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Oracle E-Business Suite Upgrade Final Report

Aqaba Special Economic Zone Authority (ASEZA)

Aqaba Community and Economic Development (ACED II) Program

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development, AECOM International Development or the ACED Program.

Acronyms and Abbreviations

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| ACED | Aqaba Community and Economic Development Program |
| AP | Accounts Payables |
| AR | Accounts Receivable |
| ASEZA | Aqaba Special Economic Zone Authority |
| CE | Cash Management |
| EBS | E-Business Suite |
| FA | Fixed Assets |
| GL | General Ledger |
| HP | Hewlett-Packard |
| HR | Human resource |
| HCM | Human Capital Management |
| IBM | International Business Machines Corporation |
| IT | Information Technology |
| PIL | Project Implementation Letter |
| PO | Purchase Order |
| USAID | United States Agency for International Development |

CONTENTS

| | |
|---|----------|
| EXECUTIVE SUMMARY | 5 |
| ORACLE EBS PROJECT OBJECTIVES..... | 6 |
| ORACLE EBS PROJECT PHASES | 6 |
| KNOWLEDGE TRANSFER AND CAPACITY BUILDING | 7 |
| MILESTONE AND DELIVERABLES | 7 |
| PENDING ISSUES..... | 8 |
| CHALLENGES | 9 |
| PATH FORWARD..... | 9 |

EXECUTIVE SUMMARY

In 2005, ASEZA upgraded to Oracle e-Business Suite (EBS version 11.5.9 release environment 11i). However, over the years, this version of the Oracle software became outdated and was no longer eligible to receive any technical support. To receive technical support directly from Oracle, the system needed to be upgraded to release Oracle environment 12. In order to undertake this upgrade, ASEZA requested USAID assistance for server upgrades, process redesign and the mapping of Oracle EBS R12 modules.

USAID commissioned AECOM, through the Aqaba Community and Economic Development (ACED II) Program, to exert best effort in providing support to ASEZA by updating certain Oracle EBS modules including, HR, financial, inventory, procurement and property management. AECOM deployed a series of Oracle upgrade short term consultants that were housed in ASEZA in addition to an IT project manager to oversee the implementation process.

AECOM's best effort to carry out this technical assistance was based on ASEZA's commitment and collaboration in finalizing the Oracle project as outlined in the project implementation letter (PIL) signed between ASEZA and USAID. Through this PIL, ASEZA agreed to revise the existing HR and finance processes; revise and approve updated job descriptions, competencies and Key Performance Indicators as completed under ACED I, within the 18-month timeframe of the ACED II Program. Furthermore, ASEZA was to assign staff to gather the required data needed to start the upgrade and the re-implementation process.

Although ACED II exerted its best effort in implementing this activity, new challenges and requirements kept emerging which went beyond ACED II's original scope of work. ACED II's original project design was based on Oracle Corporation's best practices, which clearly recommends implementing upgraded Oracle EBS with open balances and new data only and archiving old historical data. However, ASEZA's insisted that ACED II provide a comprehensive historical data migration, cleansing, and mapping from the old Oracle EBS to the upgraded Oracle EBS version R12.

Regardless of the fact that this was out of ACED II's scope requiring additional financial and human resources and a longer time commitment, the ACED II team and USAID agreed to redesign the project *against* Oracle's recommendations to meet ASEZA's customized requirements. As a result of this change, ACED II extended the project duration and then had to repeat much of the work done in the first few months of the activity once the historical migration had been completed.

To achieve the new project goals; ACED II and its Oracle upgrade experts team, commissioned a local Oracle partner to assist in the upgrade and EBS environment setup, planned three milestones through eight phases to upgrade and implement the Oracle EBS, and do the data migration. The phases are discussed below and the milestones included:

- *Milestone 1:* Successfully upgrade Oracle EBS modules with old setup from version 11 to version R12 on the old HP servers in March 2014.
- *Milestone 2:* Successfully transfer the Oracle upgraded modules with full historical data migration to the new IBM servers in May 2014.
- *Milestone 3:* Implement new and old EBS modules with new settings and features.

ACED II completed milestones 1 and 2 in their entirety but internal issues at ASEZA resulted in only partial completion of milestone 3 within the ACED II's short timeframe.

ORACLE EBS PROJECT OBJECTIVES

In all, the Oracle EBS project objectives included:

- Upgrade Oracle e-Business suite old and new modules, including HR, finance, inventory and procurement to version R12;
- Assist ASEZA in finalizing its assessment of business cycles at the various directorates and sections within ASEZA, mainly finance and HR;
- Implement modifications/re-engineer the business cycles where necessary to comply with best practice and international standards as part of the Oracle EBS R12 implementation process;
- Transfer of the entire Oracle system from old HP servers to the new IBM servers;
- Build ASEZA's staff capacities to properly implement the system.

ORACLE EBS PROJECT PHASES

Phase 1. ACED II launched this phase early in March 2013. ACED II deployed a team of Oracle upgrade short term consultants to be housed within ASEZA and an IT project manager to oversee the implementation process. Despite the short program duration, ACED II succeeded in fielding a full team of eight consultants to Aqaba who covered all Oracle EBS upgrade components including project management, HR, financial, property management, procurement and inventory, self-services and technical experts.

Phase 2: The ACED II team built on the work of ACED I and ASEZA's previous Oracle implementers to revise old scopes of work, contracts, correspondences and deliverables, and provided comprehensive recommendations on how to proceed with the Oracle implementation process. The completion of this phase included extensive work with ASEZA's technical committee and IT Directorate.

Phase 3: The ACED II team and ASEZA's IT Directorate developed a detailed work plan. The original plan was updated during the course of the project to accommodate ASEZA's needs and work requirements.

Phase 4: ACED II started providing support to ASEZA in mid-2013 by updating four old and new modules: HR, finance, inventory and procurement. The ACED II team began with assisting ASEZA in assessing and mapping business cycles with the various ASEZA directorates and sections (mainly finance and HR). ACED II then progressed to implementing modifications and/or re-engineering the business cycles where necessary to comply with best practices and international standards required of the Oracle EBS R12 implementation process.

Phase 5: After an initial series of trainings for end users, some stakeholders at ASEZA requested full historical data migration in contradiction to Oracle corporation's best practices where old data would have been kept for archival purposes only. Following discussions with USAID and ASEZA's Financial Directorate, ACED II contracted a local Oracle partner firm specialized in Oracle data migration and EBS setup. This firm worked in close cooperation with both ACED II's Oracle expert team and ASEZA's staff. The ACED II work plan was updated accordingly and the new deadline to complete ASEZA's Oracle EBS system upgrade was extended through the middle of July 2014.

Phase 6: By the 23rd of March 2014, following the completion of the historical data migration, ASEZA and ACED II started the first stage of the “Go Live” exercise with the upgraded Oracle EBS existing modules (namely HR, Finance and Inventory). The system was up and running. Following the major accomplishment, ASEZA was able to secure the direct support of Oracle Corporation for the first time in years.

Phase 7: After the first “Go Live” exercise in March 2014, ACED II transferred the newly upgraded system from the old HP servers to the new IBM servers to overcome a major technical risk for ASEZA. The outdated servers were at risk of breaking down and the potential for the loss of all data was high. By upgrading to the new servers, the likelihood of system failures decreased significantly marking a significant accomplishment for the Oracle project.

Phase 8: The final milestone was to ensure that all new functionalities were working on the upgraded Oracle system on the new servers. The ACED II team and ASEZA’s IT Directorate worked closely together to implement the new functionalities prior to the project end date. However, following internal delays at ASEZA in providing finalized HR data, ACED II worked with ASEZA to establish a plan to enable ASEZA to continue receiving the support from the consultants following the conclusion of the ACED II Program.

KNOWLEDGE TRANSFER AND CAPACITY BUILDING

Starting with housing ACED II team at ASEZA offices to work directly with ASEZA’s IT staff, ACED II designed the Oracle EBS upgrade project in a way that guarantees smooth knowledge transfer to ASEZA’s staff. These in-house consultants ensured the transfer of all business and technical knowledge directly to ASEZA’s staff and ACED II providing direct on the job training to ASEZA’s end users.

Even though ASEZA’s technical staff at the beginning did not have the required technical knowledge, ACED II trained ASEZA employees to continue developing any needed reports to be generated from the Oracle EBS system.

Both ASEZA’s technical IT staff and end users in different directorates including the Financial, HR, Procurement, Inventory, and IT Directorates; were engaged in all project activities, starting with documenting and improving processes. By incorporating them into the process, ASEZA’s staff gained the basic skills to improve process performance through using Oracle tools and templates. ACED II also provided specialized on-the-job training for end-users on how to use the new Oracle EBS features and functionalities.

MILESTONE AND DELIVERABLES

In light of the changing scope of work, the ACED II team completed the following milestones and achieved the following successes including:

- Revised business processes and updated all ASEZA’s related documents according to Oracle standards
- Upgraded ASEZA’s Oracle e-Business Suite from version R11 to R12.1.3; the upgraded modules included:
 - Finance modules (GL, AP, AR, CE, FA)

- Property management module with simple setup—which only includes the basic features with minimum customization according to ASEZA’s requirements.
- Human Capital Management (HCM) module (HR & payroll)
- Supply chain (Purchasing Orders (PO) only)
- Transferred the upgraded EBS system and data from old HP to new IBM servers
- Completed the new setup of the inventory module and integrated it with purchase orders (PO) related functionalities
- Completed the new setup of HR and Payroll according to Jordanian civil service regulations
- Completed the new setup of Finance (GL, AP, AR, CE, FA and Budget) on a test server (*ASEZA did not proceed with the testing/implementation of this module due to internal issues*).
- Completed the setup of the Oracle module for Self-service Human Resources which allows ASEZA’s workforce to update and use employee-specific information online that is personalized to an individual’s role, experience, work content, language and other information needs. It is ready to be implemented by IT directorate; the super user¹ was trained to train the rest of IT Directorate staff.
- Completed the integration point (interface) between HCM module and ASEZA’s time recordation process
- Solved most technical issues raised due to Oracle version upgrade or data migration (errors or malfunctioning of EBS), and connected ASEZA with Oracle Corporation directly to solve other pending issues.
- All required documents for all modules were delivered.

PENDING ISSUES

The on-going implementation of the Oracle EBS upgrade will continue for some time after the ACED II project’s closure. To ensure that ASEZA has access to the services it needs to continue the upgrade, ACED II connected ASEZA with the Oracle Corporation’s support system by upgrading to version R12. Some of the issues ASEZA will work with Oracle directly on are as described below.

Financial Module. During the course of implementation, the ACED II team proposed the new financial module setup according to best practices. ACED II prepared the modules on test servers for ASEZA to use in the future if they wanted to proceed with this track. However, in light of recent findings from the Jordanian Audit Bureau released in the media, the ASEZA Financial Directorate did not approve the final user test on the new financial module setup and is continuing to review and scrutinize the controls of the Oracle system.

¹ A “super user” is a technical term used for users with full administrative authorities in the system including creating new users and assigning them access rights.

HCM and Payroll Module. The ACED II team worked closely with the ASEZA HR team to implement the HCM and payroll module according to civil service regulations. The new module setup is ready on the test servers, and ASEZA recruited an HR expert directly to complete the job. However, while setting up the system, ACED II Oracle consultants noted that the ASEZA staff data was incompatible with civil services format and regulations. ACED II's experts worked closely to clean the data within the given timeframe, but additional work is needed to finalize the process. ASEZA plans to continue the work on this system and expects the system to be up and running by September 2014.

Invoicing. Following the data migration and the Oracle upgrade, several invoices were unable to be processed and paid through the system. The ACED II team worked with Oracle Corporation's support team to solve this and connected ASEZA with Oracle directly to follow-up with this process.

CHALLENGES

The ACED II team faced many challenges both technical and political during this project. The main challenges can be summarized by:

- **Time limitations.** Similar implementation efforts require on average 24 months. The original program design was for eight months and later extended later to 14 months.
- **Qualified Personnel.** One of the main challenges was to find and attract local qualified Oracle EBS experts to relocate to Aqaba for the short term, and to retain the experts who accepted to join until end of project.
- **Counterpart Commitment.** ASEZA's commitment and cooperation was another challenge. Due to pressure from the central government over previous abuses of the Oracle system, the ACED II team was forced to work in a difficult environment and to deal with different agendas on daily basis.

PATH FORWARD

ACED II recommends the following steps to maximize the benefit of this engagement and to build on achievements:

- We recommend that ASEZA commissions a local Oracle partner to follow-up on pending issues and provide technical support for Oracle EBS on daily basis for at least the coming 18 months.
- We recommend that ASEZA proceeds with the HCM module implementation and usage
- We recommend that ASEZA continue building their internal capacities in Oracle EBS management and build on what they achieved to date
- We recommend that ASEZA's top management form a steering committee to oversee the completion of financial module implementation as opposed to leaving it the discretion of a single individual.