AMENDMENT NO.3

Date: 30 April 2020

Subject: Amendment Nr.3 To RFP for "Renewal of software infrastructure of Turkish Employment Agency"

Ref*:* UNDP-TUR-RFP(KFW)-2020/02

Dear Madam/Sir,

Please find attached "Answers to questions from prospective proposers" in the context of the subject RFP issued on 21 February 2020 for "Renewal of software infrastructure of Turkish Employment Agency".

You are kindly requested to prepare and submit your proposals in response to our subject RFP with the consideration of this amendment, with all other clauses of the RFP remaining valid.

Please be sure that your proposals are submitted electronically on or before the extended submission deadline **on May 11, 2020; 23:59 (GMT - 5, EST, New York)** through UNDP ATLAS e-tendering system (accessible at https://etendering.partneragencies.org).

Attachment-1- Answers to questions from prospective proposers

Yours Sincerely,

UNDP Turkey Country Office

ATTACHMENT 1- ANSWERS TO QUESTIONS FROM PROSPECTIVE PROPOSERS

Question 1: With reference to the Terms of Reference, Section 1 "Background Information, Rationale and Project Description", please kindly share the screenshots of all the interfaces that are foreseen to be renewed to clarify the scope of the services and clearly understand amount and cost of services for the proposers.

Answer 1: All the interfaces required to be renewed are accessible at the link https://esube.İŞKUR.gov.tr/.

It is note that the contract price is based on a daily fee rate, and the payment method is "cost reimbursement" with reference to the Sub-Clause 4.2 of UNDP General Conditions of Contract . The final price of the Contract will be determined on the basis of the actual number of days worked and the daily fee rates contained in the Contractor's financial proposal.
Maximum estimated number of man-days to be invested by the Contractor are given at Section 9 of the Terms of Reference, the financial proposals shall be in line with these estimated number of working days.

Question 2: Please kindly clarify the expectations from the proposers for transformation from the existing system to the new system and the maintenance of the current system.

Answer 2: The transformation shall begin with "İstihdam" module, the other modules will be prioritized according to the outputs of collaborative analysis by İŞKUR and the Contractor. Maintenance of the current system is the responsibility of İŞKUR, the Contractor will be responsible for maintenance of the renewed interfaces during the contract implementation period. İŞKUR will assign a Project Manager to ensure the coordination, the Contractor shall implement the activities under the coordination of the Project Manager.

Question 3: The scope of work in Terms of Reference, Section 3 Scope, Component 2-Infrastructure Work is summarized as the renewal of the presentation layer design only with the specified technologies and tools. However, Articles 2, 4, 5, 8, 11, 18, 22, 24, 26 under the technical requirements title require changes in the business layer. If there is a need to extra development for the business layer, it will be useful to share detailed information. If development on the business layer is not needed, it will be useful to remove the relevant items from the specifications.

Answer 3: All the subject articles are in the scope, without any exception. The proposers shall provide their technical proposals including their own approach and methodology, that will be scored against the evaluation criteria as per the RFP. The prospective contractor will execute the services in accordance with terms of reference and his/her own technical proposal. Code Development will be done in Business Layer and some of the business rules written on the interfaces of the external user screens shall be moved to the Business Layer.

Question 4: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 1; Does it cover Article 5?

Answer 4: Yes, it covers. The first system shall enable developing fast and stable applications on the .NET Core platform; fifth system shall be based on the .NET Core infrastructure.

Question 5: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 2; Can you please clarify if a complete back-end and front-end framework is required?

Answer 5: There will not be direct access of interface layer to İŞKUR API. It shall access İŞKUR API with its own "code-behind".

Question 6: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 3; Can you please clarify if all the back-end components should be re-written according to the new framework?

Answer 6: The SOA infrastructure will be supplied by İŞKUR. The responsibility of the Contractor is only to move the business logic code (if exists) to this infrastructure and make it work. Endpoints that are not in the İŞKUR API shall be created.

Question 7: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 6; Is the business layer expression considered as the presentation layer business model? We need to have extra detail for clarification to be able to measure effort meeting that requirement. Do the codes written to web forms include any business logic? What is the approximate ratio of codes including business logic to the all codes in web forms? Can you please clarify if existing remoting approach should completely be replaced?

Answer 7: The main objectives are; Transfer of business logic written in some web forms to business side; Development of a new interface framework improving of current API infrastructure by using ASP.NET Core and, communication between the system and that interface.

Regarding these objectives, the proposers shall provide their technical proposals including their own approach and methodology in detail.

Question 8: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 8; Can you please clarify if change of UI backend codes to the old or new back-end parts of the new projects is required?

Answer 8: It might be required to change the current codes.

Question 9: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 9; Who will be responsible of the developments that will be needed in the existing İŞKUR API infrastructure?

Answer 9: İŞKUR will be responsible for the existing API infrastructure.

Question 10: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 10; Some functions, such as hardware access will be unavailable, when Windows applications are transferred to the WEB platform, which may result in loss of functionality. Can you please clarify if entire İŞKUR software shall be re-written based on the new UI and Backend frameworks within 52 weeks with a total of max. 1800 man/days indicated in the table in page 15?

Answer 10: The project scope does not include the development of the entire İŞKUR software. The interface application in this context refers to the front-end infrastructure that the current web and windows applications will be transferred. The contractor is obliged to solve problems that are directly originated from the transfer of applications to the new interface application regardless of their being on Windows or Web.

Question 11: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 11; Can you please provide a definition of the "incorrect codes"?

Answer 11: The "incorrect code" in this context refers to the codes related with business logic, but incorrectly replaced to the view layer of the applications. The responsibility of the contractor is only to transfer and/or integrate these codes to the business layer infrastructure supplied by İŞKUR without any modifications in business logic

Question 12: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 15; Please clarify the requirement.

Answer 12: The contractor's responsibility is to integrate business logic codes to the SOA interface that is currently used by some applications of İŞKUR.

Question 13: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 16; According to the LOGING structure requested, the need for development to the business layer may arise. Who will be responsible for the new development need that

may arise? Shall it be developed as a new component to be used in all applications and modules of the project and integrate to the system instead of the existing one?

Answer 13: The contractor will be responsible for the new development, and it shall be developed as a new component.

Question 14: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 17; According to the principles of software development, it is considered that the feature should be implemented on the business layer. Who will be responsible for the new development need that may arise?

Answer 14: Methods and services related to send alarm and information with SMTP shall be prepared by Contractor.

Question 15: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 22; Only Screen-Based authorization will be supported in the presentation layer. Record-Based authorization can be done in the business layer. Who will be responsible of the new development need that may arise? The document states that there are 16.134 stored procedures and record-based authorization may require changes in these stored procedures. Can you please clarify an estimated number of stored procedures to be changed ?

Answer 15: Contractor is obliged to implement record-based authorization regardless of the layer for development. The estimated number of stored procedures to be changed will be determined during the inception phase of the contract in collaboration with İŞKUR.

Question 16: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 23; Can you please clarify if this should be supported by some cybersecurity products, not the software alone?

Answer 16: The general access control mechanisms are/will be implemented by cyber security programs. Authorization mechanism should support access control over IP or interface types.

Question 17: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 28; The need for development to the business layer may arise. Who will be responsible for the new development need that may arise?

Answer 17: The Contractor is obliged to develop the mechanism regardless of the layer of development.

Question 18: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Technical Requirements, Article 31; What is the maximum number of users? Can you please emphasize the necessity of linear scalability, because the current IT environment and workloads are not visible to contractors at the moment?

Answer 18: As per the data of 28/03/2020; Internal users: 8920, External users: app. 10 Million, Provincial Directorates and Service Centers: 165, Service Centers: 2948, University Contact Points: 105, Job Clubs: 68, Last month maximum page viewing number as per google analytics: 27,377,221.

Regarding these numbers, the proposers shall provide their technical proposals including their own approach and methodology.

Question 19: With reference to Terms of Reference, Section 3. Scope, Activity 1.2, Page 7; Is there a limitation for expected wireframes?

Answer 19: No, there is no limitation as per the Terms of Reference. The Contractor might determine a limit by his/her own technical proposal.

Question 20: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Design Template Requirements, Article 7; Is there a limitation for expected number of components?

Answer 20: The current components used by İŞKUR will be shared with the Contractor at the inception phase. The Contractor might propose a limit within his/her own technical proposal.

Question 21: Can you please clarify, how "Test Processes" are defined (regarding unit, system, integration, performance, regression and User Acceptance), durations and their RACI matrix?

Answer 21: Specific to this project, the contractor's software development team has little knowledge on the business rules underlying the system. Consequently, the test expert of the contractor is responsible for preparing the test cases and scenarios with the experts of İŞKUR. The execution of the unit, system, integration and regression tests will be held by these experts with close coordination of the test expert. The performance test will be accomplished by İŞKUR.

Question 22: Can you please clarify, the "Acceptance processes" for the deliverables?

Answer 22: As per section 5 of terms of reference, all deliverables are subject to review and test by UNDP in consultation with İŞKUR. Please also refer to UNDP General Conditions of Contract available at the link https://www.undp.org/content/dam/undp/library/corporate/Procurement/english/3.%20UNDP%20GTCs%20for%20Contracts%20(Goods%20and-or%20Services)%20-%20Sept%202017.pdf

Question 23: Can you please clarify, how "Test Processes" are defined (regarding unit, system, integration, performance, regression and User Acceptance), durations and their RACI matrix?

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Question 24: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Design Template Requirements, Article 4-5; Please indicate the web browsers which the screens are compatible with.

Answer 24: Microsoft Internet Edge, Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, Safari and Opera.

Question 25: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Authorization & Identity Management Requirements; It appears that the Identity Management and Authorization software exists or will be available. Who will be responsible of the related software and the new development need that may arise?

Answer 25: Identity Management and Authorization software is available currently, however IDM-IAM tool is not used by İŞKUR. Within the inception phase, the requirement and technical proposal of the Contractor might be revised according to the actual requirements of İŞKUR within the scope as per terms of reference. The Contractor might be responsible for development within the scope as per terms of reference and technical proposal.

Question 26: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Logging Requirements; According to the principles of software development, it is considered that the feature should be implemented on the business layer. Who will be responsible for the new development need that may arise?

Answer 26: Within the inception phase, the requirement and technical proposal of the Contractor might be revised according to the actual requirements of İŞKUR within the scope as per terms of reference. The Contractor might be responsible for development within the scope as per terms of reference and technical proposal.

Question 27: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, User Interface Requirements Article 4; Please clarify the statement.

Answer 27: The statement is clear enough for a terms of reference which is a reference document for proposers to prepare a technical proposal. The proposers shall provide their technical proposals including their own approach and methodology within the limits of their understanding. Additionally, the proposers can login to https://esube.iskur.gov.tr/ website as "job-seeker" and "employer" to see the details of user interfaces.

Question 28: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, User Interface Requirements Article 19; İŞKUR expression is understood as the presentation layer. Can you share detailed information?

Answer 28: The statement is clear enough for a terms of reference which is a reference document for proposers to prepare a technical proposal. The proposers shall provide their technical proposals including their own approach and methodology within the limits of their understanding.

Question 29: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Data Entry Requirements Article 1-4; According to the principles of software development, it is considered that the feature should be implemented on the business layer and database. Who will be responsible for the new development need that may arise?

Answer 29: It is contractor's responsibility to fulfill these requirements regardless of the layer of development.

Question 30: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, Data Entry Requirements Article 2; "Client" expression is evaluated as "browser" and "Server side" expression is evaluated as "FrontEnd Api". Can you share detailed information? It is evaluated that the processes and methods within the scope of the following request should be decided mutually. The Contractor shall implement pilot applications on the E-İŞKUR screens determined by İŞKUR, starting from the 10th week of the project to the 20th week of the project and shall ensure the completion of the infrastructure and interface work in cooperation with İŞKUR.

Answer 30: Within the inception phase, the requirement and technical proposal of the Contractor might be revised according to the actual requirements of İŞKUR within the scope as per terms of reference. It shall be noted that the deadlines cannot be postponed due to the limited timeline of the project.

Question 31: With reference to Terms of Reference, Section 5. Deliverables and Schedules/Expected Outputs; The necessary to be able to create a new calendar (Page 12 - 13) according to the results of the analysis.

Answer 31: Within the inception phase, the requirement and technical proposal of the Contractor might be revised according to the actual requirements of İŞKUR within the scope as per terms of reference. It shall be noted that the deadlines cannot be postponed due to the limited timeline of the project.

Question 32: With reference to Terms of Reference, Section 6. Key Performance Indicators and Service Level; In the following request, it is considered that the definition "database management system required" which is not related to the presentation layer should be removed.

"*The Proposer shall state the information about the application server infrastructure database management system required for the software development to be developed in its reply; the same answer shall also indicate the minimum requirement suggested in the reply*."

Answer 32: The statement shall be read as: "The Proposer shall state the information about the application server infrastructure **and** database management system required for the software development to be developed in its reply; the same answer shall also indicate the minimum requirement suggested in the reply."

Question 33: With reference to Terms of Reference, Section 8. Facilities to be Provided by UNDP; Can the following item be get in a flexible format or removed completely for on-premise work so that the development processes can be carried out more efficiently?

"İŞKUR will provide working space to the experts during the implementation of the Contract. The Contractor shall provide essential office equipment and material including IT equipment for his/her staff working at İŞKUR premise (Page 15)"

Answer 33: There will be no flexibility for working outside of İŞKUR premises, all the experts shall carry out the activities at the General Directorate of İŞKUR with their own equipment.

Question 34: Is there any flexibility about the expected commencement time of work due to Covid-19?

Answer 34: The commencement date might be postponed regarding the social distance restrictions due to Covid-19 within the timeline of the project.

Question 35: Due to our firms involvement in development process in the İŞKUR e-transformation Project which is being used now and considering all the development done since then, it is evaluated that the man - hour resource listed (Page 15) will not be sufficient for the realization of the work according to our experience.

Answer 35: This is not a renewal project starting from the scratch, the maximum estimated working days are determined in line with the requirement. It shall be noted that the proposers shall propose a technical solution including their own approach and methodology within the limits of this terms of reference.

Question 36: With reference to Terms of Reference, Section 3. Scope, Component 2-Infrastructure Work, General Requirements Article 2; Is there a limitation for expected number of components in article 2, in order not to create unknown number of user controls and unidentified acceptance processes?

Answer 36: The purpose of including the development of the user controls is to benefit from the up-to-date technologies in the presentation layer. The limitation for this requirement in minimum is to ensure the current functionality of the system with new look and feel.

Question 37: With reference to Terms of Reference, Section 3. Scope, Page 5; Is there a 3rd component required which is Re-write of all code based on new framework?

Answer 37: No. İŞKUR applications are mostly developed by using .Net technologies. The main scope of the project is the renewal of the front-end interface by using e up-to-date technologies (.Net Core UI, Angular, VueJS, React, Blazor) During the analysis the contractor can suggest merging or to dispose some forms or reports. The contractor also will specify the code partitions to be transferred to other layers due to prior incorrect design or requirements of the new framework. The contractor is also responsible for performing these transfer and/or integration operations .