# Regional Programme Division (RPD) Terms of reference for Individual Contract Expert Developer Consultant – Retainer

# A. Project Title

Regional Bureau for Arab States - Regional Programme Division

## **B.** Project Description

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 occupied Palestinian territory.

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.

## B. Scope of Work

Two (2) candidates will be selected to perform the following tasks:

The task of each expert developer is to assist the ICT coordinator in internally developing several required Information and communication Technology systems by the regional projects (e.g. Websites, databases, data visualizations, mobile application and mobile friendly systems, online knowledge products, newsletters, etc...). 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 Expert Developer shall perform the following tasks and responsibilities:

- Assist the ICT coordinator in the development and delivery of the Application/Software (website, database, mobile application, etc...).
- 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 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. 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.
- Develop responsive front end for a website/portal (in html and dynamic mode) as per the design received from a designer.
- Create HTML5 animation, interactivity of web components.
- Develop the CMS for the website/portal 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.

# D. Expected Outputs and 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	Target Due Dates	Review and Approvals Required (Indicate designation of person who will review output and confirm acceptance)
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, French and English.	Since this is a retainer contract, tasks are not predetermined and each task assigned will have its own timeframe which will be agreed between the ICT Coordinator and the contractor.	Since this is a retainer contract, tasks are not predetermined and each task assigned will have its own timeframe	ICT Coordinator

# E. Institutional Arrangement

a) The Expert Developer Consultants are to be contracted on retainer basis.

b) The Expert Developer Consultants will be accountable to the ICT Coordinator. The supervision will include approvals/acceptance of the outputs as identified in the previous section.

#### F. Duration of the Work

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

# G. Duty Station

The Expert Developer Consultants are 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*.

The delivery place of the software will be indicated by the ICT Coordinator. He/She may be asked to travel, in such case UNDP will cover the travel expenses according to the United Nations Development Programme rules and regulations.

### H. Qualifications of the Successful Individual Contractor

- 1. Education: University Degree in Information Technology or related field.
- 2. Experience: At least 7 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. Proven Experience in Web programming languages, experience at least in one of the following is required: ASP.net, PHP, and ColdFusion....
- 2. Proven experience in developing responsive web designs. Experience in bootstrap is required.
- 3. Proven experience in developing interactive maps, data visualizations.
- 4. Proven experience in programming software back office.
- 5. Experience in arts and graphics software (Adobe Photoshop or Corel Draw, Adobe animate) is required.
- 6. Experience in database software, experience at least in one of the following is required: Access, MsSQL and MySQL is highly desirable

- 7. Experience at least in one of the following design programs is required: (Visual Studio, Adobe Dreamweaver, HTML, DHTML, XML....).
- 8. Knowledge of Adobe Illustrator and Flash is desirable.
- 9. Experienced in Mobile App development on both iOS and Android platforms.
- 10. Experienced in Network Programming is desirable.
- 11. Experienced in Back-End Web development and MVC architecture is desirable.
- 12. Experienced in Web frameworks is required.
- 13. Experienced in Desktop Application development
- 14. Experienced in the following languages are preferred C/C++, Objective-C, Swift, Python, C#, Java.
- 15. 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.

# I. 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.