

#### **Terms of Reference**

## **Strengthening Fiscal Governance Project (SFG1)**

# **Upgrading Oracle Tax Application "Ministry of Finance"**

Proc. Ref FC-002

## 1. Project Background

The Ministry of Finance is implementing a new project under the title of "Strengthening Fiscal Governance", for a continuous support to Public Financial Management (PFM) reforms in Lebanon. The project is funded through a loan by the International Bank of Reconstruction and Development (IBRD). The implementation period will cover FY17 – FY22. The development objective of "Strengthening Fiscal Governance" Project (SFG1) is to improve fiscal policy analysis, budget transparency, and effective cash management, enhancing public debt management, reviewing and expending MoF e-services, and reforming public procurement.

The project provides technical support to the Ministry of Finance in four main areas:

- Component One: "Functional Review of the Ministry of Finance and Capacity Building" has four sub-components as follows:
  - 1.1- Reviewing the Functions of the MoF-DG Finance
  - 1.2- Strengthening Capacity Building at MoF-DG Finance
  - 1.3- Implementing the Learning Plan
  - 1.4- Project Management and Reform Coordination
- Component Two: "Macro-Fiscal Analysis and Budget Management" has three subcomponents as follows:
  - 2.1- Enhancing Macro-Fiscal Analysis Capacity
  - 2.2- Publishing and Implementing Budget Preparation Guidelines
  - 2.3- Improving Citizen Access to Budget Information
- Component Three: "Strengthening Accounting, Cash Management and Public Debt Management" has three sub-components as follows:
  - 3.1- Strengthening Accounting and Financial Reporting
  - 3.2- Making Cash Management more Effective
  - 3.3- Enhancing Public Debt Management



- Component Four: "Developing Internal Audit, MoF E-Services and Public Procurement" has three sub-components as follows:
  - 4.1- Developing Internal Audit
  - 4.2- Reviewing and Expanding MoF E-Services
  - 4.3- Reforming Public Procurement

The Ministry of Finance (MoF), as the loan recipient, is the primary responsible for overseeing project implementation and ensuring the Bank's guidelines and procedures are adhered to (primarily fiduciary aspects (procurement management, financial management, monitoring and evaluation (M&E), and reporting to the World Bank and other relevant agencies. To facilitate this day-to-day Project implementation, a dedicated Project Management Unit (PMU) has been established within the Directorate General of Finance (DGF). The legally binding terms and conditions of the SFG1 Loan are in the legal Agreement.

The MoF is using <u>SIGTAS</u> (customized commercial application software running on Oracle database) as the Tax System to support the tax declaration in the country. Since the software version and technology platform of the tax system is outdated, the system users are experiencing technical problems, slow response times and information security issues. The MoF decided to upgrade the current SIGTAS platform based on an outdated Oracle database (Income tax and VAT) to the latest versions to address these issues.

#### 2. Objective of the Assignment

The objective of the assignment is to improve and upgrade SIGTAS modules and underlying databases, forms and reports using the latest versions/releases of related Oracle platforms, including all technical levels (application and database layers).

The current situation of the tax systems is described as follows:

- Oracle forms and reports developer 6i (around 2000 forms and reports)
- Oracle databases 11g (11 Databases)



## 3. Scope of Work

The MoF will hire a consulting firm who will work in close collaboration with project team, and MoF IT Department to complete the SIGTAS upgrade using the latest Oracle databases as follows:

- Review and evaluate the functional and technical capabilities of SIGTAS and hosting environment (servers, data storage, virtualization, etc.).
- Develop the detailed system requirements for the upgrade of the application and database layers of SIGTAS.
- Complete the upgrade, testing and acceptance of SIGTAS modules and related Oracle databases based on the requirements approved by the MoF.
- Support the migration of data from existing SIGTAS platform to upgraded system and databases.
- Coordinate with MoF on any new amendments to existing tax system modules prior to completion of work.

There is no hardware, system software or licensing purchases involved in this assignment. The expected inputs are only advisory services to upgrade the underlying Oracle database and applications of the SIGTAS platform using the latest versions. This will include relevant support and training given that the MoF has already in place a team of four developers who will work with the consulting firm on this task to transfer know-how and experiences.

The consulting firm is needed in the following specified tasks:

#### A. Database:

- i. Upgrade the Oracle databases (around 11 databases) at Ministry of Finance main office and subsidiaries from version 11g to the latest Oracle Database version 19c. (The latest version will be defined the day the RFP is released to the shortlisted firms)
- ii. Ensure the databases are secure as per the MoF requirements and in line with the Oracle DB options.
- iii. Ensuring high availability on production environment (related hardware, software and licenses to be provided by the MoF).
- iv. Synchronization of the different databases in the regions with a consolidated database HQ based on specific criteria using Oracle Golden Gate Micro services architecture.
- v. Implementing a standalone Disaster Recovery (DR) for all databases and failover testing using Oracle Data Guard.
- vi. Implementation of Oracle Database on Linux platform.
- vii. Training on Linux for Administration.



## **B.** Applications:

- i. Upgrade the MoF application tier from forms and reports 6i to the latest version of web enabled forms and reports / Oracle APEX (version 19.1.0 or later).
- ii. Security:
  - a. Implementing Data Security and Management Tool.
  - b. Transport Layer security (https) for the application tier.
- iii. Integrations: ensure the new upgraded application will support the following integrations:
  - a. With MoF active directory (AD) in order to authenticate MoF employees against AD.
  - b. Integration of Tax application with other MoF MS SQL application.
- iv. Reporting: The upgraded application will have the capability to generate the reports needed for the operations in different format (text, excel, pdf, ....).

## 4. Period of Performance

The contract period is estimated to be around 10 months with a total estimated input of 480 person-days to be provided by a team of 5 key experts in Beirut as follows:

Items	Estimated person-days
1- Databases Upgrade	
PM / Team Leader	50
DB Administrator	100
2- Application Upgrade	
Technical Team Leader	120
APEX Application Developers (2)	2 x 90
3- Training	30



#### 5. Expected Deliverables

The following deliverables should be submitted by the consulting firm during the period of his work:

<u>Deliverable 1:</u> The inception report which include the action plan for the implementation phases, the evaluation of the current systems, and the recommendations for the implementation process, and other relevant details will be delivered in week 4.

<u>Deliverable 2:</u> The upgrading of the database and the forms and reports, complete and operational (week 32). This deliverable is divided into three phases and should be reviewed by the Client as follows:

<u>Phase 1 (Beta version of the new system and relevant testing):</u> The consulting firm should deliver the beta version of the new upgraded system including all the comments of the Client and the potential amendments resulting from their own reviews (week 20).

<u>Phase 2 (The final version of the new upgrades):</u> The consulting firm should deliver, after the approval of phase 1 of this same deliverable, the final operational version of the system including all the comments of the Client and the potential amendments resulting from their own reviews (week 32).

<u>Deliverable 3:</u> Training sessions for the MoF IT designated staff on the use of the new system (Linux/Apex/Data Guard) and screens (week 30). A full report describing the training and assessing the trainees should be prepared and submitted to the Client (week 36).

<u>Deliverable 4:</u> Two final Reports should be submitted covering the Maintenance/Operation plan and the Operation Manual (week 40). The final reports should include all the details of the assignment, all the documentation, necessary measures and resources which should be allocated by the Client to ensure the proper functioning of the new system. Maintenance procedures and processes should be stated in details in the same report.

#### **6.** Reporting Requirements

- 1. The Inception Report as described in section "5"/ deliverable 1.
- 2. A monthly progress report to be submitted to the MoF IT department and SFG1/PMU to follow up the progress according to the action plan submitted.
- 3. The Final Report as described in section "5"/ deliverable 4
- 4. Medium term maintenance plan.



## 7. Institutional and Organizational Arrangements

The Consulting firm will report to and work in close collaboration with the MoF IT department and under the supervision of SFG1 Project Coordinator who will ensure the delivery of all milestones. The Project Coordinator and the MoF IT department team will communicate on regular basis, performance evaluation of the consultancy firm to the PMU to proceed with payments.

A technical committee shall be formed by the DGF for the purpose of monitoring the progress of the project and approving each of the deliverables. The Committee will submit the approvals on the deliverables mentioned earlier in section 5 (Expected deliverables).

## 8. Qualifications and Experience

#### Firm / Staff qualifications and skills

The consulting firm will have the following qualifications and experience profile:

- The firm should be an Oracle Gold or Platinum Partner
- The firm should have specialists/experts in core Oracle database technology and Apex.
- They should have successful similar implementation/s including Oracle DB upgrades (at least one Oracle DB 19c), technology and APEX (at least one APEX 19.1.0)
- Have a dedicated team that will be nominated for this project exclusively.
- The firm based in Lebanon is a plus.

The Oracle developer- key experts provided by the consulting firm- should have the following minimum qualifications:

- Degree in Computer Science, IT or relevant specialization
- More than 5 years of experience in Oracle Suite and relevant Oracle certifications
- Previous experience in similar upgrading assignments (DB 19c, APEX 19.1.0, etc.)
- Knowledge and Proven experience in PHP, MySQL, HTML5, CSS3, JQuery
- Problem solving capability and proven analytical skills.
- Fluency in Arabic and English.