ERDF.PA 3.ERDF.03.S3.Call 3.0054 – New Services by MACM

Request for Quotations/Tender No MACM 001

For the:	**Design, develop, supply, install, test and commission of a Credit Scoring Management System for Companies and Individuals at the Malta Association of Credit Management**	
Date of Publication	15 April 2020	
Deadline for receipt of quotations/Tender	8 May 2020	12:00 hrs

Notes to tenderers:

This Request for Quotations/Tender is ONLY valid if sent/received by email. Responses /submissions of quotations in response to the present request, shall likewise be only valid if submitted within the afore said deadline by email, on jbusuttil@macm.org.mt**.**

Bids submitted otherwise will be deemed ineligible and not be considered.

Terms of Tender

1. The subject of the present request for quotation/Tender is the procurement of the following supplies: **Design, develop, supply, install, test and commission of a Credit Scoring Management System for Companies and Individuals at the Malta Association of Credit Management**

2. The successful bidder(s) shall supply, install test and commission such supplies at the 86/2, Triq ta' Mellu, Il-Mosta. Quoted prices shall be deemed to be inclusive of all costs including the d**esign, development, supply, install, testing and commissioning** of the said system.

3. The said supplies shall be commissioned by the following date: **8 May 2020.** The ability to deliver earlier than this deadline will be considered positively.

4. The successful bidder(s)/contractor(s) shall be held liable for any losses incurred by MACM if this deadline is not honoured as well as for any delays in the submission of delivery notes, invoices and/or receipts and due to which MACM suffers financial liability.

5. This is a unit-price for supplies contracts. Interested parties shall quote for the whole Credit Scoring System which meets the requirements of this request for quotations as a whole, irrespective of how many modules they opt to include, with the quote indicating price excluding VAT, the value of the VAT and the price inclusive of VAT **using the tender bidding form provided. Its use is mandatory, and bids will be declared not administratively compliant if it is not used.**

6. **All communications shall be made in writing, using the email address in reference**. No other forms of communication shall be entertained. **Any communication shall be in English.**

7. This request for quotations/Tender is being issued under an open procedure.

8. This request for quotations/Tender is NOT **divided into lots**.

9. All bids must meet the minimum technical specifications provided. Variant solutions shall not be accepted.

10. The procurement in question forms part of a project part-financed by the SME Diversification and Innovation Grant Scheme, under the Business Enhance Initiative part-financed under Operational Programme I – *Fostering a competitive and sustainable economy to meet our challenges* through the European Regional Development Fund (ERDF) 2014-2020.

11. No clarification meeting/site visit is planned. However, requests for clarifications may be sent by email, as indicated above, by not later than five calendar days from the 'Deadline for receipt of quotations' indicated on the first page of this document. Replies will be published on the MACM website within 48 hours from receipt of request for clarification. No clarification will be published later than three calendar days from the deadline for the receipt of quotations.

12. Interested Parties should be aware that upon implementation (deemed commissioning of the software to the satisfaction of MACM), the Supplier shall issue a delivery note.

    Subsequently, the Supplier shall issue an invoice (distinct in form and nature from the delivery note) to request payment. The Invoice should be in line with the VAT legislation, include a description of the goods, reference to contract and delivery.

    Together with the Invoice, the Supplier shall fill in the Supplier Financial Identification Form provided by MACM.

    In view of the fact that this is a Business Enhance ERDF project, Cash disbursements are strictly prohibited. The total expenditure must be paid through transparent, traceable bank transactions, i.e.

either through direct bank transfer or through payments by cheque. Following Payment, the Supplier shall issue a VAT receipt and a warranty.

13. Payment terms may include a deposit upon signature of contract. However, the last payment shall be effected ONLY after successful commissioning of the system.
14. The warranty shall be for a period of two years.
15. Any quotation submitted under this request for quotations/tender shall remain valid for twelve (12) months from the deadline for the receipt of bids.
16. Interested Parties should keep in view that payments will be made through an identifiable bank account to the identified bank account of the Service Provider/Supplier as outlined in the Supplier Financial Identification Form.
17. In order to be considered eligible for the award of the contract, economic operators must provide evidence that they meet or exceed certain minimum criteria described hereunder.
18. MACM intends to procure the said supplies from the interested parties submitting the cheapest priced offer satisfying the minimum technical requirements. Bidders shall take the following points into consideration:
    a) The cost of any operating system/software, including its installation, shall be part included in the price, and not quoted separately.
    b) Insofar as applicable, Bidders shall ensure that system has the lowest environmental footprint possible. This shall include, but not be limited to energy consumption of the resources used by the system.
19. Without prejudice to the above, MACM. reserves the right to opt in favour of **an offer that is dearer than the cheapest technically compliant offer**.
20. Without prejudice to any other clause in this request for quotations/Tender, MACM. **may for any reason whatsoever, and without any liability whatsoever, cancel the present procurement exercise at any point in time** prior to the signature of contract with the selected bidder(s).
21. The laws of Malta shall apply in all matters relevant to the present Tender and the subsequent Contract to be entered into by MACM and the Successful Bidder(s).
22. **Eligibility Criteria**
    i   By submitting a quote, a bidder(s) shall be declaring that it does not engage in any form of discrimination on the basis of sex, gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation. It also has policies to safeguarding individuals /employees against victimization and/or harassment.

              MACM reserves the right to immediately stop any agreement with any Contractor and hold such a contractor liable for any losses which it may incur if following the signature of the agreement for the supply of items as per present RFQ/Tender, it transpires that such a declaration was not made in good faith and/or the Contractor engages or has engaged in any such form of discrimination.
    ii   The **Interested Party shall quote by providing a comprehensive description of the system, which may include brochures** and any other literature deemed necessary. The said documentation shall be in **English, and shall be sufficiently exhaustive to enable a proper evaluation of the bidder's ability to deliver the required solution as well as how the proposal meets the requirements outlined in the Technical Specifications in point 23 below**
    iii   Interested Party quotes with equipment which meets **all** the minimum technical specifications below.
23. **Technical Specifications**

(i)   The successful bidder shall design, develop, supply, install, test and commission of a Credit Scoring Management System customised to the MACM's requirement **which caters for both natural and legal persons**, which meets the specifications outlined below

The software solution shall source data from different open and own internal sources, analyses it and gives each person (whether a natural or a legal person) a credit score indicating that person's credit risk and risk of defaulting.

The credit scoring system shall utilise statistical procedures to classify the target person, as a 'good' and 'bad' risk. It shall estimate, at the time it is carrying out the request, what will be the behaviour of the target person's credit to maturity, through a predictive model by a score that measures the risk of a borrower and/or of the transaction.

It is understood that the development of such a technical solution shall be inclusive of the following steps:

Data analysis and validation

The Contractor shall familiarise oneself with the data available at/to MACM, analyse it qualitatively by carrying out an exploratory data analysis (EDA) (including an initial data analysis (IDA)) to identify data inconsistencies such as duplicate records, missing values, the fact that the value of a given variable is not consistent with the value of a variable related to it, etc and making transformations of variables as needed.

Definition of requirements

The second stage is understood to refer to the definition and mapping of the technical requirements to optimise the prediction, that is the probability that a target person will not default on one's payments. This step will build on the outputs of the data analysis and validation and ensure that the developed model captures variables which facilitate contract performance analysis within a specific time-period, considering the worst default status therein. The expected performance of the target person (default/non-default), and hence one's credit score, is to be derived from the assessment of one's credit history within a specific time-period (observation window). The latter shall be optimised through the testing of different cut-off dates, as well as by assessing possible impacts of exogenous variables (such as but not necessarily limited to customer rejects).

Sample Choice

A statistical sample of the historical data shall be chosen to facilitate the testing of the scoring model. The sample should be sufficiently representative of the characteristics of the whole target population and cover a sufficiently recent period to ensure that direct and indirect variables as well as other circumstances are relevant for the present and foreseeable future. It should also contain a sufficiently large number of defaulted payments to facilitate statistical modelling and appropriate testing on a relevant data as well as enable the definition of a benchmark for positive information.

Variable identification

The model definition stage shall include an analysis to identify all the variables that can be considered as suitable predictors of the probability that a target person will 'not default'. Intrinsic to this effort is the ability to select variables with the greatest explanatory power in

terms of the ability to facilitate differentiation between defaulters and non-defaulters. Appropriate testing shall be carried out to ensure that the relationship between the predictor and the outcome is logical and as expected.

Multivariate Regression Modelling

In view of the need for a model whose response or dependent variable is binary (two scenarios are possible – the target person defaults, or the target person does not default) a logistic regression is indicated. This will enable the model to avoid the pitfalls of a linear regression whilst providing additional flexibility, and allows the identification of the influence of each independent variable on the dependent variable (default or not default) thus providing an estimate of the probability of good, rather than a simple relative score.

Validation of the scoring model

The scoring model shall be validated to ensure:

- The minimisation of risks associated with inherent bias in the sample taken; as well as,
- Stability of the model for more recent time period.

(ii)
Project documentation

Following software commissioning, the Contractor shall hand over to MACM documentation relevant to the credit scoring system, namely:

- Requirements – that is a narrative which identifies the attributes, capabilities, characteristics, and qualities of a system.
- Architecture and design as well as pertinent technical documentation – that is an overview of credit scoring system, including database creation description, reports, and model development details.
- Manuals for the end-users, system administrators and support staff.

24. **(D) Financial Offer**

The Bidder(s) shall provide their submission using the Tendering Bid Form in Annex 1 as a template. They may copy and past it on their letterhead but shall not delete any element from it. Bidders who do not use the attached template, or who delete any element from it, shall be considered not administratively compliant, and their submission not considered any further.

The quote shall make reference to the Project Code: ERDF.PA 3.ERDF.03.S3.Call 3.0054, the name of the Contracting Authority – Malta Association of Credit Management (MACM), its registered address at Triq ta Mellu, 86/2, Il-Mosta, his VAT Number: MT 16159409, and the title of the RFQ/Tender: **Design, develop, supply, install, test and commission of a Credit Scoring Management System for Companies and Individuals at the Malta Association of Credit Management.**

Annex 1

Quote provided to Malta Association of Credit Management. of 86, Impex Court, Flat 2 Triq Ta' Mellu, Mosta, VAT Number: MT16159409, in response to the Request for Quotations/Tender No MACM 001 bearing title **Design, develop, supply, install, test and commission of a Credit Scoring Management System for Companies and Individuals at the Malta Association of Credit Management** in connection with ERDF.PA 3.ERDF.03.S3.Call 3.0054 – New Services by MACM

1	Name of the Economic Operator submitting the bid:	
2	Registration No (ID/Company Number)	
3	VAT Number of the Economic Operator	
4	Proposal by the Economic Operator Proposal by the Economic Operator [please insert a description of your offer adjacent to each heading. There is no limit as to the length of the narrative. Bidder should also refer to the literature attached which shall be deemed to be an integral part of the RFQ/tender submission.] The bidder may also opt to include the narrative in a separate document, and only cross reference it in the field below.	
	Credit Scoring Management System for Companies and Individuals	
5	Quote Validity (Minimum 12 months)	
6	Warranty (minimum 2 years)	
7	Declarations concerning exclusion grounds	*I hereby declare that I/the company I am entitled to represent* *Do not fall under any of the grounds listed under Part VI of LN352/2016.* *Do not engage in any form of discrimination on the basis of sex, gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation. Have policies to safeguarding individuals /employees against victimization and/or harassment. Understand that MACM reserves the right to immediately stop any agreement*

		with any Contractor and hold such a contractor liable for any losses which it may incur if following the signature of the agreement for the supply of items as per present RFQ/Tender, it transpires that such a declaration was not made in good faith and/or the Contractor engages or has engaged in any such form of discrimination. *Confirm that I shall abide with the terms and conditions of the RFQ/Tender in respect of which I am submitting a quote* ☐ I confirm

8	*Quotations are to be submitted and shall be awarded including taxes/charges and any import duties applicable but excluding VAT. Any discounts shall be included in the tender offer. Discounts not thus included shall not be considered. The Contracting Authority shall correct any arithmetical error (for example in the consideration of VAT) and its correction shall be final. In such an eventuality, the Contracting Authority shall update the table below accordingly.* *The VAT element, is to be quoted separately.*

Item No	Item Title	Price Excl. VAT	VAT	Price Incl. VAT
	Credit Scoring System			

_____
Signature of Economic Operator or Authorised Representative

_____
Name in Blocks/Stamp of Person Signing Request for Quotations