives Portal Europe.

In case no selection on a certain element is made, the search will include all fields from the archival descriptions at once: title and content summary, reference code and descriptive dates as well as other descriptive information such as the records creator's history or information on processing and arrangement and keywords provided by the archivist when creating the finding aid or holdings guide.

Concentrating the search on either finding aids or holdings guides could be useful if wanting to get a general overview of archival material existing on a certain topic, which is gotten most easily by starting the research on holdings guide level only. This would probably make the amount of search results more concrete in the first place and therefore easier to be evaluated in order to conduct the next steps ie selecting specific finding aids on the fonds and collections of interest.

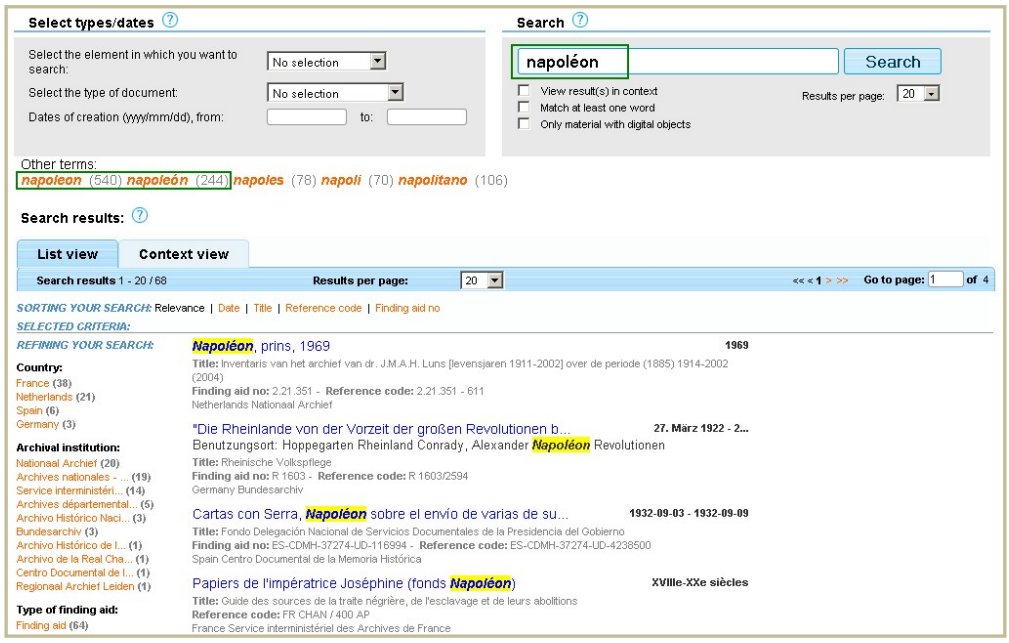
For the search on dates, the user can decide on either searching with an earliest date or a latest date only or searching within a certain time range. As for selecting one country or one institution in order to search all content provided by them, it is also possible to search date-based material only, ie without additionally entering a specific search term. This would especially be useful if one would like to know more about administrative material having been created at a certain period of time.

The user is free to combine all search options best fitting her/his field of interest and (re)search. In addition, the advanced search options can also be used for enhancing a first search based on the results found and in order to concentrate the results on those the user would mainly be interested in.

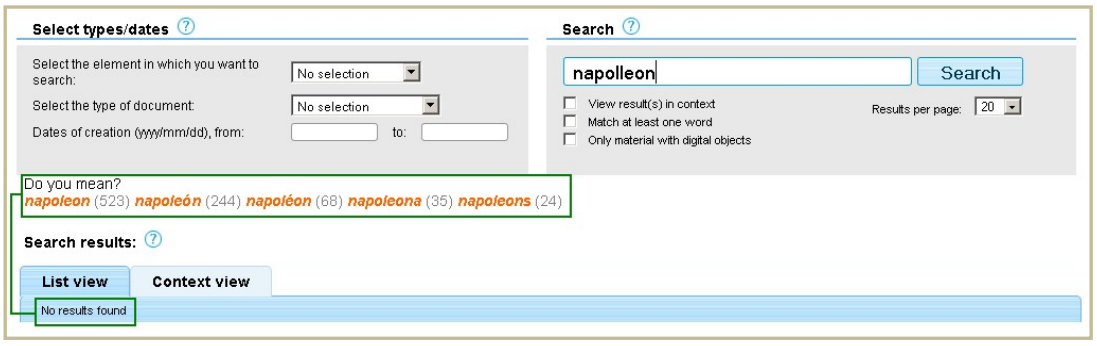
The presentation of search results – autosuggestion of alternative terms

Irrespective of having conducted a simple full-text search, a navigated search or an advanced search, the search results are always displayed in the same two views, from which the user is again free to choose the one best fitting her/his purpose. After a search, the page will start with the search results as the main part. In any case, the scroll bar at the right of the browser window will allow the user to (re-)access the advanced search options as well as the search field in case she/he would want to either check or change the search settings.

At the top of the search results, it is most likely to find some alternative terms for the current search being suggested. Similar to the autocompletion of the search term, these suggestions are based on the indexed content of the Archives Portal Europe and provide up to five alternative terms having more possible hits in the search index than the search term provided initially. Again, this can be useful for detecting similar or same terms in different languages but can also indicate alternative terms more frequently used in the archival content than might not have been previously thought of. Autosuggestion furthermore is of help with regard to possible typos to which the user is alerted by the question "Do you mean?" being displayed in front of the suggested terms.



Autosuggestion of alternative terms including different spellings of the search term



Autosuggestion as "Do you mean?" in case of no results being found (here due to a typo)

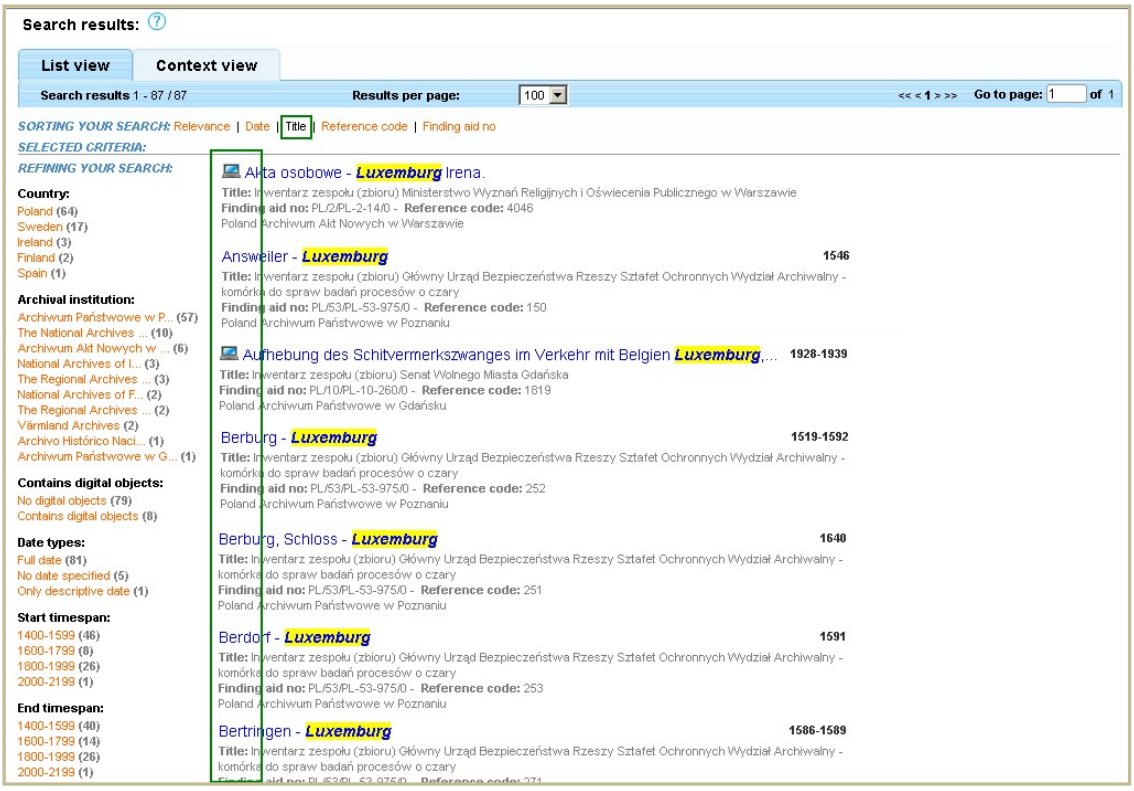
The presentation of search results – the "List view"

The default display for the search results themselves will be the "List view" where the title of the single search result, an extract of its description, its date of creation, its reference code as well as the title and identifier of the finding aid or holdings guide containing the search result, will be specified. Furthermore, the host archival institution and the country where this institution is located, are mentioned and an image icon for textual material, images, sound or videos will indicate existing digital objects.

One can customise the display slightly by changing the amount of results shown per page and the arrows at the top right of the list allow the user to browse through the different search results pages. Furthermore, it is possible to head directly for a specific page via entering the page number in the field "Go to page" and hitting the return key.

While the sequence of the "List view" by default is according to the relevance of the term found in relation to the search term used, it can also be rearranged either by date, alphabetically by the title of the single hits, by their reference codes or by the identifier of the finding aid or holdings guide to which they belong. Sorting by reference code will be done separately for each finding aid respectively for each holdings guide and therefore already includes a type of sorting by "finding aid number".

In addition to sorting the search results, the "List view" also includes a functionality to refine them by country, by archival institution, by type of document, by dates or by the aspect of the search results containing digital objects respectively by the type of these digital objects themselves. Starting with the facet having the most hits in each refinement category, at the first glance up to 10 facets each will be displayed. If more than 10 different facets are included, there will be a "More..." button at the bottom of the refinement in question in order to expand the complete list.

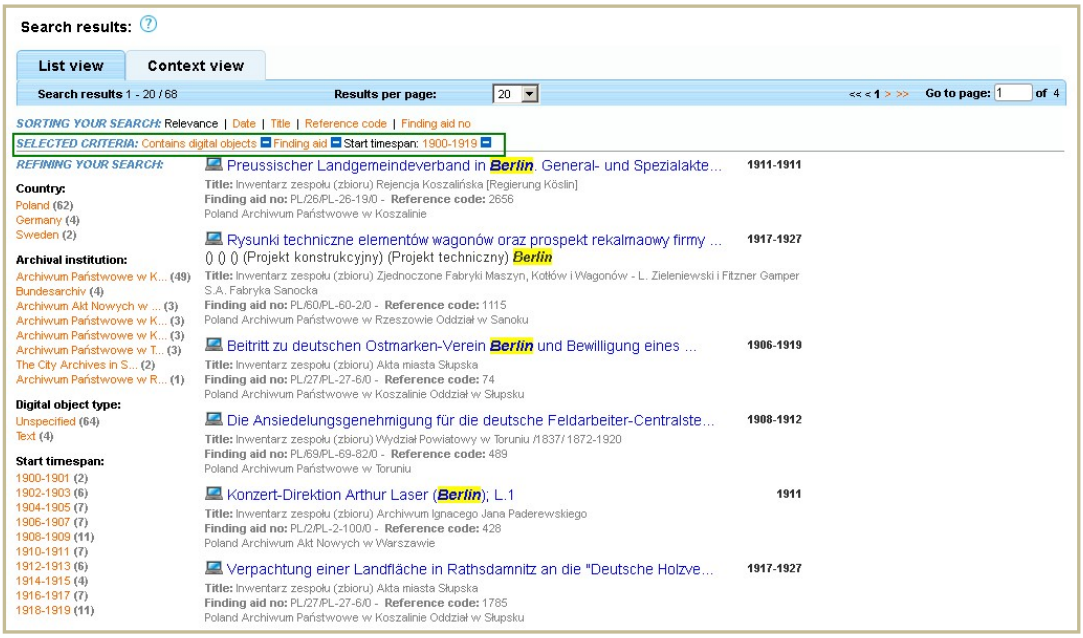


"List view" after searching for "Luxemburg" in all but Dutch and German content, sorted alphabetically by title of the descriptive unit

While refinement by country and institution is a reference to the advanced search when selecting countries and/or archives, refinement by type of document and by date corresponds to the according advanced search options for selecting types and dates. Finally, refinement by digital objects corresponds to having the checkbox for "Only material with digital objects" checked when doing your search.

To see some more information on constituent results in the "List view", a brief preview can be activated by hovering above the right end of the search result. The preview can be printed and provides access to the presentation of the search results within their complete context that will open in a second browser tab or window. This second display can also be accessed by clicking the title of one search result in the "List view".

In all three places – the search results display, the preview and the second display with the search result in its complete context – the search term found will be highlighted in yellow.

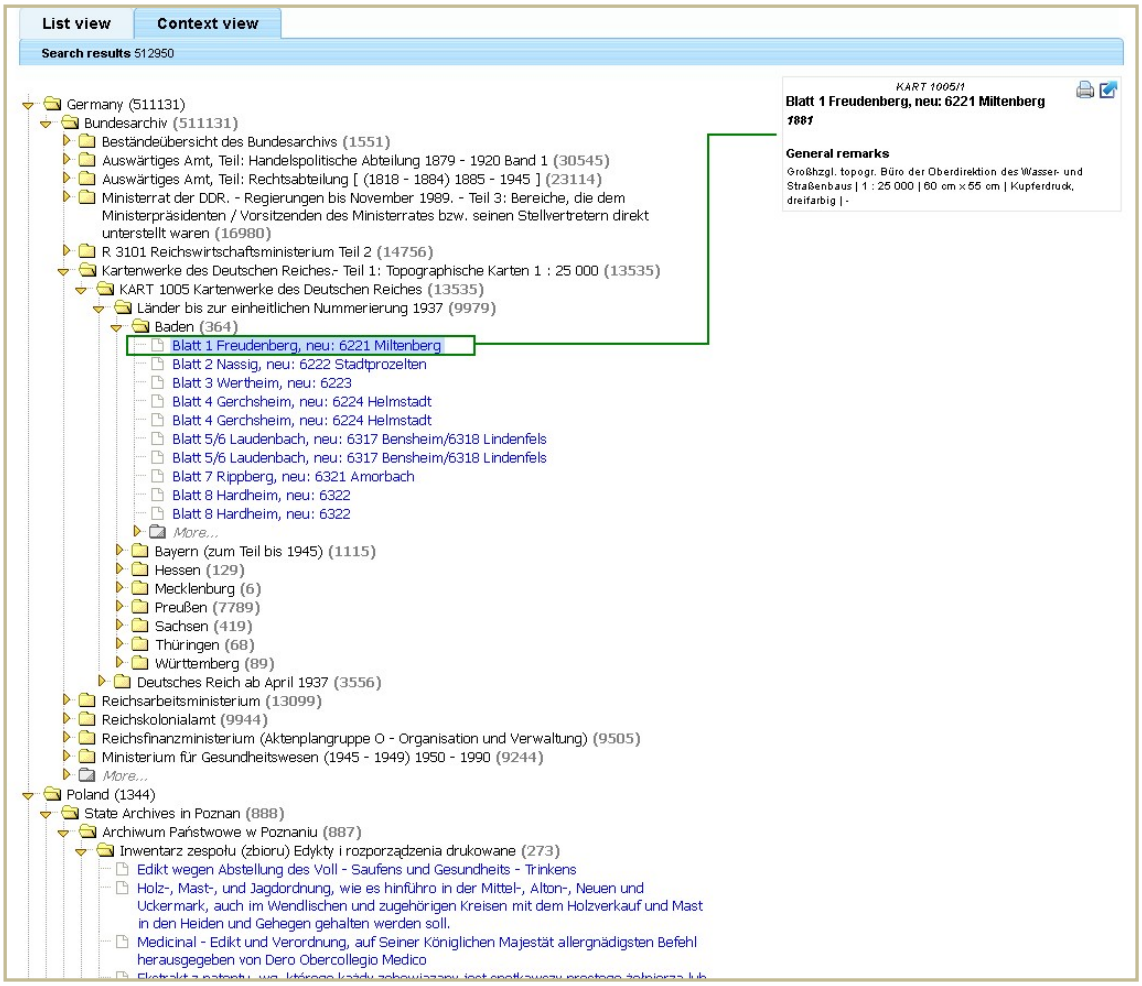


"List view" after searching for "Berlin", drilled down to 68 results (from initially 512 950) by refining for only "Finding aids", only material "Containing digital objects" and only material with a start timespan between "1900 and 1919"

THE PRESENTATION OF SEARCH RESULTS – THE "CONTEXT VIEW"

Alternatively, the single hits can be displayed in the "Context view" where they are grouped by the document to which they belong. The expandable tree in the "Context view" – similar to the one in the advanced search options – starts at country level and leads via the constituent institutions to these institutions' holdings guides and finding aids. Being a search results display, the "Context view" will of course only show those countries, institutions, holdings guides and finding aids where the search term has been found fitting other search settings chosen in the advanced search options.

The different levels are ordered by amount of hits, starting with the country, institution and finding aid containing the most search results. If there are hits within the holdings guide of one institution as well as in some of this institution's finding aids, the holdings guide will always be listed first. Within the holdings guide and finding aids, the constituent search results are then sorted according to the immanent hierarchical structure of the document itself.



"Context view" after searching for "Berlin" with some search results expanded and the preview opened for the first of these search results

To the right of each level within the tree structure of the "Context view", the number of search results included in this level will be given. By expanding the tree step by step, the user can drill down to the constituent hits which will be indicated as active links printed in blue. Clicking the title of one search result will open a preview similar to the one available in the "List view". This preview again can be printed and provides access to the complete finding aid or holdings guide which will open exactly at the place within this document where the search term has been found.

VIEW THE SEARCH RESULTS IN THEIR COMPLETE CONTEXT

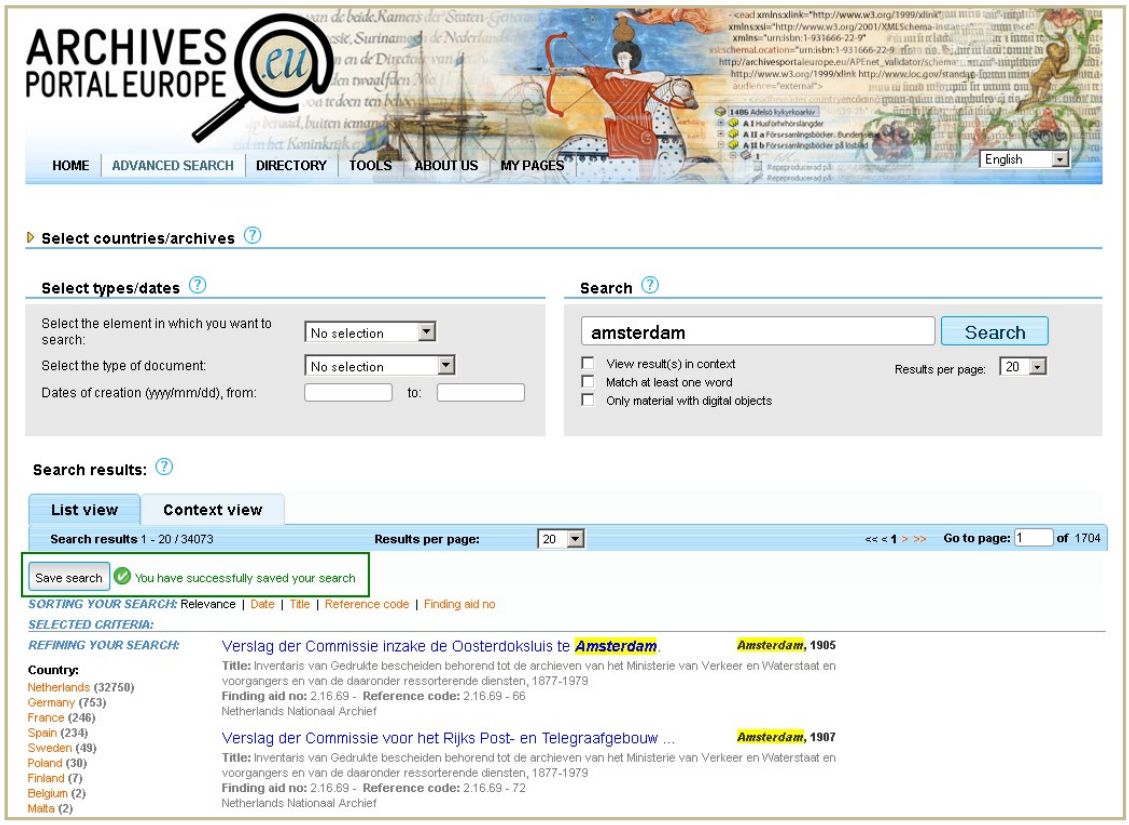
By clicking the title of a search result in "List" tab or the corresponding icon of the preview in either "List" tab or "Context" tab, the complete finding aid or holdings guide will be opened in a new browser tab or window of browser. On the right of this second display, all information available on a specific archival unit will be given so that one learns more about the file found in order to decide if it really fits the own (re)search aim and topic. In addition to this, the tree structure on the left allows the user to also explore the search result's original context when browsing the complete hierarchy and thereby discovering related resources that might also be of interest.

Provided the material is digitised and accessible online, digital objects will be indicated in the second display either via the small image icons or via a thumbnail, in case the link to that had been delivered already by the content provider. Icons as well as thumbnails will lead to the full resolution of the digital object as displayed on the content provider's own website to explore further.

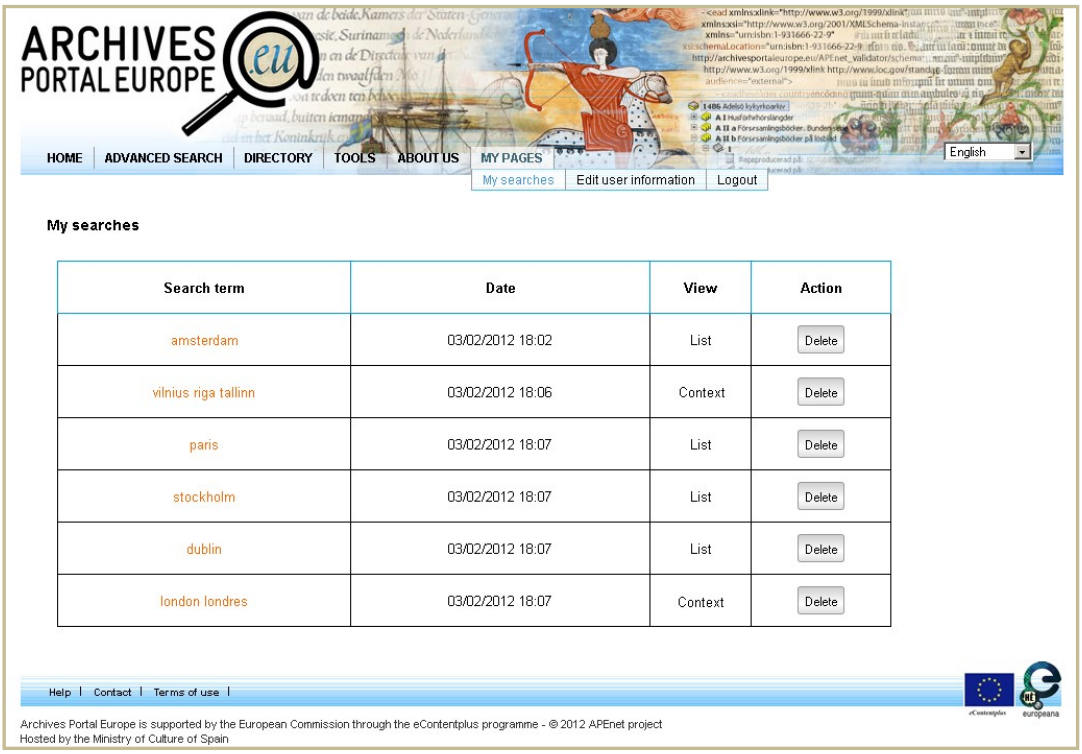
HOW TO MAKE MORE OF THE EXPERIENCE – "MY PAGES"

The recently added section "My pages" gives users the opportunity to experience the content presented at the Archives Portal Europe with a certain added value that will be enhanced with new functionalities over time. At the moment, creating a personalised account as registered user of the Archives Portal Europe allows her/him to save the best search results for recovery whenever required ie it will provide the user with access to those search results at any time.

To take advantage of this facility, one will need to be logged into "My pages" before conducting a search. At the top of the search results, a button will allow the user to "save search". When clicking this button, she/he is notified if the search has been saved successfully. To visit a saved search again, one simply clicks on the search term listed in the corresponding table at the submenu "My searches". This table not only includes the search terms used and the dates when the search was conducted and saved, but as well some information on the search result view chosen at that time.



"List view" after a search for "Amsterdam" with the "Save search" button and the message that the search has been successfully saved

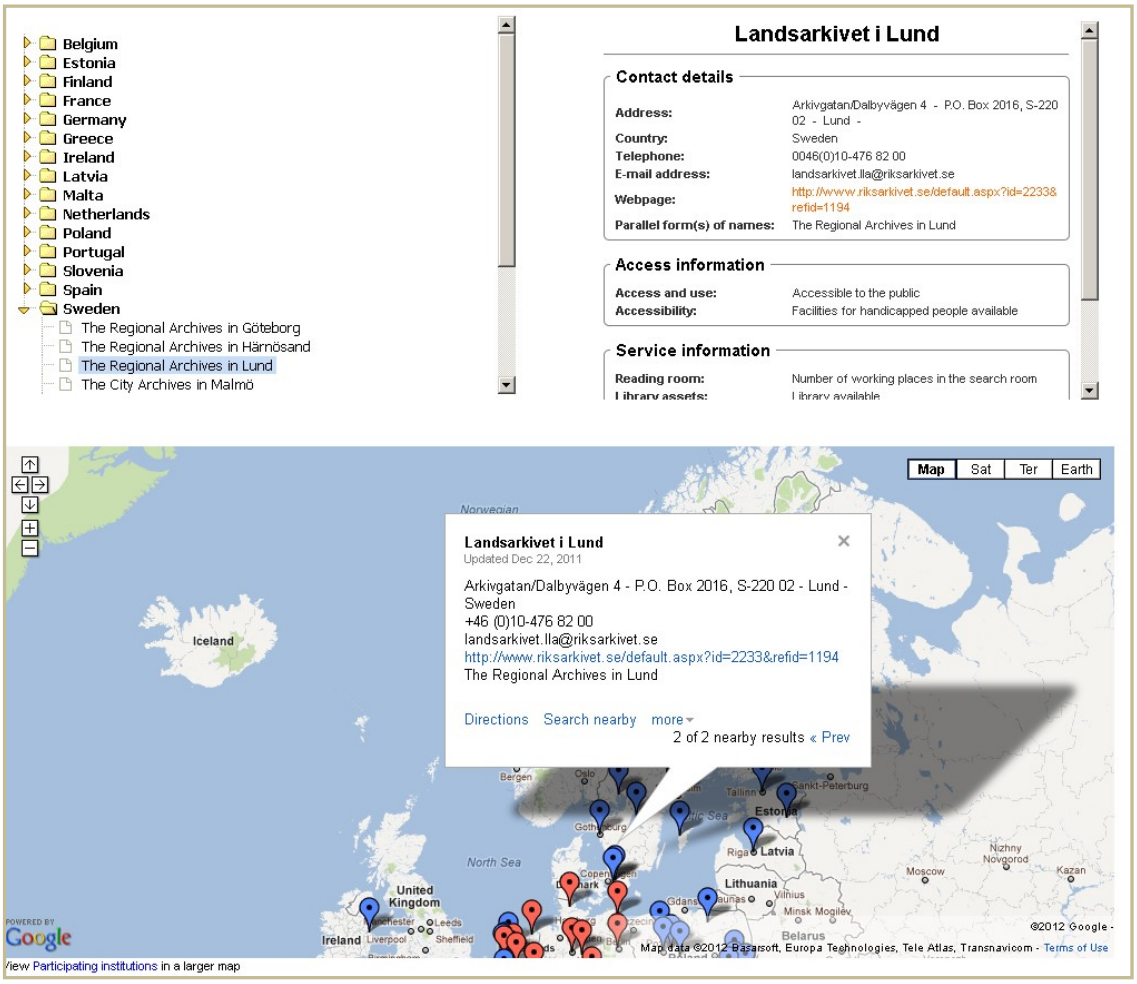


Overview of saved searches

THE DIRECTORY

In addition to the archival content itself, the Archives Portal Europe also provides its users with all the necessary information to contact the institution holding and maintaining these materials in the "Directory“ section. Here a list not only shows those archival institutions already providing content to the Archives Portal Europe, but also some information on other archival institutions from the participating European countries. The tree structure of the directory is ordered firstly by country and within each country, the single institutions are displayed by the administrative and/or regional order as provided by the national archival institutions themselves.

Clicking on the name of an institution on the left will display on the right the information currently available for this institution such as contact details (telephone numbers and (e)mail addresses etc) or a link to the institution’s own website with further and more detailed information. Furthermore, it can provide a link to the holdings guide of this institution as available within the Archives Portal Europe to access – or re-access – the archival material from here. The content of these information pages themselves might be given in the official language of the country where the institution is located, but the headers and labels will be displayed in the language you have chosen for the portal’s user interface.



The Regional Archives in Lund as presented in the "Directory"

For a general overview of the European archival landscape, a map is included at the bottom of the "Directory" section as a comprehensive visual guide to the archival resources in Europe. It provides information on the location of the participating institutions at one glance and clicking on the constituent pins will show additional information on their contact details. The blue pins indicate those institutions that deliver content to the Archives Portal Europe while the red pins redirect to national and regional portals that extend the data provided via Archives Portal Europe towards a useful virtual repository of European archival institutions and portals.

The Archives Portal Europe directory is therefore a pioneering resource created to help researchers locate primary source material in repositories that hold data on available records. It is a work in progress that is regularly updated with information contributed by all the European institutions participating in the portal.

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How to make your institution seen – Getting involved

The content information at archivesportaleurope.eu is accessible thanks to the back-end application called dashboard. The main goal of this part is to allow the project partners to upload their data and to transform them properly into the data models defined for their use within the Archives Portal Europe and the three-layers-concept of the APEnet project, in order to normalise the whole structure in the back-end and to be able to provide a seamless presentation in the front-end.

The development of this part consisted in establishing a structure to be accessed by partners from their own local systems and as much secure as possible in order to protect the content itself and their user accounts. This initial study passed different phases until its finalisation towards the current state: 19 user accounts are currently stored in the dashboard corresponding to the partners associated to the APEnet project who manage 14.5 millions of descriptive units. All processes are conducted under completely safe conditions thanks to different security facilities when a user registers for the dashboard respectively logs in the dashboard, such as the captcha implementation, the "forgotten password" rules and of course the encrypted communication and secure identification offered by Hypertext Transfer Protocol Secure (https) implementation. The dashboard application has also successfully passed some security audits with the result: "no vulnerabilities or risks found in the application". That audit not only concerned the application itself but also the technical infrastructure (servers, communications and router devices).

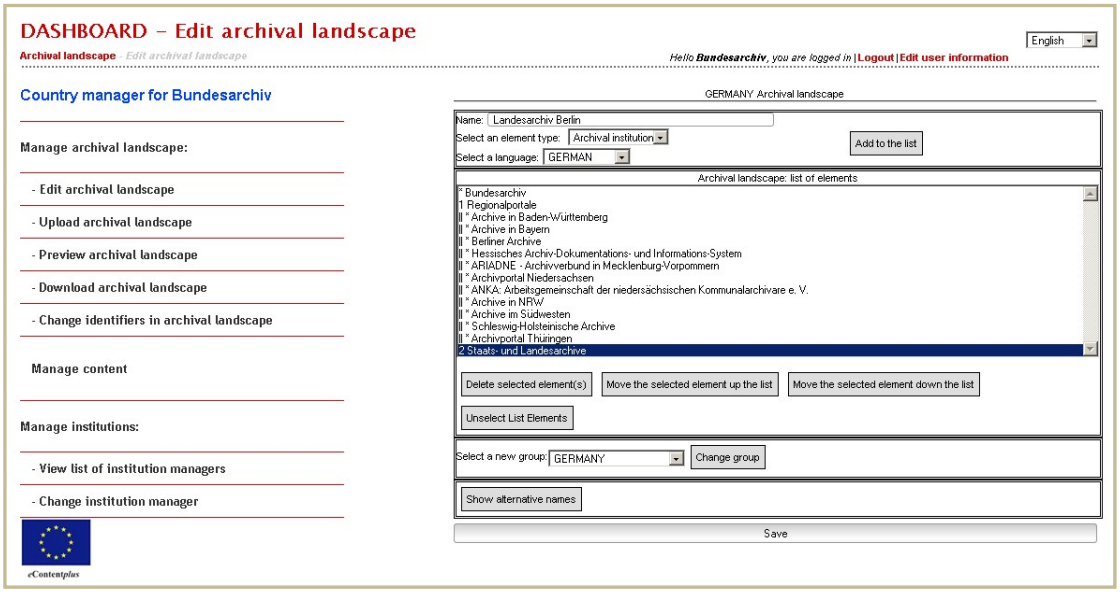
The archival landscape and the content provider's information via EAG

In terms of functionality, the well understanding of the three-layers-concept for the presentation of archival content as created by APEnet, can help to understand the way, in which the dashboard is built, and the way, in which the files must be uploaded by the partners due to this. The three layers consider:

- firstly, the definition of the archival landscape for each partner with the information of the institutions linked to it,
- secondly, the definition of each institution's holding guide(s), possibly linked with additional information on the creators of each holding and
- thirdly, the finding aids with the detailed descriptions of the constituent fonds and collections, probably including links to digital archival objects.

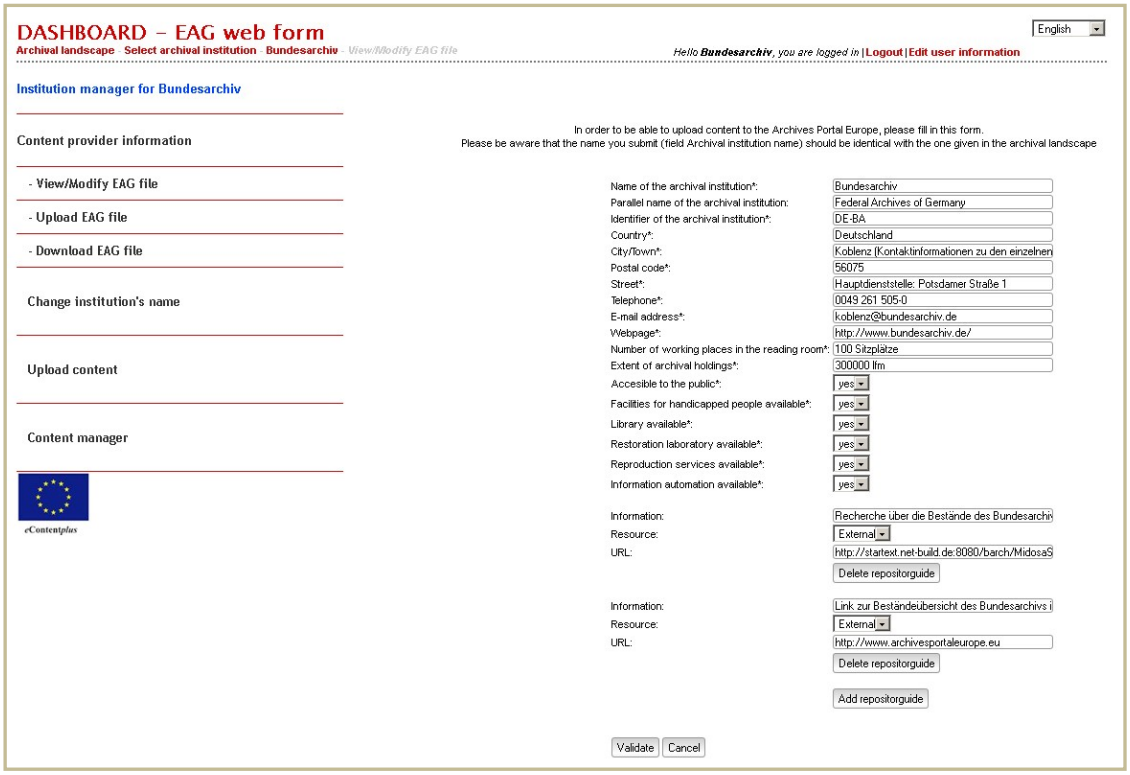
The dashboard is based on this concept, which implies that the current partners should first introduce their country's archival landscape, then the descriptions of the different institutions listed there, and finally, the content (holdings guide(s), finding aids or source guides) for each institution.

The definition of the archival landscape consists in letting the user define the whole structure of the institutions included as a simple list or by distributing them among groups, subgroups etc. This nested distribution is enabled by an EAD/XML file which the user could either deliver directly to the dashboard or which s/he could build inside the dashboard thanks to the editing facilities. If the user selects the last one, the system will build the EAD/XML file automatically; this would be available for download afterwards.



Editing the archival landscape, here: adding the new institution "Landesarchiv Berlin" to the marked group "Staats- und Landesarchive"

Once the archival landscape has been set up, the other part of the first layer could be defined: the description of each institution, which is mentioned in the archival landscape. This description is provided by an EAG/XML file, which the user either could deliver to the dashboard directly or which s/he could create online using the webform as implemented in the dashboard. The EAG/XML document created via the dashboard can also be downloaded and used by partners.

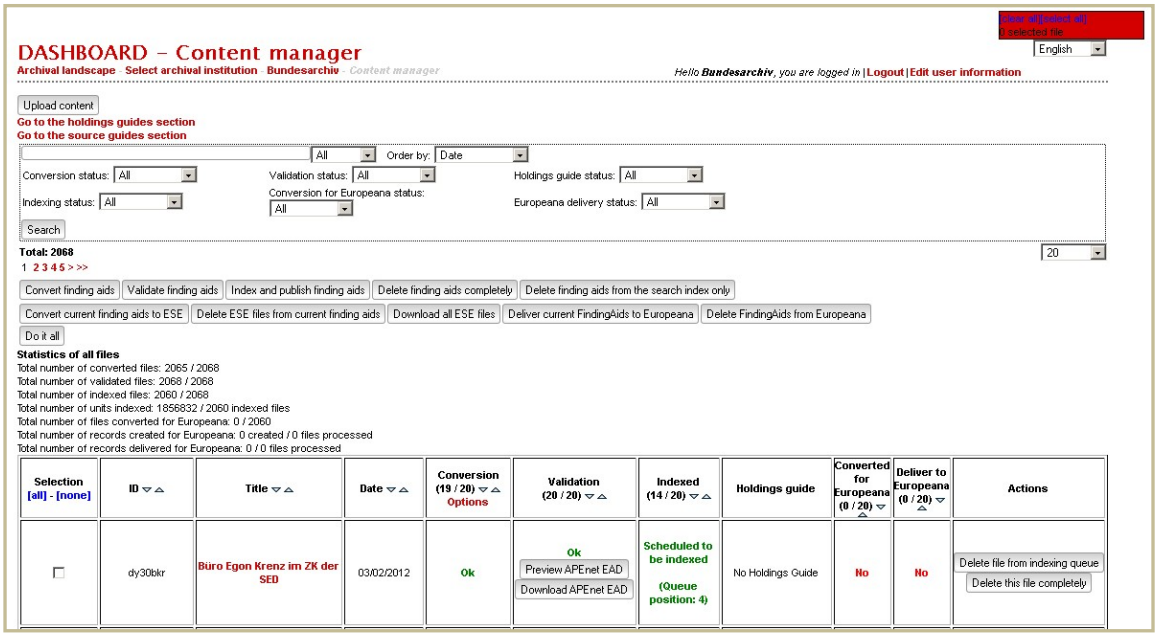


The EAG webform to provide information on one's institution

CONTENT MANAGER

Once the first steps mentioned above have been successfully conducted, it is possible to upload content for each institution defined in the archival landscape. The users can access the Content Manager where they can upload their finding aids, source guides or holdings guides via HTTP and FTP or by using OAI-PMH for harvesting their own data as constituent EAD/XML files one by one or all in one step by combining all files in a ZIP.

The uploaded files then will be shown (divided in sections: finding aids, holdings guides and source guides) in the Content Manager along with some information for data management such as the identifiers, the titles, the dates of upload, the current states of processing and the next actions available. Furthermore, some general statistics are provided, batch processing can be initiated at the top of the list and several ways of filtering and searching the files are available.



Content Manager with (from top to bottom) links to "holdings guide section" and "source guide section", searching facilities, batch processing functionality and general statistics

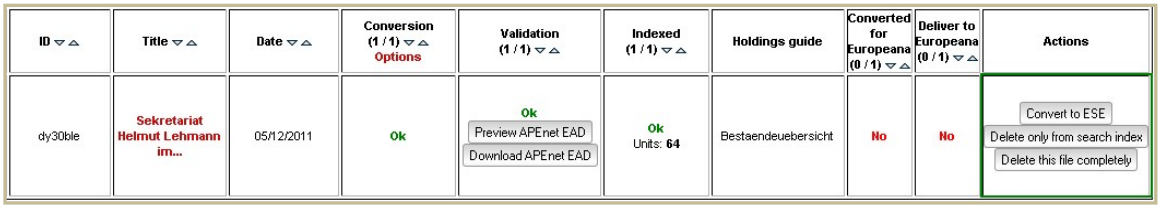
In order to get started, all uploaded files must be validated against the APEnet EAD schema, no matter if conversion has already been done locally by using the data preparation tool or has been conducted centrally after the upload. As soon as a file has passed the validation, it can be scheduled for indexation and publication, which will be run in an automatic process overnight. Which steps shall be processed on which files and when, is under the full control of each content provider.

☐	plaky1	Plakatsammlung der Sozialisti...	03/02/2012	Ok	Ok Preview APEnet EAD Download APEnet EAD	Scheduled to be indexed (Queue position: 0)	No Holdings Guide	No	No	Delete file from indexing queue Delete this file completely
☐	N2329-70160	Nachlass Kuno von Westarp	04/01/2012	No	Ok Preview APEnet EAD Download APEnet EAD	No	No Holdings Guide	No	No	Edit Index and publish Delete this file completely
☐	_dsf	Gesellschaft für Deutsch-Sowj...	04/01/2012	Ok	Ok Preview APEnet EAD Download APEnet EAD	Ok Units: 65	Bestaendeuebersicht	No	No	Convert to ESE Delete only from search index Delete this file completely

Content Manager view of uploaded files with different actions being available at the right end of the table depending on the status of the files

ARCHIVAL INFORMATION IN EUROPEANA – THE APENET EAD TO ESE FUNCTIONALITY

In addition to all facilities necessary to present one's data at the Archives Portal Europe, the dashboard also offers the APEnet EAD to ESE functionality in order to deliver digitised archival data to Europeana. Registered users of the Archives Portal Europe dashboard can – provided their institutions have signed the Europeana Data Exchange Agreement – convert their APEnet EAD finding aids into ESE records, check the future display of these in a Europeana-like preview and put them in the Archives Portal Europe's OAI-PMH repository ready to be harvested by Europeana.



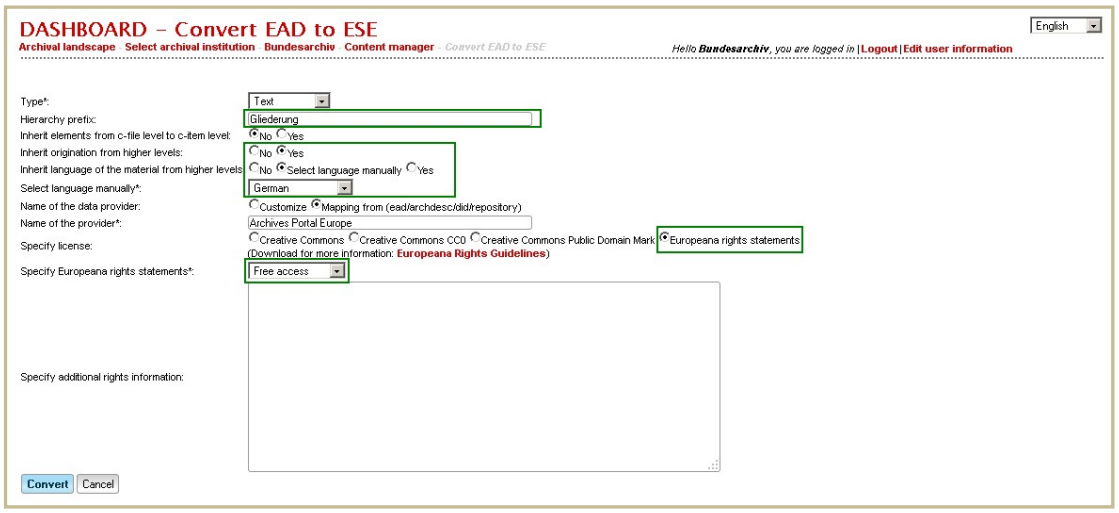
ID	Title	Date	Conversion (1 / 1) Options	Validation (1 / 1)	Indexed (1 / 1)	Holdings guide	Converted for Europeana (0 / 1)	Deliver to Europeana (0 / 1)	Actions
dy30ble	Sekretariat Helmut Lehmann im...	05/12/2011	Ok	Ok Preview APEnet EAD Download APEnet EAD	Ok Units: 64	Bestaendeuebersicht	No	No	Convert to ESE Delete only from search index Delete this file completely

Actions available for data processing towards Europeana

APENET EAD TO ESE: FINE-TUNING CONVERSION PRINCIPLES

The conversion of APEnet EAD to ESE is automated as much as possible, but since this conversion is a batch process to turn all relevant information on digital archival objects of a finding aid (or a selection of finding aids) into a set of ESE records in one process and the granularity of metadata on object level may differ per finding aid, the conversion process can be fine-tuned manually.

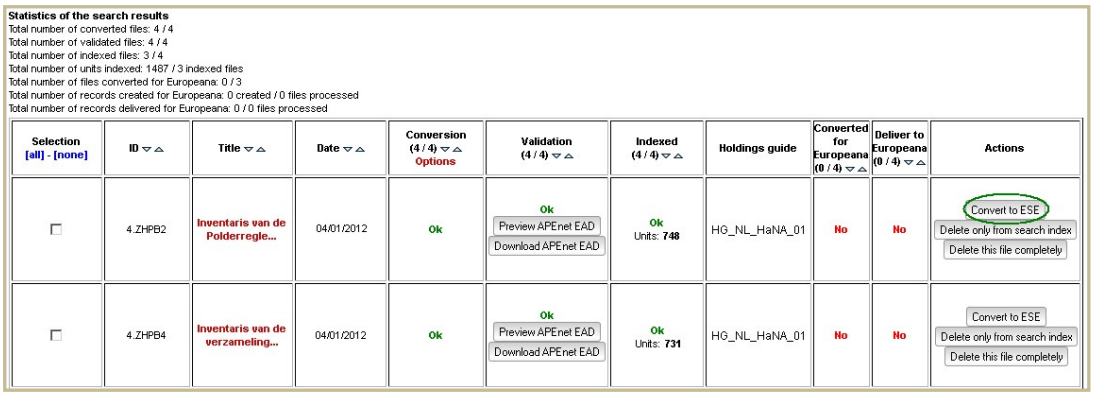
The conversion fine-tuning dialogue therefore contains several possibilities to influence the standard APEnet EAD to ESE mapping. Most of the options in this dialogue are mandatory, but the dialogue screen is designed in such a way that it is easy to understand what the fine-tuning possibilities are and for most options default values are pre-defined.



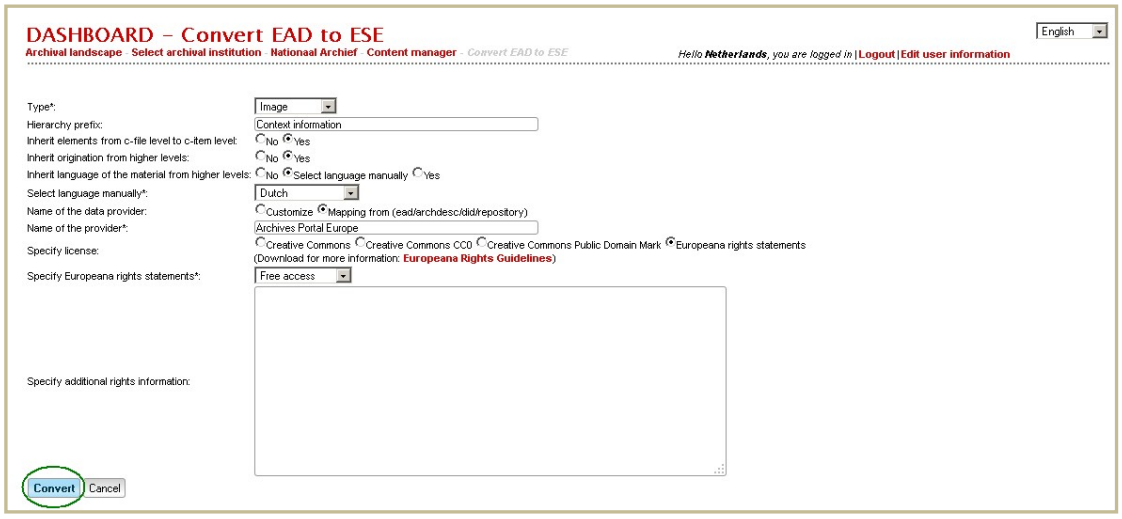
APEnet EAD to ESE conversion dialogue screen with some adaptions

APENET EAD TO ESE: CONVERSION EXAMPLE

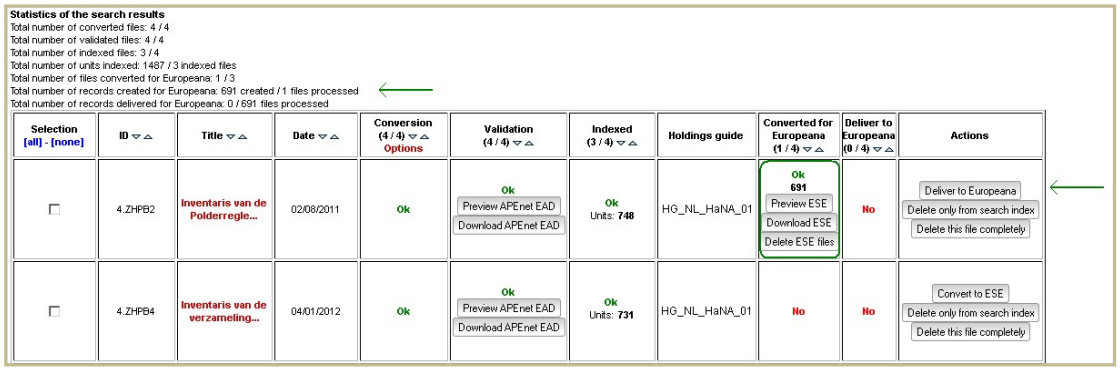
The following pages and figures show an exemplary workflow for converting an APEnet EAD finding aid to the corresponding ESE records via the dashboard of the Archives Portal Europe:



Step 1: select the finding aid to be converted and click on the button “Convert to ESE”.



Step 2: select the most suitable options for conversion and click on the "Convert" button.



Step 3: the statistics have been updated and the available ESE records can be previewed, downloaded, deleted or forwarded to Europeana.

It is only after clicking on the button "Deliver to Europeana" which will be available after the conversion fine-tuning has been done, that the ESE records will be transferred to the OAI-PMH repository, ready to be harvested by Europeana, so until this button is used, the ESE records can still be changed or improved by re-running the conversion fine-tuning without any consequences for the delivery to Europeana.

Checking whether this is necessary, can be done by using the "Preview ESE" or the "Download ESE files" button. Hitting the first one simulates the Europeana display in HTML inside the dashboard, so enables online checking, whereas hitting the latter starts the download process for the ESE/XML record files, enabling the user to check them offline, so locally in an XML editor.

APENET EAD TO ESE: DELIVERY FUNCTIONALITY

When a content provider is satisfied with the result of the APEnet EAD to ESE conversion, either checked via the "Preview ESE" functionality or via locally examining the downloaded ESE/XML record file, the actual forwarding of ESE records to Europeana can be initiated by pushing only one button.

It is possible to forward all ESE records of all converted finding aids to Europeana at once, using the batch processing button "Deliver current Finding Aids to Europeana" or to do that for only one of the converted finding aids using the "Deliver to Europeana" button in the column "Action" at the level of that particular finding aid. By pushing these buttons the ESE record files of the (selected) converted finding aids will be put in the Archives Portal Europe's OAI-PMH repository, for harvesting by Europeana. This will be conducted by Europeana at a certain interval, usually once per month, at the end of a month.

More detailed information on APEnet EAD to ESE mapping and date normalisation rules and on the way in which archival content currently is displayed in the Europeana portal can be found in APEnet's WP3 deliverable D3.2 "Final Interoperability Report"[6].

[6] Will become available soon at the project website apenet.eu "About APEnet > Outcomes & Deliverables".

EPILOGUE: THE SUSTAINABILITY OF THE PROJECT

The sustainability of the APEnet project is described in the Deliverable 5.4. "Concept for a business plan"[7]. The following epilogue of the APEnet Final Report follows its main structure and findings.

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A solid technical ground for the Archives Portal Europe, for content ingestion and for the interoperability with Europeana, has been laid in the APEnet project but the amount of content providers is not yet sufficient to reach sustainability and neither are the end-user centered developments. Expert and financial resources for expected long-time developments of metadata standards, interoperability updates, implementation of technical and software novelties, new user functionalities etc will also have to be accounted for in a situation where the Archives Portal Europe will have to run without project funding.

It is therefore important to estimate and dissect some possible weaknesses and risks in the present and future development and maintenance processes, or at least to set up a number of sign-posts to envision and sketch out a few future roles and scenarios, some stepping stones and possible stumbling blocks to aid in the long time development and administration of the portal.

STRUCTURAL IMPACT

An important factor for the successful welding of a basis for a sustainable common cause among the main European archival institutions manifested in the Archives Portal Europe is the APEnet project's close connection to the EBNA (the European Board of National Archivists) and to the ICA (the International Council of Archives). The latter, for instance, has led to the founding of the EURBICA APEnet Liaison Group (EURBICA being the European Branch of the ICA) that plays an important part in the process where the project has firmly established its objectives as an inclusive future mainline activity for European archival institutions.

DEVELOPMENT IMPACT

The valuable APEnet project results has been rendered possible through the intense and committed work of the active project partners in the areas of technical and standards development and through the intense dissemination conducted by the project partners.

[7] Will become available soon at the project website apenet.eu "About APEnet > Outcomes & Deliverables.

The impact of the project is best mirrored in the formidable interest shown by national archives or the national archives administrations at the ministries all over Europe in participating in the APEnet follow-up project, APEX, where an absolute majority of the European Union and associated member countries has shown an active interest in participation.

RISK ASSESSMENT

A sine qua non is that a risk assessment is not neglected but seriously considered and handled through the future development processes. A heavy responsibility falls on the future Archives Portal Europe steering, development and dissemination team to live up to the confidence invested in the portal by its content providers.

An equally important responsibility falls on the team assigned to portal usability that has to ensure that the complexity of the archive material and the intricate structure in which it is compiled are not to become a hindrance for a wide range of non-expert user categories to access the immensely diverse masses of information that the Archives Portal Europe is building up to contain.

METADATA STANDARD IMPLEMENTATION

During the last decade there has been a growing consciousness of the value of an integration of the European cultural heritage. Fostered by the European Parliament and Commission, the wish and determination by European institutions to structure, digitise and disseminate their content in an international environment has rapidly increased. This is the case also in the archival domain.

As the integration of content in national and international online environments is set in motion, one of the first stepping stones has been the recognition of the need for common denominators – standards to use for ingestion and correct display in the portals user interfaces. Main European-level aggregators, including Europeana clearly see the need not only to establish but to continuously develop and adapt the standards used.

When it comes to the European archives domain most large public institutions have followed a long tradition of common standards based on the International Council on Archives (ICA) guidelines. These standards then make up the basis for the more recently developed XML exchange format versions. It deserves to be noted that the archival XML standards are still in a state of transformation and that under the lead of the active working groups these standards can be expected to expand and/or conglomerate.

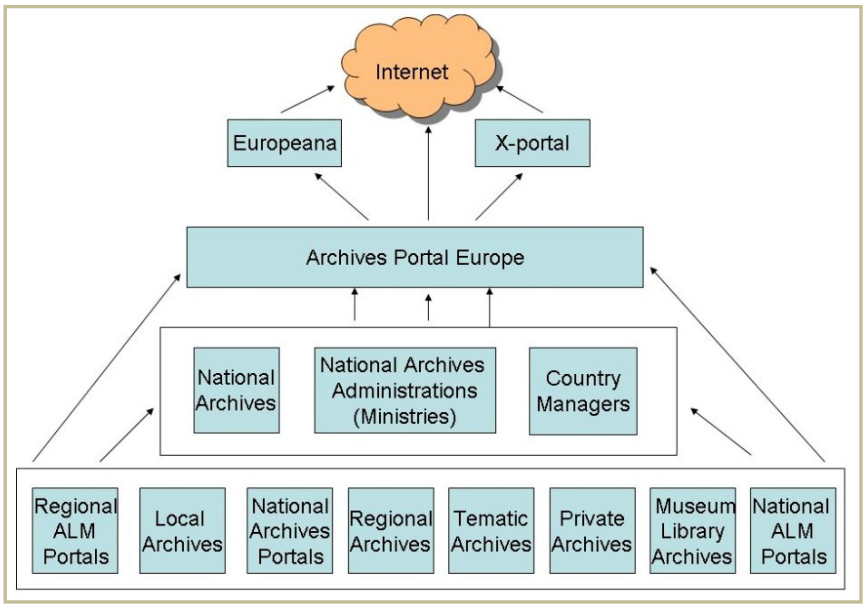
The Archives Portal Europe administration will therefore undoubtedly be an important actor, at present as well as in a long term perspective, to funnel the needs of a great number and variation of content from a large number of archival institutions throughout the continent.

This will mean that numerous and disparate content from a great variation of institutions will put an economical and organizational strain on the Archives Portal Europe administration.

INGESTION OF CONTENT BY NEW CONTENT PROVIDERS

At present the APEnet consortium has only accepted National Archives or the State administrations of archives as partners and content providers to the Archives Portal Europe. The small amount of content provided from outside this circle has been entered through the already established national partners.

Throughout the APEnet project's lifetime partners have had ongoing discussions on the logistics of content ingestion, how to manage and divide responsibilities and create efficient workflows, how to open up and provide for other actors and content holders, from regional and local, thematic archives or archival holdings, for instance within museums, universities and libraries. This process has led to a number of possible solutions which does not by necessity exclude each other but may serve as a complement and by that constitute a framework of possible ingestion pathways for efficient and scalable ingestion processes. Examples of possible ingestion path ways and aggregator stations are illustrated below.



Possible ingestion path ways and aggregator stations

CONTENT INJECTION

Even if the tools and aids produced in the Archives Portal Europe concept up till now provide a certain extent of automation in the ingestion procedure, there are still, aside from variations in the use of standards among content provider institutions, formal and legal matters as well as knowledge transfer and policy measures that will need communication and information exchange.

Therefore, cost effective ingestion workflow logistics and also some sort of knowledge exchange board at the future administration of the Archives Portal Europe will have to be in place to facilitate national and regional aggregators, country managers and other content providers with smooth ingestion paths.

This is needed since the ingestion process hardly can be made fully automatic, without a properly working human interface for the content providers to collaborate with. Furthermore the distribution of responsibility for the aggregation of data can become an area of conflict if the conditions to establish a single national aggregator are not in place.

FINANCIAL MODEL

Like all publicly founded projects that aspire on long-lived project results for the products developed, the Archives Portal Europe will in the end have to be financed in a way that is economically viable and sustainable for decades to come and even if it has the best possible prerequisites to achieve this goal it is not self evident that it will succeed. Subsequently an attentive approach should be taken towards an expected economically lean post-project situation. Also the financial consequences of the development processes should be continuously validated.

It has not been possible to produce a fully scalable cost-benefit analysis for the running of Archives Portal Europe so far. However, even without a full analysis at hand, cost such as hosting, technical updates, possible standards development updates and implementations, the cost of an Archives Portal Europe foundation, security and SLA, content provider and user services, dissemination activities, content management and design updates will together with a number of other costs amount to a substantial yearly sum that needs to be financed by Archives Portal Europe partners and/or content providers and possibly be based on content hosted or at a flat rate per partner/provider.

The figures in the table below are related to the estimated costs for annual hosting, support and technical management of the Archives Portal Europe in Spain by the Ministry of Education, Culture and Sport; although they are not market prices, they hopefully will serve as a pointer to the future part of the financial needs that comprises the concrete running costs of a dynamic portal with a growing number of content providers.

Environment	Category	Service	Unity	Quantity	Monthly unit cost	Monthly const	Annual cost	Annual cost Infrastructure (Hosting)	Annual cost Infrastructure (Development/ testing)
Development	Storement Data Center	CPU	CPU	4	102,00 €	408,00 €	4.896,00 €		4.896,00 €
Development	Storement Data Center	Disc	GB	100	0,60 €	60,00 €	720,00 €		720,00 €
Development	Storement Data Center	Memory	GB	8	51,00 €	408,00 €	4.896,00 €		4.896,00 €
	Total Storement data center				*153,60 €*	*876,00 €*	*10.512,00 €*		
Total Development					**153,60 €**	**876,00 €**	**10.512,00 €**		
Preproduction Branch	Storement Data Center	CPU	CPU	15	102,00 €	1.530,00 €	18.360,00 €		18.360,00 €
Preproduction Branch	Storement Data Center	Disc	GB	1300	0,60 €	780,00 €	9.360,00 €		9.360,00 €
Preproduction Branch	Storement Data Center	Memory	GB	15	51,00 €	765,00 €	9.180,00 €		9.180,00 €
	Total Storement data center				*153,60 €*	*3.075,00 €*	*36.900,00 €*		
Total Branch preproduction					**153,60 €**	**3.075,00 €**	**36.900,00 €**		
Preproduction Trunk	Storement Data Center	CPU	CPU	2	102,00 €	204,00 €	2.448,00 €		2.448,00 €
Preproduction Trunk	Storement Data Center	Disc	GB	150	0,60 €	90,00 €	1.080,00 €		1.080,00 €
Preproduction Trunk	Storement Data Center	Memory	GB	8	51,00 €	408,00 €	4.896,00 €		4.896,00 €
	Total Storement data center				*153,60 €*	*702,00 €*	*8.424,00 €*		
Total Trunk preproduction					**153,60 €**	**702,00 €**	**8.424,00 €**		
Production	Storement Data Center	CPU	CPU	15	102,00 €	1.530,00 €	18.360,00 €	18.360,00 €	
Production	Storement Data Center	Disc	GB	1300	0,60 €	780,00 €	9.360,00 €	9.360,00 €	
Production	Storement Data Center	Memory	GB	20	51,00 €	1.020,00 €	12.240,00 €	12.240,00 €	
	Total Storement data center				*153,60 €*	*3.330,00 €*	*39.960,00 €*		
Production	Backups	Storement backups	GB	1001	0,35 €	350,35 €	4.204,20 €	4.204,20 €	
	Total Backups				*0,35 €*	*350,35 €*	*4.204,20 €*		
Total Production					**153,95 €**	**3.680,35 €**	**44.164,20 €**		
Total					**614,75 €**	**8.333,35 €**	**100.000,20 €**	**44.164,20 €**	**55.836,00 €**

KNOWLEDGE AND DEVELOPMENT UPDATES

The archival and records management science, especially in the areas dedicated to structuring and preservation of digitised or born digital records, is subject to dynamic development and change. These developments are a challenge to the archival community in many ways and certainly also have consequences in how the holdings are presented and the way the Internet user interfaces are built.

The experiences from the APEnet project show that there is an uneven spread of knowledge, development opportunities, and research facilities among the partner institutions, this goes for methodology and technology both. A perhaps lesser but still tangible obstacle is that the resources for implementation of new knowledge and research findings might be missing even though industrious and devoted archivists, system analysts and programmers can seep novelties through increasingly tighter budget frames of the European archival institutions.

This situation will most certainly become more acutely evident when the Archives Portal Europe opens up to a large number of smaller and medium-sized institutions. There is a risk that lack of know-how will hamper the Archives Portal Europe expansion if it is not possible to accommodate for this very large group of potential participants. The consequence would be lesser content coverage in the portal.

Not only will a knowledge, development and implementation deficiency affect the Archives Portal Europe by fewer content provider partners participating, but it will also affect the portal user interface if the resources for adaption to future developments are not in place. This might not be considered as a pressing problem with three years of fresh

APEX finances ahead but seen in a longer perspective the swiftly changing on-line information-flow environment, where the Archives Portal Europe is competing, is unforgiving towards interfaces that do not live up to the users increasing demand of fast and intuitive access. In a situation like that the content providers will consider the portal less attractive as well.

The risk is then that the Archives Portal Europe will become gradually stagnant and a mere monolith over past achievements.

USABILITY, A MAIN FACTOR FOR SUSTAINABILITY

The Archives Portal Europe user services will hardly, now or in the future, give the quick answers to questions such as "Who was…?" or "What happened…?". Archival information systems are not dictionaries based on stand-alone objects but they are rather information structures where the objects need the context in which they were created to make sense. This means that the Archives Portal Europe has to be more than a pure aggregator or a mere supplier of "raw" data for external service providers. For serious use an aggregator portal for archival content must provide the researcher with the necessary historic and administrative setting in order to become a viable source of information.

Therefore an urgent task is to develop novel and inventive methods and techniques to make it easier for inexperienced users to crack the code to the archival information structures and make the way as short as possible to the landscapes of unique storytelling and serendipity. Unfortunately even the best of user manuals and knowledge management tools are not enough to smooth the path to a user-friendly system. An approachable interface is going to be an indispensable part of a portal that contains archival information.

There is however a dedicated cadre of experienced users world wide, they are to be found not only among the professional archivists and academics, in genealogic and local historic societies but also in a great variety of other research areas. They are often more than willing to share their results and offer guidance to others who share their interests.

To accommodate for these our most valuable users the development plans for the Archives Portal Europe must contain publication platforms and meeting places where they can disseminate their collections and discuss and share their findings.

ARCHIVES PORTAL EUROPE SUSTAINABILITY AND THE SURROUNDING WORLD

The future roles of the Archives Portal Europe will ultimately be determined by the surrounding world, by the technical, political and not least by the economical evolution in the years to come. The fact that "no man is an island" is certainly true for interfaces developed for Internet use, an environment where interaction is the key to survival.

It is a difficult task to predict even the near future sustainability of the Archives Portal Europe taking into account factors such as the coverage of the Europeana Data Exchange Agreement (DEA) with the Creative Commons 0 licensing (CC0), the Public Sector Information Directive (PSI), the Europeana Data Model (EDM) developments, the impact of Linked Open Data and the response to the opening up of content reuse among commercial actors and the creative industry.

Some European cultural heritage projects have taken the decision to act only as an aggregator of content to other service providers, for the moment primary to Europeana.

In the APEnet project the main object of the Archives Portal Europe is to publish the collected European archival descriptions, albeit with a growing number of digital and digitised representations attached to them. Therefore, for obvious reasons, the portal was created as an end-user interface.

For the Archives Portal Europe partner institutions that choose to accept the Europeana Data Exchange agreement and adhere to the changing PSI directive it is quite plausible that the portal also will inherit the role of a "dark portal" and become an aggregator, not only for Europeana but also for any service provider actor that wishes to create applications based on the metadata from the Archives Portal Europe partner which is published under the CC zero license agreement.

The final responsibility for the data that is published under the DEA/CC0 condition is of course taken by the content holders themselves but it will also affect the Archives Portal Europe since the portal will act as a forefront for the content aggregated through it.

Whether a substantial amount of external service provider products that are based on content aggregated through the Archives Portal Europe will contribute to the sustainability of the portal is open to debate, but certainly it will mean an increased responsibility to support, update and maintain the data published through the portal.

AN OUTLOOK TO THE FUTURE

The sustainability planning in the APEnet project is expressed and documented as concrete tasks in the description of work (DoW) of its follow-up project, APEX. Herein a full work package (WP8) is dedicated to the task. Also WP1, WP6 and WP7 have significant parts dedicated to securing the sustainability of the project results. And also in the technical and content handling work packages (WP2, 3, 4 and 5) long-time sustainability also permeates a number of tasks.

The primary measure to guarantee the long time survival of the Archives Portal Europe is the forming of a post-project administrative body – the Archives Portal Europe

Foundation. In the next three year planning the APEX project sustainability work package (WP8) will therefore lead the work to set up the organisational and financial terms for the foundation. It will then be ready to seamlessly take over the responsibility of running the portal.

The APEX project will throughout its lifetime use risk management and containment tools that will be indispensable also for the monitoring and documentation of the post-project sustainability hazards. The APEX project DoW additionally contains an ambitious effort for knowledge transfer through extensive workshop and lecture activities. But in a post project perspective it will not be economically viable to crew a team of lecturers and to arrange workshops throughout Europe (and beyond).

The consequences of this is that some kind of incremental knowledge transfer mechanisms, aside from user manuals and on-line tutorials, would have to be part of the long-time sustainability of the portal, not only as an added value for the content provider institutions but also regarding functionalities related to the user interface of the portal. To account for this requirement the APEX project dissemination and training work package (WP7) will implement a Learning Management System (LMS) on the project website where communication and knowledge transfer can take place. Post-project the LMS will have developed into a useful toolkit for the foundation in the day to day running of the portal.

In addition, the Tools and Support work package (WP5) has substantial resources available during the APEX project lifetime to provide help for the Archive Portal Europe partners with mapping to standards and ingestion of content. Most likely it will not be possible to maintain this service on a full scale without project funding. Therefore it is of outmost importance that a network of ambassadors and supporters that can serve as tutors to new providers (irrespective of being national, regional aggregators or just interested individuals at single institutions) will be constructed during the project period, a network that the Archives Portal Europe foundation can rely on for continuous collaboration.

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THE PROJECT DIARY

In the late Middle Ages, the **books of hours** became quite popular as a manner of integrating elements of monasticism in everyday's devotional life. Nowadays, books of hours are the most common type of surviving medieval illuminated manuscripts and the following chapter is designed to illustrate the thousands of hours devoted by all project members to the most important and the most apparent outcome of the APEnet project: the Archives Portal Europe. You are welcome to join us in commemorating the highlights of these last three years and thereby adding one special piece to the archival treasures that our portal already offers.

> WHEN JOINING FORCES WHILE BEING LOCATED AT ALL DIFFERENT ENDS OF EUROPE, MEETINGS AND DISSEMINATION ACTIVITIES BECAME MAJOR PEAKS IN THE APENET "HISTORY" HIGHLIGHTED HERE MONTH BY MONTH.

Month 0 – Not only a month, but symbolising several years. Years needed to combine all efforts and to reach a consensus. A consensus on naming the necessity as well as the dream of an Internet Gateway for Documents and Archives in Europe and on jointly taking on the challenge. The Archives Portal Europe network comes to life in January 2009 – right away teaching everyone involved to also take advantage of the amusing side of our endeavour as APEs.

Month 1 – The APEnet project holds its Kick-off meeting on 28th January 2009 in Brussels, after the contract between the European Commission and the 13 project partners has been signed on 9th December 2008. With ten partners being present, the work done so far with regard to dissemination and interoperability with Europeana is presented and the tasks for the next months are shared and distributed.

Month 3 – As a platform not only for informing the interested public on the APEnet project's proceedings, but also as a central communication tool for the project members, the project website www.apenet.eu is launched. While the public area of the website will serve as the APEnet project showroom in order to communicate the intention and objectives of the project, the members area will incorporate a Wiki, a Forum and a section

for uploading project-internal documents to easily gather and exchange information and ideas among the partners.

Month 4 – Reporting time: With the Project Handbook (D6.1) and the "State of the Art (SOTA)"-Report (D1.1) the first project documents lay ground for the work to be done. While the Project Handbook comprises the main administrative aspects like the distribution of work, the list of milestones and deliverables or financials, the SOTA-Report refers to the "Report on Archives in the enlarged European Union" and presents an overview over currently used standards for archival descriptions throughout Europe as well as existing online presentations of the project partners. The annex already includes a comparison table of the use of EAD (Encoded Archival Description) in France, Germany, the Netherlands, Spain, and Sweden.

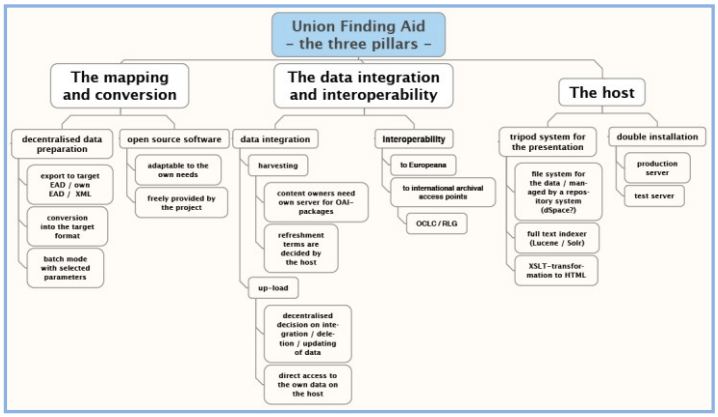
Month 5 – May is the month for visiting Berlin in spring, where Work package (WP) 1 celebrates its Kick-off meeting on 12th and 13th. Based on the SOTA-Report, the logical model and the structure of the future Archives Portal Europe are being formed in this occasion.

Month 6 – In June 2009 the first Work package Leader (WPL) meeting takes place in Brussels, kindly hosted by the Belgium State Archives. The day after, a public informative session is held at the Berlaymont building with the courtesy of the European Commission and with several non-APEnet partners participating. This meeting kicks off the expansion of the project's network with two of the attendees joining the consortium later on in 2009: Belgium State Archives and National Archives of Ireland. Following this line, the APEnet project is also presented at the conference "New Archives – new problems, new solutions" organised by the Society of Polish Archivists in Ustka, Poland and at the ICARUS meeting, organised by the Moravian State Archives in Brno, Czech Republic.

Month 7 – The Dissemination Master Plan (D5.2) as published in July 2009 picks up these latest dissemination activities and provides the framework and the tools to guarantee a proper and harmonised dissemination of the results throughout the APEnet project's lifetime. As the news is spread, the logical model of the future Archives Portal Europe evolves by identifying and describing the archival standards to be used and by explaining their advantages and the corresponding requirements for future implementation in the second deliverable of WP1. Proposed APEnet profiles of the different standards EAD, EAC (Encoded Archival Context), EAG (Encoded Archival Guide), and METS (Metadata Encoding and Transmissing Standard) as well as the description of eight uses cases are included in the Annex.

Month 8 – Summer 2009 is dedicated to the development of the project's testbed installation as well as a first version of conversion engines for the translation of national EAD profiles from France, Germany, the Netherlands, Spain and Sweden to the common APEnet EAD profile. With an overall full text search as well as different possibilities to restrict the search on singular archival institutions, on singular elements such as title or scopecontent, running dates, or call numbers, on either only holdings guides or only finding aids plus a password-protected access to upload, update, or delete one's institution's documents, the testbed installation is suggestive of a future implementation of the logical model.

Month 9 – Resulting from the testbed installation the finalised description of the logical model in D1.3 consists of three main pillars: **mapping and conversion** of the locally maintained data to prepare its presentation within the central portal, stressing the use of open source software; **data integration**, either via direct upload or via harvesting, as well as the interoperability between the Archives Portal Europe and Europeana (and other inter-national archival access points); **the host** with a double installation of test and production servers, both based on a tripod system for the presentation (file system for the data, full text indexer, XSLT transformation to HTML). Further to this the Content analysis report (D4.1) defines the different kinds of content to be inserted in the portal as mentioned in "The Report on archives in the enlarged European Union" (p.83): archives descriptions provided by partners; digitised archives; records of creators; descriptions of the institutions of the partners that have provided content to the gateway; educational content; editorial content; downloadable tools.



Dissemination activities continue with an APEnet Master Class presentation on access to digitised archives at the Europeana Plenary Conference, The Hague, and the project being presented at the Nordic Archival Days in Trondheim.

Month 10 – The APEnet project co-arranges the pre-conference activities of conference on "Improving Access to European Cultural Heritage" during the Swedish EU Presidency in October 2009. The city of Lund welcomes the project participants to the 1st General Assembly during which two new members are joining the consortium. The Belgian State Archives and the National Archives of Ireland will contribute generously to the project with their knowledge and experience and also with their national archival fonds being integrated to the future Archives Portal Europe. With Ireland getting on board,

Elizabeth McEvoy, a smart English native speaker and proof reader, joins the APEnet team and lays important grounds for refining the project's "Euro-English".
Unfortunately, not all application stories have their happy ending: In order to best concentrate and follow the efforts in "standardising the standards" and bringing all different National Archives' materials towards a central research and publication platform with one common "look & feel", it is decided to stick with this national level of institutions on the first phase of development.

Taking on the challenge of defining a European use of the international archival standards, Lund also introduces most of the APEnet team in more detail to the main one of them: EAD (Encoded Archival Description), which is to become the "back-bone" of the Archives Portal Europe and its three-layer-concept leading from the archival landscape via the holdings guides to the constituent finding aids and - where applicable - the digitised material. Daniel Pitti, University of Virginia (USA), and Karin Bredenberg, Riksarkivet (Sweden), join forces in this first APEnet workshop, showing how the seemingly complicated can become easier and can be used for the common benefit within the Archives Portal Europe.

Month 11 – Continuing from the presentation of the APEnet project at the Europeana Local Conference in Härnösand, Sweden, in late October 2009, APEnet attends the CITRA conference in Malta on 17th to 21st November 2009 and disseminates the project and its objectives in the "Information Marketplace" area[8]. Charles Farrugia, Head of the National Archives of Malta, presents the project later on in November at the The Specialist Repositories Group (SRG) Conference in Bristol, England, an opportunity to co-operate with European colleagues and to understand issues faced by archivists in different countries. His presentation **"Benefits of Networking: the APEnet case study"** especially points out the benefits of networking on a project like APEnet also in the fields of cataloguing and digitising of collections.
November as well brings the start of the technical work in APEnet with the work packages 2 (Definition of the physical model of the gateway) and 4 (Content frame-work) holding their joint Kick-off meeting in Madrid.

[8] See the interview done by the CITRA Flying Reporters at http://flyingreporters.ica.org/malta2009/2009/11/19/a-word-from-the-information-marketplace-apenet/

Month 12 – APEnet concludes its first year by a presentation of the project at the EVA/Minerva conference in Jerusalem, Israel, and by summarising 2009's activities and results in the deliverable D6.2, the first "Annual report".

Month 13 – January 2010 is the month for completing the APEnet core team with the development team, located in León, Spain, and two additional technical team members at the Nationaal Archief, Netherlands, joining. By this the project is now ready for the challenge of technically implementing what has been discussed, set up and defined so far from a mainly archival professional point of view.

Furthermore, WP3 (Interoperability between APEnet and Europeana) holds its official Kick-off meeting on 28th January 2010 at the Nationaal Archief in The Hague, Netherlands, although its beginnings point back to even before the project's official start. Relating to a Europeana WP3 meeting in preparation of mapping (archival) data to the Europeana Data Model (EDM) a few days before in Berlin, Germany, the WP3 leader and Technical coordinator Wim van Dongen presents the current state of interoperability with Europeana, which builds the basis for the latter development of the APEnetEAD2ESE conversion tool. Additionally, this meeting and the PMT meeting on 29th January also clear the way for the specifications on the commonly used APEnet EAD profile in general.

Month 14 – To get the developers, who have recently joined the APEnet team, informed, updated and started, a taskforce meeting between Kerstin Arnold (Bundesarchiv, Germany) and Yoann Moranville (Service interministériel des archives de France) and Jara Álvarez Aller, Eloy García and Eduardo Higuero (all Subdirección General de los Archivos Estatales, Spain) is held in León on 24th to 26th of February 2010. The official signal of the works having started in León is given in form of a press conference at the INTECO building the week after (4th March 2010).

Month 15 – Results of the APEnet project's first year are reviewed on 11th March 2010 during a meeting with representatives of the European Commission in Luxembourg to a favourable outcome. The next steps can be made based on the already laid grounds.

Month 16 – Following the cross-domain Europeana WP3 meeting in January, the second major event out of a list of several meetings with the Europeana team is a meeting focused especially on mapping archival data to EDM held in Berlin, Germany, in late April 2010. During the same week, the APEnet project is presented at the 8th European Conference on Digital Archiving, held on 28th to 30th of April 2010 in Geneva, Switzerland. With conference discussing the challenges currently facing the world of archiving due to advances in

information and communication technology (ICT), Angelika Menne-Haritz (Bundesarchiv, Germany) and Wim van Dongen, APEnet's Scientific and Technical coordinators, introduce the approach of the project towards these challenges in their presentation "The APEnet project – building a gateway to archives in Europe".

Month 17 – APEnet publishes its first newsletter on 15th May 2010 and Peder Andrén (Riksarkivet, Sweden), WP5 leader, and Wim van Dongen present fruitfully the current state of the developments as well as the planning for the months to come to the European Board of National Archivists (EBNA) and the 8th meeting of the European Archives Group (EAG) during their meetings in Madrid a few days later.
The month concludes with a joint meeting of the work packages 2, 3 and 4 in The Hague on 31st May and 1st June 2010, giving the actual signal for the detailed technical development of the pilot installation of the Archives Portal Europe.

Month 18 – The progress reached during the first half of 2010 is presented to the project partners in form of an interactive presentation, led by Jara Álvarez Aller (Subdirección General de los Archivos Estatales, Spain), WP2 leader, on the 29th of June 2010. One day later, the 2nd General Assembly is held in León. The project gradually extends the circle of partners with the National Archives of Bulgaria, Estonia and the Czech Republic getting on board as associated partners during this meeting.
The General Assembly is accompanied by a press release, sent out in the morning of 30th June 2010, and a press conference, where Ignacio González Ubierna, INTECO Vice Chairman, Rogelio Blanco, General Director of Books, Archives and Libraries of the Spanish Ministry of Culture, and Severiano Hernández, General Subdirector of the State Archives of the Spanish Ministry of Culture and Project Coordinator of the APEnet project, give an update to the local and national press about the project in general as well as the cooperation between INTECO and the Spanish Ministry of Culture to build the Archives Portal Europe.

Month 20 – Starting anew after the summer break, the project is presented at the Annual meeting of the Society of American Archivists (SAA) in Washington D.C. WP1 leader Angelika Menne-Haritz explains about APEnet during the pre-conference meeting on EAD on 8th August 2010 in her presentation called "Moving forward with Authority" and reports on the project developments with regard to standardisation in brief during the round table on EAD as part of the official conference programme on 10th August.

Month 21 – Furthermore, APEnet extends its dissemination and interoperability activities during the month of September 2010. Peder Andrén presents the project on 16th September 2010 during the CITRA conference in Oslo, Norway, an event that provided the possibility to also announce the establishment of the APEnet liaison group of EURBICA, which is intended to hold two meetings/workshops in the course of 2011. In addition, APEnet is presented at the Conference for Swedish Records Managers, a yearly conference for Records Managers and archivists at governmental organisations in Sweden, taking place on 30th September 2010 in Stockholm.
Mid-September WP3 members Go Sugimoto (Nationaal Archief, Netherlands) and Wim van Dongen attend the Europeana Hierarchical objects and metadata meeting, held in The Hague on the 16th. In his presentation on behalf of the archives community, Wim van Dongen stresses the importance of proper display of hierarchical objects and their metadata when providing access to archival material, gives an overview of APEnet's efforts dealing with this when ingesting digital archival objects and metadata in the Europeana prototype and Rhine release, and he shares his ideas on how to improve this in future Europeana releases, based on the new Europeana Data Model (EDM).

Month 22 – October is a month for meeting with current and with new partners. The APEnet Flying Team is invited to Tartu, Estonia, on 6th October 2010, to meet with the Director of the National Archives, Priit Pirsko, the Director of the Historical Archives, Indrek Kuuben, and the Head of the Department of Digital Preservation, Lauri Leht, and other staff members of the National Archives of Estonia. Peder Andrén, Kerstin Arnold and Yoann Moranville take the opportunity of this first meeting to report to the new partners about the current project status and to present the already developed software tools. These software tools enable participating institutions to prepare their data locally for the implementation in the Archives Portal Europe. It will depend on the technical requirements and the decisions of the institutions themselves if the implementation to the

central server of the portal will be via HTTP-Upload, via a FTP-Server or by using harvesting of OAI-PMH. After the meeting, the APEnet project is given a tour through the National Archives and a presentation of the archive systems in use. They also got a preview of the planned internal developments.

One step ahead in the preparation of their data are the colleagues at the Subdirección General de los Archivos Estatales, Spain, with whom Kerstin Arnold and Yoann Moranville meet on 18th October to concretise the conversion between the local export format and the centrally defined APEnet EAD. In between these two "Flying Team" meetings, they attend a second internal technical meeting, held from 13th to 15th October 2010 in León, to discuss some of the current technical questions in more detail. Some of these questions are afterwards dealt with in a meeting between the members of APEnet's development team and the technical department of the Spanish Ministry of Culture on 22nd of October 2010 in Madrid.

In parallel, APEnet is presented at the Europeana coms group meeting on 14th October as well as at the annual Europeana conference "Open Culture 2010 Conference: Wikipedia, Google and the GLAMs", held on 14th and 15th October, both in Amsterdam, Netherlands.

Concluding the circle of October meetings, the WP5 and WP6 members hold a joint meeting in Warsaw, Poland, on 19th and 20th October 2010. Main topics are the successful move of the APEnet project website (www.apenet.eu) from Sweden to the servers of the National Digital Archives of Poland, the settling of steps to be followed by archival institutions interested in joining the project (written request, approval by the General Assembly, approval by the European Community, represented by the Commission of the European Communities), the establishment of in-project communication ways and tools, etc. Furthermore some general project management topics are discussed, such as progress reports, working time records, and the processing of the 2nd Instalment to all Consortium members.

Month 23 – WP 4 invites its members to Paris, France, on 9th November 2010 to present the current version of the APEnet data preparation tool and to discuss any questions the partners might have with regard to the preparation of their data to be integrated in the pilot release of the Archives Portal Europe. In a parallel session, the Paris

meeting additionally covers a first feedback on the technical developments for the pilot achieved so far. The day after, the Project Management Team meets to settle the next steps towards the pilot release and towards the 3rd General Assembly planned in Brussels in spring 2011.

Luis Enseñat Calderón (Subdirección General de los Archivos Estatales, Spain), APEnet's Deputy Project Coordinator, presents the project at the end of its second year during the 9th meeting of the European Archives Groups in Brussels, Belgium, on 19th November 2010 and at the International Conference "Archives on the Web – Experiences, Challenges, Visions", hold in Vienna, Austria, from 23rd to 25th November 2010.

Month 24 – Season's greetings with the project's second newsletter on 22nd December 2012 determine year 2 for APEnet. By summarising that year's activities this newsletter also is a first basis for the second Annual Report (D6.4): The network of participating countries has once more been extended, the development of tools to prepare the local data, to integrate and publish them in the central host installation has evolved, all partners have been working avidly on getting their data ready and on translating the additional texts in order to ensure the portal's multilingual (inter)face right from the start. All this leads to the successful release of the Archives Portal Europe pilot installation in mid-January 2011.

Month 26 – We want to get even better: with the pilot installation being a major, but only a first step and with a lot of ideas to improve existing and to add new functionalities a technical evaluation meeting is held in Paris from 14th to 16th of February 2011 with members of work packages 1 to 5. The outcomes of this meeting will now be used as basis for the enhancement of the pilot installation towards the final release of the Archives Portal Europe in January 2012, which will be scheduled along two intermediate releases: one in June, one in November 2011.
Furthermore, APEnet is testing the waters for co-operation with some external technical partners concentrating on the question of hierarchical object data display in Europeana. WP3 members therefore meet with Delving on 23rd February 2011 in The Hague to discuss common goals and options for collaboration.

Month 27 – First improvements and changes resulting from the evaluation meeting in Paris already have been included when the Archives Portal Europe version 0.1 is officially presented to all project partners during the 3rd General Assembly on 10th March 2011 in Brussels, Belgium. This release provides access to nearly eight million descriptive units coming from 47 different archival institutions. About 10% of the descriptive units link digital objects, comprising about 25 million digitised pages of archival material in total. The third APEnet newsletter, sent on 18th March 2011, announces the release of the pilot installation and provides an outlook on the project's last year.

Month 28 – Bern, Switzerland, is the hosting city for the first meeting of the APEnet Liaison Group of EURBICA held on 12th April 2011. Angelika Menne-Haritz, Luis Enseñat Calderón, Susanne Waidmann (Bundesarchiv, Germany) and Wim van Dongen present the project, its objectives, the current contents and functionalities of the Archives Portal Europe and the tools available in the back-end for local and/or central data preparation and ingestion to participants from 10 different institutions and 8 EU and non-EU Member States. The National Archives of Croatia will join APEnet later during the project's last year and they – as well as four more attendees (the National Archives of Liechtenstein, Luxemburg and Norway and the Federal Archives of Switzerland) – will be partners in the follow-up project APEX from 2012 onwards.

Month 29 – The Project Management Team meets on 4th May 2011 in Berlin to see the ongoing technical development in preparation for the next intermediate release of the Archives Portal Europe scheduled for June. Furthermore, the planned Content Provider Agreement is discussed and a presentation is given by Wim van Dongen summarising the main outlines of the intended proposal on a follow-up project starting in 2012. The main objectives will be concentrating on the expansion of the network in horizontal and vertical dimensions, ie more countries and more different archival institutions will be part of the project, and on deepening the networks activities, ie building up an effective network of national and regional contact points fostering the standardisation achievements of the project, the use of the tools provided and the dissemination of the knowledge and experiences gained.

These proposed outlines also are presented a week later at the EBNA meeting in Budapest, Hungary, thereby laying grounds for the Archives Portal Europe's future.

Month 30 – Developing the initial ideas for the follow-up project in more detail and gathering all necessary administrative information from the (then) 27 future partners for this first step, the proposal for the "Archives Portal Europe network of eXcellence (APEX)" is submitted right in time on 1st June 2011. At the same time, the development, design and testing team is busy in preparations for the June release and gathers for a face-to-face meeting in León on 15th and 16th June. Among a whole lot of smaller improvements, the main additions of the June release are the enhanced navigated search functionality, the addition of autocompletion and autosuggestion and the creation of an administrator account for the back-end of the Archives Portal Europe.

June concludes with the second APEnet international conference on "Communicating Archival Metadata" and a meeting of the Project Management Team in Stockholm from 28th June to 1st July 2011. Following the first day, that gives an overview of different approaches on the topic of communicating archival metadata as well as of some of the standards being of relevance in this field, the participants get to know the standards EAC-CPF, OAI-PMH and METS in more detail during the next two days.

Month 33 – Summertime has once more been busy: technical development of new and extended functionalities has advanced and preparations for the November release are in full swing. In addition, networking activities have been kept on a high level after the Stockholm conference and so APEnet is joining the second meeting together with EFG (European Film Gateway), EDL (European Digital Library) and Europeana held in Frankfurt, Germany, on 8th September 2011.
In the second half of September, on 22nd and 23rd, the designated members of the APEX Project Board hold their first meeting in The Hague to prepare the next steps for finalising the follow-up project's Description of Work (DoW) and the negotiations meeting settled for mid-October in Luxembourg.

Month 34 – APEnet is presented at the Europeana Tech conference in Vienna, Austria, on 4th and 5th October, by Eloy García Almadén (Subdirección General de los Archivos Estatales, Spain) and Kerstin Arnold as well as at the European Cultural Commons conference in Warsaw, Poland, on 12th October. Here Peder Andrén speaks about how different aggregators see their positions in European Cultural Commons, their target users and relations with other providers in the cultural space.

The project is furthermore attending the CITRA in Toledo, Spain. In the course of the pre-conference programme, the second meeting of the APEnet Liaison group of EURBICA is held, a hands-on workshop this time, attended by about twenty colleagues from seven European countries representing twelve different institutions. During the morning session Jara Álvarez Aller, Kerstin Arnold, Marga Conde Valderrama (Subdirección General de los Archivos Estatales, Spain), Susanne Waidmann and Yoann Moranville show the functionalities of the portal and the tools which have been designed to pool the descriptive resources of the partners associated in the APEnet project. During the afternoon session, the participants get a chance to try their own data on the tools and to get direct feedback from the APEnet team members.

Month 35 – In accordance with the topic of the Stockholm conference in late June, the Bundesarchiv is inviting to Berlin for the Conference "Mapping Archival Metadata" on 2nd November 2011. Wim van Dongen presents the achievements and experiences of the APEnet project with regard to the interoperability with Europeana alongside presentations on several local, national and international portal projects. The Project Management Team meets the day after that in Berlin as well to settle the final steps for the last two months of the project.
By the end of the month, the fourth newsletter (sent on 30th November) announces the November release of the Archives Portal Europe. Its main enhancements include the extended autocompletion and autosuggestion functionalities based on the full content of the portal, a now completely renewed "navigated search" allowing users to browse the archival material within the framework of its original structures and to directly access the full display of the holdings guides and finding aids available, an improved "list view" offering a variety of options to either sort or refine search results as best fitting the user's needs, a more user-friendly "preview function" giving access to details of the search results in the pages of the "list view" and the "context view" as well as a first start towards personalised user accounts at the Archives Portal Europe, where users from now on can save their favourite searches and search results.

Month 36 – Besides APEnet being represented at the Europeana CCPA conference on 6th December 2011 in Rotterdam, Netherlands, and at the DISH2011 conference two days later as well in Rotterdam, the preparations for the Final release define this last month of the project: already existing content is being updated, f.i. including more links to now digitised material, new content is added, functionalities of the front- and the back-end are fine-tuned and all partners collaborate in a last huge translation task to provide a final multilingual version of the Archives Portal Europe. The results of these joint efforts are presented by the work package leaders and their team members during the 4th and last General Assembly of the APEnet project, held on 12th January 2012 in Madrid, Spain. The Archives Portal Europe version 1.0, providing access to more than 14 million descriptive units from 62 institutions and linking to more than 63 million digitised pages of archival material, is released on 15th January 2012.
With the National Archives of Croatia and Hungary joining the APEnet project during the 4th General Assembly the final number of participating institutions climbs to 20.

…and beyond – The APEnet project is over – Long live the ARCHIVES PORTAL EUROPE

THE PROJECT CONSORTIUM – ROLES AND MEMBERS

Partici-pant No.	Participant full name (short name)	Country	Role in the project	Key personnel
1	Subdirección General de los Archivos Estatales (ES. MCUSGAE)	SPAIN	Project coordinator Deputy project coordinator Project manager WP2 leader WP6 leader Participating in all WPs Standardisation Content provider	Alfonso Sánchez Mairena
				Eduardo Higuero
				Eloy García Almadén
				Emilio Sanz Hernández
				Jara Álvarez Aller (WPL2)
				Javier Fernández Fernández
				Javier García Carvajo
				Luis R. Enseñat Calderón (DPC)
				Marga Conde Valderrama (PM)
				Maiche García González
				Miguel Ángel Sánchez Alcázar
				Patricia Bermejo Monroy
				Paúl Sordo Corrales
				Severiano Hernández Vicente (PC)
2	Kansallisarkisto Riksarkivet (KA)	Finland	Participating in WP4 and WP6 Content provider	Mikko Erakaski
				Markus Merenmies
3	Direction générale des Patrimonies – Service interminis-tériel des archives de France (SIAF)	France	WP4 leader Participating in all WPs Content provider	Claire Sibille
				Frederic Rolland
				Jean-Francois Moufflet
				Lucile Grand (WPL4)
				Pauline Moirez
				Yoann Moranville

Partici-pant No.	Participant full name (short name)	Country	Role in the project	Key personnel
4	Bundesarchiv (BA)	Germany Germany Germany	WP1 leader Scientific coordinator Participating in all WP Standardisation Content provider	Angelika Menne-Haritz (WPL1_SC) Kerstin Arnold Susanne Waidmann
5	L-Arkivji Nazzjonali ta' Malta / National Archives of Malta (NAM)	Malta	Participating in WP4, WP5 and WP6 Content provider	Alison Borg-Hili Charles J. Farrugia Joseph Bezzina
6	Nationaal Archief (NANETH)	Netherlands	WP3 leader Technical coordinator Participating in all WPs Standardisation Content provider	Bastiaan Verhoef Go Sugimoto Wim van Dongen (WPL3_TC)
7	Archiwa Państwowe (NDAP)	Poland	Participating in all WPs Content provider	Anna Krochmal Anna Matejak Barbara Berska Rafal Magrys
8	Direcção-Geral de Arquivos (DGARQ)	Portugal	Participating in WP4 and WP6 Content provider	Francisco Barbedo Lucilia Runa Silvestre Lacerda
9	Riksarkivet (RA)	Sweden	WP5 leader Participating in all WPs Standardisation Design Content provider	Karin Bredenberg Martin Bjersby Mårten Johansson Peder Andrén (WPL5) Susanne Danelius
10	Latvijas Nacionālais Arhīvs (DGSAL)	Latvia	Participating in WP1, WP2, WP4, WP5 and WP6 Content provider	Andra Abolina Haralds Krumins Janis Siders Martins Eizentals

Partici-pant No.	Participant full name (short name)	Country	Role in the project	Key personnel
11	Γενικά αρχεία του κράτους (GSA)	Greece	Participating in WP3, WP4, WP5 and WP6 Standardisation Content provider	Anastasia Dikopoulou Georgia Tsouri Lina Bountouri Marietta Minotos Vassiliki Psimouli
12	Arhiv Republike Slovenije (ARS)	Slovenia	Participating in WP4 and WP6 Content provider	Alenka Kačičnik-Gabrič Aleš Matijevič Boris Domajnko Damjan Lindental Miroslav Novak
13	Europeana Foundation (EDL)		Participating in WP1, WP2 and WP3	Antoine Isaac Julia Brungs Valentine Charles Vanessa Proudman
14	An Chartlann Náisiúnta / National Archives of Ireland (NAI)	Ireland Ireland Ireland	Standardisation Dissemination Content provider	David Craig Elizabeth McEvoy Micheál Ó Conaire
15	Algemeen Rijksarchief en Rijksarchief in de Provinciën – Archives générales du Royaume et Archives de l'État dans les Provinces (AGR)	Belgium	Content provider	Karel Velle Lucie Verachten
16	Rahvusarhiiv (NAE)	Estonia	Content provider	Indrek Kuuben Kuldar Aas Maiu Pevkur Olga Kislitsina
17	Národní Archiv České republiky (NACR)	Czech Republic	Content provider	Michal Wanner
18	Държавна Агенция Архиви (DAA)	Bulgaria	Content provider	

Partici-pant No.	Participant full name (short name)	Country	Role in the project	Key personnel
19	Hrvatski državni arhiv (CSA)	Croatia	Content provider	
20	Magyar Országos Levéltár (NAH)	Hungary	Content provider	

The Project's Standardisation Achievements

International archival standards

Being a best practice network the APEnet project did not aim at establishing or identifying new standards, but on implementing a common framework across Europe that uses existing global archival standards targeted for a European context. By this, it was envisaged that the acceptance of trans-national standards will be supported and promoted as well as their use will be encouraged in order to secure interoperability with the various national and institutional archives portals.

> Standardising the standards for their use within a European context

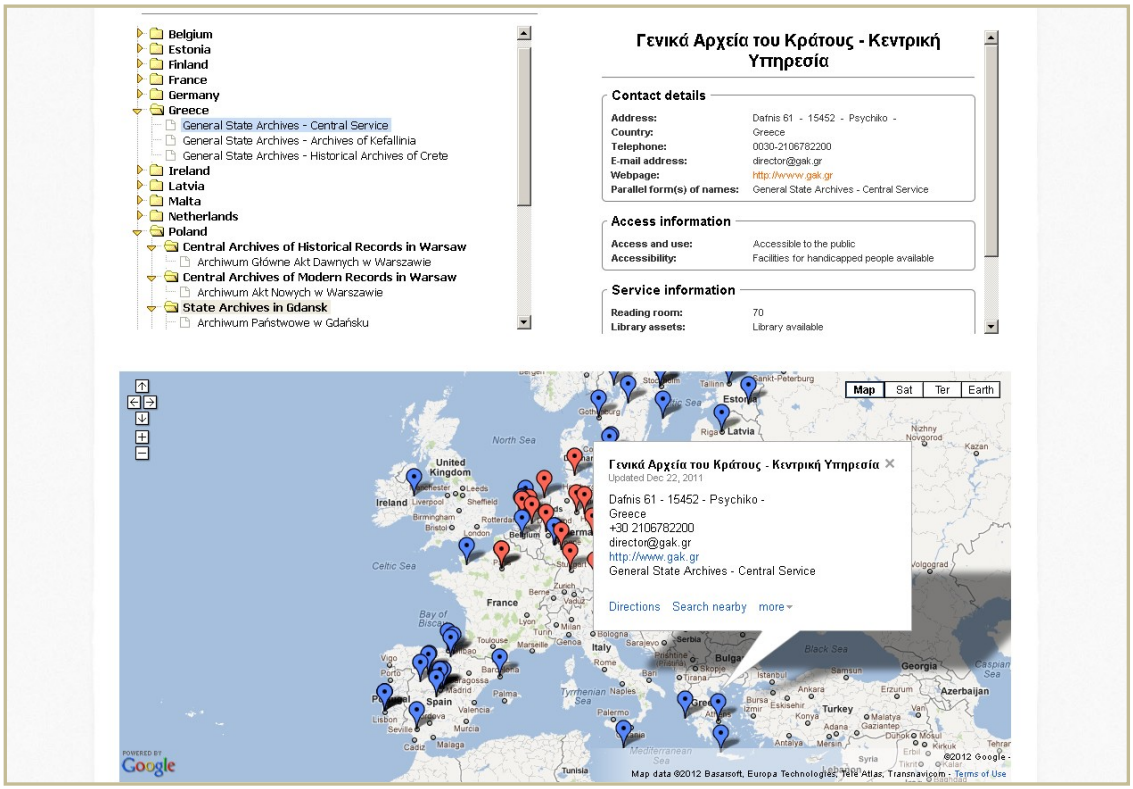
In the APEnet project's lifetime the according standards have been EAD (Encoded Archival Description) and EAG (Encoded Archival Guide), both of which have been defined in an own APEnet schema adapted for their use within the Archives Portal Europe network.

The use of EAD as backbone within the three-layers-concept of the Archives Portal Europe

Within the Archives Portal Europe EAD is used with a concept of three interrelated and interconnected layers of description. Each of them consists of individual documents structured internally with the levels of EAD.

The first layer, the archival landscape, consists of one EAD document and has the function of a sort of umbrella for the whole providing future users of the Archives Portal Europe with a starting point for navigational research by

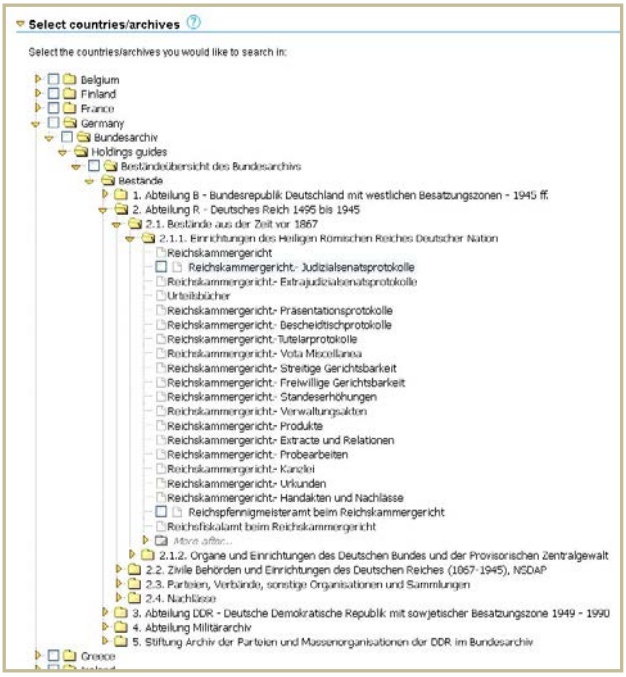
- naming all participating archival institutions in a structured way (f.i. sorted by country) with links to their more detailed descriptive information on the next lower level and
- granting access to detailed information on the institutions themselves like contact details or opening hours given in EAG files linked to the archival landscape.



The Directory at the Archives Portal Europe, resulting from the EAD archival landscape (top left) and linked to detailed descriptions of the named archival institutions based on EAG (top right). The additional map (bottom) provides a more visual entry point to this information.

The second layer, the holdings guides, consists of a set of EAD documents containing each a structured list of fonds or record groups of every archival institution. It aims at

- giving an overview of the fonds and collections of the single archival institutions, intended to include links to more detailed information on records creators in EAC-CPF files in future,
- providing short information on fonds and collections incl. f.i. conditions concerning their access and use and
- linking to their detailed description on the next lower level.



Example of a holdings guide as accessible via the option "Select countries/archives" in the Advanced search section of the Archives Portal Europe (top) and as seen in the second display including more detailed information on the constituent fonds and collections as well as links to finding aids where applicable (bottom)

The third layer, the finding aids, consists of EAD documents containing detailed description for the single fonds or record groups structured according to series and arrangement groups. Finding aids will

- provide detailed information on the archival material from fonds or collection level down to units' level indicating the reference numbers necessary for ordering or communication with the archival repositories and

- grant access to digitisations of the archival material, if applicable.

Example for the second display of a finding aid encoded in APEnet EAD and including links to digitised archival material

DEFINING AND CREATING APENET EAD

In preparation of a joint presentation in a union access point the APEnet EAD schema has been created and is continually enhanced and improved along with further steps of the project's progress.

The complete APEnet EAD schema is defined as a subset of the EAD 2002 schema fulfilling the requirements for the joint presentation in the union finding aid of the Archives Portal Europe. It is optimised for the use inside the union finding aid and contains only those parts of EAD needed for common display, for linking and identification purposes. It was drafted on the basis of a the comparison of EAD profiles and practices of the National Archives currently participating in the project. In cases of different possibilities it names those elements and attributes commonly used – and describes how they are used.

The APEnet EAD schema is the target when

- transforming archival descriptions from the content providers to the commonly used APEnet EAD,
- for validating the results of transformation and conversion of local EAD/XML documents,
- for indexing the data to be used in an overall search,
- for creating HTML presentations of archival material within the future Archives Portal Europe, and
- for data exchange with other gateways such as Europeana.

Information on APEnet EAD as used for finding aids and holdings guides

There are several ways to get informed on the current state of development of APEnet EAD:

- the APEnet EAD table, a tabular overview on how APEnet EAD has been defined for now to be used with finding aids, naming and listing the different elements and attributes, each with a short note on its intended use;
- the APEnet EAD guide, a full text description of each element and attribute along with some examples concerning possible contents as well as the encoding of these elements in EAD /XML and some examples of complete finding aids encoded in APEnet EAD;
- the APEnet EAD schema, the technical implementation of the profile.

These documents still are slightly evolving along with the further developments within the Archives Portal Europe. But the possible changes and adaptations are expected to be minor, probably will not reduce but increase the number of elements and attributes and will not touch the general structure and the elements defined so far.

When you are interested in the question how to map and convert your own data into APEnet EAD, please refer to the mapping and normalisation best practice for the APEnet project.

THE PROJECT'S TECHNICAL ARCHITECTURE

WORKING WITH A DISPERSED TECHNICAL TEAM

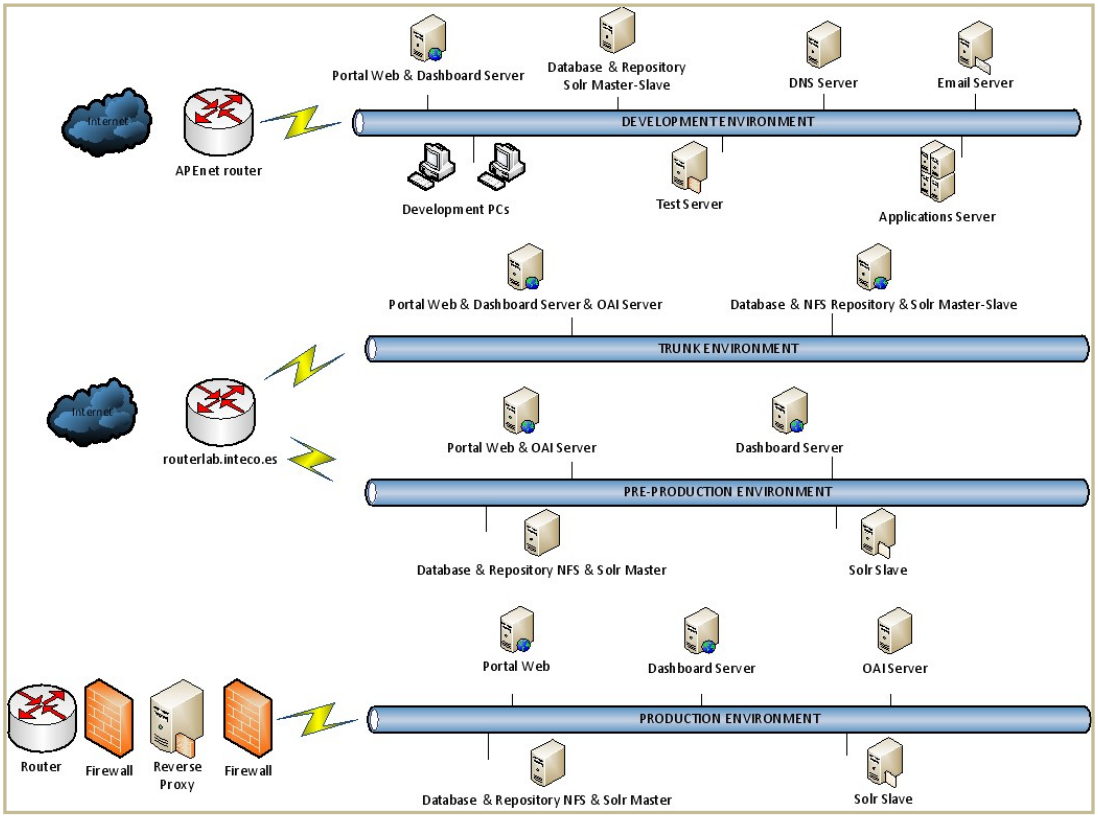
A major aspect in developing the infrastructure for the Archives Portal Europe has been the necessity to be flexible enough to adapt quickly and at any time to new and more partners getting involved as well as to new and more functionalities being added during the development process. Furthermore, the challenge of developing in multiple places due to the technical team members being located in León, The Hague and Berlin implied to do everything accessible (and published).

With regard to the purely technical side of this, an SVN server has been installed to host the code and to allow versioning. In addition, Hudson has been used for continuous code integration.

For the management part, initially dotProject has been set up to register tasks and subtasks and to control their development and schedule. During the course of the project, however, this has been replaced by the TRAC application. First mainly used to register bugs and new feature requests as well as to follow their fixing and development, TRAC has been extended by a Wiki for specifying requirements, discussing new features and documenting the outcomes of the weekly technical meetings.

FROM DOUBLE TO TRIPLE INSTALLATION

In addition to the development environment, only accessible to the developers for their daily work, two testing environments have been set up. To both, all members of the development, design and testing teams have been granted password protected access in order to test new functionalities (deployed in the "Trunk" environment) and to check the fixing of bugs detected in already existing functionalities (deployed in the "BranchTest" environment). The successfully tested features of both testing environments have then been deployed to the publically accessible ("BranchProduction") environment at archivesportaleurope.eu in the course of the public release in March 2011, the following June and November releases and the final release in January 2012.



Overview of the infrastructure of the Archives Portal Europe

THE PROJECT'S TOOLS, MANUALS AND GUIDELINES

THE DATA PREPARATION TOOL

With the Data preparation tool, the APEnet project has prepared a set of converting engines and plug-ins for participating institutions in order to present their data as consistent as possible in the central installation of the Archives Portal Europe. The tool enables the content providers to convert their local data formats into APEnet EAD and to validate the converted files against it, either in the central back-end of the Archives Portal Europe, the dashboard, or via the stand-alone version. Furthermore, the tool (in its current version 1.0.3) offers the possibility to create a holdings guide in EAD/XML or an EAG/XML document to describe one's institution.

In the upcoming release of the Data Preparation Tool, the content providers will also have the possibility to prepare their data for publication on the Europeana portal. The version 1.1 of the tool will become available for download via the project website www.apenet.eu (section "About us > Developments").

The tool relies on the already mentioned international standards EAD and EAG and also provides a basic transformation from EAC (beta) to EAC-CPF (Encoded Archival Context – Corporate Bodies, Persons, and Families). It is currently available in English, German and French, while the corresponding manual is only in English at the moment. The tool is open source and at your disposal, however, developed under a project funded by the European Commission, this tool is submitted to a European Union Public License. The general terms of this license can be found here.

If some errors or problems are encountered in using the tool, the project team corresponding reports are welcome via the contact form of the Archives Portal Europe.

THE CONTENT CHECKER AND THE INGESTION MANUAL

In addition to the production environment with personalised accounts for the current content providers to the Archives Portal Europe, the APEnet team has set up a complete demo environment on a dedicated webserver of the Nationaal Archief in the Netherlands. This Content Checker is meant to enable the APEnet consortium partners to familiarise themselves with the functionality of the Archives Portal Europe's dashboard before they embark on managing their data in the production system. The Content Checker therefore contains all functionality of the "real" Archives Portal Europe (except for the OAI-PMH functionality) and will be continued and available for any institution interested in exploring the possibilities of the Archives Portal Europe as a publication platform for archival content.

Any archival institution interested can get in contact with the project team via the contact form of the Archives Portal Europe to check on the next steps and/or to get provided with an account for the Content Checker as well as with the Ingestion Manual for more information.

The latter serves as a step-by-step manual for data ingestion and management for the Archives Portal Europe. It describes how the content providers need to prepare their data and how to use the tools provided by the APEnet project to deliver, manipulate, publish, manage, and maintain the data compliant with APEnet specific uses of international archival standards.

THE NAVIGATION GUIDE

As the Ingestion Manual is aimed at the content providers as the users of the Archives Portal Europe's back-end, the Navigation Guide is dedicated to the users of its front-end. This guide describes and explains the constituent sections and functionalities of the portal, the type of information that can be found and where it can be found. In particular, the combined search strategies available on the Archives Portal Europe are described in detail, including some examples of searches to be made. This is complemented by an explanation of the way in which the search results are presented.

The Navigation Guide is accessible directly at the Archives Portal Europe via the link "Help" in the footer menu and it is (currently) translated to all project partners' languages. The complete document as well as its single chapters can as well be downloaded in PDF format.

THE PROJECT'S DESIGN

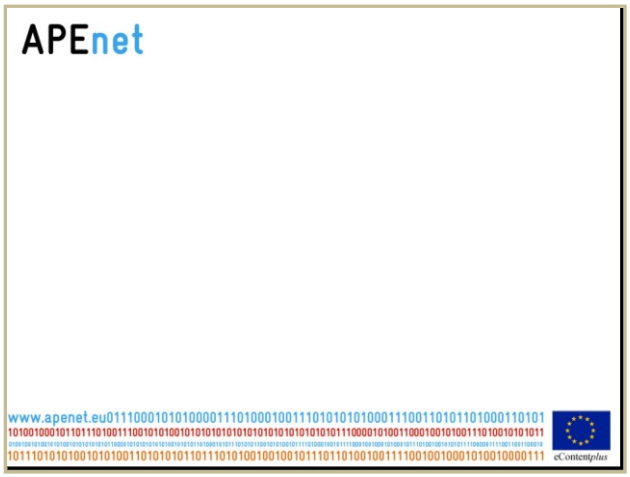
THE PROJECT WEBSITE

The project website has been the first deliverable of the APEnet project. As such it also was the first test on the practical co-operation and communication between the most active partners and partner institutions.

As a showcase for presenting the project it was important to decide on the look and feel for the website as fitting best with the subjects being presented and consistent across all parts. This was achieved by using a general template for all pages with different images of archival material as catalyst between the past and the present terms of archival data management systems, overlapping with a binary code to symbolise today's computer processing. The result can be seen below:

Homepage at www.apenet.eu

The same style also is kept for the project's presentation template, that all project members have been using on each occasion they have gotten the opportunity of spreading the news:



Template for project presentations

THE LOGOS OF THE PROJECT AND THE ARCHIVES PORTAL EUROPE

As the project's logo has been decided to be the project's name only, this concept has been followed as well when defining the logo for the Archives Portal Europe. For this the name of the portal has been extended by a magnifying glass, symbolising the portal's main functionality as a (re)search platform. Being based on the @-sign, it also points to the project's objective of online accessibility for archival content and to the searches being done in digital form. Furthermore, the magnifying glass shows the domain of the portal's website ".eu" to indicate the European context.

Logo of the project (top) and horizontal logo of the Archives Portal Europe (bottom; left as used initially online, right as used currently online as well as for project documentation)

DESIGN AND SLOGANS IN DISSEMINATION

In addition to the project website updating everyone interested in the progress of the project on a more continuous basis, there have been five newsletters sent between 2009 and 2012 informing about recent and planned developments, meetings, etc. Herein the spirit of the "APEs", that arose during the project, has become most obvious in the illustrations accompanying the news.

Furthermore, folders, leaflets, flyers, roll-ups and posters have been designed, distributed and used during the General Assemblies, meetings and workshops to present and promote the APEnet project and to assist the APEnet core team as well as all partners in their dissemination activities. With these materials some handy slogans have been introduced catching the main ideas and objectives of the project: "European archives collaborating for accessibility" and "The missing link to the archives".

THE PROJECT'S STATISTICS – CONTENT AND USERS

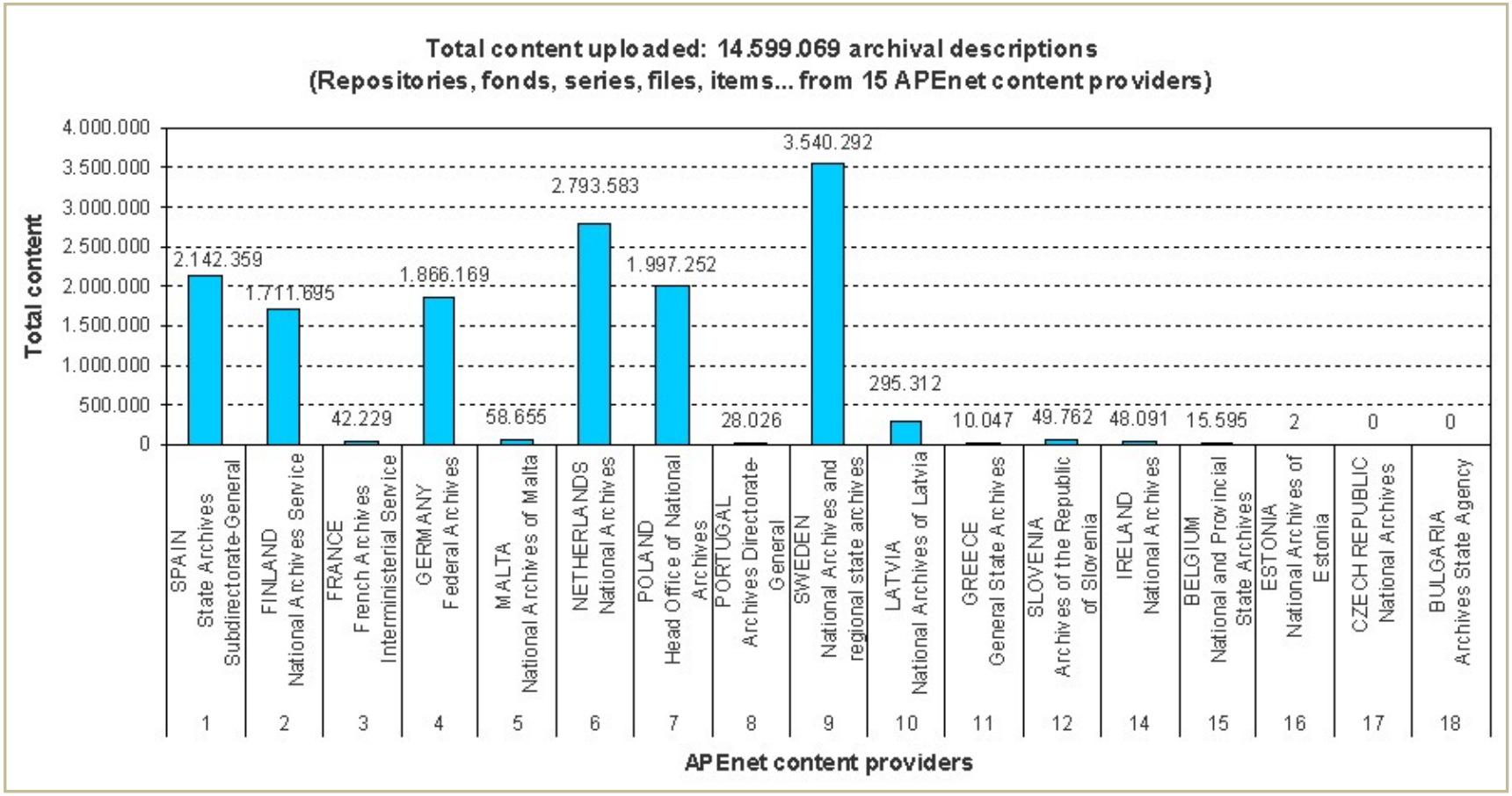
CONTENT

By the end of January 2012, the Archives Portal Europe offered:

- information on **126** archival institutions located in **15** countries accessible at the portal itself and
- additional information on **34.283** archival institutions accessible via the "Directory" of the portal;
- information on the archival content down to the lowest level (file or item) provided by **62** institutions;
- making **14.599.069** descriptive units available, from the fonds level to the item level, for an overall search;
- **2.153.227** of which furthermore providing links to digitised documents and by this
- **63.781.468** digitised documents in total being linked via the portal.
- Nearly a fourth of the descriptive units including links to digitised documents, **626.060** ESE records in total, are furthermore available as Archives Portal Europe contribution in Europeana.

Please note, that the above figures change every day due to the huge amount of stakeholders involved in and joining the project as well as updates being included on the archival content.

APEnet participants as content providers Country		Total APEnet content uploaded: EAG and EAD files, incl. the amount of descriptive units	APEnet EAG files uploaded Archival institutions (repositories or archives)	APEnet EAD files uploaded		Descriptive units in the APEnet EAD files uploaded (all c levels)	
				Holdings guides	Finding aids	Totat number	Number of descriptive units with links to images
1	SPAIN. State Archives Sub-directorate General	2.142.359	55	9	369	2.141.926	626.105
2	FINLAND. National Archives Service	1.711.695	1	1	11.099	1.700.594	38.763
3	FRANCE. French Archives Interministerial Service	42.229	3	1	100	42.125	4.371
4	GERMANY. Federal Archives	1.866.169	12	1	2.065	1.864.091	7.533
5	MALTA. National Archives of Malta	58.655	1	1	5	58.648	0
6	NETHERLANDS. National Archives	2.793.583	7	3	6.328	2.787.245	61.003
7	POLAND. Head Office of National Archives	1.997.252	23	155	14.717	1.982.357	1.160.261
8	PORTUGAL. Archives Directorate-General	28.026	3	2	68	27.953	0
9	SWEDEN. National Archives and regional state archives	3.540.292	12	12	42.097	3.498.171	196.359
10	LATVIA. National Archives of Latvia	295.312	1	0	20.802	274.509	0
11	GREECE. General State Archives	10.047	3	0	6	10.038	9.081
12	SLOVENIA. Archives of the Republic of Slovenia	49.762	1	0	10	49.751	49.751
14	IRELAND. National Archives	48.091	1	1	33	48.056	0
15	BELGIUM. National and Provincial State Archives	15.595	1	0	9	15.585	0
16	ESTONIA. National Archives of Estonia	2	2	0	0	0	0
	TOTAL	**14.599.069**	**12**	**186**	**97.708**	**14.501.049**	**2.153.227**


Total content uploaded: 14.599.069 archival descriptions
(Repositories, fonds, series, files, items... from 15 APEnet content providers)
Total content
4.000.000
3.500.000
3.000.000
2.500.000
2.000.000
1.500.000
1.000.000
500.000
0
2.142.359
1.711.695
42.229
1.866.169
58.655
2.793.583
1.997.252
28.026
3.540.292
295.312
10.047
49.762
48.091
15.595
2
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SPAIN State Archives Subdirectorate-General
FINLAND National Archives Service
FRANCE French Archives Interministerial Service
GERMANY Federal Archives
MALTA National Archives of Malta
NETHERLANDS National Archives
POLAND Head Office of National Archives
PORTUGAL Archives Directorate-General
SWEDEN National Archives and regional state archives
LATVIA National Archives of Latvia
GREECE General State Archives
SLOVENIA Archives of the Republic of Slovenia
IRELAND National Archives
BELGIUM National and Provincial State Archives
ESTONIA National Archives of Estonia
CZECH REPUBLIC National Archives
BULGARIA Archives State Agency
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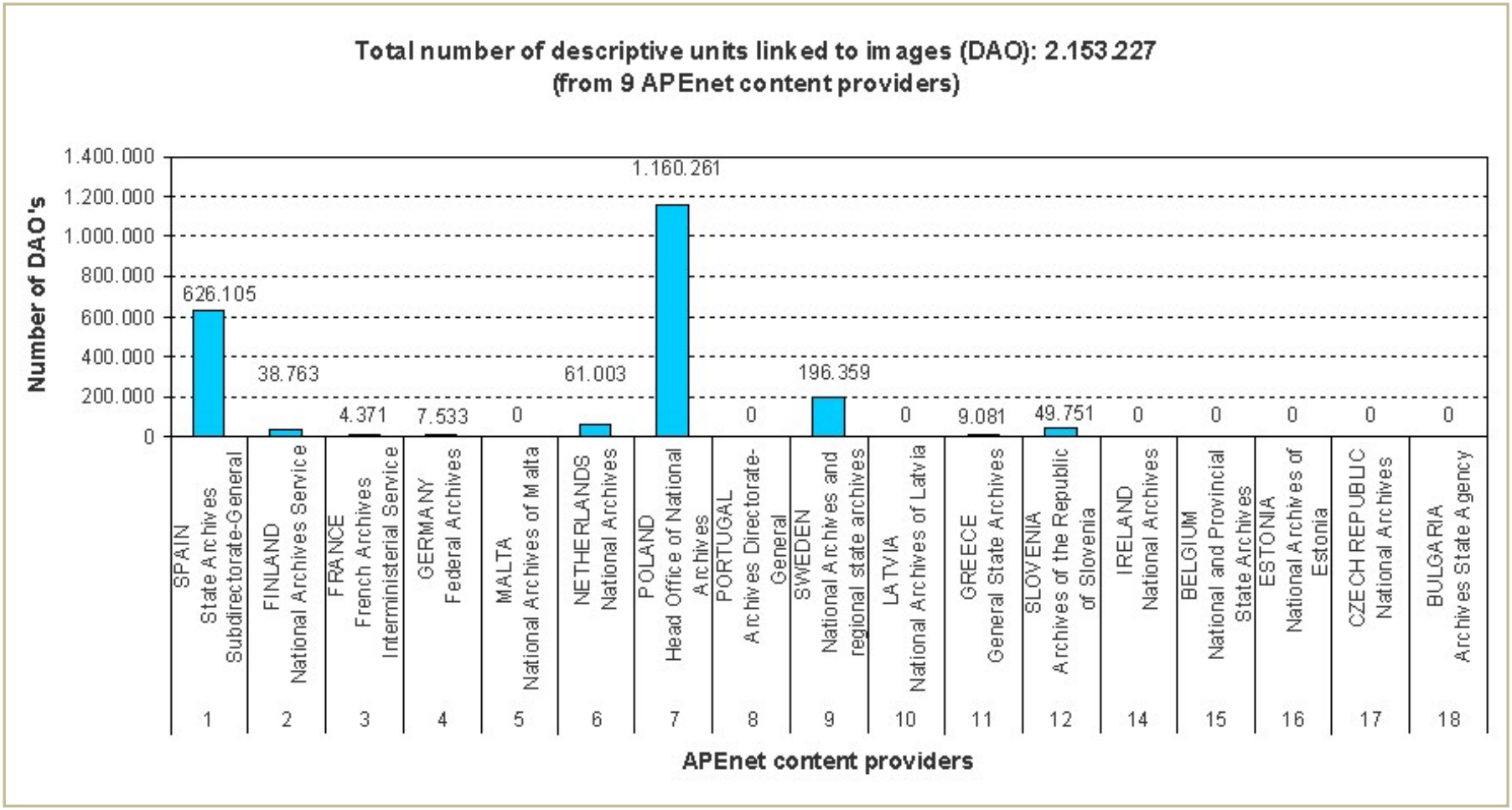
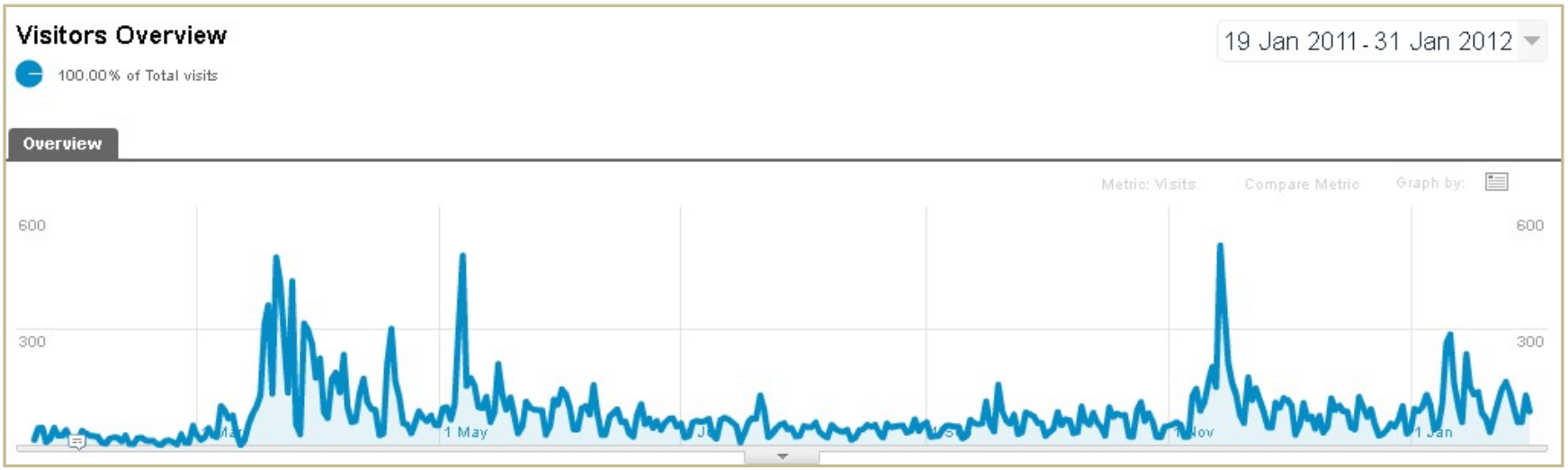
APEnet content providers


Total number of descriptive units linked to images (DAO): 2.153.227
(from 9 APEnet content providers)
Number of DAO's
1.400.000
1.200.000
1.000.000
800.000
600.000
400.000
200.000
0
626.105
38.763
4.371
7.533
0
61.003
1.160.261
0
196.359
0
9.081
49.751
0
0
0
0
SPAIN State Archives Subdirectorate-General
1
FINLAND National Archives Service
2
FRANCE French Archives Interministerial Service
3
GERMANY Federal Archives
4
MALTA National Archives of Malta
5
NETHERLANDS National Archives
6
POLAND Head Office of National Archives
7
PORTUGAL Archives Directorate-General
8
SWEDEN National Archives and regional state archives
9
LATVIA National Archives of Latvia
10
GREECE General State Archives
11
SLOVENIA Archives of the Republic of Slovenia
12
IRELAND National Archives
14
BELGIUM National and Provincial State Archives
15
ESTONIA National Archives of Estonia
16
CZECH REPUBLIC National Archives
17
BULGARIA Archives State Agency
18
APEnet content providers

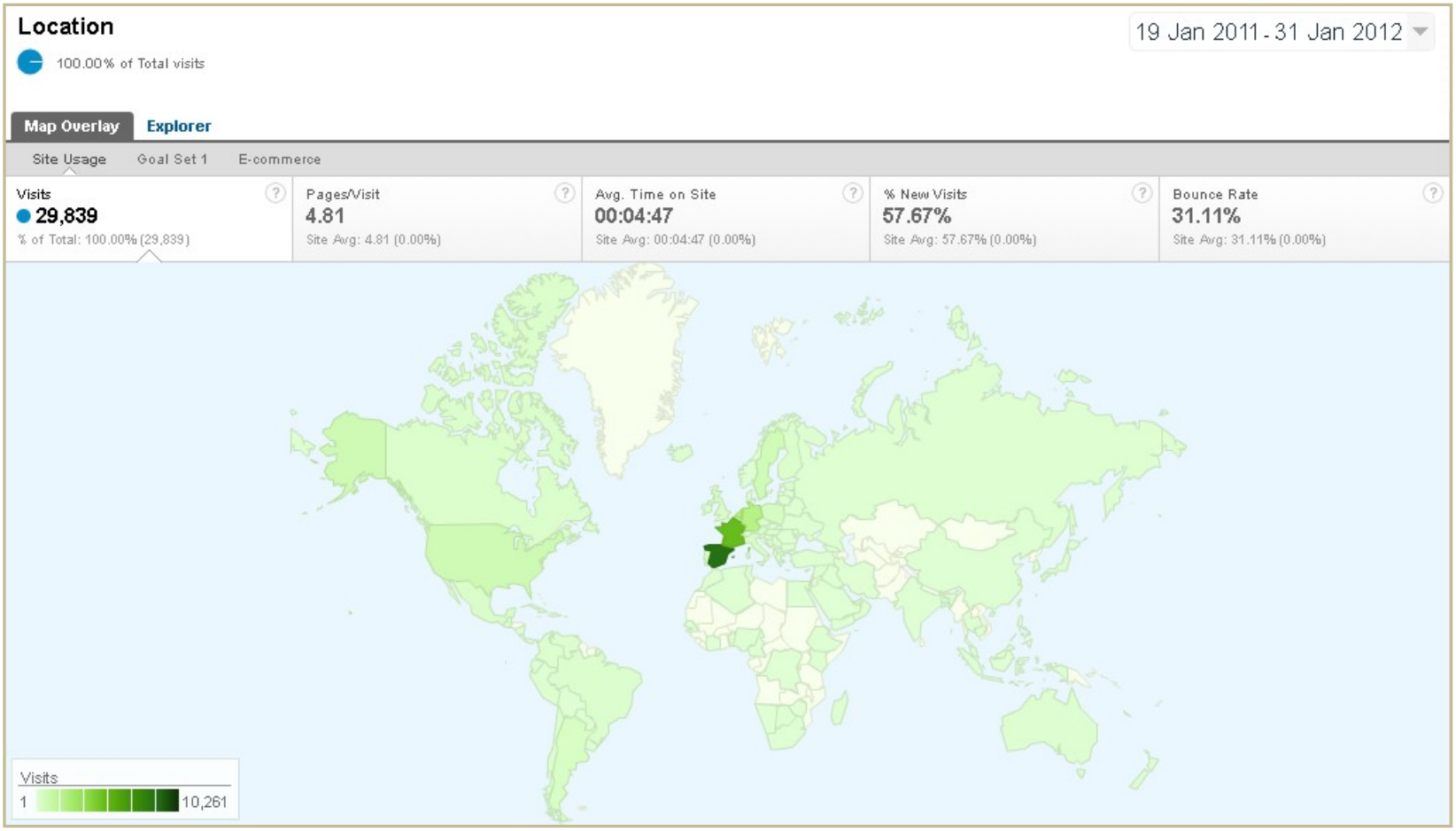
USERS

Between the release of the pilot installation of the Archives Portal Europe on 19th January 2011 and today, 31st January 2012,

- **29.839** visits came from **117** countries/territories, divided about half and half in new and returning visits;
- **143.436** pages were viewed, which equals **4.81 pages per visit**
- **17.235** unique visitors browsed the Archives Portal Europe and stayed in average **4:47 minutes** on-site.



Visitors overview showing definite peaks around and after the public release of the Archives Portal Europe in March 2011, the EBNA conference discussing the project's future in early May 2011, the November release of 2011 with a whole lot of extended and new functionalities and the final release in mid-January 2012



Map showing where visitors of the Archives Portal Europe are located (total)