

#### INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: October 20, 2019

Post Title:	Mobile Application Developer
National or International Consultants:	National or International Consultant
Duration:	Long Term agreement (LTA) for period of 12 Months (260 Days)
Location:	Home Based – with possible travel
Project:	Management Support Unit
Requisition Number:	
Is this a LTA (yes/no)?	yes

### CONTEXT/BACKGROUND

The Regional Bureau for Arab States (RBAS) based in New York serves as the headquarters for UNDP regional programmes and country offices in 17 Arab countries, with the 18th located in the state of Palestine.

Region-wide initiatives through the Regional Programme Division complement support to regional projects including: Arab Human Development Report (AHDR), Aid for Trade Initiative for the Arab States (AfTIAS), Anti-corruption and Integrity in the Arab Countries (ACIAC), Arab Development Portal (ADP), Arab Climate Resilience Initiative (ACRI), Arab Knowledge Report (AKR), Disaster Risk Reduction (DRR), Fostering Inclusive Participation and Effective Contribution of Women in the Public Sphere (Mosharaka), Promoting Social Cohesion in the Arab Region (PSCAR), Water Governance Programme for Arab States (WGP-AS).

The services required from the consultant shall meet the needs of any of the projects mentioned above in the context of consultancy and development of needed mobile application software.

### SCOPE OF WORK AND DELIVERABLES

The task of the mobile application developer is to assist the ICT coordinator in internally developing several mobile application in native and hybrid code. This will be done by assessing the received requirements from the project team, deciding on the most convenient information system to handle and present the data, and transform the design a functional program along with its related modules (such as backend, etc..) . This will entail a close coordination with the Management Support Unit and the Projects CTAs.

Under the overall supervision of the Results and Resource Management Specialist, and under the direct supervision and directions of the ICT Coordinator the Mobile application developer shall perform the

following tasks and responsibilities:

- Assist the ICT coordinator in the development and delivery of the Application/Software (mobile application for iOS or Android).
- Read and understand the needed software project requirements received from the ICT coordinator, the management and the CTAs.
- Assist the ICT coordinator in drafting the project technical needs, and the needed terms of reference for any mobile software procurement exercise.
- Review and understand the system detailed design Proposed by the ICT coordinator. Assist the ICT coordinator in proposing the most convenient and latest technology solutions.
- Assist the ICT coordinator in analyzing the existing materials including all software documents and evaluating the content technological needs.
- Analyze, evaluate and draft reports for any received software.
- Assist the ICT coordinator in creating the software wireframes.
- Develop, configure and install software databases.
- Develop, configure and install a mobile application using native language and other frameworks (such as ionic or similar etc..). Publish the mobile application on apple and android stores.
- Develop responsive web interfaces using latest technology needs.
- Develop advanced data visualization tools (for offline and online presence).
- Receive the final graphic web design from a web designer and perform all necessary steps to build the new software in order to achieve a final satisfactory working version.
- Create HTML5 , interactivity of web components.
- Develop the CMS for the appl using divers' languages.
- Develop Desktop applications using different technologies.
- Assist the ICT coordinator in the development of the software and any task related to the software development.
- Regularly report to the ICT coordinator on the process of the software development.
- Meeting the project Team/CTAs when requested.
- The development and delivery of all necessary relevant software and source codes to insure a final working version of the software.
- Providing technical assessment, feedback and recommendations related to the progress of work done.
- Performing initial application testing/debugging, in particular unit testing and integration testing procedures in addition to regression testing whenever required.
- Performing the database design/modifications and implementation of the various database objects and functionalities that are to support the application development effort and requirements.
- Participating in the launching of the installation of the application and other related meetings as necessary.
- Preparing and submitting the required technical deliverables, in particular the detailed design reports, the application source codes, the test result log, and other documents and artifacts as detailed in the deliverables section below.
- Being ready to work on a testing host server to put the developed version and any new software changes on a daily basis.
- Performing all fixes/new components required by the ICT coordinator during the agreed duration.
- Training one staff designated by the ICT coordinator for the use of the final version.
- Perform any other tasks requested by the ICT coordinator and related to the development of the software.
- Read to learn any technology proposed by the ICT coordinator for a specific project and apply it in the development phase.
- Design, develop, code, test, and debug mobile applications
- Create unit test plans/case, develop, unit test, conduct code and unit test walk-throughs
- Work with users to define existing or new system scope and objectives

- Provide analytical support and technical advice during the conceptualization, development, and implementation phases
- Maintain applications, including bug fixes, performance enhancements and runtime production support
- Generate technical documentation for various aspects of the applications developed
- Design, Develop, and Test mobile based applications on Android and/or Apple iOS platform.
- Support Mobile Applications.

## **EXPECTED OUTPUTS AND DELIVERABLES**

### **Deliverables**

Progress towards achieving each task during the contract will be monitored on a regular basis and with reference to a clear set of deliverables, including, where needed/applicable:

- Initial and Final Application Development detailed plan and evaluation of the start status and final status.
- The Detailed Application Specifications Document.
- Weekly Progress Reports.
- Issues Logs.
- Final Coding Standards and Conventions Document.
- Database Entity-Relationship Diagram.
- Source codes of the application.
- Database.
- Application test plans.
- Application detailed design report.
- End-of-mission report that concludes mission and assesses it.
- Copy of the program/final application (web and windows application if existed and it was compiled).
- The Database: including the mdf and the ldf file, filled with the latest version of data.
- The ERD (entity relationship diagram).
- Object and Class diagram.
- The Comments fields for all database tables.
- The Source Code (ASP.net or any other used language).
- All Data source.
- The Data entry system (if it exists).
- All related electronic materials (CDs, e-books, etc) acquired as part of the project (originals where applicable)
- The Work Procedure.
- The Documentation about database procedures.
- The Functional documentation (cahier de charge)
- The Technical documentation including the installation documentation and the detailed application specifications document.
- The Help program: user and administrator manual documentation and any other software training materials related to the developer and the user.
- All necessary documentation (hardware and Software): to maintain the sites where the software has been installed and all related passwords.
- All user profiles and access credentials: including the administrator profile and any related password to the database or source code or online host/website related to the software.
- Procedure of back up and the disaster recovery plan.
- Any other information related to the software.
- Quality Assurance and test results.

Weekly reports to the supervising team on the tasks performed and/or completed.

Deliverables/Outputs	Estimated Duration to Complete	Review and Approvals Required
The final product is an information system which responds to the agreed strategy and criteria and provides a platform which ensures visibility of a large amount of resources, provides easy access to up-to-date information and materials in Arabic and English. French is an asset.	Since this is a LTA for one year, tasks are not predetermined and each task assigned will have its own timeframe which will be agreed between the ICT Coordinator and the contractor.	ICT Coordinator

### **INSTITUTIONAL ARRANGEMENT**

- a) The Mobile application developer is to be contracted on retainer basis.
- b) The individual is required to exhibit his or her commitment to this assignment with UNDP-RBAS;
- S/He shall perform tasks under the general guidance of the Resource Management Specialist and the direct supervision of the ICT Coordinator. The supervision will include approvals/acceptance of the outputs as identified in previous sections;
- d) The individual is expected to liaise and collaborate in the course of performing the work with other consultants, suppliers and UN colleagues;
- e) The individual is required to maintain close communication with the UNDP-RBAS on regular and needed basis at any period throughout the assignment in order to monitor progress. In the event of any delay, s/he will inform UNDP promptly so that decisions and remedial action may be taken accordingly. Delays that would affect the flow of the collaborative work and the delivery of outputs on schedule will lead to termination of contract; and
- f) Should UNDP deem it necessary, it reserves the right to commission additional inputs, reviews or revisions, as needed to ensure the quality and relevance of the work.

## **DURATION OF THE WORK**

The duration of the work is expected to be 1 year from the start of the contract.

## **DUTY STATION**

The Mobile application developer Consultant is home-based. He/She will be required to attend meetings at the Regional Programme premises in *Lazarieh Building - Bloc 02A 2<sup>nd</sup> Floor, Down Town, Beirut - Lebanon.* 

If unforeseen travel outside the consultant home based city is requested by UNDP and not required by the Terms of References (ToR), such travel shall be covered by UNDP in line with applicable rules and regulations and upon prior written agreement. In such cases, the consultant shall receive living allowances not exceeding the United Nations (UN) Daily Subsistence Allowance (DSA) rate for such other location(s).

## QUALIFICATIONS OF THE SUCCESSFUL INDIVIDUAL CONTRACTOR

- 1. Education: Bachelor's Degree in Information Technology or any related field. Master's degree is preferred.
- 2. Experience: 5 years of relevant experience in software-development.

3. Languages: Fluency in English and Arabic is required. Knowledge of French preferable.

## **Functional Competencies**

Ability to plan, prioritize, manage a demanding workload and meet the set deadlines.

## IT and computer skills:

- 1. (Required) Five years developing and deploying mobile applications to Android and Apple iOS platforms using native code (Java and SWIFT) or any other framework/language (such as ionic, React or similar), vendor deployment portals and tools, and development tools
- 2. (Required) Hands-on experience with Mobile Development Technologies.
- 3. (Required) Experience with UX/UI testing of mobile application
- 4. (Required) Knowledge of additional Programming Technologies such as Swift, HTML5, JSP, Java, JavaScript, CSS, Bootstrap, NoSQL databases, Android development concepts...
- 5. Well-developed interpersonal and relationship management skills
- 6. Proven experience in solution development life cycle methods, tools and techniques, using Agile principles preferred
- 7. Proven Experience in Web programming languages, experience at least in one of the following is required: ASP.net, PHP, and ColdFusion....
- 8. Proven experience in developing responsive web designs. Experience in bootstrap is required.
- 9. Proven experience in developing interactive maps, data visualizations.
- 10. Proven experience in programming software back office.
- 11. Experience in arts and graphics software (Adobe Photoshop or Corel Draw, Adobe animate) is required.
- 12. Experience in database software, experience at least in one of the following is required: Access, MsSQL and MySQL is highly desirable
- 13. Experience at least in one of the following design programs is required: (Visual Studio, Adobe Dreamweaver, HTML, DHTML, XML....).
- 14. Knowledge of Adobe Illustrator and Flash is desirable.
- 15. Experienced in Network Programming is desirable.
- 16. Experienced in Back-End Web development and MVC architecture is desirable.
- 17. Experienced in Web frameworks is required.
- 18. Experienced in Desktop Application development
- 19. Experienced in the following languages are preferred C/C++, Objective-C, Swift, Python, C#, Java.

20. Knowledge of open source CMS such as Drupal, Joomla, etc... are preferred.

Demonstrated ability to adapt quickly to the working environment. Proven ability to work proactively and as part of a multi-sectoral cross-cultural team.

## SCOPE OF PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

All proposals <u>must</u> be expressed in *hourly rate*. Each task assigned during the contract will have its own timeframe which will be agreed between the ICT Coordinator and the contractor. It will be calculated based on number of hours needed for each task. This hourly rate amount must be "all-inclusive". Please note that the contract hourly rate will be fixed regardless of changes in the cost components. The maximum number of hours for this contract should not exceed 2088 hours.

Interested individual consultants must submit the following documents/information to demonstrate their qualifications. Candidates that fail to submit the required information will not be considered.

- a) Duly accomplished **Letter of Confirmation of Interest and Availability** using the template provided by UNDP;
- Personal CV or P11, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;
- c) Financial Proposal that indicates the hourly rate (for a maximum of 2080 hours per year). If you are employed by an organization/company/institution, and you expect your employer to charge a management fee in the process of releasing you to UNDP under Reimbursable Loan Agreement (RLA), you must indicate this at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

Interested candidates shall submit above documents to the Job Advertisement Website: <a href="https://jobs.undp.org/cj\_view\_jobs.cfm">https://jobs.undp.org/cj\_view\_jobs.cfm</a> as one document not later than 03 November 2019.

Interested candidates can find Procurement notice, letter of confirmation of interest and availability and P11 <a href="http://procurement-notices.undp.org/">http://procurement-notices.undp.org/</a>

Please do not submit financial proposal in this stage. Financial proposal shall be requested from Candidates who are considered technically responsive

### **CRITERIA FOR SELECTION OF THE BEST OFFERS**

Combined Scoring method – where the qualifications and methodology will be weighted a max. of 70%, and combined with the price offer which will be weighted a max of 30%; using the following evaluation criteria:

Criteria	Weight	Max. Point
Technical Competence	70%	100
Criteria A: Academic and practical experience and		100
technical capability		
Academic Qualification		15
Bachelor's degree in relevant fields of education.		8
Master's degree in relevant fields of education		15
Number years of relevant work experience.		20
Up to 5 years of experience		10
Over 5 years of experience		20
A solid experience in the areas of the technical requirements mentioned under section IT and Computer Skills		65
Five years developing and deploying mobile applications to Android and Apple iOS plat-forms using native code (Java and SWIFT) or any other framework/language (such as ion-ic, React or similar), vendor deployment portals and tools, and development tools		35
Hands-on experience with Mobile Development Technologies		05
Experience with UX/UI testing of mobile application		10
Knowledge of additional Programming Technologies such as Swift, HTML5, JSP, Java, JavaScript, CSS, Bootstrap, NoSQL databases, Android development concepts		15
Financial (Lower Offer/Offer*100)	30%	100
Total Score	Technical Score * 0.7 + Financial Score * 0.3	

Individual consultants will be evaluated based on the following methodologies:

# **Step I: Screening and desk review:**

Individual consultants will be evaluated based on the following methodology.

Applications will be first screened and only candidates meeting the following minimum requirements will progress to the pool for shortlisting:

- Bachelor's Degree or equivalent in computer science or related field;
- At least 5 years of practical experience in mobile application development.
- Proven experience in a professional background in mobile development.

Shortlisted Candidates will be then assessed and scored against the following evaluation criteria.

## <u>Technical evaluation Criteria</u> max 100 points (Weighted 70):

- Bachelor's Degree or equivalent computer science or related field (8 points); Master's degree will receive 15 points
- At least 5 years of practical experience in mobile application development (10 points). Above 5 years will receive 20 points.
- Proven experience in a professional background in mobile development (65 points);
  - Five years developing and deploying mobile applications to Android and Apple iOS platforms using native code (Java and SWIFT) or any other framework/language (such as ion-ic, React or similar), vendor deployment portals and tools, and development tools (35 points)
  - Hands-on experience with Mobile Development Technologies (5 points)
  - Experience with UX/UI testing of mobile application (10 points)
  - Knowledge of additional Programming Technologies such as Swift, HTML5, JSP, Java, JavaScript, CSS, Bootstrap, NoSQL databases, Android development concepts... (15 points)

Financial Criteria - 30% of total evaluation

For those offers considered in the financial evaluation, the lowest price offer will receive 30 points. The other offers will receive points in relation to the lowest offer, based on the following formula: (PI / Pn)\* 30 where Pn is the financial offer being evaluated and Pl is the lowest financial offer received.

## **Step II: Final evaluation**

The final evaluation will combine the scores of the desk review and the financial proposal with the following weights assigned to each:

Individual consultants will be evaluated based on the <u>cumulative analysis</u> methodology (weighted scoring method), where the award of the contract will be made to the individual consultant whose offer has been evaluated and determined as:

- Responsive/compliant/acceptable; and
- Having received the highest score out of a pre-determined set of technical and financial criteria specific to the solicitation.

Technical Criteria weight: [70%] Financial Criteria weight: [30%]

Only Individual Consultants obtaining a minimum of 49 points (70%) on the Technical evaluation would be considered for the Financial Evaluation.