

## **Call for tenders for the development of a software application for Risk analysis and Risk assessment in museums, archives and libraries.**

### Technical specifications

#### **Art. 1**

##### **Premise**

Mazzini Lab Srl Benefit, leader of the consortium of partners of the RMCH project (Risk Management of Cultural Heritage), funded by the European Union in the ERASMUS + program (agreement n ° 2021-1-IT01-KA220-VET-000034797), promotes, through funds made available to initiatives in favour of Museums, Archives and Libraries (hereinafter MAB), a project on the issues of risk assessment on cultural heritage and their mitigation.

The consortium of Partners intends to equip itself with a web application that will be available for the professionals trained by the VET training course described in the project.

#### **Art. 2**

##### **Context**



The project intends to develop actions aimed at defining the professional profile of the Risk Manager for Cultural Heritage. The consortium is made up of five entities, three of which are universities and two are private companies. The countries involved are Italy, Germany, Austria and the Czech Republic. The web platform and user manuals must be in English and Italian.

### **Art. 3**

#### **Object of the supply**

The development of a software dedicated solely to solving the problem described in the previous paragraph is required, in which two main components are distinguished:

1. A web-based component that allows you to record data, information and upload relevant documents;
2. A reporting and accounting component that allows Risk Managers to create summary reports at the end of the risk assessment procedures.

The purpose of the application is to meet the following general needs:

- gather information in a single repository;
- keep track of all phase changes;
- facilitate the printing and scanning of documents that sanction the transition from one phase to another;
- maintain a centralized registry;
- offer tools for notification and coordination between the various professionals who insist on the same analysis;
- support the development of a Safety and Emergency Plan based on the collected information;
- provide reports to the Risk Manager.

The web application takes the form of a management system accessible via the Internet, after granting access credentials, and after registration in the system database as a user with a well-defined role and therefore with profiled permissions for viewing and possibly disposition. The management system must keep track, for each investigation, of the progress of the risk assessment process, and memorize all the information that historically accumulates, as well as memorize the documentary evidence that allows the passage from one state to another of the investigation, until the drafting of the final report.

The web application must provide the user with pages with simple and intuitive graphic elements for all and only the functions relating to a single process phase, or personal data, or other functions necessary for the operation of the system.

Finally, ad hoc pages must be provided for only users of the institution able to show summary reports on the progress of the census operations.

#### **Art. 4**

#### **Constraints and assumptions**

The application must be created in such a way that it can be used online, compatibly with the following web browsers:

- Microsoft Edge;
- Firefox 20 and later version;
- Safari 5 and later version;
- Chrome 3 and later version.

The application must be released, by the supplier, on a suitable web space that allows operation to all users and administrative access to the technical staff of the Consortium. The technical proposals are required to define a release method, as well as to indicate the operational and technical specifications of the service to be associated with the application.

The sizing of the service offered by the application must include:

- the management of at least 50 Risk Managers;
- the management of 10 tutors;
- the management of at least 100 MABs.

No restrictions are placed on the software technology to be used for the creation of the Web application, however, the referential title will consist of state of the art technologies that favor maintainability and scalability.

Preferred title will also consist of the use of frameworks for the description and management of business processes.

Any third party proprietary software charges used for this purpose are to be charged to the supplier.

## **Art. 5**

### **Description of the services**

After the release of the application, the supplier will support Mazzini Lab S.r.l. Benefit (leader of the Consortium) in a one-off start-up activity to use the system.

The release of the application will be defined as an application delivery service via Web, configuration management, MAC and MEV.

## **Art. 6**

### **Methods of execution and general characteristics**



The creation of a web application for storing and editing cultural heritage risk assessment forms is required. The software must be provided as a service in SaaS mode.

The service must be usable via the web and provided on a cloud platform by the supplier. The cloud platform must be adequately sized according to the needs of the project and provided with adequate storage for the number of expected users.

It is required that the web server and storage are physically located within the European Union, even if the provider uses third-party cloud services.

The web solution must be responsive and usable from any type of device (personal computer, tablet, smartphone) with the use of the most common browsers and without the need to install software or plug-ins on users' clients.

The proposed solution must have administration and configuration tools that allow the introduction of any changes quickly and without the need for intervention on the source code (low coding). The changes include the insertion of new fields, the revision of the insertion masks, the consultation and modification, the addition of print reports, the addition of graphics, the automatic sending of e-mails based on events defined.

The proposed solution must be based on standard SQL databases and must allow simple data extraction also on the front-end side.

In terms of interoperability, it is required that the solution has functionality for exchanging data to and from the outside via web service or that it has the ability to always generate interfaces in low coding mode.

The system must guarantee the security of the information and prevent any type of commonly known cyber attack (CRSF, SQL injection, JS injection, etc.).

The potential for greater functionalities available and not necessary in this phase, the experiences and solutions implemented, also in other sectors, will also be considered as improvement elements.

## 6.1

### User and access management

At the access management, profiling and logging levels, the software must include:



- Definition of profiling groups with the assignment of different levels of permissions;
- User profiling and association to profiling groups;
- Integration with Active Directory (LDAP);
- Management of complex passwords;
- Log of accesses made by the single user;
- Log on individual operations (insertion, modification, deletion) configurable;
- User blocking after a configurable number of incorrect login attempts;
- Blocking of users from the administration system;
- Unblocking of users from the administration system.

## 6.2

### Functional characteristics

Access is required for at least 2 types of users:

- Risk Manager;
- Administrator.

In general, the Risk manager user will be able to manage and view only the data entered by himself/herself, while the Administrator user will be able to view the data entered by multiple Risk manager users or grouping (or area) of Risk managers. It is therefore required that not only the group or profile they belong to but also the area to which they belong can be defined. The area is therefore a set that can group users belonging to different groups or profiles.

Access must be done by entering a username and password by the user.

## 6.3

### Risk manager user

Once logged in, the Risk manager user must be able to change their password.

The user must be able to consult the survey forms already entered by viewing both the entered data and any attached files.

Each user will be able to view and modify only the previously inserted cards. He/she must not be able to view data entered by others.

The selection and the search must take place through a grid that presents the columns relating to the main information entered and that can be modified by displaying additional columns or hiding the present ones.

The software must allow the search for any element (textual or numerical) in any field it is found or more targeted searches on the values of single fields, even combined with each other.

The grid must allow the sorting for each column displayed in a simple and intuitive way.

It must be possible to insert a new survey card, view an existing card, or modify an existing card. All preferably from the same web page without having to open additional pages for each requested operation.

The survey form must allow a simple division between the following information:

- General information;
- Environmental context with geolocation of the building on a map;
- Characteristics of the building;
- Preserved heritage;
- Attachments management.

Each group of information may contain different types of fields such as:

- short and extended texts;
- integers or real numbers;
- date;
- drop-down look-up;
- multi drop-down selection;
- check-box;
- attachments (upload and files review);
- maps with geolocation points.

The available spaces must comply with various mandatory and validation rules, dependence on other fields, limitation for uploads (file size and type). The rules must be configurable in the system without intervening on the source code to allow rapid tuning of the application.

## 6.4

### Administrator user



The Administrator user must be able to consult the survey forms entered by the Risk manager users assigned to his own area. It must be able to filter the cards therefore also by Risk Manager.

The general functions are the same as for the Risk manager user, except for the ability to print reports, extract data from the cards in standard CSV format.

The Administrator user will not need to insert new detection cards, but eventually to modify the forms inserted by the Risk managers.

## Art. 7

### Evaluation of the technical offer and evaluation of the economic offer

The tender will be awarded according to the criterion of the most economically advantageous offer on the basis of the best quality / price ratio depending on the evaluation elements and methods indicated below.

The overall score will be given by the sum of the score obtained for the technical offer and the score obtained for the economic offer. The maximum overall score is 100 points, distributed as follows:

ID	EVALUATION CRITERIA	MAXIMUM SCORE
1	TECHNICAL OFFER	80
3	ECONOMIC OFFER	20
<b>TOTAL SCORE</b>		<b>100</b>

Table n. 1

The evaluation of the offers received will be carried out on the basis of the criteria and sub-criteria indicated below:



ID	CRITERIA		SUB SCORE (MAX)	SCORE (MAX)
<b>TECHNICAL OFFER</b>				
<b>A - PROFESSIONALISM AND ADEQUACY OF THE OFFER</b>				
A	A1	Professionalism and adequacy of the offer are inferred from a <u>maximum number of two services</u> considered by the competitor to be significant for their ability to perform the services.	15	15
	<p><i>The tenderer must produce the documentation useful to illustrate a maximum number of two services performed which are considered by the competitor to be significant in their ability to perform the service and which are relevant to the services to be awarded. Those offers will be positively evaluated, the documentation of which illustrates in a more precise, clearer and more exhaustive manner the comparable services performed and allow to estimate the level of specific professionalism, reliability and quality of the competitor on the basis of the complexity of the services provided; the amounts relating to the services performed and of the results achieved with respect to the services entrusted.</i></p>			
<b>B - METHODOLOGICAL FEATURES OF THE OFFER</b>				
B	<p><i>The tenderer must produce the documentation of his proposal relating to the performance of the services covered by this contract, with particular reference to the operating procedures that he intends to adopt in order to best perform the assignment, in compliance with the indications set out in the Specifications and with a view to pursue the best efficiency, speed, reliability and verifiability of the activities carried out. In particular, the methods of execution of the service will be evaluated with regard to the following elements:</i></p>			35
	B1	Reliability and effectiveness of the methodology of approach to the execution of the service. Verifiability of activities and results.	25	
	<p><i>The tenderer must illustrate, with specific reference to the services to be awarded, the methodology and the approach of carrying out the assignment, highlighting in particular the objectives to be achieved as well as possible critical and unexpected issues with the related resolution proposals. The tenderer must also draw up a program of activities that illustrates in detail the development of the various phases of the service - in line with its specific organization - with an indication of any further and intermediate milestones that it intends to propose, in line with the provisions of the Specifications, for the delivery and verification of the output produced.</i></p>			
	B2	Effectiveness and efficiency of the methods of interaction/integration with the Supplier	10	
<p><i>The tenderer must illustrate the methods of interaction / integration with Mazzini Lab S.r.l. Benefit, describing methodologies, tools and means to ensure the necessary coordination between the working group.</i></p>				
<b>C - ADEQUACY OF THE TECHNICAL-ORGANIZATIONAL STRUCTURE</b>				
C	C1	Adequacy of the overall organizational structure	30	30
	<p><i>The tenderer must illustrate the organizational structure that he intends to make available for the execution of the service, highlighting the consistency and quality of the human resources used for the development and management of the assignment. Higher points will be given to offers that present an organizational model that is more functional to the execution of the service, in terms of timeliness, quality and reliability.</i></p>			
<b>TOTAL TECHNICAL OFFER (A + B + C)</b>				<b>80</b>



ECONOMIC OFFER		
D	Single percentage discount	20
<b>OVERALL OFFER</b>		<b>100</b>

Table n. 2

## Art.8

### How to participate in the tender

Interested companies will be able to submit their offer **by 15 July 2022** by certified email sending to the address **mazzinilab@pec.it**. They'll need to attach, in addition to the economic offer, the supplier form completed and signed by the legal representative with a CV / Company presentation.

For any requests for clarification write to: [info@mazzinilab.it](mailto:info@mazzinilab.it).

