LACUNA – "Leveraging innovative Approaches to Comprehensively UNderstand Ancient Epicurean Texts. Towards the First AI-Enhanced Editions of Herculaneum Theological Papyri"
Project funded under the Italian Science Fund 2022–2023 (Call FIS 2).
Project code: FIS-2023-01833

CUP: E53C24003870001 – CUI: S00876220633202500005

TECHNICAL REPORT

This is an unofficial courtesy translation. The original Italian version shall prevail in case of discrepancies.

OPEN PROCEDURE APPLYING THE CRITERION OF THE MOST ECONOMICALLY ADVANTAGEOUS OFFER BASED ON THE BEST QUALITY-PRICE RATIO, PURSUANT TO ARTICLES 71 AND 108(1) OF LEGISLATIVE DECREE NO. 36/2023 AS AMENDED, FOR THE PURPOSE OF "RESEARCH ACTIVITIES AIMED AT THE DESIGN AND DEVELOPMENT OF 'THEION', A SOFTWARE BASED ON THE APPLICATION OF ARTIFICIAL INTELLIGENCE MODELS TO THE TEXTUAL RECONSTRUCTION OF HERCULANEUM PAPYRI, CAPABLE OF (1) MAKING LINGUISTIC PREDICTIONS TO SUGGEST GAPS IN THE TEXTS OF PHILODEMUS BASED ON CONTEXT AND AUTHORIAL STYLE AND (2) PERFORMING AUTOMATED TEXT MINING TO SUGGEST RELEVANT TEXTUAL PARALLELS"

1. INTRODUCTION

This tender procedure is part of the LACUNA research project (project code FIS-2023-01833) – ERC sector SH5 "Texts and Concepts – Cultures and Cultural Production" – funded in the amount of €1,321,477.30 and identified by CUP E53C24003870001. The project's Principal Investigator is Dr. Marzia D'Angelo (University of Naples Federico II).

As part of this project, it is necessary to acquire a research service aimed at designing and developing a software application based on artificial intelligence models (named "Theion") intended for the analysis of Herculaneum papyri. No existing expertise or comparable solution is currently available within the administration. Therefore, in order to meet this highly specialized project need, a public tender is launched to award the abovementioned service to qualified external providers.

The service in question has the characteristics typical of an intellectual service with high technical content, not subject to standardization, and based on activities of design, research, modeling, and customized algorithmic development. As such, it qualifies as an intellectual services contract pursuant to Legislative Decree No. 36/2023.

The awarding will take place through an open procedure, applying the criterion of the most economically advantageous offer based on the best quality/price ratio, pursuant to Articles 71 and 108(1) of Legislative Decree No. 36/2023, as amended (hereinafter referred to as the "Code"). The contract concerns:
"Research activities aimed at the design and development of 'Theion', a software based on the application of artificial intelligence models to the textual reconstruction of the Herculaneum papyri, capable of (1) making linguistic predictions to suggest gap fillings in the texts of Philodemus based on context and authorial style, and (2) performing automated text mining to suggest relevant textual parallels."

The service will be carried out at the Department of Humanities – University of Naples Federico II, Via Porta di Massa, 1, Naples – NUTS code ITF33.
CUI: S00876220633202500005; CUP: E53C24003870001.
The Single Project Manager (RUP), pursuant to Article 15 of the Code, is Michele Codella – PEC: michele.codella@personalepec.unina.it.

2. TENDER DOCUMENTATION

2.1 TENDER DOCUMENTS

The tender documentation includes:

1. **Project documents** (pursuant to Article 41, paragraph 12 of the Code), including the following: this Technical Report by the RUP (Single Project Manager), Special Tender Specifications, Technical Specifications, and the Economic Framework of the project;
2. **Call for Tenders**, Tender Rules, ESPD (European Single Procurement Document) of the bidder, Annex A1, A2, A3, A4, Annex D, Draft Contract Agreement, Operational Instructions for accessing the e-Procurement Platform, Technical Rules for its use, e-Procurement System Rules, Integrity Pact, National Code of Conduct for Public Employees, University's Integrated Activity and Organization Plan, and the University Code of Conduct;
3. **DUVRI** (Interference Risk Assessment Document): Considering the intellectual nature of the service covered by this tender, there is no obligation to prepare a DUVRI, as provided for in Article 26, paragraphs 3 and 3-bis of the aforementioned decree.

Due to the specific type of procurement, **no Minimum Environmental Criteria (CAM)** are applicable to this contract.

There are **no active Consip Framework Agreements** pursuant to Article 26, paragraph 1, of Law No. 488/1999 as amended, nor any tenders under the Dynamic Purchasing System for goods and services for the Public Administration (SDAPA), applicable to the service in question.

3. CONTRACT OBJECT, VALUE AND LOT DIVISION

A single lot is foreseen, as the required service constitutes an organic and indivisible whole. Dividing the contract into multiple lots would be incompatible with the unified nature of the service—research activities aimed at the design and integrated development of the software "Theion"—and would compromise its overall technical coherence and effectiveness (Article 58, paragraph 2 of the Code).

Table 1 – Contract Object

No.	Description of Services/Supplies	CPV	P (Main) / S (Secondary)	Amount (€)
1	Service/supply for "Research activity aimed at the design and development of 'Theion', a software based on the application of artificial intelligence models to the textual reconstruction of the Herculaneum papyri"	72230000-6 (Custom software development services)	P	€300,000.00

No.	Description of Services/Supplies	CPV	P (Main) / S (Secondary)	Amount (€)
		73110000-6 (Research services)	S	
2	Safety charges not subject to discount	N/A		€0.00
	Total contract value (net of VAT)			**€300,000.00**

The above base contract value (€300,000.00) is net of VAT and/or other applicable taxes and statutory contributions, and excludes safety charges for interference risks, which have been quantified at €0.00.

In accordance with Article 108, paragraph 9 of the Code, no separate estimation of labor costs has been made, as the services are of an intellectual nature. The base amount has been determined based on the economic framework of the funded LACUNA project and an estimate of the professional and technological resources needed to carry out the service (in the absence of relevant reference prices published by ANAC for similar services).

4. CONTRACT DURATION, OPTIONS AND RENEWALS

4.1 DURATION

The duration of the contract (excluding any options) is set at 36 (thirty-six) months starting from the date of signature or from the minutes of early commencement of the service as per Article 17, paragraph 8 of Legislative Decree No. 36/2023.
For execution timelines and delivery details, refer to Article 4 of the Technical Specifications.

4.2 OPTIONS AND RENEWALS

There is no provision for renewal of the contract under the same terms.
Award of similar services: No provision is made for the award of subsequent similar services to the contractor.
Contract modifications under Article 120, paragraph 1, letter a): No specific contractual modification clauses are foreseen beyond what is established by the Code.
For the purposes of Article 14, paragraph 4 of the Code, the maximum estimated value of the contract is €310,000.00, net of VAT and/or other applicable taxes and statutory contributions (safety charges due to interference risks: zero). This amount is broken down as follows:

- Total contract base value: €300,000.00
- Safety charges not subject to discount: €0.00
- Options pursuant to Article 120 of Legislative Decree 36/2023: €10,000.00

This maximum estimated value is specified exclusively for the purpose of calculating the ANAC contribution, and has been estimated in accordance with Article 14, paragraph 4 of the Code.

5. GENERAL REQUIREMENTS

Bidders must not be in any of the exclusion situations set forth in Articles 94, 95, and 98 of Legislative Decree No. 36/2023, as amended, nor in the conditions preventing participation as outlined in Article 53, paragraph 16-ter of Legislative Decree No. 165/2001.

6. ELIGIBILITY REQUIREMENTS

Participation in this procedure is open to legal entities, public or private, Italian or from other Member States, legally established and operating in the scientific, technological, or industrial field, with demonstrable experience and expertise in the activities covered by the contract. In particular:

- For entities with commercial or entrepreneurial purposes, registration with the Chamber of Commerce or, where applicable, the Register of Artisanal Enterprises is required, for activities consistent with the subject of this procurement procedure.
  For economic operators from another Member State, not established in Italy, registration in one of the professional or commercial registers listed in Annex II.11 of the Code is required. In accordance with Article 100, paragraph 3 of the Code, the foreign economic operator must declare, pursuant to Presidential Decree No. 445 of December 28, 2000, that they are registered in one of these registers.
- For non-commercial entities (such as public research bodies, universities, research institutes, foundations, or research consortia), proof of legal personality and of statutory or institutional relevance to the activities subject to the contract is required.

For verification purposes, registration in the Chamber of Commerce is automatically acquired by the contracting authority through the FVOE (Virtual File of Economic Operators).
Economic operators based in other Member States must upload into the virtual file the data and information necessary to verify the requirement, if available.
Access is permitted to non-EU legal entities, even in the absence of an international agreement with the EU that ensures equal and reciprocal access to public contracts.

6.1 ECONOMIC AND FINANCIAL CAPACITY REQUIREMENTS

Given the highly specialized nature of the contract—concerning the application of artificial intelligence technologies to ancient artifacts, a field mainly involving research groups or academic entities engaged in project-based, non-commercial work—no economic and financial capacity requirements are imposed, in line with the principles of proportionality and relevance under Article 100, paragraph 2 of Legislative Decree No. 36/2023.

6.2 TECHNICAL AND PROFESSIONAL CAPACITY REQUIREMENTS

Similarly, considering the highly specialized nature of the contract, no minimum number of similar services previously performed is required as a condition for participation, in accordance with the principles of proportionality and relevance stated in Article 100, paragraph 2 of Legislative Decree No. 36/2023.

7. SUBCONTRACTING

Tasks related to the development of artificial intelligence algorithms and advanced software components specified in this tender may not be subcontracted, due to:

- Their technological complexity (to ensure project quality and consistency);
- The need to maintain a high-quality standard (to ensure a uniform and coherent result aligned with technical specifications);
- The protection of intellectual property and security (to avoid unauthorized disclosure of proprietary algorithms or sensitive data).

Any exceptions will be allowed only for subcontractors with proven technical qualifications in the field of artificial intelligence, and must be explicitly approved in advance by the Contracting Authority.

8. SITE INSPECTION

A site inspection is not required.

9. CONTENT OF THE TECHNICAL OFFER

With reference to this procedure, the bidder must—under penalty of exclusion—submit and ensure delivery to the Administration of a Technical Offer according to the following procedure:

- submission via the System of the digitally signed Technical Report, containing a technical-organizational proposal that illustrates, with reference to the evaluation criteria and sub-criteria indicated in the table in point 13 below, the following elements:

1. Quality of the technical offer
- 1.1 Alignment with the milestones and timelines indicated in the technical specifications
- 1.2 Ability to integrate HTR in multispectral images of the Herculaneum papyri
- 1.3 Strategies for visualizing textual reconstructions of lacunae

2. Experience of the development team
- 2.1 Experience in automatic character recognition in handwritten texts
- 2.2 Experience in training AI models for fragmentary texts

3. Expertise of the development team
- 3.1 CVs of proposed professionals
- 3.2 Publications and participation in international projects in the field of Digital Humanities

4. Cybersecurity

5. Value-added elements for service delivery

6. Post-service guarantees and support

For criterion 1. Quality of the technical offer and its sub-criteria, the Technical Offer must include a specific section that clearly describes the proposed project as required by Article 3 "WORK PLAN AND PROJECT IMPLEMENTATION TIMELINE" of the Technical Specifications.

For criterion 2. Experience of the development team, the relevant section of the Technical Offer must describe the team's composition in detail, addressing:

- **Experience**:

• Previous experience in developing prototypes or pilot projects for the automated transcription of ancient texts, highlighting technical solutions used;
• Portfolio of relevant past work;
• Experience in designing user interfaces for research applications.

For criterion 3. Expertise of the development team, the relevant section must detail the team's qualifications in terms of:

- **Competence**:

• CVs and publications relevant to the project's goals;
• Proven expertise in the use and development of AI models for analyzing and reconstructing fragmentary texts.

For criterion 4. Cybersecurity, a specific section must describe the company's cybersecurity policies, strategies, and technological solutions to ensure adequate protection during project activities. Evaluation will consider: the existence of a formal Cybersecurity Policy, measures for incident prevention/detection/management, and personnel training in cybersecurity.

For criterion 5. Value-added elements for service delivery, a dedicated section should describe proposed improvements that enhance the software "Theion" and the user experience. Examples include:

• Advanced and customizable user interface;
• Interactive feedback system for refining models based on user interaction;
• Effective application of HTR to complex stratigraphy images of Herculaneum papyri.

For criterion 6. Post-service guarantees and support, a section should propose methods to ensure the operational continuity of the software and provide qualified technical support after project completion. Evaluated elements may include:

• Detailed post-service support plan with response/resolution timelines and possibly a dedicated help desk;
• Maintenance guarantee for the code, with full documentation (APIs, user manuals, database structure, software architecture) and support for future portability;
• Offer of additional training sessions;
• Monitoring and update service for at least 12 months after final delivery, aimed at model optimization and bug resolution.

The Technical Report must demonstrate compliance with all minimum requirements specified in the tender documents. It must also clearly describe any value-added elements offered. The report, including any technical sheets and/or informational brochures, must be written in Times New Roman font, size 12, with single line spacing, and must not exceed 30 A4 pages (excluding cover page).

Any pages beyond this limit will not be considered in the evaluation.

To ensure efficient evaluation and in accordance with good administrative practices, the report must be organized into paragraphs. The first paragraph must describe the proposed solution's characteristics and show compliance with the minimum requirements. Subsequent paragraphs, one for each proposed value-added element, must detail the improvements.

You may include diagrams, graphs, drawings, brochures, etc., indicating the corresponding reference chapter in each file name. These annexes must be in A4 or A3 format (up to 20 pages total, regardless of size), uploaded to the System in digital format (.pdf, .doc, .xls, .dwg, etc.), compressed (ZIP or RAR), and not exceeding the system's file size limit.

Each file within the compressed folder must bear a digital signature. Be mindful of the maximum size allowed by the system—oversized files will not be uploadable. Multiple compressed files may be uploaded.

The technical offer must comply with the minimum requirements set out in the Project, under penalty of exclusion, and in accordance with the principle of equivalence referred to in Art. 79 and Annex II.5 of the Code.

The economic operator must attach a signed declaration detailing the parts of the offer deemed confidential, along with the justification for their confidentiality. A redacted version of the Technical Report, hiding trade and technical secrets, must also be submitted. The contracting authority reserves the right to assess the validity of the confidentiality claims and may require the tenderer to prove the actual existence of such secrets.

The technical offer must be digitally signed by the legal representative of the tenderer or their proxy.

In the case of joint bidders, the offer must be signed in accordance with the signature requirements for the application.

For tenderers not based in Italy but in another EU Member State or in one of the countries listed in Art. 100(3) of the Code, the technical offer may be signed with a handwritten signature, accompanied by valid ID of the legal representative.

10. CONTENT OF THE FINANCIAL OFFER

With reference to this procedure, the bidder must—under penalty of exclusion—submit and ensure delivery to the Administration, via the System, of a Financial Offer following the procedure and modalities outlined below:

entry, in the appropriate section of the System, of the percentage discount offered on the total tender base value, expressed in figures only. These values will be included in an offer declaration automatically generated by the System in PDF format ("Financial Offer"), which the bidder must submit and deliver to the Administration through the System after:

i) downloading and saving it to their own computer;

ii) digitally signing it.

Financial offers exceeding the tender base amount are not admissible.

The "Financial Offer" must indicate, under penalty of exclusion, the percentage discount offered. The discount must be expressed with a maximum of three decimal places. Any discount with more than three decimal places will be truncated (e.g., a 1.2449% discount will be considered as 1.244%). If fewer than three decimal places are indicated, the missing digits will be assumed to be zeros (e.g., a 1% discount will be considered as 1.000%). If the percentage discount is entirely missing, the bidder will be automatically excluded from the tender. The Administration, through the Project Manager, will in any case verify the appropriateness of the Offer—including the stated amounts—in accordance with Article 110, paragraph 5, letters c) and d) of Legislative Decree No. 36/2023.

The financial offer must be signed **under penalty of exclusion**, using the same methods specified for the signing of the application as described in the previous paragraphs.

11. AWARD CRITERION

The contract will be awarded on the basis of the most economically advantageous offer, determined by the best quality/price ratio, in accordance with Article 108, paragraph 1 of the Code. Evaluation of both the technical and financial offers will be based on the following scores: The contracting authority, pursuant to Article 108, paragraph 4 of the Code, gives weight to the qualitative aspects of the offer and identifies criteria that ensure real competitive comparison on technical aspects. To that end, the authority sets a **maximum score for the financial offer at 20%** of the total available points.

	MAXIMUM SCORE
Technical offer	***80***
Financial offer	***20***
TOTAL	**100**

11.1 CRITERIA FOR EVALUATION OF THE TECHNICAL OFFER

The technical offer score is assigned based on the evaluation criteria listed in the table below, with the corresponding score distribution.
Column "Points D" indicates **Discretionary Points**, i.e., scores whose weighting is assigned based on the discretion exercised by the evaluation committee.

Table of Discretionary Evaluation Criteria (D) for the Technical Offer

N°	EVALUATION CRITERIA	MAX POINTS		SUB-CRITERIA	PUNTI D MAX
1	Quality of the technical offer	30	1.1	Compliance with milestones and timelines	14
			1.2	HTR integration in multispectral images as indicated in the technical specifications	8
			1.3	Strategies for visualizing textual reconstructions	8
2	Experience of the development team	22	2.1	Team experience in automatic character recognition in handwritten texts	10
			2.2	Team experience in training AI models for fragmented texts	12
3	Competence of the development team	13	3.1	Curricula of proposed professionals	8
			3.2	Publications and participation of the team in international Digital Humanities projects	5
4	Cybersecurity	5			5
5	Improvements in service delivery	5			5
6	Guarantees and post-service support	5			5
	Totale	**80**			**80**

Pursuant to Article 108, paragraph 7 of the Code, a minimum threshold of 38 points is established for the overall technical score, along with specific minimum thresholds for the following criteria:

11.1.1 Quality of the technical offer: 18 points;

11.1.2 Experience of the development team: 13 points;

11.1.3 Competence of the development team: 7 points.

The bidder **will be excluded** from the tender if they receive a score below any of these thresholds.

MOTIVATIONAL CRITERIA

1. **Quality of the Technical Offer**
   - **1.1 Compliance with milestones and timelines**
     The best offer will present a detailed and realistic work plan, fully aligned with the milestones and timelines specified in the Technical Specifications, demonstrating organizational capacity to ensure strict adherence to deadlines and interim goals.
   - **1.2 HTR integration in multispectral images of the Herculaneum papyri**
     The best offer will show an effective technical solution for integrating Handwritten Text Recognition (HTR) technologies into multispectral images of the Herculaneum papyri. This includes evidence of the ability to segment characters and lines of text to produce automatic diplomatic transcriptions, as well as strategies for segmenting complex stratigraphic texts where sequences are interrupted across different layers.
   - **1.3 Strategies for visualizing textual gap reconstructions**
     The best offer will propose advanced strategies for effectively visualizing reconstructed text in gaps. The expected result is a photorealistic rendering of letters integrated into the gaps using HTR models trained on the fragment handwriting. Particularly valued are dynamic highlighting mechanisms, where selecting a gap in the transcribed text automatically highlights the corresponding area in the papyrus image, and vice versa.

2. **Experience of the Development Team**
   - **2.1 Team experience in automatic character recognition in handwritten texts**
     The best offer will demonstrate significant, proven experience in developing systems or prototypes for automatic character recognition, preferably on papyrus, clearly documenting achieved results and innovative solutions from similar projects.

   - **2.2 Team experience in training AI models for fragmented texts**
     The best offer will demonstrate highly qualified experience in developing and training AI models applied specifically to ancient fragmentary texts on papyrus or other media, in any language. Concrete examples, methodologies, results, and scientific impact should be provided.

3. **Competence of the Development Team**
   - **3.1 Curricula of proposed professionals**
     The best offer will propose professionals with the most relevant and qualified curricula for the project objectives, particularly in digital papyrology, AI applied to fragmentary texts, and software development for Digital Humanities.
   - **3.2. Publications and participation of the team in international Digital Humanities projects**

The best offer will present a team with high scientific qualifications, proven by internationally significant publications and solid experience in international Digital Humanities projects.

4. **Cybersecurity**

The best offer will guarantee an appropriate level of IT security, with proof of a corporate cybersecurity policy and description of technical and organizational measures for data protection and incident management.

5. **Improvements in service delivery**

The best offer will propose innovative elements that add tangible value to the "Theion" software and the user experience. This may include (but is not limited to): advanced customizable user interfaces; solutions for reconstructing texts from complex-stratigraphy papyri, integrating linguistic prediction with HTR models to identify and reassemble scattered letter sequences.

6. Guarantees and post-service support

The best offer will ensure qualified post-service technical support via email or phone, including:

- Dedicated support for a minimum of 12 months after final delivery;
- Technical documentation to ensure future maintainability and portability;
- Additional training sessions, if applicable.

These motivational criteria, consistent with the tender documentation, allow the Evaluation Committee to assess technical offers effectively and transparently.

The contracting authority has deemed it appropriate to adopt discretionary evaluation criteria to highlight qualitative and design aspects that cannot be adequately measured through purely automatic or tabular parameters.

11.2. METHOD FOR ASSIGNING THE COEFFICIENT FOR CALCULATING THE TECHNICAL OFFER SCORE

Each qualitative element assigned a discretionary score in column "D" of the evaluation table is assigned a coefficient using the pairwise comparison method applied to each sub-criterion (e.g., 1.1, 1.2, 1.3, 2.1, B.2.2, etc.). This is done by converting the values assigned by each committee member into coefficients ranging between zero and one, as detailed below:

The coefficients—ranging from 0 to 1—used to evaluate each qualitative element (sub-criteria: B.1.1, B.1.2, B.1.3, B.2.1, B.2.2, B.2.3, etc.) of the various offers are determined through the use of a triangular comparison table (see below), where the letters A, B, C, D, E, F, ... N represent the offers submitted by each bidder, evaluated element by element.

The table includes as many cells as there are possible pairwise combinations of all the offers.

Each evaluator assesses which of the two elements in each pair is preferable. Additionally, considering that the degree of preference may vary, a score is assigned on the following scale: 1 = parity, 2 = minimal preference, 3 = slight preference, 4 = moderate preference, 5 = strong preference, 6 = maximum preference. If the evaluator is uncertain, intermediate scores may be used.

In each cell of the table, the letter corresponding to the preferred offer is placed, along with the degree of preference. In the case of a tie, both offer letters are entered in the cell, and one point is assigned to each.

B						
	C					
		D				
			E			
				...		
					N - 1	

maximum preference	= 6
strong preference	= 5
moderate preference	= 4
slight preference	= 3
minimal preference	= 2
parity	= 1

For the purpose of determining the coefficients related to the qualitative evaluation elements of the aforementioned sub-criteria, in cases where fewer than three offers are submitted, such coefficients will be determined by averaging the coefficients discretionally assigned by each committee member.
In this case, the evaluation of each sub-criterion will involve each committee member assigning a discretionary coefficient ranging from 0 to 1, based on an evaluation scale ranging from "excellent" to "non-existent", depending on the level of professionalism best suited to ensuring the fulfillment of the task in accordance with the highest quality standards and the most effective organizational and technical structure proposed. Specifically, the Evaluation Committee, at its sole and unquestionable discretion, will assess the offers and assign a score to each evaluation sub-criterion according to the following parameters:

Evaluation Level	Coefficient
Excellent	1.0
Very Good	0.9
Good	0.8
Fair	0.7
Sufficient	0.6
Partially sufficient	0.5
Almost sufficient	0.4
Poor	0.3
Insufficient	0.2
Severely insufficient or not assessable	0.1
Non-existent	0.0

If a technical offer is incomplete due to the absence of proposed improvements for one or more criteria/sub-criteria, the corresponding coefficient of "zero" will be automatically assigned to the missing criterion/sub-criterion, and it will not be evaluated.

For the evaluation of offers, scores will be expressed with two decimal places, rounded up if the third decimal digit is five or higher. This rule will apply to all mathematical operations used to assign scores to all elements of the Offer.
The committee will calculate the arithmetic mean of the coefficients assigned by the individual members for each sub-criterion, in order to obtain the average coefficient to be applied.

11.3. METHOD FOR ASSIGNING THE COEFFICIENT FOR CALCULATING THE SCORE OF THE FINANCIAL OFFER

As for the financial offer, a coefficient—ranging from zero to one—is assigned to the economic element, calculated using the:

"Bilinear" formula

$$C_i \quad (\text{for } A_i <= A_{threshold}) \quad = \quad X \ (A_i / A_{threshold})$$

$$C_i \quad (\text{for } A_i > A_{threshold}) \quad = \quad X + (1{,}00 - X)\ [(A_i - Athreshold) / (A_{max} - A_{threshold})]$$

Where:

Ci = coefficient assigned to the i-th bidder
Ai = percentage discount offered by the i-th bidder
A_threshold = arithmetic mean of the percentage discounts offered by all bidders
X = 0.85
A_max = highest (most favorable) percentage discount offered

11.4. METHOD FOR CALCULATING SCORES

Once the assignment of coefficients to the qualitative elements is completed, the evaluation committee will proceed, for each bid, to assign the scores for each individual criterion using the following compensatory aggregation method.

The score is calculated using the following formula:

Pi = Cai × Pa + Cbi × Pb + ... + Cni × Pn

Where:

Pi = score of bidder i;
Cai = coefficient for evaluation criterion a for bidder i;
Cbi = coefficient for evaluation criterion b for bidder i;

...

Cni = coefficient for evaluation criterion n for bidder i;
Pa = weight of evaluation criterion a;
Pb = weight of evaluation criterion b;

...

Pn = weight of evaluation criterion n.

In order not to distort the weights assigned to the various criteria, if no bidder achieves the maximum score in a specific criterion, the scores will be rescaled.
This so-called "rescaling" applies to qualitative criteria whose formula does not allow distribution of the maximum score. The contracting authority will assign the maximum score for that criterion to the bidder who received the highest coefficient, and all other bids will receive proportionally lower scores.

12. EVALUATION COMMITTEE

The evaluation committee is appointed after the deadline for the submission of bids and is composed of three members, who are experts in the specific field relevant to the subject of the contract. Committee members must not have any conflicts of interest that would prevent their appointment, pursuant to Article 93, paragraph 5 of the Code. For this purpose, they must submit the required declarations as provided in the current University Integrated Activity and Organization Plan.
The committee is appointed in accordance with the transitional provisions approved by DG No. 711 of 19/07/2016. The evaluation committee is responsible for assessing the technical and economic bids submitted by the bidders and assists the RUP (Project Manager) in evaluating the consistency and

appropriateness of the technical offers. The committee must complete its work within the timeframes indicated below:

Number of bids received	Days allowed for evaluation
From 1 to 10 bids	Total of 15 days
From 11 to 30 bids	Total of 30 days

If the number of bids exceeds the maximum indicated in the table above, the undersigned will assess and communicate the additional time to be granted to the committee to complete its work.

13. VERIFICATION OF ABNORMALLY LOW BIDS

Bids are considered abnormally low if they obtain both the price score and the sum of the scores for the other evaluation criteria equal to or greater than four-fifths of their respective maximum possible scores. This calculation applies only if at least three bids have been admitted.

Pursuant to Article 110 of the Code, the Contracting Authority reserves the right to verify the appropriateness, reliability, sustainability, and feasibility of the best offer. If the best offer appears abnormally low, the undersigned will assess its adequacy—potentially with the support of the committee. If the offer is deemed anomalous, the same procedure will be applied to the next best offers considered abnormally low, until a compliant offer is identified. The Contracting Authority may also opt to verify the appropriateness of all offers that appear abnormally low simultaneously. The undersigned will request the bidder to submit written justifications, indicating the specific components of the offer considered anomalous, if applicable. A deadline of no less than fifteen days from receipt of the request will be given. With the potential support of the committee, the undersigned will examine the explanations in a closed session. If the explanations are insufficient to rule out the anomaly, additional clarifications may be requested—including via oral hearing—with a maximum deadline for response.

14. DEADLINE FOR SUBMISSION OF BIDS

Given the complexity of the contract and the time required to prepare the bids, a 30-day deadline for the submission of offers is deemed appropriate.

Project Manager
Dr. Michele Codella