DELIVERABLE

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Validation Plan

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Statement of originality:

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LIST OF ABBREVIATIONS

ISE	EAGLE Inscription Search Engine
FMA	EAGLE Flagship Mobile Application
FSA	EAGLE Flagship Storytelling Application

For D5.1, D5.2 see References

EXECUTIVE SUMMARY

This document discusses the methodology and the instruments that will be used to conduct the validation phase for the user-dedicated services of the EAGLE project. We define "validation" as the process of assessing whether the products developed in the context of the project meet all requirements and identifying and correcting the defects within the next phases of the development cycle.

Section 1 provides an introduction to the EAGLE user-dedicated services and reports a synoptic view of their functional requirements. Section 1.3.1 in particular provides information about the scheduled release plan for the applications, which is crucial for the timing of the validation process.

Sec. 2.1 introduces the main concepts of the validation process by defining some of the terms that will be used in the document; it also discusses some fundamental aspects of the methodology that we have adopted.

The next paragraphs of Sec. 2 introduce the different tests to be used for the validation phase of the EAGLE Inscription Search Engine (ISE), the Flagship Mobile Application (FMA) and the Storytelling Application (FSA).

Sections 2.2.1 trough 2.2.5 present a detailed overview of the functional validation by describing the roles and actors involved in the process (2.2.1), as well as the steps that will be followed to execute the tests (2.2.4) and evaluate the results (2.2.5). Particular attention is dedicated to the design of the test scenarios and test cases that will be used (Sec. 2.2.2 and 2.2.3). A preliminary list of the test cases to be used in the evaluation process is given in Appendix I.

Sec. 2.3 discusses an alternative methodology of collecting feedback for the ISE, namely an open feedback form that was diffused to the general community of partners and affiliates of the EAGLE consortium. We provide some details on the responses that we have already received via this channel.

Finally, conclusions and future work are outlined in Sec. 3.

1 INTRODUCTION

1.1 DOCUMENT PURPOSE

In Deliverable D5.1 we presented the functional requirements that were defined and approved by the partners of the EAGLE project during the development cycle. The requirements of D5.1 served (and are still serving) as blueprint for the implementation of the interfaces and the general architecture.

The aim of this document is to present a detailed plan on how to verify that the applications, whose first versions have been recently released, comply with the planned functionality and meet the requirements agreed by the partners.

1.2 INTENDED AUDIENCE

This Deliverable is primarily directed to the persons that, both within the group of partners of the EAGLE project and in the larger community, will be involved in the validation phase.

Within the circle of the EAGLE project, this text documents the steps that are taken in order to ensure the conformity of the applications to the specifications and requirements. Also, it is intended as a guide and primary reference for the partners who will perform the functional tests described in the following sections.

To the larger community that is addressed by EAGLE (working in education, cultural heritage and tourism), part of which have already started providing feedback on the ISE (see Sec. 2.3), the document provides an occasion to monitor the ongoing development of the applications that will ultimately allow the public to access our unique collection of inscriptions and related materials. Also, by consulting this document every potential user of the EAGLE services can verify how we intend to check, and eventually correct and improve, the functions of every service.

1.3 THE EAGLE USER-DEDICATED SERVICES

The services that allow users to interact with the EAGLE content for their professional, scholarly or leisurely activities form a complex ecosystem where each component is studied to serve a specific purpose and they can dialogue with each other. The ecosystem is described elsewhere in its details (see especially D5.1 for the design and D5.2 for the architecture of the portal, which represents the core of the EAGLE services).

In the following paragraphs, we only provide a summary of each application's rationale and a short list of the functional requirements, which are crucial to understand test cases and scenarios.

1.3.1 Release plan and validation

The following release plan has been scheduled for the EAGLE user-dedicated services:

- **First release:** due on month 18 (ISE) and month 21 (FMA, FSA) of the project (namely, September and December 2014); the first release of each software is described in the corresponding deliverables [D5.2, D5.3.1, D5.4.1].
- **Second release:** due on month 30th (FMA, FSA), namely September 2015.

A validation cycle will be performed after both first and second release, following the methodology that will be detailed in Sec. 2. The results of the tests performed during the validation will be published in months 27th and 36th of the project (namely, June 2015 and March 2016).

Although no official second release or upgrade of the ISE on the EAGLE portal is scheduled, the developers and the project manager have agreed to plan the release of a new version according to the outcome of the first validation (see Sec. 2.2.3), in order to correct any issue or bug that still remain in the search engine.

The functional requirements of each application have been ranked as high, medium or low according to the aforementioned timeline of releases [D5.1: p. 28]. Functions with priority value "high" are set as mandatory since the first release, while "medium" requirements are scheduled to be implemented for the second release, or later; "low"-priority functions are listed as candidate that will be evaluated for a final release or for a future upgrade after the end of the current project.

Accordingly, only the requirements with "high" priority are included in the test cases for the first validation phase discussed in this deliverable (see Appendix I). Test cases based on "medium" or "low" requirements, as well as other test cases that the testers will request to add, will be included before the beginning of the second validation cycle (Sec. 2.2.5).

1.3.2 EAGLE Portal

The EAGLE web portal is the "main gateway into the world of the EAGLE services and initiatives" [D5.1]. The first release of the ISE was completed in the autumn of 2014 and allows users to access the inscriptions, images and other related materials provided by the partners [D5.2]. It includes a Basic and an Advanced Search interface, as well the option (for registered users) to save the result lists and single records.

Table 1 reports a list with short description of the portal requirements; further details can be found in Deliverable D5.1.

ID	Sec.	User	Requirement	Priority
PSE01	4.2.1	Generic	Create account to access all EAGLE user services	High
PSE02	4.2.1	Generic	Help menus for search and result pages	High
PSE03	4.2.2	Generic	Simple and advanced search	High
PSE04	4.2.1	Generic	Full-text query on simple search	High
PSE05	4.2.1	Generic	Simple search interface with one text field	High
PSE06	4.2.1	Generic	Search fields for advanced search	High
PSE07	4.2.1	Generic	Boolean operator AND, OR, NOT or exact phrase match	High
PSE08	4.2.1	Generic	Include and exclude diacritics	High
PSE09	4.2.1	Generic	Switch to polytonic Greek and Hebrew keyboard	Medium
PSE10	4.2.1	Generic	Limit search to inscriptions that have images and/or translation	High

PSE11	4.2.1	Generic	Vocabularies for advanced search	High
PSE12	4.2.1	Generic	Expansion of simple search	Medium
PSE13	4.2.1	Generic	Results split in pages	High
PSE14	4.2.1	Generic	Table for list of matches	High
PSE15	4.2.1	Generic	Print and export the list of results	Medium
PSE16	4.2.1	Generic	Access the detailed record of each item of the result list	High
PSE17	4.2.1	Generic	Related content for the records	Medium
PSE18	4.2.1	Generic	Download the EpiDoc file of each item	Medium
PSE19	4.2.1	Generic	Avoid duplicate record	High
PSE20	4.2.1	Generic	Access the portal from mobile devices	Medium
PSE21	4.2.1	Generic	Interface text available in multiple languages	Medium
PSE22	4.2.1	Generic	Add instances of search fields	Low
PSE23	4.2.1	Generic	Faceted browsing	Low
PSE24	4.2.1	Generic	Refine search with faceted categories	Medium
PSE25	4.2.1	Generic	Map to browse the inscriptions	Low
PSE26	4.2.1	Generic	Content from the Pelagios Network	Low
PSE27	4.2.1	Generic	Search by image	Medium
PSE28	4.2.2	Registered	Private space for registered users	High
PSE29	4.2.2	Registered	Save items from search results	High
PSE30	4.2.2	Registered	Save queries	Medium
PSE31	4.2.2	Registered	Add notes to records	High
PSE32	4.2.2	Registered	Edit, delete, download saved objects	High
PSE33	4.2.2	Registered	Edit records and submit the modified data	Low

Table 1: EAGLE portal requirements

1.3.3 Flagship Mobile Application

The FMA leverages the camera and internet connectivity of mobile devices to allow users to query the inscription collection from their phones or tablets. Pictures taken using the mobile camera are sent to a dedicated image-recognition service, where it is processed by image-recognition technologies and matched against the EAGLE database of images. Information about the monument and the inscribed text will be returned and displayed on the mobile device.

Table 2 lists the functional requirements for the FMA.

ID	Sec.	User	Requirement	Priority
MBE01	4.3.1	Generic	Change default values of basic parameters	High
MBE02	4.3.1	Generic	Search images by "similarity search"	High
MBE03	4.3.1	Generic	Search images by "exact match"	High
MBE04	4.3.1	Generic	Browse history of previous queries	High
MBE05	4.3.1	Generic	Login to the EAGLE system	High
MBE06	4.3.2	Registered	Create and save simple-text notes on records	High
MBE07	4.3.2	Registered	Upload and save pictures of an inscription	High
MBE08	4.3.2	Registered	Browse history of saved images and text	Medium

Table 2: EAGLE Flagship Mobile Application requirements

1.3.4 Flagship Storytelling Application

The FSA provides a storytelling environment where users can compose their epigraphy-based narratives and easily enrich them with multimedia content from general (e.g. Youtube or Wikipedia) as well as specialized repositories for the study of the Greco-Roman Antiquity. Users can write text paragraphs about e.g. an inscription in Rome and, by using the dedicated search plugins of the writing environments, retrieve and include texts and images from the EAGLE collections, videos from Youtube, and other objects from EUROPEANA.

Table 3 reports the functional requirements of the FSA.

ID	Sec.	User	Requirement	Priority
STE01	4.4.1	Generic	Perform full text search on stories	High
STE02	4.4.1	Generic	Browse stories with a keyword word-cloud	Medium
STE03	4.4.1	Generic	List of recently published stories	High

STE04	4.4.1	Generic	Share stories on social networks	Low
STE05	4.4.2	Registered	Create new stories	High
STE06	4.4.2	Registered	Create paragraph in WYSIWYG editor	High
STE07	4.4.2	Registered	Use title and description paragraph	High
STE08	4.4.2	Registered	Retrieve and add content from the EAGLE database and from selected external repositories	High
STE09	4.4.2	Registered	Retrieve and add content from the Perseus Project	Medium
STE10	4.4.2	Registered	Format of the search results	High
STE11	4.4.2	Registered	Single window for the story editor interface	High
STE12	4.4.2	Registered	Drag and drop content	High
STE13	4.4.2	Registered	Save drafts	High
STE14	4.4.2	Registered	Publish a story	High
STE15	4.4.2	Registered	Edit, unpublish, delete published stories	High
STE16	4.4.2	Registered	Access and include saved items	Medium
STE17	4.4.2	Registered	Generic EpiDoc XML reader	Medium
STE18	4.4.2	Registered	Add tags to a story	Medium

Table 3: EAGLE Flagship Storytelling Application requirements

2 THE VALIDATION PHASE

2.1 DEFINITIONS

By **validation** we define the set of procedures aimed to verify that the three user-dedicated services of the EAGLE project under development (ISE, FMA, FSA) meet the requirements defined in D5.1 and the needs of EAGLE end users. The steps of this process will be described in the next paragraphs of this section.

We focus on **functional validation**, i.e. the set of testing techniques that verify that some software does what it is intended to do. To this goal, we design a series of **test cases**, i.e. a list of performable routines that define rigorously the input of the system, the steps that must be performed, the results that these steps are expected to produce and the conditions to determine whether the test is passed or failed [IEEE 1991]. A more specific definition of test case in the context of the functional validation of the EAGLE services is given in Sec. 2.2.2.

In order to design the test cases, especially those that involve the search functionality of the three services, we started from a series of real-life **test scenarios**. Scenarios involve realistic tasks that users might want to perform, or problems that they might want to solve by availing themselves of the software under test. Examples include the task of searching for all the images of inscriptions written on a certain material and found in a specific region of the Roman Empire. Test scenarios for the EAGLE validation are discussed in Sec. 2.2.2.

The test cases will be executed by a group of **testers** (see Sec. 2.2.1). The format of the test cases is detailed in Sec. 2.2.3. In the final stage, the results provided by the testers will be evaluated by the **developers**, i.e. the partners that are responsible for implementing and maintaining the applications, the portal and the architecture; the developers, together with the project managers and project coordinator, will assess whether a release meets the requirements or not (sec. 2.2.5).

2.2 FUNCTIONAL VALIDATION

2.2.1 Test groups and roles

The EAGLE consortium constitutes a unique platform of cooperation among some of the most important projects in digital epigraphy, both in Europe and worldwide. As it was already clear with the functional requirements, the experience of the consortium members both in epigraphic data curation and in user-dedicated services is a strategic asset of the project. For this reason, all the partners of the EAGLE project will be involved in the process of functional validation.

The roles involved in functional validation are the following:

- **Leaders**: as a leader of the task T5.5 (testing and validation), the DAI will coordinate the activities, schedule and manage the meetings with the testers and developers, collect the test-case reports from the testers.
- **Testers**: the persons who will execute the test cases and fill the reports; the names of the testers will be indicated by the content providers of EAGLE and partners affiliated with the project so as the represent the different projects and institutions involved in the consortium.
- **Developers**: the partners responsible for the development of the three applications (Googate. Promoter and CNR-ISTI for ISE; Eureva and CNR-ISTI for FMA; DAI for FSA; CNR-ISTI for the image recognition service and the general architecture), together with the project coordinator

and management; they will evaluate the outcome of the tests, decide how to correct the issues that were identified and schedule the release of corrected versions.

One crucial duty of the leaders is to carry out all the preliminary operations that precede the execution of the tests (Sec. 2.2.4 on the planning phase), and especially to ensure that the test cases are easy to understand, unambiguous and complete in their formulation; the leaders will assist the tester in the execution of the test and coordinate the steps detailed in Sec. 2.2.4.

2.2.2 Test scenarios and test cases

Most functionality of the ISE, FMA and FSA rely on the capability of each application to retrieve inscriptions and other related content from the EAGLE collection. In our functional validation, great emphasis is therefore given to tests that involve searching for epigraphic content (texts, images, artifacts) using complex combinations of keywords. Such functionality is central in the different use cases that were presented in Deliverable D5.1 [pp. 18-27]. For example, users might want to resort to the ISE to retrieve all inscriptions that belong to a certain class (funerary inscriptions, honorary decrees, etc.) and that contain a certain string in the text; users of the FSA might want to include in their stories inscriptions found in a certain ancient region of the Roman Empire (e.g. the "Transpadana") that have at least one image.

This situation has lead us to design the test cases around very simple but realistic user scenarios that could be as close as possible to queries that we expect from our real users. The use cases discussed in Delivearble D5.1 provide a preliminary source of examples and a structure for the scenarios. The scholars and professionals that are involved in many of our partner projects possess a vast experience in data-driven research on epigraphy.

One user scenario that we will use several times for the ISE requires testers to retrieve all inscriptions that have the string "filia" (Latin for "daughter"), or abbreviated forms, in their text; this simple task is expanded by adding several different constraint: e.g. in addition to the text string "filia", the inscriptions must belong to different types (funerary and honorific) or are inscribed on monuments made of some specific materials (e.g. marble). The task of searching for inscriptions containing the roman family name Aurelius written in Greek (Αὐρήλιος), possibly combined with other search keys, is also another useful user scenario.

When designing the scenarios for our test cases, some practical limitations must also be taken into consideration. For the FMA, the first scenario is based on the use case UC.MOB.01 [D5.1, pp. 21-23], where a user takes a picture of a monument and the photo is recognized by the FMA. It is difficult to test this scenario with photos of real monuments, and therefore we will limit ourselves to the alternative scenario: testers will be asked to work with printed photos of sample inscriptions.

Given this definition of test scenarios, we can provide a more detailed definition of a test case as a series of instructions to execute one scenario. Generally, the scenario includes the task of searching for some specific epigraphic content, and it can also require the tester to perform some additional operations on it, as defined by one or more functional requirements. Based on the requirements, we expect the executions of the steps to provide a successful outcome (e.g. the inscriptions are retrieved and users can perform the requested operations on the records or the result page, such as save, annotate, include into stories etc.). Testers are then asked to assign a status of failure or success to the test case, according to whether the actual result corresponds to the expected outcome or not (see Sec. 2.2.3 for the possible values that testers can assign to the outcome of the test cases).

Very often, a test case must be further developed and subdivided into many different cases, so that the

behavior of the system can be evaluated with many different input values, or different query options. While in some cases the number of combinations can be determined in advance, in other occasions the different values cannot be listed in full; occasionally, the need to test different values or options becomes evident only after or during the test.

An example of the former case, where the number of different options is known in advance, is a login interface; since in similar occasions the system typically asks for username and password, and since the values of these two fields can only be valid, invalid or blank, the number of combination to be tested can be fixed in advance.

The latter situation, where the combination of values is too big or even infinite, is more frequent in the case of the search functionality of ISE, FMA and FSA; moreover, the first and foremost requirement for search engines such as those implemented in the three services is to retrieve with the highest accuracy the documents that match all the constraints set by the users in their queries. Several combinations of the available search options and constraints must therefore be tested.

To give an example, requirement PSE08 mandates that users shall be able to "to include or exclude diacritics (including brackets and other symbols adopted by the Leiden convention) in their queries" [D5.1, p. 34]; at the same time, it shall be possible for users to search either Greek or Latin characters. A proper test of PSE08 must therefore ensure that diacritics can be included/excluded at will with both Latin and Greek characters. It must also be verified whether the definition of "diacritics" implemented to satisfy the PSE08 includes the accents and the so-called "breaths" used in modern transcription of the Ancient Greek script[1], a detail that is not made clear by the requirement but is very likely to have a strong impact on the experience of the end users. Whereas PSE08 prescribes that a search with "consul" shall also match "co(n)s(ularis)", it is not stated precisely whether a search for "Αυρηλιος" will only match unaccented strings or also "Αὐρήλιος". Therefore, the validation for this requirement must be split in several tests and we cannot foresee that we have exhausted all the meaningful or relevant combinations.

For this reason, we design our system to be easily extensible, so that integrations or new formulations of the test cases are always possible. The list of tests that we have prepared can be easily expanded: variations of the existing tests with different combinations of query options or values can be created; the hierarchical relation between the children and the parent tests is recorded in a special field (labeled "parent") of the new test (Sec 2.2.3).

Thus, for example, PT2.0 tests the login function of the ISE and it requires the user to enter valid login credentials into the password and username fields. In order to verify how the system responds in case invalid or blank credentials are given, two children tests are created (PT2.1 and PT2.2), each with PT2.0 recorded as the parent in the dedicated field. Tests for mixed combinations of blank-invalid, valid-invalid, or valid-blank values are at the moment not provided, but they can be easily added using the same naming and labeling conventions (by creating children test cases PT2.3, PT2.4 etc).

[1] Accents, breathings and other orthographical sings used in modern editions of ancient Greek texts are commonly referred to as "diacritics"; See e.g. http://en.wikipedia.org/wiki/Greek_diacritics

2.2.3 Structure of the test cases

Each test case is defined by the following mandatory properties:

- **ID**: a string that uniquely identify each test case, created according to this structure: a first letter identifying the application (P = portal; M = mobile, S = storytelling), T (marking the test case), a two-field numeric identifier providing the sequence of parents and children test cases (1.0, 1.1, 2.0 etc.).
- **Parent**: the parent a variation of a test case originates from (see the example in Sec. 2.2.2).
- **Requirements**: ID of the functional requirement(s) where the functionality that is being tested is mandated and described in full (as defined in D5.1).
- **Name**: a short description of the main function that is tested or the main goal that the test wants to achieve.
- **Description and steps**: this field lists the steps that the testers are required to execute in order to perform the test.
- **Expected outcome**: the final status that the system is expected to reach (landing page on a browser, displayed results, etc.) once the steps are executed.
- **Outcome**: the actual outcome observed by the tester. Only the following values are allowed for the field:
    - **OK:** the outcome observed corresponds to the expected outcome. The test is considered valid.
    - **Warning**: the test is executed with the expected outcome and the text is considered valid, but either some improvements can be suggested in the execution of the steps or some new testing (with different steps and/or values) is suggested; testers must explain the warning in the **note** field (see next point).
    - **Failed**: the expected outcome cannot be obtained; the test fails or is interrupted in some of the steps. Testers must leave a note recording the step where the process is interrupted and/or the outcome that they have observed.
- **Notes**: the testers have the possibility to leave a detailed text note recording any observation they might have on the tests; in case the status "Warning" or "Failed" is selected, testers are expected to use the field to give as detailed a description as possible of the problems encountered.

We decided to keep this structure as simple as possible, while at the same time registering all the information that the testers need in order to perform the validation. Prerequisites, i.e. preconditions that the system is supposed to meet before the actual execution of the workflow of a test can begin, are often explicitly stated in the description of a test case. For example, a prerequisite before the testing of functionality for registered users is that the user is logged in. However, these preconditions can equally find place in the "Description" field as the first step, so that the structure of the test case is kept simpler. On the other hand, two preconditions for all the test cases of the FMA (except for those that explicitly ask for the contrary: see e.g. MT4.2 in Appendix I.2) are that the FMA is installed on the mobile devices of the testers and that the devices are connected to the internet. Similar general preconditions will find place in instruction sheets, rather than being repeated in the description of all cases.

Table 4 gives an example of a test case for the Advanced Search interface of the ISE.

Property	**Value**
ID	PT5.0
Parent	–
Requirements	PSE06, PSE11
Name	Advanced search: search all the honorary inscriptions containing the word "filia"
Description and steps	- Access the "Advanced Search" page - enter "filia" in the field "text of the inscription" - select "honorific inscription" in the menu "type of inscription"
Expected Outcome	Return all the inscriptions with "filia" (also with diacritics: e.g. f(ilia)) in the text and "honorific inscription" (or related terms in the controlled vocabularies: e.g. "ehreninschrift") as type of inscription; results should be formatted as in PT4.0
Outcome	To be selected by the testers (can be "OK", "Warning", or "Failed")

Table 4: An example of test case for the ISE (PT5.0)

The complete list of test cases is stored in a spreadsheet to be distributed to the testers and collected once that the testers have performed the validation. The spreadsheets for the three services are given in Appendix I.

2.2.4 Validation session: steps and procedure

Each validation phase is preceded by a planning session and concluded with an evaluation procedure where the results of the test cases are collected and analyzed by the developers (Sec. 2.2.5).

The goal of the planning is to establish the list of the testers, revise the grid of the test cases and prepare the testers for the execution of the cases. The leaders will diffuse the spreadsheets with the test cases to the testers indicated by the partners of the EAGLE consortium. Any addition to the test cases will be discussed at this stage. A detailed guide on how to use the test case documents will be disseminated; a textual version of the test cases (similar to that in Table 4) will also be made available on the WP5 repository in the reserved area of the EAGLE portal. Leaders have also the task to ensure that no technical problems (e.g. server failures, inaccessible files etc.) will prevent the execution of the tests and will assist the testers with any preliminary steps that they might need (e.g. with the installation of the FMA).

The planning phase will start immediately in January 2015; results will be collected by the end of the second year of the project. We expect to collect a significant number of them in time for the first plenary

meeting of the EAGLE project in 2015 (to be held in March in Nicosia, Cyprus).

2.2.5 Final evaluation

In the final evaluation, the developers, together with the project management and the coordinator, will evaluate the results of the tests performed by the partners. Tests that are marked as "failed" or "warning" by the testers will be scrutinized. In case of ambiguous outcome, further testing, with the addition of new test cases or the re-execution of some of those previously included in the spreadsheets will be considered at this stage.

Once all the required evidence has been obtained, the developers together with the project management and coordinator will list the interventions that must be implemented in the following releases in order to fix the problems that the testing procedure has highlighted. A calendar for an update of the ISE, for which no official new release is currently scheduled, will also be established.

Before the end of the first evaluation phase, the leaders and developers will set the agenda for the second evaluation cycle, updating the test cases with the new functions to be implemented and deciding which of the old tests will be kept in the spreadsheets to ensure backward compatibility.

2.3 FEEDBACK QUESTIONAIRE ON ISE

As soon as a development version of the ISE was published online, we decided to open another channel to collect feedback on the search interfaces for the inscriptions. In order to allow the users to send comments and report issues to the developers as soon as possible, we prepared a form, which was disseminated through several mailing lists of institutions and partners of the larger EAGLE communities in November 2014. In particular, the form (and the links for the "Simple" and "Advanced Search" pages) were sent to four different mailing lists that include[2]:

- Partners of the EAGLE projects
- Affiliated partners
- Institutions with an existing cooperation agreement with EAGLE
- Institutions with an existing memorandum of understanding with EAGLE

[2] An updated list of the institutions, divided in the four categories, can be seen on the EAGLE website at: http://www.eagle-network.eu/about/partners/

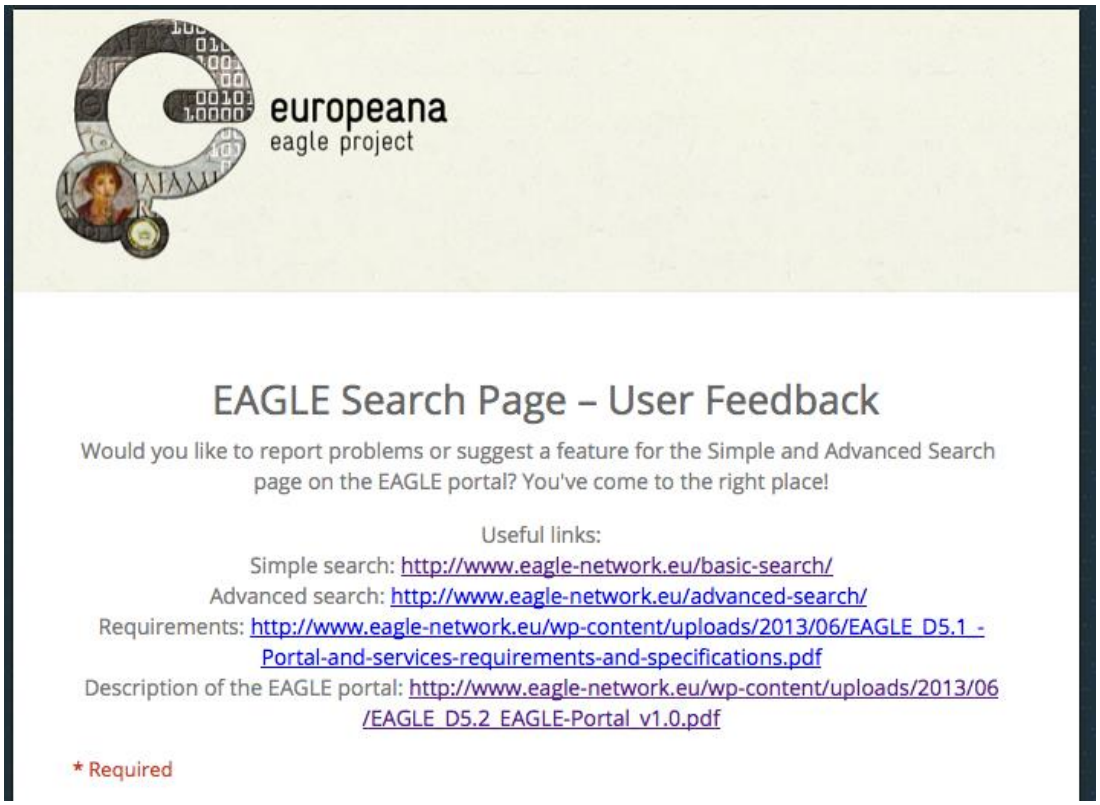

Figure 1: The ISE user feedback form on the EAGLE reserved area

The form can be accessed in the "Surveys" section of the reserved area of the project's website (Figure 1)[3]. It is formulated so as to leave the greatest freedom to the users on what they can report, while at the same time helping the developers to have a minimal system to keep track of the areas that are affected by each problem/suggestion.

Users have the option to select whether they want to report a bug or suggest a new feature. A single free text field is then left to describe the issue or suggestion. Users have also the option to select multiple keywords to describe the functionality or the aspect of the interface (e.g. Simple search, result list, etc.) that their feedback is related to. A starting list is offered, but users are free to add custom descriptive keywords to their report.

Users can also leave an email address, which, as it is stated in the instructions, will be used only for communication related to the feedback and especially if the developers need to collect additional information on the reported issue (Figure 2).

The form will remain open and available for the users until the conclusion of the second evaluation phase. The feedback received will be evaluated together with the result of the test cases: the issues reported by the users, as well as the new features suggested, will be addressed in the final stage of the evaluation phase (Sec. 2.2.5).

[3] http://www.eagle-network.eu/about/reserved-area/project-surveys/eagle-portal-user-feedback/

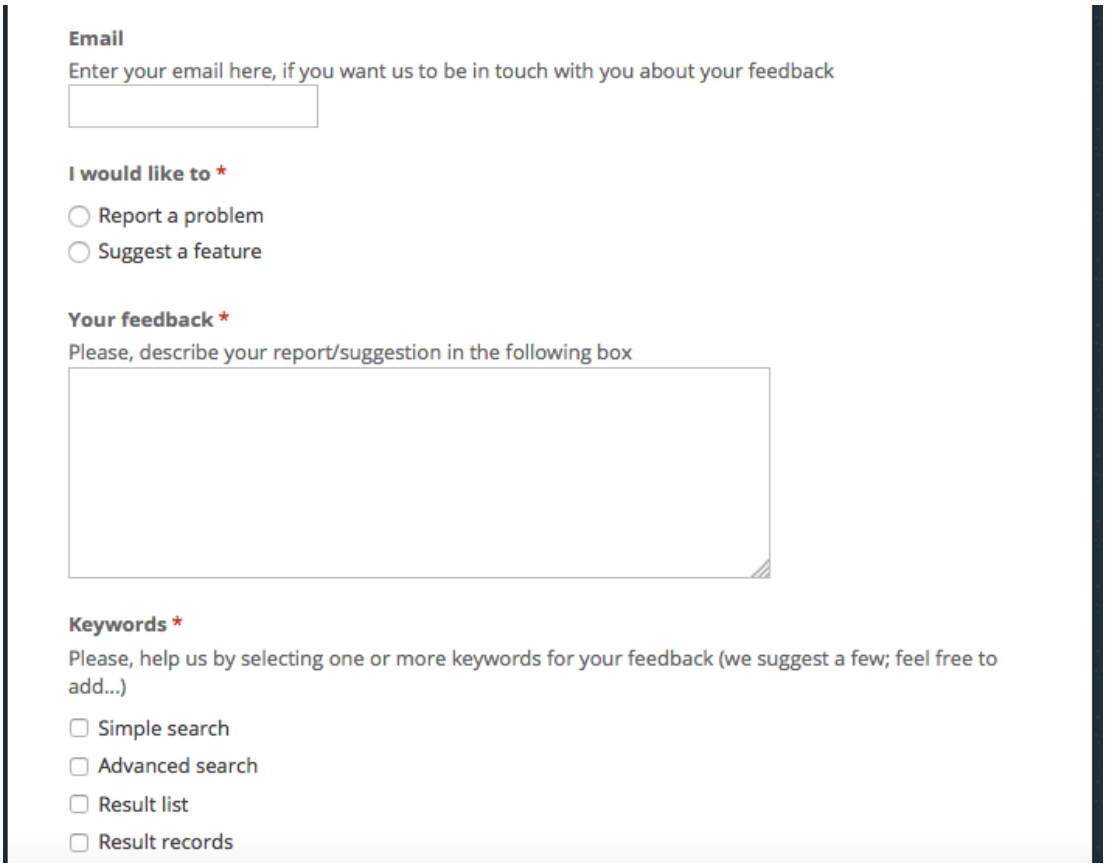

Figure 2: ISE user feedback form: text field and keywords

At the moment of writing, 17 forms have been sent to us, in English or Italian. All but one of them were classified by the users as bug reports. The spreadsheet containing the feedback is visible to the developers and the project management. The proportion of the keywords used to categorize the reports is shown in Figure 3.

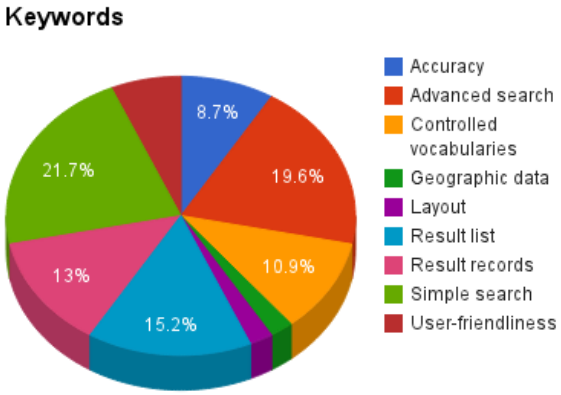

Figure 3: Keywords used for user feedback using the ISE feedback form

In our view, the form has already provided very useful feedback. For the reasons discussed above (Sec. 2.2.2), our test cases cannot exhaust all the real-life scenarios that the users will encounter. The form is an important channel to collect evidence on the behavior of the system with new input values that are not part of the test scenarios used for the functional validation. While it will be impossible to use test cases to make exhaustive trials on objects and metadata and compare the results with the content provided by each partners, users involved in our partner projects are already reporting issues on the way content from their collection is queried through the ISE (see the example from Nov. 10th in Table 5).

Instead of reporting single problems, some of the users have resorted to the form to leave more or less comprehensive reviews of the search interface, thus raising multiple issues in a single instance. In those cases, some post-editing has been necessary on our side in order to split complex reports in "ticket"-sized issues that can be singularly evaluated, assigned to the developers and tracked. In total, after the post-editing "split" process we have listed 39 issues or suggestions reported in the 17 responses; Table 5 provides a few examples to the readers.

Date	Type	**Report**
26/11/2014	Problem	It is not possible to limit the search to the inscriptions that have images and/or translations, as requested in req. PSE10
11/11/2014	Problem	At the result list you use the term "location" in fact it is the "find spot"
11/10/2014	Problem	[Search for term "aschenkiste"] The first search result: Aschenkiste mit Reliefs do not give information on the location which is acording to LUPA: Millstatt; Spittal an der Drau [Bezirk]; Kärnten [Bundesland]; Österreich
11/8/2014	Problem	The lists of controlled vocabularies (e.g. object type, type of inscription, ...) do not respect a strict alphabetical order: at the end of each there is a bunch of words out of the expected alphabetical position.
11/6/2014	Problem	Duplication of some criteria in the drop down lists to the left; too many "ignoratur"
11/6/2014	Suggestion	Long lists of facet options push the filter button way down out of sight. Consider putting them in a scrollable section of fixed size.

Table 5: An example of the issues reported using the ISE feedback form

As soon as the first version of the FMA and FSA are released, we intend to put in place similar feedback forms also for the two applications; these forms will be disseminated to the same mailing lists and the reports will become part of the evaluation cycle according to the same schedule adopted for the ISE.

3 CONCLUSIONS

We have provided a descriptions and a timeline of the different stages of the validation phase for the applications and services that will be developed by the EAGLE WP5 (the ISE, FMA, FSA). The validation phase will be articulated in two cycles; the first, which starts from January 2015 and is concluded with the publication of D5.6.1, will help the developers to track the bugs and issues that will be fixed in the second release of the two applications (FMA, FSA), scheduled for September 2015. Also, an improved version of the ISE on the EAGLE portal will be planned in order to correct any problem that the validation procedures highlights.

The data for the evaluation is collected through two main channels. The partner of the EAGLE project are asked to perform a series of test cases on ISE, FMA and FSA and to report whether their actual outcome conforms to the expected results.

The functional validation will follow the procedures and steps that were presented in detail in Sec. 2.2.4, which will then be repeated in order to validate the updated version of the three services.

A form to collect feedback on the ISE from the partners and other member of the larger EAGLE community is also available; several issues were already reported to us through this channel. Similar forms will also be provided for the FSA and FMA as soon as the development of the first release is concluded.

4 REFERENCES

[D5.1]

F. Mambrini. EAGLE portal and services requirements and specifications. EAGLE Deliverable 5.1. Available online at:

http://www.eagle-network.eu/wp-content/uploads/2013/06/EAGLE_D5.1_-Portal-and-services-requirements-and-specifications.pdf

[D5.2]

C. Prandoni, N. Alfarano, V. Casarosa. EAGLE Portal. EAGLE Deliverable 5.2. Available online at:

http://www.eagle-network.eu/wp-content/uploads/2013/06/EAGLE_D5.2_EAGLE-Portal_v1.0.pdf

[IEEE 1991]

Institute of Electrical & Electronics Engineers. 1991. *829-1983 - IEEE Standard for Software Test Documentation*. Available online at: http://standards.ieee.org/findstds/standard/829-1983.html

5 APPENDIX I – TEST CASE SPREADSHEETS

In this appendix we include the test case spreadsheets for the three applications that will be distributed to the testers. The partners will report their results by selecting one of the allowed values ("OK", "Warning", or "Failed") in the "Outcome" column and by filling the "Note" fields, in case they have some observation to report.

As it was indicated in the discussion (Sec. 2.2.2 and 2.2.4) the list will be discussed by partners and developers before the tests are executed, so that new test cases based on different scenarios can be added. The spreadsheets included here must not therefore be viewed as definitive.

The grids attached to this deliverable are labeled as:

- **Appendix I.1 – Test cases for the ISE**
- **Appendix I.2 – Test cases for the FMA**
- **Appendix I.3 – Test cases for the FSA**

Appendix I.1 -- Test Cases for the ISE

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
PT1.0	-	PSE01	Create account	- Users must not be logged in - click on the "create account" link - fill in the requested values for Email, Username and Password - click on the "create an account" button	A new account for the user is succesfully created. The user will receive a confirmation	Select	
PT1.1	PT1.0	PSE01	Create account (blank values)	- Users must not be logged in - click on the "create account" link - leave all values for Email, Username and Password blank (no text inserted) - click on the "create an account" button	No account is created. An error message is shown	Select	
PT2.0	-	PSE01	Sign in into personal account	- Start from the Search page on the EAGLE portal - fill in the credential used to login in the EAGLE reserved area (known to the partners) - click on the "Login" button	The user is logged in; user should land on the same page she started from; the Username and a link to access the personal space should be displayed	Select	
PT2.1	PT2.0	PSE01	Sign in into personal account (invalid credentials)	- Start from the Search page on the EAGLE portal - fill in "test", "test" in the Username and Password field of the "Login" menu - click on the "Login" button	The user is not logged in. An error message is displayed	Select	
PT2.2	PT2.0	PSE01	Sign in into personal account (blank credentials)	- start from the Search page on the EAGLE portal - leave the Username and Password field of the "Login" menu blank (no text inserted) - click on the "Login" button	The user is not logged in. An error message is displayed	Select	
PT3.0	-	PSE01	Sign out	- Users must be signed in - select the "Logout" option	The user should land on the same page she started from; the menu to login becomes available again	Select	
PT4.0	-	PSE04, PSE13, PSE14	Basic search: search the word "consul"	- Access the "Basic Search" page - enter the string "consul" in the text field	Return all the inscriptions that contain the word in the text and in all the other metadata; the output should be a result list, with the results split in pages, with the following columns: Trismegistos ID, Text, Ancient find spot (region), Date, Number of istances. The results returned belong to the type "artefacts" in the EAGLE conceptual model (see Manual, p. 3)	Select	
PT4.1	PT4.0	PSE04, PSE13, PSE14	Basic search: search empty string	- Access the "Basic Search" page - enter no text in the searhc field - hit the "Search" button	Return all the inscriptions in the collections; results should be formatted as in PT4.0	Select	
PT4.2	PT4.0	PSE04 PSE07	Basic search: use boolean	- Access the "Basic Search" page - enter "Volumnio OR Mario" in the text field - hit the "Search" button	Return all the inscriptions that contains either "Volumnio" or "Mario" in the text or in the other metadata; results should be formatted as in PT4.0	Select	
PT4.3	PT4.0	PSE04	Basic search: enter text in Greek	- Access the "Basic Search" page - enter the search string "Αὐρήλιος" - hit the "Search" button	Inscriptions containing the word Αὐρήλιος (in Greek alphabet) will be returned	Select	

Appendix I.1 -- Test Cases for the ISE

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
PT4.4	PT4.0	PSE04	Basic search: search images	- Access the "Basic Search" page - enter the search string "filia" - hit the "Search" button - in the first result page, select the tab "Images" on the top of the result list	The full-text query is performed on the images of the EAGLE collection; a list of images containing the string "filia" in their metadata is returned; for each record, the information specified in the Manual (p. 6) is given	Select	
PT4.5	PT4.0	PSE04	Basic search: search texts	- Access the "Basic Search" page - enter the search string "filia" - hit the "Search" button - in the first result page, select the tab "Texts" on the top of the result list	The full-text query is performed on the objects of the EAGLE collection belonging to the category "Text"; a list of texts containing the string "filia" in their metadata is returned; for each record, the information specified in the Manual (p. 5) is given	Select	
PT5.0	-	PSE06, PSE11	Advanced search: search all the honorary inscriptions containing the word "filia"	- Access the "Advanced Search" page - enter "filia" in the field "text of the inscription" - Select "honorific inscription" in the menu "type of inscription"	Return all the inscriptions with "filia" (also with diacritics: e.g. f(ilia)) in the text and "honorific inscription" (or related terms in the controlled vocabularies: e.g. "ehreninschrift") as type of inscription; results should be formatted as in PT4.0	Select	
PT5.1	PT5.0	PSE10	Limit the search to inscriptions with images and/or translations	- Access the "Advanced Search" page - enter "filia" in the text field - check the option to search only the inscriptions with images - check the option to search only the inscriptions with translations	Only the inscription with translations and images are returned as results	Select	
PT6.0		PSE08	Search with and without diacritics	- Access the "Basic Search" page - enter "f(ilia)" in the search field	Only the inscription with the abbreviated form and critic transcription employing the parentheses, i.e. "f(ilia)", will be returned; inscriptions with the unabbreviated word "filia" must not be included in the results	Select	
PT6.1	PT6.0	PSE08	Search with and without diacritics (Advanced Search)	- Access the "Advanced Search" page - enter "f(ilia)" in the field "text of the inscription"	Same as PT6.0	Select	
PT6.2	PT6.0	PSE08	Search with and without diacritics: Greek	- Access the "Basic Search" page - enter Αυρηλιος in the search field	Both the inscriptions without diacritics (i.e. Αυρηλιος) and with diacritics (e.g. Αὐρήλιος) should be returned	Select	
PT7.0	-	PSE16	Access detailed record	- Go to "Simple Search" page - enter "filia" in the text field - click on the first result in the returned list	Users are directed to a page displaying a series of tab (minimum one), one for each of the instances of the same inscriptions available in the collection. Each tab shall contain the field listed in PSE 16 (title, TM ID, thumbnail, etc.)	Select	
PT7.1	PT7.0	PSE16	Access the record in the original page of the CP from the detailed view	- Perform a query using the simple or advanced interface - click on the first result in the returned list - in the detailed record view, click on the link to see the record in the original content provider	Users are redirected to the website of the original content provider of the retrieved record, landing on the page dedicated to this specific inscription	Select	

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
PT7.2	PT7.0	PSE16, PSE19	Access detailed record (multiple instances)	- Go to "Advanced Search" - enter "Narsis" in the text and select "sepulcralis" from the menu "Inscription type" - select the first result in the list (TM ID = 202554) - in the record page, click to switch tab and visualize the record from another content provider	For the same inscription (with the same TM ID), one single record is returned in the result list, but at least two tabs are available in the detailed view, each for every content provider that has a record on the inscription. By clicking on the tab, users switch between the records	Select	
PT7.3	PT7.0	PSE16	Return to the result list (from the detailed record view)	- same as 7.0 - click the button "Back to result list"	Users are brought back to the page with the result list	Select	
PT8.0	-	PSE24	Refine search with faceted categories	- search for "filia" in the "Simple Search" page - in the result list, select Material facet from the category list - select "Marmor"	The records containing the word "filia" and with material = 'marmor' (or related terms in the vocabulary: e.g. "marble") are returned to the users; the number of the results returned corresponds to the number reported in parentheses for the value "marmor" in the material facet	Select	
PT9.0	-	PSE27	Search with image (default: similarity search)	- access the image search interface - upload a picture of an inscription - hit the "Search" button	A "similarity search" is performed using the EAGLE image recognition service. A list of matching inscriptions ranked in order of similarity with the image used for the search is returned to the user	Select	
PT9.1	PT9.0	PSE27	Search with image (exact match)	- access the image search interface - upload a picture of an inscription - select the "exact match" option - hit the "Search" button	An "exact match" search is performed using the EAGLE image recognition service. Either either the matching inscription or an “image not found” error is returned to the user	Select	
PT10.0	-	PSE30	Save query results	- Login using the the credential used to access the EAGLE reserved area (known to the partners) - search for "filia" in the "Simple Search" page - in the result list, select the option to save query results	The result list is saved in the personal space of the registered usered and can be accessed in the "Archives" area	Select	
PT10.1	PT10.0	PSE30	Save query results (not logged in)	- Make sure you are not logged in as a register user (click "logout" if necessary) - search for "filia" in the "Simple Search" page - in the result list, select the option to save query results	The results are not saved. A message error, warning that the user must be logged in in order to save items, is returned to the user	Select	
PT11.0	-	PSE29	Save single items	- Users must be signed in - search for "filia" in the "Simple Search" page - in the result list, select the first item to access the detailed view - select the option to save the current item	The inscription is saved in the personal space of the registered user ad can be accessed in the "Archives" area	Select	

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
PT11.1	PT11.0	PSE29	Access single item	- Users must be signed in - perform a query using the simple or advanced search - select one item returned - save the item (see PT11.0) - access the personal space selecting the "Archives" option, then "Single Items" - select the item just saved and hit the "View" button	The saved item is loaded in the same view as in PT7.0		
PT12.0	-	PSE31	Add/edit notes to single records	- Users must be signed in - perform a query using the simple or advanced search - select one item returned - save the item (see PT11.0) - access the personal space selecting the "Archives" option, then "Single Items" - select the item just saved and hit the "Edit" button - insert some text in the field "Notes"	The note on the saved item is saved and it is stored for the users; it will not be visible by other users or unregistered users		
PT13.0	-	PSE32	Delete single record	- Users must be signed in - perform a query using the simple or advanced search - select one item returned - save the item (see PT11.0) - access the personal space selecting the "Archives" option - select the item just saved and hit the "Delete" button	The single record is delete from the personal space and is no longer accessible to the registered user		
PT13.1	PT13.0	PSE32	Delete result list	- Users must be signed in - perform a query using the simple or advanced search - save the query (see PT10.0) - access the personal space selecting the "Archives" option - select the qury result just saved - hit the "Delete" button	The query result list is delete from the personal space and is no longer accessible to the registered user		

Appendix I.2 -- Test cases for the FMA

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
MT1.0	-	MBE05	Sign in into personal account	- Start the FMA - access the "Login"/"Logout" area - fill in the credential used to login in the EAGLE reserved area (known to the partners) - select "Login"	The user is logged in	Select	
MT1.1	MT1.0	MBE05	Sign in into personal account (invalid credentials)	- Start the FMA - access the "Login"/"Logout" area - fill in "test", "test" in the user name and password - select "Login"	The user is not logged in. An error message is displayed	Select	
MT1.2	MT2.0	MBE05	Sign in into personal account (blank credentials)	- Start the FMA - access the "Login"/"Logout" area - leave the Username and Password field of the "Login" menu blank (no text inserted) - select "Login"	The user is not logged in. An error message is displayed	Select	
MT3.0	-	-	Sign out	- Users must be signed in - access the "Login"/"Logout" area - select "Logout"	The user is signed out of her personal account	Select	
MT4.0	-	MBE02	Perform a similarity search	- Users must have a printed copy of a sample image from the EAGLE collection (http://edh-www.adw.uni-heidelberg.de/fotos/F010800.JPG) - start the FMA - use the FMA to take a picture of the printed image - select to perform a "similarity search"	A list of inscriptions (ranked in order of similarity to the searche image and formatted per the indications of MBE02) is returned to the users	Select	
MT4.1	MT4.0	MBE02	Similarity search (no recognizable image in the EAGLE collection)	- Start the FMA - point the camera away from the sample image and towards any object that does NOT depict an ancient monument - select to perform a "similarity search"	Either a list of "best guesses" from the images in the EAGLE collection or a warning message that no relevant content was found is returned to the users	Select	
MT4.2	MT4.0	MBE02	Similarity search (no internet connection)	- Sisable the internet connectivity on your device - start the FMA - take a picture of the sample image - select to perform a "similarity search"	No result is returned; a warning message that internet connection is needed in order to search the EAGLE collection is returned	Select	
MT5.0	-	MBE03	Exact match	- Users must have a printed copy of the sample image (see MT4.0) - start the FMA - use the FMA to take a picture of the sample image - select to perform an "exact match"	The matching inscription is returned to the users	Select	
MT5.1	MT5.0	MBE03	Exact match (no recognizable image)	- Start the FMA - point the camera away from the sample image and towards any object that does NOT depict an ancient monument - select to perform an "exact match"	No result is returned; users should see a warning message that the requested image was not found	Select	
MT6.0	-		Access the detailed record from the search result list	- Users must have a printed copy of the sample image (see MT4.0) - start the FMA - use the FMA to take a picture of the sample image - select to perform a "similarity search" - select the first item returned in the result list	The image of the selected record as well as other selected information (title, transcription of the text, type of inscription, type of object, ancient find place (region and city), present location, date, content provider) is visualized	Select	
MT7.0	-	MBE04	Access the chronology of the queries performed	- Start the FMA - select the chronology tab from the application menu	The list of the queries performed by the user is returned	Select	

Appendix I.2 -- Test cases for the FMA

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
MT7.1	MT7.0	MBE04	Retrieve the results from the chronology of queries	- Start the FMA - select the chronology tab from the application menu - select the first item from the chronology list	The list of the results for the selected query is loaded; the records are accessible as in MT6.0	Select	
MT8.0	-	MBE06	Create text notes on search results	- Users must have a printed copy of the sample image (see MT4.0) - users must be logged in their personal space - start the FMA - use the FMA to take a picture of the sample image - select to perform a "similarity search" - select the first item returned in the result list - select the option to add a text note - enter some text in the text box - save the content entered in the text box	The text note is saved; the user will be able to retrieve, edit and/or delete the note from the user area on the mobile app and to upload it to her personal space on the EAGLE portal (see manual of the portal, p. 15)	Select	
MT9.0	-	MBE07	Save and upload a photo of an inscription	- Users must have a printed copy of the sample image (see MT4.0) - users must be logged in their personal space - start the FMA - use the FMA to take a picture of the sample image - select to perform a "similarity search" - select the first item returned in the result list - select the option to upload the picture	The photo is saved; the user will be able to retrieve, edit and/or delete it from the user area on the mobile app and to upload it to her personal space on the EAGLE portal	Select	
MT10.0	-	MBE08	Access and delete elements in the user temporary area	- Users must be logged in - start the FMA - access the personal area - select a textual note or a photo from the list of saved items - select to delete it	The photo or textual note is deleted from the temporary user area; it will be not synced with the user space on the EAGLE server and will therefore not be accessible on the personal space of the user on the EAGLE portal	Select	
MT10.1	MT10.0	MBE08	Access and edit notes in the user temporary area	- Users must be logged in - start the FMA - access the personal area - select a textual note - edit the text of the note by inserting new text at the bottom	A new version of the note, with the added text, is saved in the temporary area	Select	

Appendix I.3 -- Test Cases for the FSA

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
ST1.0	-	-	Sign in into personal account	- Start from the FSA starting page - select the option to login - fill in the credential used to login in the EAGLE reserved area (known to the partners) - click on the "Login" button	The user is logged in; user should land on the same page she started from; the Username and a link to access the personal space should be displayed	Select	
ST1.1	ST1.0	-	Sign in into personal account (invalid credentials)	- Start from the FSA starting page - select the option to login - fill in "test", "test" in the Username and Password field of the "Login" menu - click on the "Login" button	The user is not logged in. An error message is displayed	Select	
ST1.2	ST1.0	-	Sign in into personal account (blank credentials)	- Start from the FSA starting page - select the option to login - leave the Username and Password field of the "Login" menu blank (no text inserted) - click on the "Login" button	The user is not logged in. An error message is displayed	Select	
ST3.0	-	-	Sign out	- Users must be signed in - select the option to logout	The user lands on the FSA starting page; the option to login should be visible again	Select	
ST4.0		STE05	Create story	- Users must be signed in - select the option to create a new story	A WYSIWYG text editor is loaded; a new story with a default title and description paragraph is created	Select	
ST5.0	-	STE07	Edit title and description	- Users must be signed in - select the option to create a new story - select the default title paragraph and edit it at will - select the default description and edit it at will - select the option to save the new story	The new title and description inserted by the user is saved in place of the default text of the title and description paragraphs	Select	
ST6.0	-	STE15	Load and edit a previously saved story	- Users must be signed in and have created a story (see e.g. ST5.0) - access the personal space on the FSA page - select the first story in the list of the previously saved stories - select the option to load it	The previously created story is loaded in the editor and can be edited by the users		
ST7.0	-	STE06	Create text paragraphs	- Users must be signed in - select the option to edit a previously created story (or create a new one) - select the option to create a new text paragraph and add some text to it - save the new story	The new text paragraph is created and the story is saved; it will be possible to read the newly created paragraph the next time that the story is loaded (see e.g. ST6.0)	Select	
ST7.1	ST7.0	STE06	Create a text paragraph and format it as section header	- Users must be signed in - load or create a story in the editor - create a new text paragraph and write some text - select the option to format it as a section header	The paragraph is created; it is formatted with the default style for unnumbered section header	Select	
ST7.2	ST7.0	STE06	Create a text paragraph and format a word in bold typeface	- Users must be signed in - load or create a story in the editor - create a new text paragraph and write some text - highlight a word in the written text and select the option to format it as "bold" - save the story	The typeface of the selected word is changed to bold and the formatting is saved	Select	
ST8.0	-	STE08 STE10 STE11	Search and include content from EAGLE	- Users must be signed in - load or create a story in the editor - in the search pannel of the editor, select the EAGLE collection from the possible sources of material - enter "filia" in the search box	A list of inscriptions that match the string entered (in the inscription text or in any other field) is returned to the user, formatted as prescribed in STE10	Select	

Appendix I.3 -- Test Cases for the FSA

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
ST8.1	-	STE08 STE10 STE11	Search and include content from Europeana	- Users must be signed in - load or create a story in the editor - in the search pannel of the editor, select "Europeana" from the possible sources of material - enter "funerary inscription" in the search box	A list of items from Europeana that match the string entered (in the inscription text or in any other field) is returned to the user, formatted as prescribed in STE10	Select	
ST8.2	-	STE08 STE10 STE11	Search and include content from Youtube	- Users must be signed in - load or create a story in the editor - in the search pannel of the editor, select "Youtube" from the possible sources of material - enter "epigraphy" in the search box	A list of videos from Youtube that match the string entered is returned to the user, formatted as prescribed in STE10	Select	
ST8.3	-	STE08 STE10 STE11	Search and include content from Wikipedia	- Users must be signed in - load or create a story in the editor - in the search pannel of the editor, select "Wikipedia" from the possible sources of material - enter "epigraphy" in the search box	A list of pages from Wikipedia that match the string entered is returned to the user, formatted as prescribed in STE10	Select	
ST9.0	-	STE12	Move objects and paragraphs	- Users must be signed in - load or create a story in the editor - in the search pannel of the editor, select EAGLE as source - enter "filia" in the search box - select one record of the results and drag it into the story - save the story	The record (formatted as specified in STE10) is inserted into the body of the story; the story with the new object included is saved	Select	
ST9.1	ST9.0	STE12	Move objects and paragraphs (in relation to other elements of the story)	- Users must be signed in - load or create a story in the editor - create a text paragraph and write some text - search items from one of the sources (see e.g. ST09) - drag and drop the first retrieved record into the story so that it is placed after the text paragraph - in the editor pane, select the newly inserted item and drag it above the text paragraph, so that now the position of text and item is switched (the item precedes the text) - save the story	The item searched and retrived from the repository is inserted in the story and it now precedes the text paragraph; the story is saved with the new object placed in the specified position	Select	
ST10.0	-	STE13	Drafts not visible to unregistered users	- Users must be signed in - load or create a story in the editor - add some new content (e.g. by creating text paragraphs, or by searching and including items) - save the story - logout from the personal account - access the FSA starting page	The newly edited story is NOT visible in the FSA starting page and it cannot be accessed by unregistered users	Select	
ST11.0	-	STE14	Publish a story	- Users must be signed in - load or create a story in the editor - select to publish the story - logout from the personal account - access the FSA starting page	The newly edited story is now visible in the FSA starting page and it can be accessed and read (but not edited) by unregistered users	Select	

Appendix I.3 -- Test Cases for the FSA

ID	Parent	Requirements	Name	Description and steps	Expected Outcome	Outcome	Notes
ST12.0	-	STE15	Edit a published story	- Users must be signed in - load or create a story in the editor - select to publish the story - access the FSA starting page - select the newly created story - select the option to edit it - add some content to the story (e.g. by creating a text paragraph) - save the story	The story is published and the new edits made by the authors are immediately saved; the edits made after the publication become visible to the unregistered users after the story is saved	Select	
ST12.1	ST12.0	STE15	Unpublish a story	- Users must be signed in - load a published story (see ST12.0) - select the option to unpublish it - logout from the personal account - access the FSA starting page	The unpublished story is NOT visible in the FSA starting page and it cannot be accessed by unregistered users	Select	