TECHNICAL EVALUATION REPORT

EGI-2023-001

Open procedure

"Procurement: Purchase of software/service for image analysis in phenological research with implementation, licensing, support, and maintenance".

1. INTRODUCTION

This document corresponds to the results obtained from the technical analysis of the evaluation of the bids submitted to the tender for the contracting of "purchase of software/service for image analysis in phenological research with implementation, licensing, support, and maintenance".

Following a detailed and in-depth analysis of the bids submitted, this report has been prepared by the Evaluation Committee, composed of the following persons:

- Elisa Cauhé, EOSC DIH Coordinator, Strategy, and Innovation Officer at EGI FOUNDATION
- Dr. Eng. Damian Józefczyk. University of Life Sciences, Poznán
- Dr. Eng. Nikos Vogiatzis, EOSC DIH monitorization and impact evaluation

2. METHODOLOGY

The following methodology has been used for the analysis and evaluation of the bids submitted by the competing companies:

1. Receipt and verification of tenders submitted.
2. Personal reading of them by all members of the Evaluation committee
3. Score for each of the proposals in each of the evaluation criteria established in the tender specifications for the analysis of the bids submitted, with the weighting assigned to each of them.

3. ANALYSIS AND EVALUATION OF THE SUBMITTED BIDS

The first analysis of the bids submitted is based on the personal reading, by all the members of the evaluation committee, and the tender specifications that served as the basis for the tender, as well as the proposals submitted by the competing companies.

Subsequently, the report on the proposals submitted will be drawn up, which will include all the technical aspects necessary for the evaluation of the bid.

Once the proposals submitted have been analysed individually, they are score taking into account the Award criteria established in the tender specifications, and the weightings assigned to each one of them.

The evaluation criteria used in this report will be as follows:

ASSESSMENT QUALITY AWARD CRITERIA	**Maximum number of points per criterion**		**Total points: 100 Weighting: 70%**
Methodology - **Sub criterion 1.1: quality and relevance of the proposed methodology for the implementation of activity 1** - **Sub criterion 1.2: quality and relevance of the proposed methodology for the implementation of activity 2** - **Sub criterion 1.3: quality and relevance of the proposed methodology for the implementation of activity 3**	**14** **14** **14**	**Very good proposal**: referring both to the suitability and the scope of the methodology proposed in such a way that could be perfectly implemented. The proposal is more than adequate in terms of methodology and its sub criterions. **Good proposal**: referring both to the suitability and the scope of the methodology proposed in such a way that could be implemented, although some weak points or aspects exists so the methodology could be implemented after an adjustment. **Acceptable proposal**: referring both to the suitability and scope of the methodology proposed in such a way that could be implemented, although there are many weal points or aspects that should be adjusted before putting the proposal into practice. **Deficient proposal**: referring both to the appropriateness of the methodology and the scope, the evaluation committee has identified many weaknesses which would make it unfeasible to service delivery with an adequate level of quality.	90-100 points 75-90 points 60-75 points Less than 60 points
Total points	**42**		

Organisation of the work and resources - **Roles, responsibilities of the team involved, and distribution for each activity.** - **Composition and structure of the team**	**14**	**Very good proposal**: referring both to the suitability and the scope of the organisation of the work and resources. The proposal is more than adequate since the composition, structure, roles, responsibilities, and distribution of tasks are totally clear. **Good proposal**: referring both to the suitability and the scope of the organisation of the work and resources. The proposal could be implemented, although some weak points or aspects exists so the proposal could be implemented after a slight adjustment. **Acceptable proposal**: referring both to the suitability and scope of organisation of the work and resources. The proposal could be implemented, although there are many weak points or aspects that should be adjusted before putting the proposal into practice. **Deficient proposal**: referring both to the appropriateness of the organisation of work and resources, the evaluation committee has identified many weaknesses which would make it unfeasible to service delivery with an adequate level of quality.	90-100 points 75-90 points 60-75 points Less than 60 points
Total points	**14**		
Quality control measures - **Quality system** - **Risk management** - **Measures to ensure compliance with**	**14**	**Very good proposal**: referring both to the suitability and the scope of the quality control measures. The proposal is more than adequate since the quality	90-100 points

the Data protection law. - **Measures to ensure the performance of the software for at least 12 months after the end of the contract.**		system, risk management, measures to ensure compliance with the data protection, and measures to ensure the performance of the software for at least 12 months after the end of the contract, have been considered and perfectly explained. **Good proposal**: referring both to the suitability and the scope of the quality control measures. The proposal could be implemented, although some weak points or aspects exists to the proposal could be implemented after a slight adjustment. **Acceptable proposal**: referring both to the suitability and scope of the quality control measures. The proposal could be implemented, although there are many weak points or aspects that should be adjusted before putting the proposal into practice. **Deficient proposal**: referring both to the appropriateness of the quality control measures. The evaluation committee has identified many weaknesses which would make it unfeasible to service delivery with an adequate level of quality.	75-90 points 60-75 points Less than 60 points
Total points	**14**		
Total points of the three criterion (Sum)	**70**		

The specific characteristics that motivate the scoring of each of the competing companies in the Award criteria are those included in the following evaluation sheets:

3.1 COMPANY 1: CERTH

Quality award criteria:

Methodology: (Please, evaluate the methodology in general terms.

- **Sub criterion 1.1:** The offer describes all required activities from no. 1 but Amazon cloud application can be problematic in the future taking in to account the cost of AWS.
- **Sub criterion 1.2:** The activity no. 2 lacks detailed information.
- **Sub criterion 1.3:** The activity no. 3 does not describe any information about applied AI method.

Methodology	
Strong points	**Weak points**
General description of the methodology is included.	Weak detailed description of the activities, not fully adapted to the structure of activities and sub-activities suggested. The description lacks more details on each of the criteria. In general it is described at a very high level.
FINAL SCORE	
28.5 /42	

Organisation of the work and resources

- **Roles, responsibilities of the team involved, and distribution for each activity.**

  Roles, responsibilities, and work organization are presented for each team member. However, there is a lack of Work organization at team/group level.

  The usage of planning tools such as GANTT and/or Sprints would have helped the work planning for each activity.

- **Composition and structure of the team**
  The participating team members appear to be sufficient for the tasks at hand.

Organisation of the work and resources	
Strong points	**Weak points**

All the basic roles and responsibilities of team members are described. Roles, responsibilities, and work organization of the team involved and distribution for each activity are addressed. The participating team members appear to be sufficient for the tasks at hand.	The work schedule of the team members was not presented, the required graphic description is missing. Lack of a GANTT or sprints to help map the flow of work. No description of hardware resource management. Organization of work and how experience fits the activities to carry out could be elaborated with more details. Lack of Work organization at team/group level.
FINAL SCORE	
10.5 / 14	

Quality control measures

- **Quality system**

A rigorous testing and review process, involving testing at different levels of the software development process, is claimed to be implemented for quality control, including unit, integration, system, and acceptance testing. However no specific measures are proposed.

- **Risk management**

An Artificial Intelligence sector is claimed to exist among the centre, with several high-quality developers who will be shadowing the lead developers, and will be monitoring the progress of the development, ready to step in case of absence or need. However, this is a rather generic statement on Risk management.

- **Measures to ensure compliance with the Data protection law.**

All data are claimed to be compliant with the GDPR in terms of lawful processing, purpose limitation, minimization, accuracy, storage limitation, confidentiality and accountability of the processors and controllers. However no specific measures are reported.

- **Measures to ensure the performance of the software for at least 12 months after the end of the contract.**

To ensure the performance and maintenance of the platform for the desired time, a comprehensive maintenance and support plan is claimed to be implemented. This will include updates, bug fixes and patches, performance monitoring, logging and error handling, backup and disaster recovery, testing and validation, documentation, and support. However, this is a rather broad and generic approach.

Quality control measures	
Strong points	**Weak points**
A rigorous testing and review process is claimed to be implemented. An Artificial Intelligence sector is claimed to exist among the centre, with several high-quality developers who will be shadowing the lead developers. All data are claimed to be compliant with the GDPR. A comprehensive maintenance and support plan is claimed to be implemented.	No specific quality system measures are proposed. Risk management is rather generic. No specific data protection measures are proposed. Broad statements on maintenance and support plan without KPIs and targets to help benchmark performance. A description of maintaining the platform for 12 months after delivery is missing.
FINAL SCORE	
9.8 /14	

3.2 COMPANY 2: SCIO

Quality award criteria:

Methodology: (Please, evaluate the methodology in general terms.

- **Sub criterion 1.1:** There is no detailed information about data storage and transfer. The methodology described in A1 is unclear.
- **Sub criterion 1.2:** Activity no. 2 description of the data processing process does not include the details required for proper execution of the task.
- **Sub criterion 1.3:** The activity no. 3 is not fully described - there is a lack of description of suggested AI methods.

Methodology	
Strong points	**Weak points**
General description of the methodology is included according with the specification of the tender. Well defined methodology, especially for 1.1, 1.3. Description of sub activities including references to specific hardware References to the co-development with PULS / EGI Consideration of user journeys and mock-ups. Roles, credentials for users are considered.	The methodology described in A1 is unclear. A2 description does not include the details required for proper execution of the task. A3 Deployment of the final solution to production environment is not very well described
FINAL SCORE	
32.4 / 42	

Organisation of the work and resources

- **Roles, responsibilities of the team involved, and distribution for each activity.**

Each major development task is claimed to be taken over by a dedicated team, led by a senior expert in the relevant field.

The Team descriptions and experts are well documented.

Team leaders are appointed.

- **Composition and structure of the team**

The participating team members appear to be sufficient for the tasks at hand.

Organisation of the work and resources	
Strong points	**Weak points**
Each major development task is claimed to be taken over by a dedicated team, led by a senior expert in the relevant field. The Team descriptions and experts are well documented. Team leaders are appointed. A GANTT chart is presented. The participating team members appear to be sufficient for the tasks at hand.	The names of team members are not thoroughly listed in the table section. The meaning of colors in the Gantt chart is not described, which makes it difficult to accurately analyse the chart.
FINAL SCORE	
	13.5 /14

Quality control measures

- **Quality system**

The development of the platform is claimed to be carried out under a comprehensive Quality Assurance (QA) / Quality Control (QC).

Specific quality system measures are presented (e.g. JIRA/confluence etc)

KPIs and baseline targets are presented.

- **Risk management**

Risk management proposes specific measures.

- **Measures to ensure compliance with the Data protection law.**

Data protection measures are sufficiently elaborated.

- **Measures to ensure the performance of the software for at least 12 months after the end of the contract.**

Performance and maintenance measures are claimed but are rather vague and not sufficiently elaborated.

Quality control measures	
Strong points	**Weak points**
The development of the platform is claimed to be carried out under a comprehensive Quality Assurance (QA) / Quality Control (QC). Specific quality system measures are presented (e.g. JIRA/confluence etc). KPIs and baseline targets are presented. Risk management proposes specific measures. KPIs and baseline targets are presented. Data protection measures are sufficiently elaborated.	Performance and maintenance measures are not sufficiently elaborated.
FINAL SCORE	
11/14	

3.2 COMPANY 3: SETH

Quality award criteria:

Methodology: (Please, evaluate the methodology in general terms.

- **Sub criterion 1.1:** Well defined methodology for 1.1. Detailed description of the functionalities and reference to hardware, methods and technology used.
- **Sub criterion 1.2:** Well defined methodology for 1,2. References to the pre-processing operations for image quality
- **Sub criterion 1.3:** Very well described methodology for 1.3

Methodology	
Strong points	**Weak points**
General description of the methodology and tools are included. Suggested tools for application in activity 1-3 are well planned and explained. The activity description in no. 3 is very well described and full of details.	Prepared user manual (a1.5 activity) description is weakly described in the activity no. 1.
FINAL SCORE	
37.8/42	

Organisation of the work and resources

- **Roles, responsibilities of the team involved, and distribution for each activity.**

Each major development task is claimed to be taken over by a dedicated team and/or expert. However specific persons and team leaders are not documented/appointed.

Organization of work in sprints utilizing Scrum Agile methodology.

- **Composition and structure of the team**

The participating roles appear to be sufficient for the tasks at hand.

Organisation of the work and resources	
Strong points	**Weak points**

Distribution for each activity is very well described. Each major development task is claimed to be taken over by a dedicated team and/or expert. Composition and structure of the team is clear. Organization of work in sprints utilizing Scrum Agile methodology. The time schedule of the two-week sprints is adequate for the tasks presented in the assumed time of the project. Task management is clearly presented graphically. Reference to collaboration with the scientific community is included.	Specific persons and team leaders are not documented/appointed.
FINAL SCORE	
11.9/14	

Quality control measures

- **Quality system**

A quality system with specific quality system measures is presented e.g. scrum agile tech, jira/confluence, etc.

KPIs and baseline targets are presented.

ISO 9001 in place covering quality management for software development.

- **Risk management**

Risk management proposed processes are sufficient.

- **Measures to ensure compliance with the Data protection law.**

Data protection is claimed to adhere to ISO 27001.

- **Measures to ensure the performance of the software for at least 12 months after the end of the contract.**

Performance and maintenance measures are presented and convincing.

Quality control measures	
Strong points	**Weak points**
Specific quality system measures are presented (e.g. scrum agile tech, jira/confluence). Quality management of the platform and related components is described in high detail. Reference to a good technical infrastructure to maintain the platform beyond 12 months after the end of the contract. ISO 9001 in place covering quality management for software development. KPIs and baseline targets are presented. Risk management proposed processes are sufficient. Performance and maintenance measures are presented and convincing. Data protection is claimed to adhere to ISO 27001.	
FINAL SCORE	
13.8/14	

4. SUMMARY

This evaluation committee, on the basis of the detailed and comparative study of the bids submitted by the competing companies, establishes and proposes to eh Evaluation Committee the following order of points:

#	COMPANY	TOTAL SCORE
1	SETH	63.5
2	SCIO	56.9
3	CERTH	47.8

Netherlands, 21st March 2023

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