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SITUATION ASSESSMENT

IRAQ FINANCIAL MANAGEMENT INFORMATION SYSTEM

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FMIS SITUATION ASSESSMENT

FINAL REPORT

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Monitoring and Evaluation Performance Program, Phase II (MEPP II)

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PREFACE

The Memorandum of Understanding (MOU) signed by the Ministry of Finance (MOF) and the United States Agency for International Development (USAID) on January 14, 2008, requires an independent assessment of the Iraq Financial Management Information System (IFMIS), prior to the handover of both the system and all operational responsibilities to the MOF. International Business & Technical Consultants Inc. (IBTCI), was contracted to provide an assessment of the current situation, the likelihood of achieving the stated objectives within the MOU, gauge the MOF's ability to assume full responsibility for operating the IFMIS and finally, to provide recommendations on moving forward with the system. The following independent assessment was conducted during the period of October 17 to November 18, 2008.

The purpose of this assessment is to provide a snapshot of the status of the IFMIS implementation as of October 31, 2008 by Bearing Point prior to the planned hand over of the IFMIS to the MOF at a date yet to be determined.

The assessment is intended to review the viability and utility of the IFMIS at this stage in Iraq's financial development as well as the MOF's management and system requirements, and capabilities to successfully implement the system upon handover from USAID. This assessment focuses specifically on the General Ledger component of IFMIS.

It is important to note that the assessment of the IFMIS is not an evaluation of the performance of BE in implementing the system, it is not an audit and does not evaluate the appropriateness of the FreeBalance software. Rather, this is as an independent due diligence technical review, which may be used to inform decisions between USAID and the MOF regarding the future implementation of the system.

Several studies/audits have been conducted on the implementation of the IFMIS and were used by USAID's Economic Growth and Agriculture office to inform the SOW for this task.

In carrying out this situation assessment, the IFMIS assessment team received and reviewed over 100 documents as evidence of IFMIS implementation progress to date (Annex B).

ACRONYMS

BE	Bearing Point
COA	Chart of Accounts
CPA	Coalition Provisional Authority
COP	Chief of Party
COSIT	Central Organization for Statistics and Information Technology
CTO	Cognizant Technical Officer
DCOP	Deputy Chief of Party
DFID	Department for International Development (UK)
DG	Director General
DRP	Disaster Recovery Plan
DRS	Disaster Recovery System
ERP	Enterprise Resources Planning
FML	Financial Management Law
FB	FreeBalance
FMIS	Financial Management Information System
GOI	Government of Iraq
GFS	Government Finance Statistics
GFSM 2001	Government Finance Statistics Manual of 2001
IBTCI	International Business & Technical Consultants, Inc.
IFMIS	Iraq Financial Management Information System
IZ	International Zone
M&E	Monitoring and Evaluation
MEFP	Memorandum of Economic and Financial Policies
MOF	Ministry of Finance
MOPDC	Ministry of Planning and Development Cooperation
MOU	Memorandum of Understanding
PFM	Public Financial Management
PRT	Provincial Reconstruction Team
PSD	Personal Security Detail
SIGIR	Special Inspector General for Iraq Reconstruction
SOW	Scope of Work
SU	Spending Units
TOT	Training of Trainers
USACE	US Army Corps of Engineers
USAID	United States Agency for International Development
USG	United States Government

EXECUTIVE SUMMARY

Background

In 2003 The United States Government (USG), under the authority of the Coalition Provisional Authority (CPA), instructed USAID to begin implementation of the Iraq Financial Management Information System (IFMIS) through the Economic Governance (EG) contract implemented by BearingPoint (BE). This task was undertaken in an effort to modernize Iraq's public financial management systems within a cash accounting framework. Bringing the IFMIS to full operation and implementation was then, and is considered now, a key component of the Government of Iraq's (GOI) International Monetary Fund Stand-by Arrangement (IMF-SBA), which outlines requirements that the GOI must fulfill to be eligible for IMF emergency assistance and debt cancellation from the Paris Club.

Reports indicate that by June 2007, the IFMIS had been rolled out in 132 spending units (SU) nationwide. According to BE and the MOF, these 132 SUs collectively captured over 80[1] percent of GOI expenditures. However, work on the IFMIS was terminated by USAID following the abduction of five BE consultants in May 2007 at the MOF, as well as due to difficulties in aligning the system to the needs of the Iraqi government.

On January 14, 2008, USAID and the Ministry of Finance (MOF) signed a Memorandum of Understanding (MOU). The signing of the MOU gave impetus for USAID to restart the program by outlining an agreement to cooperatively identify and resolve technical issues and transfer full ownership of the IFMIS to the MOF. While USAID may continue to offer limited technical assistance to the MOF to operate, maintain and update the system, the MOF will assume full ownership of the computer hardware and software. (Annex D)

Accomplishments since January 2008

Following the restart of the program, in July 2008, USAID assistance to the MOF has resulted in a number of accomplishments.

- As of October 31, 2008, the IFMIS Core Module is fully functional and the system is ready for full operation by the MOF upon rollout to all SUs.
- The IFMIS servers are fully functioning and ready for handover to the MOF upon notification by the MOF to BE that a secure location can be provided.
- The IFMIS hardware server components, which were over four years old, have been upgraded.
- Re-subscription of software licenses for all FMIS components has been acquired. Upon their expiration in January 2009, the GOI will be responsible for their renewal.

[1] Since all original data was destroyed in a fire at the Central Bank, it was impossible to verify this figure. However, both BE and MOF have independently quoted this percentage.

- MOF and SU staff has been retrained to implement IFMIS.
- The IFMIS system was reactivated and pilot processing of 11 SUs are underway.
- The Director General for Information Technology (DG IT) obtained a budget allocation of 3.9 billion Dinars for providing SUs with new or upgraded IT facilities.
- BE and the MOF are now undertaking site surveys of all SUs to assess the readiness of each SU. This includes their capacity to connect and use IFMIS.
- Ministerial approval has been obtained to procure and equip a first batch of 70 new SUs.
- The MOF has nominated a number of staff to be trained by BE as IFMIS trainers as part of a Train the Trainers program.
- The MOF drafted and issued a Ministerial Order on November 11, 2008 to all SUs to commence parallel processing backdated to August 1, 2008, and requested that reconciliations be carried out between the IFMIS and the legacy systems.
- BE has completed all preparatory work and documented the budget business process.
- BE has undertaken the necessary preparatory work, configured the IFMIS purchasing module, and is ready to install, pilot test, train staff and hand over to MOF the IFMIS once there is agreement of a timeline for implementation of the FMIS purchasing module between the MOF and Ministry of Planning and Development (MOPD).
- At the request of the MOF, BE and FreeBalance (FB) have designed a static report available to all SUs which allows them to produce their Trial Balance in a similar format to what was offered by their legacy system.
- BE has completed three volumes of accounting policy manuals, as well as Treasury regulations, in Arabic for use by the MOF and SUs.

Activities in the Pipeline for Implementation

- By the end of November 2008, the MOF targeted to have 42 SUs (i.e., 29 SUs in Greater Baghdad and 13 MOF supported SUs) connected to and using the FMIS.
- By the end of December 2008, the MOF expected to have 126 SUs connected to and using the FMIS. This expectation was based on being able to rapidly bring up to speed most of the previous 132 SUs that were operational before the shutdown of the FMIS in June 2007.
- Over the period of late November and December 2008 and January 2009, MOF IT staff are scheduled to attend advanced hands-on IT technical training at the BE compound in the IZ.

Based on the targeted rollout date for implementation of the IFMIS to the SUs, BE formulated the number of SUs that will need to be assessed monthly as well as numbers of staff needing training to achieve the MOF's goals noted above. BE anticipated that by October 31, 2008, 83 SUs would have been assessed, trained and using IFMIS. In reality only 41 assessments were completed, 11 SUs received training and 28 SUs are in a position to use IFMIS. It is clear that unless significant progress was made in December, the target dates will slip.

Findings

- FMIS implementation by BE has been done in a very professional manner. BE utilized standard Project Management practices and processes.
- Eleven pilot SUs have been using IFMIS for less than five months and entered an average of less than 10% of total monthly transactions during the period of July to November 2008.
- The MOF DG of IT is supportive of the IFMIS and has worked closely with BE in the re-start of the system despite certain logistical constraints which hindered the implementation process.
- SUs may be engaging in poor financial management procedures by only entering Journal Voucher summaries of transactions instead of each transaction into the IFMIS. This impacts the specificity of the data entered into the IFMIS and may preclude the generation of detailed reports due to the absence of transactional information.
- Reporting will remain a problem until the GOI addresses fundamental issues with their financial management practices and affords IFMIS with the required support identifying it as the system of record for accounting and discourages SUs from populating IFMIS with inadequate information.
- The acquisition of Crystal Reports (CR) will not resolve reporting problems. Nonetheless, if the MOF continues to use CR, it will require additional training, which is currently not considered as part of the handover process.
- While the MOF is satisfied with the IT technical training they are receiving in the classroom refresher courses, the MOF believes the amount of "hands on" training could be increased adding value to put to practical use the curricula taught in the classroom.
- IFMIS hardware has benefited from minor repairs and upgrades to power-supplies. It remains relatively identical to the previous system and BE is of the opinion that the existing system has more than enough processing power to support all 266 SUs once they are up and running.
- Internet connectivity remains a serious challenge for many SUs equipped with shared connections; to date the MOF has not been able to implement a viable solution. USAID has been approached to engage senior MOF officials in an attempt to resolve the issue.

- The 132 originally connected SUs account for over 80% of all financial transactions. While it is imperative that the additional 134 SUs be connected as soon as possible, delays should not pose a significant issue in terms of the GOI ability to produce meaningful reports as the most important SUs from which critical reporting is required are currently functional.
- The Ministerial Order did not provide a cut-off date for use of the legacy system or penalties for non-compliance. Additional instructions from senior MOF officials are required.
- MOF DG Accounting and Budget departments have not demonstrated the required commitment to the IFMIS. Additionally, the MOF will need to observe SU uptake to determine compliance and act accordingly.

Recommendations

To ensure the successful implementation of IFMIS and to enable the GOI to reap the benefits of the total anticipated $29,923,395[2] million USAID has already invested to complete the IFMIS implementation the following steps are recommended:

Ministry of Finance

- Identify a suitable location for the transfer of the IFMIS servers, including production, test and backup, from the BE compound to ensure MOF operation and control as soon as possible.
- Identify a suitable location for the housing of the Disaster Recovery System.
- The Disaster Recovery Plan should be tested regularly to ensure existing and new employees are able to implement the plan as required.
- The Disaster Recovery System should be physically separated to ensure, in the advent of a serious citywide catastrophe, the backup has a significant chance of surviving intact.
- Additional Ministerial Orders must address the following:
  - The cut-off date for the switch from the manual legacy system to the IFMIS.
  - The shut down date of the legacy system to make the IFMIS the primary and only, accounting record of GOI, which will be subject to audit.
- Ensure that all SUs undertake parallel processing from January 1, 2009 so as to have a full year's financial data on IFMIS. Failing this, efforts should be made to operationalize all SUs as soon as technically possible.

[2] This number includes an additional $7,839,009 obligated by USAID upon the signing of the MOU to complete the implementation of the IFMIS roll out. There is an anticipated estimated gap of $1.6 million to fully implement the IFMIS as outlined in the MOU. It is this team's belief that the additional obligated funds were sufficient to complete the requirements outlined in the MOU had there not been a delay of seven months from the signing of the MOU to the restart of IFMIS. During this delay, resources were being expended by BE in retaining staff in preparation for the restart. These expended resources are now a large part of the estimated gap of $1.6 million needed to complete the rollout process outlined in the MOU.

- Establish a high-level IFMIS Steering Committee chaired by the Minister of Finance with the participation of key GOI ministries.
- Establish a working-level Steering Committee chaired by either the DG of IT or Senior Enterprise Resources Planning (ERP) Manager with the participation of key GOI ministries.
- Hire experienced ERP project managers who can provide an organizational perspective and vision.
- Introduce a strong Internet usage policy, improve security measures by installing and maintaining anti-virus and firewall software on all computers (not just FMIS terminals), monitor employee use of the Internet, and where possible disable access to websites and applications which interfere with, or adversely affect, the SUs ability to use critical business functions.
- Appoint an experienced senior level IFMIS project/program manager to ensure ongoing growth and development of the IFMIS.
- Develop a capacity building strategy, especially in the areas of analytical functions.
- The GOI should consider the development of a data warehouse as part of the future growth and development of the IFMIS.
- Acquire strategic knowledge in key area, VSAT technology and FMIS application support, to ensure the MOF is able to understand and manage vendor relationships.
- Introduce a Human Resource sustainability strategy to address possible IFMIS employee attrition.

USAID and Bearing Point

- Facilitate the identification of a suitable location for a production system and Disaster Recovery System together with senior GOI and MOF.
- Discuss the implementation of the Procurement and Performance Budgeting Modules with senior MOF to improve IFMIS and GOI financial management procedures.
- Facilitate MOF access to IFMIS hardware in an effort to address MOF concerns with hands-on experience.
- Engage a training expert familiar with Iraqi or Middle Eastern culture and learning habits to assess the IFMIS training materials.
- Reach an agreement with the MOF as to who will be responsible for funding the financial gaps identified in rolling out a fully functional IFMIS as outlined in the MOU.

IFMIS Benchmarks

There are some IFMIS implementation benchmarks or milestones that were set by BE in consultation with the MOF to ensure a rapid re-launching of IFMIS prior to the handover to the GOI. These were[3]:

1. By November 30, 2008, 70 SUs will connect and enter data.
2. By December 31, 2008, 132 SUs, or approximately 50%, will connect and enter data.
3. By the end of the first quarter of 2009, 267, or 100%, will connect and enter data.
4. The FB licenses for 2009 should be paid by the MOF before December 31, 2008. The renewal fee is estimated at US$165,000.

Required MOF Action Items

The effective use of the IFMIS by the MOF in the benchmarked targets noted above and the successful and sustainable handover of the IFMIS from USAID to the MOF will only be possible if/when the following key actions are taken by the MOF:

1. The IFMIS is under the sovereign control of the MOF, meaning the MOF has identified and secured a suitable site for the IFMIS hardware and is in full control of the system's management.
2. Full parallel processing is ongoing when all 267 SUs enter a full month's data from January 1, 2009.
3. A GOI financial audit is conducted and based on the IFMIS.
4. The MOF issues a follow-up ministry order (MO) providing: additional clarity and guidance on the use of FMIS including; shutdown date for the legacy system and identify the FMIS as the only accounting system of record for the GOI; FMIS used as the primary source data and reporting; and ordering SUs to adopt appropriate financial management procedures to ensure the quality and completeness of financial data.
5. Identification of a suitable location for the Disaster Recovery System.
6. The MOF ensures IT skill capacity to maintain and upgrade the FMIS on a continuing basis.
7. A FMIS Steering Committee is set up and a FMIS "Champion" is identified.
8. The Budget module to support the 2010 budget cycle is implemented.
9. The MOF initiates procurement of FMIS equipment as soon as possible in light of a possible 2-3 month time lag to obtain procurement approval.

[3] It should be noted that these benchmarks are recommendations only, based on KIIs and review of documentation to date by the FMIS assessment team. The team notes these are aggressive in nature and will take full cooperation of all stakeholders if they are to be met within the timeline set forth above. These benchmarks are considered to be 'best case scenario'. The FMIS assessment team cannot determine at this point whether or not they can or will be met within the timeframe outlined.

The actions noted above must be driven by the MOF. Without these being fully executed, the conditions set forth for completion of the IFMIS within the MOU dated January 14, 2008[4], will not be met prior to fully expending current USAID funding. It is anticipated that the main areas of work that will **not** be completed under the current funding arrangements are:

Phase 4: Providing technical assistance at an estimated Level of Effort (LOE) of 90 days to the MOF Accounting Directorate to build capacity and introduce international best practices to business processes and accounting regulations.

Phase 6: Providing technical assistance at an estimated LOE of 171 days for the implementation of the FMIS Performance Budgeting module.

Phase 7: Providing technical assistance at an estimated LOE of 60 days for the implementation of the FMIS Purchasing Functionality.

The slippage of these components is primarily due to the absence of MOF and MOPD counterpart support. BE consultants are currently engaged but are not fully utilized awaiting counterpart support. While this situation continues, BE and USAID are expending valuable funding for little return at this stage on the Budget Performance and Purchasing IFMIS modules. Due to the slippage in rollout, primarily being the responsibility of the MOF, the assessment team does not believe that USAID or its implementing partner BE should be responsible for the components not delivered as outlined in the MOU, and highly recommends this be discussed between USAID and the MOF soonest possible.

IFMIS Implementation Costs

The total cost of the FMIS until the June 2007 shutdown was $22,093,386. The amount obligated for reactivating IFMIS under the MOU was $7,830,009 for a total cost of $29,923,395. The FMIS assessment team estimates that to fully implement the current MOU prior to the handover to the MOF an additional 321 days of LOE will be needed at a cost of $5,000 per day. This represents $1,605,000 of unfunded activity beyond April 30, 2009 to ensure the successful completion of this project. That said, it is the judgment of the assessment team that without robust MOF counterpart support no amount of money or time will ensure complete implementation of the IFMIS by USAID and believes these costs should be incurred by the MOF.

USAID Strategic Options

The MOU outlines an agreement to cooperatively identify and resolve technical issues and transfer full ownership of the IFMIS system to the MOF. These obligations are the joint responsibility of both USAID and the MOF. Due to the numerous outstanding issues yet to be addressed and/or resolved by the GOI and MOF, USAID cannot meet the expectations of the MOF outlined in the MOU upon handover.

The strategic options for USAID include the following:

[4] It is not anticipated these actions will have been taken prior to the expiration of the current MOU.

- USAID does not provide any more funds than currently allocated to the IFMIS, on the premise that no amount of money or time will successfully complete the implementation of the IFMIS.
- USAID allocates the additional estimated $1.6 million for the remaining outstanding tasks to be completed, including the implementation of the Performance Budget and Procurement modules, with conditions placed on the MOF to complete their responsibilities within a clearly set timeframe.
- USAID requires that the MOF finance the additional costs incurred as a result of MOF delays in taking appropriate and timely actions in IFMIS implementation to date.

Conclusion

USAID and its implementing partner BE have gone to great lengths to provide the MOF with a fully functioning FMIS under extremely difficult operational circumstances. From a purely technical point of view, BE has brought the IFMIS to as fully a functional system as can be provided until such time as the MOF and GOI complete the tasks required of them to ensure a fully functioning FMIS. The assessment team reviewed all systems related to the IFMIS currently in place finding they are adequate to meet the current and likely future needs of the GOI.

According to a World Bank study completed in 2003, the average time taken to fully implement a FMIS is seven years. An argument could be made based on the Bank study that the IFMIS has not yet hit the seven-year threshold for implementation and therefore the expectations set forth in the MOU are unrealistic, particularly given the Iraq context. That said, it is the opinion of the assessment team that while there appears to be increased political will within the GOI to implement this system, until such time as all GOI stakeholders see IFMIS as a priority and are willing to take ownership of it, it will likely never be fully implemented, the MOU between USAID and the MOF notwithstanding.

I. INTRODUCTION

In 2003 The United States Government (USG), under the authority of the coalition Provisional Authority (CPA), instructed the United States Agency for International Development (USAID) to begin implementation of a Financial Management Information System (FMIS) through the Economic Governance (EG) contract implemented by Bearing Point (BE). As a result of this directive, implementation of the Iraq Financial Management Information System (IFMIS) was started.

As part of its efforts to modernize public financial management, the Government of Iraq (GOI), with the assistance of BE, brought its Chart of Accounts (COA) and budget classification in line with the Government Financial Statistics Manual (GFSM 2001) within a cash accounting framework.

As of June 2007, the IFMIS had been rolled out in 132 spending units (SU) nationwide. According to BE and Ministry of Finance (MOF), these 132 SUs captured over 80[5] percent of GOI expenditures. However, work on the IFMIS was terminated following the abduction of five BE consultants in May 2007, as well as due to difficulties to align the system to the needs of the Iraqi government.

On January 14, 2008, a Memorandum of Understanding (MOU) was signed at the request of the GOI's MOF between USAID and the MOF to restart the implementation of the IFMIS. This request demonstrates some degree of political will on the part of the GOI to have a fully functional IFMIS. The MOU outlines an agreement to cooperatively identify and resolve technical issues and transfer full ownership of the IFMIS system to the MOF. While USAID may continue to offer limited technical assistance to the MOF to operate, maintain and update their system, the MOF will assume full ownership of the computer hardware and software.

Having a fully functional and implemented IFMIS is considered a key component of the GOI's International Monetary Fund Stand-by Arrangement (IMF-SBA), which outlines requirements that the GOI must fulfill to be eligible for IMF emergency assistance and debt cancellation from the Paris Club. This may be, in part, the impetus behind the GOI's desire to push the implementation of the IFMIS to completion.

Report Structure

This Independent Situation Assessment of the IFMIS is presented in two volumes:

Part 1 Main body of the report covers the independent situation assessment of IFMIS.

Part 2 Provides annexed documents in support of the team's findings as well as relevant background materials.

As required in the SOW, the IFMIS report addresses the following issues:

[5] Since all original data was destroyed in a fire at the Central Bank, it was impossible to verify this figure. However, both BE and MOF have independently quoted this percentage.

- Current functionality of the FMIS General Ledger, including data entry, data processing and analysis, completeness of required financial data, GOI capacity to implement, modify and maintain the FMIS and suitability of hardware and connectivity.
- Report generation, including suitability of report configurations and types for GOI needs, efficacy, accuracy and ease of use of reporting tools, and adaptability in customizing alternate reports.
- Recommendations which include identification of benchmarks necessary for full implementation and institutional and organizational needs of the GOI for the successful implementation of the FMIS.

Scope of Work and Approach

Several previous assessments have been conducted on BE's implementation of the FMIS on behalf of USAID. The most notable of these are:

- The IMF report on implementing a FMIS as an emphasis on reporting needs (March 2007).
- The SIGIR report on efforts to implement the IFMIS in Iraq (October 2007).
- The IMF report on Iraq reform priorities in Public Financial Management (April 2008).

These reports provided the basis of perceptions and expectations from which was developed a SOW for the FMIS assessment team. (Annex A)

As part of the SOW, the IFMIS assessment team was required to first to travel to IBTCI's home office where they were provided a brief of the operational situation in Baghdad, met with IFMIS stakeholders, including BE management, as well as draft their pre departure work plan which would provide the foundation for their work in Iraq.

In Iraq, the IFMIS assessment team conducted the fact-finding portion of the initiative which included meetings with USG officials from USAID and the US Treasury, BE and GOI officials including the MOF Director General for IFMIS as well as the information technology support staff, and the Senior Adviser to the Finance Minister.

Discussions with stakeholders were also an opportunity to request and collect supporting documentation which would allow the IFMIS assessment team to draft its report. Finally, the IFMIS assessment team was able to access two SUs within the IZ as well as attend a IFMIS refresher training session. Although the SOW stipulated that the IFMIS assessment team meet with the MOF DG of Budget and the DG of Accounting, unfortunately, and despite several attempts, these meetings did not materialize during the team's time in Iraq.

II. BACKGROUND

As mentioned, this is one among several previous assessments of the IFMIS conducted in recent years. Previous reports, which included detailed assessments of IFMIS

implementation, are rich in background information on the various systems and applications which make up the IFMIS. In an effort to address the issues and concerns presented in the SOW, the IFMIS assessment team has foregone a more traditional approach to report structure and opted to respond directly to the questions outlined in the SOW. Nonetheless, where appropriate, background information on the IFMIS system has been incorporated into the various responses. Additional background information which may be of interest to the reader is available in the appendices and is referenced accordingly.

Memorandum of Understanding between the United States Government and the GOI

The history of the IFMIS dates back almost five years. The MOU between the USG and GOI dated January 14, 2008 is regarded as the starting point for this independent situation assessment of the IFMIS. (Annex D)

The MOU clearly sets out a specific schedule of tasks for the MOF and USAID. An update of the progress to October 31, 2008 by each party in meetings its obligations are noted in the table below. Nonetheless, details of USAID's, and its implementing partner's, BE, status regarding the MOU deliverables will be addressed in more detail further on in this report as we respond to the specific questions outlined in the SOW.

Table 1 – MOU Progress to October 31, 2008

MOU DELIVERABLES by MOF	
Deliverable	**Action(s)**
Work with MOF to identify and correct any currently identified technical problems with the IFMIS system and enable the system to absorb 250 sites.	Besides some minor servicing and upgrades to the servers and FB application, the system did not suffer from many major problems. These minor issues have been addressed. The main concern of the MOF is with internet and bandwidth availability. This is being addressed by BE.[6]
Provide technical support for restarting IFMIS servers and resuming VSAT internet connectivity for IFMIS sites previously funded under the program (USAID will not pay connectivity charges or equipment charges going forward).	BE is providing the technical support to the MOF and has completed a restart of the IFMIS system. Site assessments are underway to determine the needs of SUs which previously had access to the IFMIS. MOF does not currently have a strategy to address inadequate bandwidth issues affecting certain SUs. Solutions are being investigated. The MOF has earmarked 3.9 billion Dinars for the purchase of computers and VSAT for SUs not part of the original rollout of the IFMIS
Facilitate introductions and relationship development for MOF IT Directorate and appropriate functional staff with all software and hardware vendors. This will allow the MOF to assume an ownership role over the system software.	BE contacted FB to introduce MOF IT staff and facilitate initial discussions. BE working jointly with MOF IT staff to build up capacity and experience in managing and maintaining the IFMIS. BE notified MOF senior officials in writing of

[6] It is the opinion of the IFMIS assessment team that based on the current system, this should not be an issue. Further discussion is found under the section "Hardware Support."

MOU DELIVERABLES by MOF	
Deliverable	**Action(s)**
	upcoming renewal of contractual obligations, i.e.: software licenses, service-level agreements, VSAT connections.
Work with the MOF to develop additional training programs to engender greater understanding of the IFMIS and its abilities. These efforts will be designed to build capacity in the MOF and other GOI entities to take full advantage of the program's deliverables.	BE developed and commenced train-the-trainer sessions with MOF employees. Advance training is being designed to provide SUs with greater knowledge of IFMIS functionalities.
Develop a workable offline data-entry tool.	BE and FB are developing offline versions of expenditure function for SUs with connectivity issues or as a backup in the event of long periods of inability to connect/utilize the IFMIS. This tool is not a substitute to the IFMIS and the MOF should continue to work towards network connectivity of all SUs.
Complete the installation of Crystal Reports.	Crystal Reports (CR) licenses have been acquired. Trial Balance report has been created but does not require CR. At this point CR is not being used.
Provide train-the-trainer workshops to foster sustainability for program gains and ensure GOI buy-in going forward.	BE commenced training of MOF staff to take on IFMIS training to existing and future IFMIS SUs/users. Current training to users is provided by local BE staff who could be hired by the MOF to continue training after BE departs.

The IFMIS will be considered completed when the USAID advisors have addressed the technical issues that have been formally identified and has returned the IFMIS server equipment to the MOF. While USAID may continue to offer limited technical assistance aimed at promoting capacity at the MOF to use, maintain and update their system the GOI will assume full ownership of the computer system and the software at this time. As such, the MOF will have the sole obligation to fund upkeep and maintenance costs once USAID has transferred the IFMIS system to the MOF as 'completed'.

III. CURRENT STATUS OF IFMIS IMPLEMENTATION AND USAGE BY THE MOF

The completeness of required financial data

The IFMIS assessment team had originally planned on visiting 10 SUs; these 10 were assumed to represent a cross-section of SUs equipped with the IFMIS. Upon arrival in-country and subsequent to meetings with both USAID and BE, it was made clear that these SUs were part of a pilot project intended to determine the required effort in advance of a comprehensive re-launch of the IFMIS. Additionally, these 10 SUs had been provided with support and guidance that will most likely not be available to other

SUs once they are determined to be ready for re-launch. As a result, USAID and BE advised the IFMIS assessment team that visiting the 10 SUs would provide little meaningful data from which to draw conclusions as to the conditions and state of readiness of the staff in all SUs.

These factors in addition to the restricted access to the IFMIS impeded the IFMIS assessment team's ability to draw final conclusions regarding the completeness of financial data. Although the issue of data suitability was never raised as a main concern, and it appears that the data elements currently captured represent the priorities of the GOI at this point in time, MOF financial management procedures may be introducing unreliable and/or incomplete transaction data which impacts IFMIS reporting and data integrity. Additionally, the implementation of the Procurement and Budgeting Modules are important components and would significantly increase the financial data captured by the GOI.

Notwithstanding the above noted information gaps, it was found that other functionalities which could contribute to improving the quality of the financial data are currently being omitted. For example, the advent of computer based accounting systems has allowed for the adoption of commitment controls by which the system monitors expenditures by SUs against allocated budget and available funds. FB is equipped with such functions however the MOF has chosen not to enforce them. This, among other things, greatly diminishes the role the IFMIS plays in budget execution within the GOI and limits its ability to become a strategic tool for the MOF. In summary it is noted that:

- The IFMIS Core General Ledger is a fully functional in production system and is ready for full operation.
- The IFMIS Budgeting module has been configured by BE but is yet to be implemented and is awaiting the MOF DG of Budget buy-in. No time line for implementation has been set.
- The IFMIS Purchasing module has been configured but yet to be implemented as it is awaiting MOPD buy-in. No time line for implementation has been set.

GOI Chart of Accounts

The COA is a reference number which is attached to each transaction entered into the IFMIS. The COA can vary greatly from organization to organization and is very useful for tracking expenditures against certain types of activities or initiatives. The GOI's COA is a 15-digit numerical code which can be decomposed into its various segments and provides detailed information on the nature of the transaction. In Iraq, the COA captures only basic financial information such as expenditures and assets at various levels of aggregation. In addition to this information, the IFMIS automatically generates a corresponding Global Financial System (GFS) code but only as far down as the Level 3 transaction detail. Levels are explained further down in this section.

Table 2 – Structure of the GOI Chart of Accounts

COA Segments						
Section	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**GFS**
E.g.: Expenditures, Revenues	Levels of transaction aggregation					GFS codes are automatically generated by the IFMIS. SUs are not required to enter this information.

In developing countries it is common for the COA to include segments pertaining to priority activity sectors such as health, agriculture, education and public works. Additionally, some governments may also have segments which identify particular programs or projects being implemented with development partner funding (e.g. the Millennium Challenge Corporation (MCC), President's Emergency Plan for AIDS Relief (PEPFAR)) to ensure accurate and comprehensive reporting against funds received. Although the GOI does collect such information on its transactions, it is not as a matter of practice incorporated into the COA.

Essentially, the COA is the backbone of the system and is configured to specifically meet the needs of the government entity. This includes the ability to create accounting table roll up structures that summarize financial data from one table to the next (each table in the roll up structure providing a more summary view to the preceding table). This is extremely significant for reporting purposes. More detailed information of the COA may be found in Annex F.

If we consider Figure 1 below, it helps us understand how the information within the COA is generated and categorized. As we can see, “Section” determines if it is a Revenue or Expenditure and is the highest level of aggregation available. If the transaction is an expense, then it is tagged with a “2” under Section. When we move to the “Level”, users are provided with various degrees of precision pertaining to the type of transaction. If we start with Level 5 and work our way up, we can see that “Lecturers Wages”, for instance, are in fact a sub-component of “Standard Wages and Salaries” (Level 4), which is in turn part of “Wages and Salaries in Cash” (Level 3), which is also part of “Wages and Salaries” (Level 2) and so on. From the user’s perspective, all transactions entered into the IFMIS are tagged at Level 5, which automatically generates all the upstream codes and tags the transaction accordingly. The last column, with the grey heading, is the GFS code. Users are not required to input GFS codes, instead, BE designed the IFMIS to automatically tag each transaction with the appropriate GFS code during the data entry phase.

GFS Compatible 2007 Expenditure & Non Financial Assets COA													
2006 COA Coding						New 2007 COA Coding						[MoF use only]	
Section	Chapter	Item	Type	Type Detail	Description	Section	Level 1	Level 2	Level 3	Level 4	Level 5		GFS 2001 Coding
					Expenditures	2							2
					Compensation of Employees	2	01						21
					Wages and Salaries	2	01	01					211
					Wages and Salaries in cash	2	01	01	01				2111
					Standard Wages and Salaries	2	01	01	01	01			
2	01	01	001	01	Salaries	2	01	01	01	01	01		
2	01	03	001	01	Rewards for Employees	2	01	01	01	01	02		
2	01	04	001	01	Contractors wages	2	01	01	01	01	03		
2	01	05	001	01	Lecturers Wages	2	01	01	01	01	04		
2	01	06	001	01	Examinations Wages	2	01	01	01	01	05		
2	01	07	001	01	Committees Wages	2	01	01	01	01	06		
2	02	25	001	01	Education leave of Absence	2	01	01	01	01	07		
					Allowances	2	01	01	01	02			
2	01	02	001	01	Hazardous allowances	2	01	01	01	02	01		
2	01	02	002	01	Overtime	2	01	01	01	02	02		
2	01	02	003	01	Residential allowance	2	01	01	01	02	03		
2	01	02	004	01	Hospitality allowance	2	01	01	01	02	04		
2	01	02	005	01	Exceptional Allowances	2	01	01	01	02	05		
2	01	02	006	01	Controlling Allowance	2	01	01	01	02	06		
2	01	02	007	01	Position Allowances	2	01	01	01	02	07		
2	01	02	008	01	University Service Allowances	2	01	01	01	02	08		
2	01	02	009	01	Alarm Allowance	2	01	01	01	02	09		

Figure 1 - Chart of Account Structure

Financial management practices within the GOI

In addition to the COA, the nature in which data is entered into the IFMIS is also a pivotal factor in the ability of the IFMIS to produce required reports at an appropriate level of detail. Although the IFMIS assessment team was not granted access to data, discussions with both BE and the staff at two SUs provided additional information regarding financial management practices currently in use within the SUs. Although IFMIS is in limited use, the accounting system of record is the legacy application which was designed on the FoxPro platform. The manufacturer of this software no longer exists. Following the November 11, 2008 Ministerial Order (MO), SUs were instructed to use the IFMIS and the legacy system in parallel for accounting purposes. Since the legacy system appears to have precedence over IFMIS, it is common practice for SUs to enter their transactions into the legacy system first, await approval of the transaction, which can take up to 15 days, and then enter the transaction into the IFMIS.

Prior to the issuance of the MO, the IFMIS was not perceived as an important task and therefore, according to discussions with two SUs, IFMIS employees were often tasked with other responsibilities which in some cases were considered of greater importance than the IFMIS. In an effort to complete all their tasks and ensure that the IFMIS is up to date, SUs will in many cases only enter Journal Voucher summaries of transactions instead of each transaction into the IFMIS. This impacts the specificity of the data entered into the IFMIS and may preclude the generation of detailed reports due to the absence of transactional information. It is impossible to ascertain the commonality of this practice however it is not the result of poor training as the staff knows how to enter the appropriate data they simply haven't done so.

Suitability of IFMIS reports for MOF needs

The reporting capabilities of applications such as the IFMIS are by far one of the most essential and powerful functionalities. Previous IFMIS studies have postulated that IFMIS reporting functions are inadequate and, in large part, the fundamental reason the GOI is unable to produce all the IMF proposed/required reports.

Reports critical of the IFMIS stated that the FB software did not permit users access to all data elements and limited formatting options, and therefore concluded that FB was the main obstacle to producing among others, IMF reports. Following the IFMIS assessment team's analysis of both FB reporting tools and GOI financial management procedures, the team has concluded that although there are some minor limitations with elements of the FB reporting function, the primary reason that the GOI is unable to meet most of the IMF reporting requirements is a product of poor financial management mechanisms on behalf of the GOI, not the system itself. Notwithstanding these issues, the description of the reporting tools assumes the integrity and availability of all data at the outset. The impact of poor data quality is addressed further in this report.

IFMIS reporting

The IFMIS was designed with two approaches to reporting. The first, which was recently introduced to fulfill the requirements of the MOU, is a static "Trial Balance" created by FB[7] at the MOF's request which allows SUs to produce their Trial Balance in the identical format available in the legacy accounting system. The second approach is a drill-down tool, pictured below in Figure 2, which allows users to produce reports based on all the data elements and according to the level of specificity they desire.

[7] The Trial Balance is the only static report FB were asked to produce. Although the FB reporting tool could provide the same data as the Trial Balance, the format provided by the standard FB reporting tool was inadequate to MOF needs.

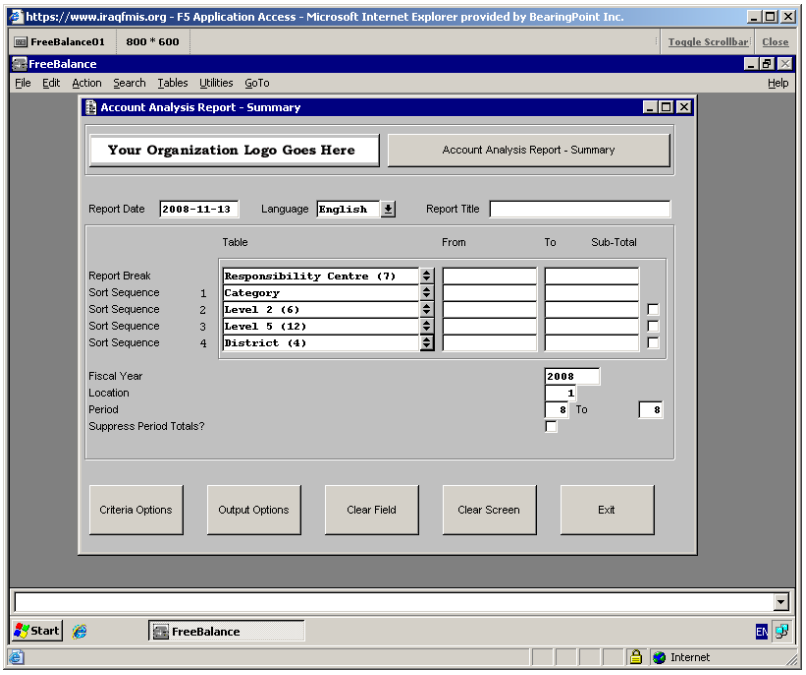

Figure 2 – FreeBalance Drill-down Reporting Tool

FreeBalance reporting tool

Access to certain data elements is predicated on the user's access rights. Therefore, despite the existence of certain data elements, not all users will be able to generate reports on them. Some typical restrictions are at the SU level. SUs can only access and view data from their respective SU. Additionally, they will not be able to view aggregated data at a higher level, for example groupings of SUs within a particular Governorate.

As noted above, the IFMIS generates a COA for each transaction entered into the system. In addition to the COA, the IFMIS also captures other data such as Fund Component (i.e. origin of the funds for the particular expenditure), Responsibility Center (i.e. Spending Unit), District (i.e. location within the Governorate) and Project coding (i.e. reference code associated with a particular project where applicable). This information is not treated as a segment of the COA however, is it attached to each transaction.

The FB reporting tool requires that users identify Responsibility Center and then the Category (i.e.: "Section" element of the COA). Users are then able to query data at either the Level 2 or Level 5 of specificity. To the right of the fields just mentioned are the "FROM" and "TO" fields through which users select either a limited range of transactions or all transactions depending on their requirements. For instance a user could select only Education Leave of Absence by specifying the following range: "From": 20101010107, "To": 20101010107. Therefore if users want Level 5 details but not all expenditures, the range will allow them to constrain this element. For presentation purposes, since all data is tagged at the Level 5, a Level 2 will be the aggregation of Level 5 transaction within the selected range if applicable. Once the user has entered the range of information desired the report is generated and can either be displayed on

the screen or printed. From a review of the COA it is apparent that providing reporting at these two levels of transaction detail affords users with a sufficient range of data elements and specificity and in no way constrains or limits access to data elements as is suggested in other reports.

If there is one complaint with the FB reporting tool, it is its limited formatting capabilities. With the exception of the Trial Balance which was designed as a static report, all other reports are structured in exactly the same format regardless of the data selected. As the IFMIS assessment team was only able to view Arabic versions of the reports, we relied on information received from the MOF and SU staff as to the structure's suitability. For the most part, users appear satisfied with the structure but did express relief with the creation of the Trial Balance which appears to be their primary reporting concern. While the assessment team spoke with only a limited number of MOF and SU staff concerning this issue, it is the Team's opinion that the structure may indeed not suit other reports such as those required by the IMF. This is not a huge limitation however and can be overcome as FB is equipped with an export function that allows users to transfer the report data to a file for import into an application such as Excel. Following the export from FB and the import into Excel, users can then conduct further analysis of the data or reformat the report as required. In the IFMIS assessment team's view, this is actually a more viable approach to addressing this limitation within the FB reporting function than acquiring the Crystal Report (CR) software which is very specialized and requires additional training to use. It is very likely that a majority of GOI users are already familiar with Excel and may find this alternative preferable to using CR.

Crystal Reports

As part of the MOU, and in addition to the reporting tools mentioned above, BE was instructed to acquire the CR reporting software in an effort to improve the quality of GOI reports which, according to the SIGIR, were limited due to the inadequate reporting tools available in FMIS and more specifically FB.

CR is an "off-the-shelf" reporting software which allows users to access data in their repositories and create various static and ad hoc reports based on the available data. CR is a powerful application but requires technical knowledge of the application as well as analytical skills to explore the various ways in which financial data can be processed and presented to utilize it full benefits.

Bearing Point response to IMF report

As noted by BE in their September 13, 2008 response to the April 2008, IMF "Reform Priorities in Public Financial Management" report, which outlined a number of financial reports which IFMIS should be able to produce, BE stated:

> *"The FreeBalance system will provide the necessary reports as noted in the IMF Report of April 2008 with minimal secondary record keeping. Accounting analysis and special report requests will still require some financial calculations…*
>
> *Until such time as the GOI devotes the necessary resources and commitment to the development of nationwide accounting procedures, standardized documents,*

training and oversight, and, the appropriate use of an ERP system, the true capacity of any accounting software solution will be underutilized... Further, continued requests by the MOF and donor organizations to modify report formats or meet extraneous reporting requirements, ignores the larger picture that the existing policies and procedure are antiquated, dysfunctional and jeopardize the financial structure of the nation. Until these operational policies and procedures are addressed, any FMIS system will only provide unreliable data and reports."

The Team's assessment of the IFMIS supports BE's conclusions. In contrast to SIGIR, reporting will remain a problem until the GOI addresses fundamental issues with their financial management practices and affords the IFMIS with the required support identifying it as the system of record for accounting and discourages SUs from populating the IFMIS with inadequate information. The acquisition of CR will not resolve these problems. Nonetheless, if the GOI continues to use CR, it will require additional training which is currently not considered as part of the handover process.

Technical capacity of MOF staff to implement, utilize and maintain IFMIS

In an effort to respond to this question the IFMIS assessment team assessed the current system structure and deployment, existing and availability of in-country skilled human resources and ongoing initiative to train and expose GOI employees, including MOF, to the system.

Since the IFMIS assessment team was not able to observe MOF IT staff conducting either maintenance on the system, or training GOI employees, it relied on BE opinion of MOF IT staff, their assessment of the availability of adequate technical expertise within the country, and observations from the meetings and discussions with MOF IT staff.

Comprehensive training of all technical staff is underway. BE has designed a number of training sessions to ensure MOF IT staff are well versed in all components of the IFMIS including FreeBalance Tier 1[8] troubleshooting and support, computer hardware maintenance and configuration, as well as supporting other elements of the FMIS including the Operating System and Firepass, and conducting regular system backups, and management of the Disaster Recovery Site.

IT human resource capacity within Iraq

BE has expressed satisfaction with the level of technical skills demonstrated by current MOF IT staff which they assess at more than adequate to support the IFMIS. In addition, based on their success with recruiting local IT experts, BE is also of the opinion that notwithstanding the security issues, which may limit the number of IT experts willing to work for the GOI, Iraq does not suffer from a shortage of competent IT skilled people able through training and hands-on experience to take over the management of the IFMIS.

Although the MOF has expressed some reservations with the pending handover, for the most part this is due to a perceived lack of hands-on experience in maintaining the

[8] Tier 1 support relates to technical issues with can be addressed by MOF and does not require modification to the applications or significant repairs to hardware either at the SU or IFMIS IT center. This could include difficulties in connecting to the IFMIS.

IFMIS and not an inadequacy to manage the IFMIS. These concerns are valid. A contributing factor to this anxiety is the lack of in-country FB technical experts.

In order to assess the current contingent of MOF IT technical staff, the IFMIS assessment team requested a copy of the MOF's organization chart. Although the assessment team was able to obtain the chart, it was not provided an opportunity to engage the MOF in a meaningful discussion which hindered the IFMIS assessment team's ability to undertake a full assessment of MOF staffing.

Nonetheless, the IFMIS assessment team was able to ascertain the following about the current HR situation within MOF IT. (Annex H). The MOF has a team of 19 staff. Under the MOF DG of IT, the organization has several units of IT skills including security, planning, network, Internet, data management, training, and operational management. Within the list of technical staff, the MOF has advised that they will assign two full-time engineers to the task of maintaining the IFMIS hardware. The engineers are currently employed by MOF and have been trained on the IFMIS. According to BE only one engineer is required. However, having two engineers will ensure there are at least two skilled technicians, for the time being, with hands-on experience in managing the IFMIS. The issue of hands-on training is addressed in more detail in Question 2a.

IFMIS training

As Iraq does not appear to suffer from a shortage of skilled IT individuals, the MOF's ability to provide training to new and existing IFMIS users is fundamental. From the inception of the IFMIS, BE has developed and delivered a range of IFMIS related training. When operations on the IFMIS ceased in June 2007, approximately 590 GOI users had undergone IFMIS related training.

IFMIS training modules currently available to the GOI/MOF are:

Train the Trainers: Training designed to provide MOF staff with the skills and knowledge required to undertake IFMIS training to SUs following the handover of the IFMIS. After reactivation of the IFMIS in July 2008, the first batch of six "train the trainers" will be completed in November 2008. It is expected that they will assist in conducting both refresher and new IFMIS user training in December 2008 and first quarter of 2009.

Refresher Training: Two day refresher training course provided to all SUs/users using the IFMIS prior to its shutdown in June 2007. Provided by BE local staff and currently underway.

FMIS Training: Five day IFMIS hands-on-training course using terminals and entering of test data for SUs/users who have never used the IFMIS. This training has not yet commenced for the re-launch of the IFMIS.

Super User Training: Administrative level IFMIS training provided to a select number of key users from large SUs allowing them to have

access to user related administrative changes to the IFMIS. This training has not yet commenced for the re-launch of the IFMIS.

IT Technical Training: Advance level IT technical training provided to MOF DG of IT staff consisting of training on various components of the IFMIS.

Table 3 – IT Technical Training Source BE

IT Training Topic	No of locations	Date
MS SQL 2005	4	Oct 18-20
MS ISA 2004	3	Nov 1-3
IFMIS architecture overview & configuration training	10	Nov 13th
FirePass F5	8	Nov 16 – 17
Disaster Recovery Configuration	10	Nov 18-23
Network Infrastructure Planning/Implementing	4	Dec 7-15
Active Directory	4	Dec 28 – Jan 3
Systems Configuration and Operations Training	10	Jan 5th

FreeBalance Training: Training provided by the manufacturer of the software to IT experts tasked with maintaining the IFMIS. Arrangements are being made to train an initial batch of four MOF DG IT staff in Canada during the first quarter of 2009[9].

In support of the above mentioned training, with the exception of the FB training, BE has designed a number training manuals for IFMIS users. These manuals, all translated into Arabic, are available for downloaded via the internet and include:

Table 4 – IFMIS User Training Manuals

FMIS User Training Manuals
IFMIS Overview (PowerPoint Presentation)
IFMIS Data Entry
Free Balance Basic
Interface Manager User Interface
Security Manager User Interface
Free Balance Planning Module
Budget User Manual
Accounting Directorate User Manual

Additionally, the MOF IT staff will be provided with a number of technical manuals which provide all of the settings and configuration of the hardware and supporting systems. At the time of the assessment these documents were still in draft format. BE is progressing

[9] As with all other aspects of the IFMIS, the GOI is responsible for the funding of such activities. However, USAID is considering the possibility of assisting the GOI in this endeavour as it is an important aspect in ensuring GOI is capable of supporting IFMIS once USAID and BE pull-out.

well in this area and have indicated that these users manuals should be available to MOF prior to handover, however no firm date for completion has been set.

Training material and manuals appear to be adequate and well designed. Although the IFMIS assessment team observed one Refresher Training session, which was well attended and participants indicated they were satisfied with the content, the team was not able to attend other types of training as none were scheduled during the team's time in Iraq. Of particular interest are the Train-the-Trainer sessions which will ensure the MOF is able to undertake the training function upon assuming responsibility and control of the IFMIS.

The Team's limited observations of Refresher Training appear to show that skills of pre-existing IFMIS users have not significantly degraded. Although BE has allocated two days of training for refreshers, according to both BE staff and IFMIS trainers, for the most part one session has been sufficient to bring them back up to speed.

The MOF is satisfied with the IT technical training with one caveat; the amount of classroom training, as opposed to hands-on access to the IFMIS hardware which would allow them to put into practical use their newly acquired knowledge. The MOF is of the opinion that the theoretical nature of the training is insufficient and that a handover in the absence of sufficient access in advance is problematic.

Expert research has demonstrated that training should be tailored to its audience. It is acceptable to assume that training materials designed for one culture may not be as well suited to another. In light of the technical nature of training materials, it may be advisable to have the IFMIS materials assessed by a training expert familiar with either Iraqi or Middle-Eastern culture and learning habits.

Hardware support

A FMIS can be rolled out as a remote-access networked system or as a decentralized stand-alone system. For the latter, SUs would be provided with their own computer network including a server and terminals, their own fully functioning copy of the FB application, and be required to maintain the equipment, conduct routine maintenance, perform regular back-ups of their data and periodically forward their financial data to the MOF for consolidation, as well as a large number of other IT related activities to ensure the proper functioning of the system.

In Iraq, the IFMIS has been rolled out as a remotely-accessed networked application. Under this scenario, the IFMIS application will be housed at a central location, the MOF HQ in Baghdad, on large servers which manage both the database and the application interface. For this approach, SUs are only required to have a few computer terminals, a printer and an Internet connection. This approach to installation has a number of benefits including simplicity of installation and limited maintenance requirements for SUs. The main drawback is that a poor or unavailable internet connection could prevent an SU from accessing the system.

Under the current system, SUs require the following equipment:

- Computer terminal(s) with CPU, screen, keyboard and mouse[10]
- Printer
- Internet connection[11] providing a minimum bandwidth of 128kbps[12] uplink[13] and 256kbps downlink
- Internet browser software, e.g.: Internet Explorer, Firefox

Of the 266 SUs, 132 have already been outfitted with the above noted equipment. The MOF has set aside 3.9Billion Iraqi Dinar for the purchase of equipment for all other SUs including the replacement of equipment that was lost at the SUs during the lapse in IFMIS operations.

With this approach to roll-out, the central servers are the pivotal element in the systems functioning and ability to support the IFMIS. MOF IT staff has expressed reservations with the central hardware's capability of supporting all 266 SUs once they are all connected and accessing IFMIS simultaneously. To address this issue of systems capacity one must examine the original approach to IFMIS implementation.

Prior to shut-down, 132 SUs were connected and entering financial data into the IFMIS. According to BE and the MOF, these SUs represented approximately 80% of total budget expenditures for the GOI at the time and most likely a significant majority of actual transactions. On average, SUs are provided with 2-4 terminals when they are connected to the IFMIS. With the addition of 134 SUs it is estimated that there may be a possible increase from between 268-536 users. From the two site visits the IFMIS assessment team made it was noted that average-size SUs are processing between 200-300 transactions a month. Therefore, even if the number of transactions were to double most new SUs will be processing no more than 30 transactions a day and even with the maximum number of employees, which increases the number of simultaneous users of the system, each user will only be accessing the system to enter seven transactions a day.

Notwithstanding this, the system can be upgraded to handle an increase in users without requiring anything more than adding a server to distribute the workload across a larger number of systems. In conclusion, it is difficult to predict how the system will be affected by the doubling of the total number of potential users. In the past, the system was functioning properly with a majority of transactions being captured. Although the system has benefited from some minor repairs and upgrades to power-supplies, it remains relatively identical to the previous system and BE is of the opinion that the existing system has more than enough processing power to support all 266 SUs once they are up and running sometime in the new year.

[10] The number of terminals is based on the size of the SU and the volume of transactions. According to BE, so far SUs have received at a minimum two terminals and as many as four.
[11] This connection can be obtained through a VSAT system or through other internet service providers if available.
[12] Kbps is kilobits per second, which is the rate at which the data travels across the network.
[13] Uplink refers to the process of transferring data from the SU computer to the MOF central server. Downlink refers to the process of acquiring data from the MOF central server and transferring it to the SU.

Hardware suitability and connectivity

In the context of Iraq, the approach to design and development of the IFMIS adopted by BE has virtually eliminated the need by the MOF IT staff to travel to SUs to conduct maintenance beyond the initial installation of terminals and printers. In light of the ongoing security risks to travel across country overland, this is an important feature.

IFMIS is based on the FB software platform and is comprised of one module with several components. From the user's perspective, the interface is the component with which they will interact. Part of the server is dedicated to managing the multiple screens available to the users and provides a visual layout that will in part facilitate data entry and inform the user what information is required to complete the transaction. In the case of FB, the interface has been developed using programming standards that permit users to access the system through the use of a web browser such as Internet Explorer, Safari or Firefox. Since all the screens are housed in the IFMIS headquarters, it essentially eliminates any need by the IFMIS IT team to visit SUs to conduct any maintenance or corrections to the interface.

Where concerns remain is with Internet connectivity. SUs connect to the IFMIS in one of two ways: through a dedicated internet connection installed for exclusive use by the IFMIS or through the existing SUs internet connection installed for use by all SU staff not just those with access to the IFMIS. Though the latter is more cost effective, it has caused problems for the IFMIS. As mentioned, the IFMIS requires a minimum of 128/256kbps to connect and use the system properly. On dedicated connections the speeds often exceed this minimum requirement and both BE and the MOF have received very few complaints regarding IFMIS access from these SUs.

However, in the case of shared access, many SUs have complained of difficulties in accessing the IFMIS, especially during normal working hours when a significant number of employees are using the Internet for both work and personal reasons. But even after hours, the internet connection is often too slow to allow access. Although there is no proof to support our speculations, BE, the MOF, and the IFMIS assessment team are of the opinion that employees accessing web sites which demand high bandwidth to view their web pages or those downloading music and videos through file-sharing applications are absorbing a large amount of the available and limited bandwidth thereby impeding the use of critical business tools such as the IFMIS.

Other issues affecting the speed of their internet connection could be related to serious computer virus infestations of several computers, not just IFMIS terminals, which may in some cases be under the remote control of computer hackers who leech off these computers to conduct other computer attacks thereby diverting a significant amount of the internet bandwidth away from other legitimate users. Again, many of these computers have become infected due to unauthorized/inappropriate internet usage/access by files which are often contaminated with viruses.

During discussions between BE, USAID and MOF IT, the MOF acknowledged that connectivity was an issue but did not feel that they had any viable solutions to the problem. The MOF DG of IT has indicated they do not have enough money to equip all

SUs with dedicated VSAT connections and also despite requests to senior SU management, the connectivity issue has not improved and connectivity speeds remain below the required levels to access the IFMIS.

BE has explored a number of options such as limiting access to web sites, blocking communications ports (which prevent file-sharing applications from working) and more rigid security procedures. Despite the benefits, these options all come with problems. Blocking ports and web sites requires a certain amount of technical skills and this will need to be managed at the SU directly, which in most cases may not have employees with sufficient knowledge to maintain and manage these settings. Also, improper management of these security processes could result in the complete loss of Internet connectivity, legitimate and otherwise.

The legitimate use of internet thus requires a management solution more than a technical one. It's quite apparent that users are not being instructed and limited in their internet use and management may be involved in many of the above mentioned activities/practices. The GOI must come out with a very strong Internet usage policy, improve security measures by installing and maintaining anti-virus and firewall software on all computers, not just IFMIS terminals, monitor employee use of the Internet, and where possible disable access to websites and applications which interfere with or adversely affect the SUs ability of use critical business functions.

In addition to the issues outlined above, Iraq faces challenges from other problems that adversely affect Internet connectivity. The current conflict has damaged much of the infrastructure and therefore Internet connectivity is achieved via wireless satellite connection. In light of this and the delay in procuring VSAT equipment, especially for remote SUs, BE and FB are in the process of developing a stand-alone limited functionality application which will provide SUs with unreliable and/or without Internet connectivity an application with which to enter their financial transactions and forward these entries to MOF for consolidation with the central repository. This application will not be as comprehensive as the main FB application as BE and MOF have determined that the cost of developing the stand-alone version of their system would be much higher than to resolve the outstanding internet connectivity issues for the few remaining SUs.

GOI plans for rollout and funding

The rollout strategy for IFMIS by BE was to limit the amount of technical support SUs would require. As previously mentioned, part of their approach was to design IFMIS as an application accessed through the Internet. For SUs, this means that all they require is a computer terminal with a web browser application such as Internet Explorer, which is available free of charge and a connection to the Internet.

For the most part, SUs will require very little onsite technical assistance from MOF IT as they are only equipped with basic computer terminals and printers. The most technical piece of equipment is their VSAT internet connection which is supported by the local vendor.

Spending Units

At the outset of the IFMIS assessment, the IFMIS assessment team had planned on conducting a number of site visits in support of answering many of the SOW questions. The team was provided a list of 10 SUs to visits and although most (7) were located within the greater Baghdad area, a few (3) were in other provinces. In support of these visits the team developed a comprehensive survey questionnaire, translated it into Arabic, which it planned to present during a workshop to present the IFMIS assessment, and distribute to SUs in advance of the visits.

Following discussion with USAID and BE in Iraq the IFMIS assessment team was advised that contrary to earlier information, only 11 pilot SUs were targeted for the initial re-launch of IFMIS and of those, only nine were actually entering data into the IFMIS (and just for the last four months) and data entered represented less than 10% of their total monthly transactions.

Additionally, as mentioned in Question 1 a) conditions surrounding the data entry and support did not represent real-world conditions which further diluted the value of any information received.

In summary, based on the USAID approved work plan, prepared in advance of its arrival in Iraq, the IFMIS assessment team had proposed to undertake a number of steps. However, as circumstances changed some of these steps were not completed or required:

- Developed a survey questionnaire (completed)
- Pilot tested questionnaire (not required)
- Conducted group workshop to issue questionnaire (not required)
- Translated the questionnaire into Arabic (completed)
- Planned visits to 10 pre-defined SUs (not required)

Despite the discussions undertaken with USAID and BE, the IFMIS assessment team requested and received permission to visit some of the SUs in an effort to meet with SU staff and discuss their use of the IFMIS. In support of this request, the MOF originally suggested six SUs in the International Zone (IZ) and finally agreed to contact four. Unfortunately, the MOF did not contact the SUs to advise them of the IFMIS assessment team's proposed visits. During the Refresher Training session the IFMIS assessment team was able to schedule visits to two SUs independently: the Public Integrity Commission and the Council of Representatives. Of the other two, one, the Cabinet Secretariat, refused to grant the team permission without confirmation from the MOF and the other, the National Security Council, never responded to the team's requests for a meeting. Although no conclusions can be drawn as a result of these visits as to the capabilities of all SUs, the results of these visits helped to inform the writing of this report

Site assessments

As part of the MOU, USAID agreed to undertake site assessments of all existing and new SUs in coordination with the MOF. These assessments began November 8th with 42 having been completed at the time of this writing. Assessment visits continue on a weekly basis.

The following graph was provided by BE. The baseline was based on the assumption that 4.85 sites could be completed per week. It is not clear how BE determined this baseline however as of October 31, 2008, BE had expected 83 SUs to have been assessed, trained and using the IFMIS. In reality, only 41 assessments have been completed, 11 SUs have received training and 28 SUs are in a position to use the IFMIS. It is clear that unless significant progress is made in December, the target dates will slip. The graph illustrates the current status of assessments, training and uptake in relation to the BE established baseline at the original writing of this report. One revealing point is that uptake does not appear to be predicated on completing Refresher Training. This is a positive finding which should continue following the issuance of the November 11, 2008, MO.

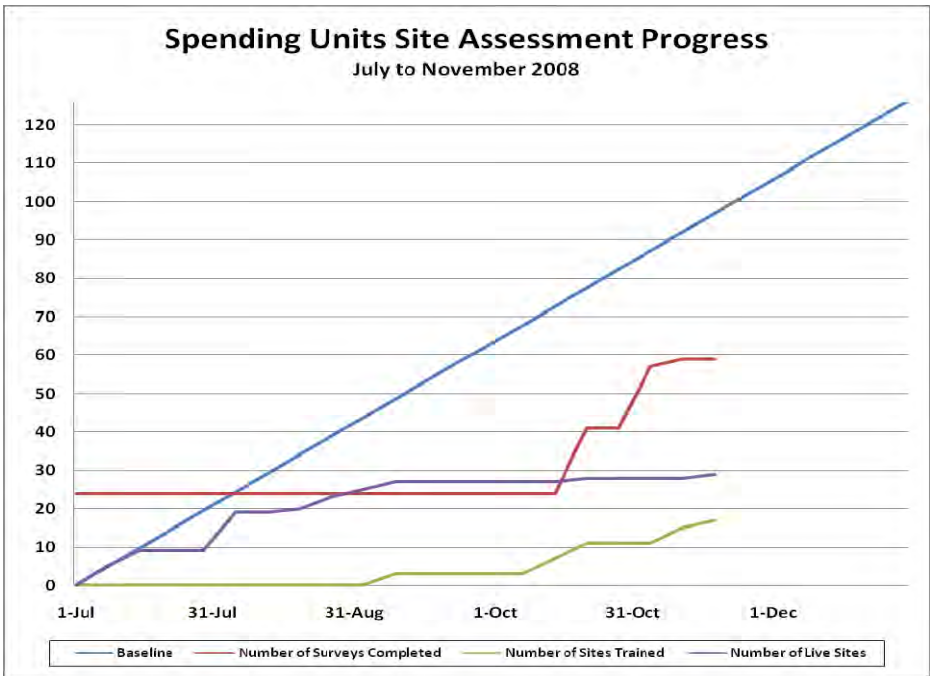

Figure 3 – Spending Unit Site Assessment Status

These site assessments are being conducted by both MOF staff and BE locally engaged staff. As a matter of record, the IFMIS assessment team was provided with assessment overview reports by both the MOF and BE. Although the approaches to assessment differ slightly, all SUs are being evaluated more or less on the same basis. For SUs who were part of the original rollout of IFMIS, they are being reviewed to determine if the equipment and trained employees are still onsite. According to both MOF and BE, there has been little loss of equipment and for the most part it is a matter

of re-establishing the Internet connection and providing previously trained staff with refresher training.

The training has been successful, and many, if not most, participants have actually required much less refresher training time than was allocated. Participation has been in limited in some cases. It appears participation is limited due to the lack of certainty that IFMIS will actually be re-launched. Until the MO announcing the re-launch of IFMIS, many SUs have been reluctant to work on IFMIS as the legacy accounting system has remained the system of record for financial management and trial balance production. It should be noted that there are no links between the legacy system and IFMIS, therefore, SUs who prior to the MO chose to use IFMIS, were required to enter financial data twice. Most SUs are understaffed and so in several cases IFMIS employees are also tasked with other duties in addition to IFMIS, which according to discussions with the two SUs visited, often supersede IFMIS as priority tasks.

Finally, as part of the MOU it was agreed that the MOF would be responsible for funding on-going activities for IFMIS. It appears that SUs using the IFMIS prior to May 2007 are, for the most part, equipped to restart the use of the IFMIS immediately however, these account for only 50% of the total 266 SUs in Iraq at this point in time. Anecdotally, a figure of approximately 500 total SUs has been advanced. Nonetheless, the MOF is targeting a total of 266 SUs for rollout. In an effort to fund the setup of the new SUs, MOF has earmarked 3.9 billion Dinar for the purchase of the necessary equipment required by SUs to connect to the IFMIS.

On November 11, 2008, the MOF authorized the purchase of equipment for 70 SUs. In light of the onerous procurement process and the fact that many of the new SUs are located outside of Baghdad, it is difficult for the IFMIS assessment team to determine exactly how long it will take the MOF to equip these 70 and all other new SUs. The MOF IT staff has expressed concern that the procurement process can be quite long, 3-6 months, and that this will impact their ability to rollout the IFMIS in a timely manner. MOF IT would have preferred to purchase IFMIS equipment for all 134 SUs in one process as it is unclear when and how long the next round of purchasing will occur.

As the original 132 SUs accounted for 80% of total IFMIS data, the delays in bringing the other 134 SUs on line, while important, in the short term the data provided by these units should not pose significant issues in terms of the GOI's ability to report through the IFMIS on a majority of budget expenditures. Additionally, these SU could in theory continue to track their expenditures in the legacy accounting system.

IV. NEXT STEPS IN TRANSFERRING OWNERSHIP OF IFMIS TO THE MOF

As part of the handover of management and control of the IFMIS, BE has undertaken a number of steps to ensure that the MOF is prepared to take over total IFMIS control and management.

Of particular concern to USAID are the tasks or events, often time sensitive, which must occur to ensure the ongoing use, development and ultimate success of the IFMIS. Many

of these factors will be the responsibility of the MOF to address and could be viewed as determining factors in the MOF's desire to achieve a successful IFMIS implementation as well as the likelihood of identifying a senior MOF champion willing to push for full implementation of the IFMIS. As of November 30, 2008, the IFMIS assessment team identified the following critical success factors:

1- Renewal of FB licenses for 2009, which are to be paid by the MOF before December 31, 2008, to ensure legality of use and ongoing access to support, updates and upgrades. The license fee is estimated at $165,000. This does not include any additional specialized support requests, such as the development of additional static report like the Trial Balance or training for MOF IT staff. There are two main obstacles to this event: agreement by senior MOF officials to allocate funding towards payment of the licenses and the onerous procurement procedures, either of which could result in a delay in achieving the renewal in a timely manner. Nonetheless, the application will continue to operate without the payment of licenses but the MOF will be left to its own devices until the fees are paid.

2- Relocation of the Disaster Recovery System to a secured off-site location. At this point it appears that Adnan Palace may be the best alternative. This needs to be managed by the MOF in coordination with BE. This requires support from senior MOF officials. Discussions are ongoing but no firm date for deployment was available upon prior to the Team's departure from Iraq.

3- Relocation of the production unit to MOF control. The MOF DG of IT has requested BE's assistance in engaging senior MOF officials in resolving this issue. BE and the IFMIS is ready for this handover. No suitable location has been identified and discussions are ongoing.

4- MOF IT skill capacity to maintain and upgrade the IFMIS on a continuing basis. Training will represent an important cost for IFMIS. It is unclear if the MOF has allocated sufficient financial resources required for the training of new users at existing SUs, new IT experts as well as other forms of ongoing training and capacity building.

5- Setting up the Steering Committee and identifying a key MOF official to "champion" the IFMIS. The lack of senior leadership with regards to the IFMIS is a cause for concern. The ad hoc nature with which its roll-out has been administered by the MOF has provided some benefits but in the long run will most likely impede its uptake/use and undermine the rollout to SUs. Despite the issuance of the MO, the Minister has yet to demonstrate a true commitment to the success of IFMIS. Additionally, the creation of both a senior level inter-departmental steering committee as well as a working level committee will ensure that future growth and management of IFMIS consider GOI requirements and concerns.

6- The adoption of appropriate financial management procedures which ensure data integrity and completeness. As with other aspects, the lack of

commitment to IFMIS is undermining the quality of the data. The appropriate use of the system must be emphasized and monitored. Additionally, the MOF must address outstanding financial management procedural issues such as the adoption of Budget planning procedures and the rollout of the Performance Budgeting Module.

7- The MOF's ability to procure IT facilities in time. The process may take 2-3 months to get all SUs equipped to use the IFMIS. Delays in procurement of VSAT equipment and computers for SUs will undermine the IFMIS and impose undue burden on SUs which will bear the responsibility to comply with MOs in the absence of equipment and support

In addition to the success factors, other performance benchmarks have been discussed between BE and the MOF and should be considered to ensure a timely handover of the IFMIS to the GOI.

SU assessment and uptake of IFMIS

1- By 30th November, 70 SUs connected and entering data.

2- By 31 December, 132 SUs connected and entering data.

3- By Q1 267, 100% of SUs connected and entering data.

Broader IFMIS achievements

1- The IFMIS is under MOF control and management.

2- Full parallel processing of all monthly transactions by all 267 SUs as of January 1, 2009.

3- MOF decision to decommission legacy accounting system.

4- MOF declares the IFMIS as the system of primary accounting record for GOI.

5- MOF declares that GOI financial audit will be based on the IFMIS.

6- IFMIS is used as the primary source data and reporting tool for internal and external reporting in a transparent manner giving confidence to external stakeholders such as the World Bank, IMF, USAID, DfID etc.

Hardware location and hands-on training

In addition to training, BE technical staff are working closely with MOF IT staff in an effort to create joint working groups so that BE can incrementally hand over daily management of the IFMIS systems to MOF IT staff. Unfortunately, this has been hindered by the MOF's apprehension at traveling into the IZ and BE refusal to travel to MOF HQ which is located in the red zone. Despite this issue, BE has indicated that a majority of the management of the system can be performed remotely using a high-speed internet connection and accessing the system's administrative functions from a computer outside the IZ as long as the IFMIS server remains at the BE compound. The MOF has expressed concern with this approach as it is only allows them to maintain the applications since no hardware maintenance can be done remotely. If a server crashes

or stops functioning, it often requires physical access to the equipment to either restart the computers or replace malfunctioning components.

The MOF has requested that the IFMIS hardware be moved to a location outside the BE compound, preferably outside the IZ. BE does not object to the relocation of the equipment however the MOF has not been able to identify a suitable location to house the system. BE is somewhat reluctant to move the equipment outside of the IZ too quickly until they are satisfied that the MOF is able to conduct any necessary repairs or maintenance without the assistance of BE staff. Given the history related to security of BE staff, they are understandably apprehensive about traveling outside the IZ on a regularly scheduled and/or announced basis.

Recently the MOF has tentatively agreed to allow some of their IT staff to travel to the BE compound and maybe even reside on the compound temporarily to allow to them to gain hands-on experience in maintaining the IFMIS system.

In the interim, MOF IT has requested BE and USAID assistance in escalating the discussions with senior MOF officials to determine the future location of the IFMIS. At the time of writing this issue remained unresolved.

Vendor relations

One often overlooked area is the client-vendor relationship. Even with comprehensive training and recruiting, clients are discouraged from trying to become self-sufficient in maintenance of all components of their FMIS. VSAT connectivity is a good example. In most cases, vendors do not permit clients to configure or service the equipment. Since it is unlikely that the VSAT equipment will require regular repairs and in light of the specialized nature of this equipment, the MOF would be well suited to acquire some strategic knowledge in this area to ensure they are able to understand and manage these relationships.

In this respect, BE is facilitating and introducing MOF IT staff to various vendor points of contacts including FB and VSAT. Prior to the IFMIS assessment team's departure, BE had already contacted FB and was awaiting their return call to setup the initial introduction with the MOF DG of IT.

Disaster Recovery Plan

Disaster recovery planning is the process, policies and procedures for restoring operations critical to the resumption of business, including regaining access to data (records, hardware, software, etc.), communications (incoming, outgoing, fax, etc.), workspace, and other business processes after a natural or human-induced disaster.

BE is in the process of establishing a disaster recovery system with off-site back-up and training to MOF staff on how to recover lost data and resume normal business functions. Disaster Recovery Plans (DRP) should be tested regularly to ensure existing and new employees are able to implement the plan as required. In addition to training MOF staff on efficient disaster recovery, BE is preparing technical manuals which run through the necessary steps for proper disaster recovery as well as proper planning in advance of a disaster, which includes test runs and ongoing training.

At the time of this writing, the MOF and BE had still not firmly agreed to a location for housing the disaster recovery server. Although Adnan Palace has been advanced as a possible location, no official decision has been rendered by the MOF. In light of the ongoing security concerns, as well as past disasters such as fires and theft related to IFMIS data or equipment, the choice of locations is limited.

V. IFMIS SUSTAINABILITY

IFMIS Ministerial Order (November 11, 2008)

Although the MOU, which is the catalyst for the re-launch of IFMIS, was the signed on January 14, 2008 BE was only granted access to the IFMIS hardware in July 2008. Originally, the MOF had resisted requests by BE to relocate the IFMIS equipment to their compound for assessment, repairs and upgrades while BE refused to leave the security of the IZ following the abduction of their employees. Finally, in July, the MOF acquiesced and the equipment was delivered to BE where it remains housed.

Additionally, as demonstrated by the IFMIS rollout chart, implementation of the IFMIS during the period of July to November 2008 has been somewhat stagnant in terms of number of sites being surveyed, provision of training and SU connecting or entering data.

One of the major reasons cited by both BE and staff within the MOF was the lack of senior official leadership in the form of a MO to demonstrate to the SUs the significance and importance of the IFMIS to the GOI.

On November 11, 2008, the MO was finally issued (Annex E). The MO provides clear instruction to all SUs to use the IFMIS and demonstrates a strong endorsement of the IFMIS by the GOI. The MO stipulates that "parallel" processing commence as from August 1, 2008, requests SUs carry out reconciliation of IFMIS processing with the legacy system and confirms the availability of the IFMIS Help Desk.

From the limited meetings with the SUs, the IFMIS assessment team was able to determine that the MO has increased interest and focus on ensuring the IFMIS hardware and application are functioning and there is increased interest from managers, who, according to IFMIS staff in the SU, had expressed little interest for the IFMIS in the past.

Unfortunately, the MO stopped short of detailing a cut-off date for the legacy system after which the SUs are to use only IFMIS. Additionally, it provided no incentives or penalties for compliance or non-compliance and left SUs unclear on a number of elements which is contributing to confusion and concern on the part of SUs as to when they are expected to complete their data entry, and what support will be available. From these limited observations, it is noted that additional instruction from senior MOF officials is required.

The support and commitment to the IFMIS by the MOF IT DG and her staff is clearly demonstrated. However, the IFMIS assessment team could find no clear evidence at this time from the MOF in supporting the implementation of the IFMIS from an

accounting, budget or purchasing perspective. It is also too early to observe the level of support by SUs in using the IFMIS. These might be demonstrated by year end or the end of first quarter of 2009.

Other elements to consider for IFMIS sustainability

Although the MOF appears to have a dedicated and competent team working on the IFMIS at this point, as the system expands and new modules are introduced, the MOF will require additional skilled employees. They will also have to introduce a sustainability strategy to account for employee attrition. In anticipation of employee attrition being an issue, BE is being proactive in conducting train-the-trainer sessions with MOF staff, however, it remains unclear what strategy, if any, the MOF has in place to ensure they will have the required technical staff to maintain the IFMIS. Fortunately BE's strategy to rollout the IFMIS by connecting SUs to the central system via the Internet will greatly reduce the number of technical staff required to maintain the IFMIS. Additionally, BE is working with senior MOF IT employees to establish a relationship with various vendors such as FB, and VSAT and hardware suppliers in an effort to ensure the MOF is able to respond to capacity gaps through training and possible short-term contracting.

As mentioned earlier, the IFMIS is an ERP application and unlike traditional software, such systems are meant to not only enhance the data collection and reporting functions, they also aim to improve overall business performance and processes. ERPs are analytical tools and their strength lies in their ability to provide a comprehensive picture of an organization through consolidations of various data types including but not limited to financial data, HR data, manufacturing data, etc.

However, if an organization does not recruit employees with analytical skill sets, this functionality is greatly underutilized and the ERP then becomes just a large repository of data. The MOF is not expected to capitalize on this benefit at the start and should focus first on data entry and statutory reporting. Nonetheless, over time as the organization matures, it may feel the need to expand its analytical capabilities and utilize the system in that manner.

Implementing, maintaining and expanding the systems require experienced ERP project managers who can provide an organizational perspective and vision. Although operationally the MOF's DG of IT may be adequate to maintain the hardware and conduct some routine troubleshooting, they are not sufficiently experienced and knowledgeable. If the MOF intends to expand the IFMIS, it is essential that they acquire such expertise. Additionally, even if the MOF chooses to simply maintain the system as it is, they will still require ERP expertise should they choose to improve/modify the COA, or if they are required to undertake significant upgrades or modifications to the system.

VI. COSTS ASSOCIATED WITH IFMIS IMPLEMENTATION

Table 5 – FMIS Estimated Costs - Summary

Period	Million US$	Million US$
EG-I	$2,361,679	
EG-II	$19,731,707	

Period	Million US$	Million US$
Reported costs - July 2003 to June 2007		$22,093,386
Program restart - January 2008 to April 30, 2009		$7,830,009
Total Funded IFMIS costs to 30 April 2009*		**$29,923,395**
Total Unfunded Cost – Balance Activities		$1,605,000
Estimated Total IFMIS cost to Complete		**$31,528,395**

(*) Activities that will not be completed within the given time frame and "not funded" are estimated to cost US$1,6M. (321 days @ US$5,000 per day)

On the assumption that USAID will fund the balance of activities, the total cost to complete the IFMIS is estimated at $31.5 million. However, the underlying critical success factor still remains that without appropriate MOF commitment, no amount of financial support or time will ensure complete implementation of the IFMIS by USAID.

IFMIS cost estimate

The implementation cost of IFMIS is given in the Table below:

Table 6 – FMIS Estimated Cost – Details

Iraq Economic Governance Top-down Summary: FMIS Costs	
IRAQ ECONOMIC GOVERNANCE I and II Program start (July 2003) to June 2007 shutdown	
Total Labor, Expenses, Allowances, subcontractors	$22,093,386
IRAQ ECONOMIC GOVERNANCE II Program Restart (January 2008) to April 30, 2009*	
Cost Category	**Cost of Service**
SUMMARY OF FMIS COSTS DURING IRAQ EG II January 2008 – April 2009	
Labor	**Cost of Service****
Expatriate IFMIS Core LOE	$5,108,301
FMIS Performance Budgeting Mod. LOE	$858,013
FMIS Purchasing Mod. LOE	$992,541
Local National IFMIS LN LOE	$604,365
Subcontractors***	**Cost**
360 TECHNOLOGIES INC	$13,680
AMERICAN EXPRESS CARD SERVICES	$644
FREE BALANCE INC	$252,464
Total Labor, Expenses, Allowances, subcontractors	**$7,830,009**
IRAQ ECONOMIC GOVERNANCE I and II Program start (July 2003) to April 30, 2009	
Total Labor, Expenses, Allowances, Subcontractors	**$29,923,395**

(*) Period reflects restart of IFMIS as governed by USAID-Iraq MOF Memorandum of Understanding
(**) Includes expatriate and local advisor cost of service, expenses, and allowances plus security costs relative to indicated module.
(***) Includes FMIS license fees associated with restart.

The costs associated with delivering technical assistance at the LOE projection provided in Table 7 below, must vary considerably based on security, life support, compensation, contracting and logistic considerations. A given implementing partner might incur costs from $3,000 - $5,000 per LOE day. That amount would likely cover security, life support, CCN support and interpreters, travel, and other costs.

Table 7 – IFMIS Outstanding Activities – Summary

Phase	FMIS Activity	Current Funding (Note 1)	New Funding (Note 2)
4	Provide technical assistance to the MOF Accounting Directorate to build capacity and introduce International Best Practices to business processes and accounting regulations	Partly	LOE – 90 days
6	Implement IFMIS performance budgeting module	Partly	LOE – 171 days
7	Implement IFMIS Purchasing Functionality	Unlikely	LOE – 60 days
		Total	**LOE – 321 days**

(*) Activities that will NOT be completed within the given time frame and <u>not funded</u> are estimated to cost US$1,6M (321 days @ $5,000 per day)

<u>GOI IFMIS annual recurring software licensing costs estimate</u>

BE has subscribed for software licenses through December 31, 2008. Renewal of software licenses as from January 1, 2009, will be the responsibility of the GOI. The MOF DG IT has undertaken to follow up with all vendors to renew licenses to ensure ongoing FMIS operations. However, the MOF DG has requested assistance from BE to ensure senior MOF officials are aware of the urgency of licensing renewal which may not be fully appreciated at the upper echelons of the MOF. Annual recurring licensing costs are estimated at $796,000 and are itemized in the table below: (Annex G)

Table 8 – GOI IFMIS Annual Recurring Budget

IFMIS Annual Recurring Budget Estimate – Final			
Category	**Occurrence per annum**	**Estimated cost per Unit**	**Estimated Subtotal**
Hardware Costs Total			**$123,000**
Communications Costs Total			**$56,040**
FreeBalance – Software Licensing			
Core System	1	$165,939	$165,939
Purchasing Module	1	$22,000	$33,000
Budget Module	1	$9,000	$9,000
DR System	1	$108,000	$108,000
Microsoft	12	$5,000	$60,000
Firepass License	1	$8,100	$8,100
FreeBalance Reporting Services	24	$1,232	$29,568
Symantec	1	$5,180	$5,180
Software Costs Total			**$418,787**
Services Costs Total			**$198,000**
Estimated IFMIS Annual Recurring Expenditure			**795,827**

Qualifiers**:**

- The ongoing cost estimates will be determined by the procurement negotiations set forth by the MOF IT and Finance Leadership.
- This estimate DOES NOT include any indirect costs that will be incurred. Examples of indirect costs include fuel for generators, labor costs for the employees entering data at the various ministries and the cost of the labor for the IT staff at the MOF to maintain the system.
- This estimate DOES NOT take into consideration normal annual increases in the cost of services.
- This estimate DOES NOT include software and hardware costs for the PCs that will need to be procured for each spending unit.
- At 250 sites and three PCs per location, this cost will be significant and could easily approach $1,000,000. Additionally one-time MOF building preparation costs are not reflected in this estimate.

VII. FINDINGS

The following is a summary of the major findings following the IFMIS assessment team's fact-finding mission to Iraq as well as a review of the documentation obtained from USAID, BE, the MOF and other sources.

- FMIS implementation by BE has been done in a very professional manner. BE utilized standard Project Management practices and processes.
- Eleven pilot SUs have been using IFMIS for less than five months and entered an average of less than 10% of total monthly transactions during the period of July to November 2008.
- The MOF DG of IT is supportive of the IFMIS and has worked closely with BE in the re-start of the system despite certain logistical constraints which hindered the implementation process.
- SUs may be engaging in poor financial management procedures by only entering Journal Voucher summaries of transactions instead of each transaction into the IFMIS. This impacts the specificity of the data entered into the IFMIS and may preclude the generation of detailed reports due to the absence of transactional information.
- Reporting will remain a problem until the GOI addresses fundamental issues with their financial management practices and affords IFMIS with the required support identifying it as the system of record for accounting and discourages SUs from populating IFMIS with inadequate information.

- The acquisition of Crystal Reports (CR) will not resolve reporting problems. Nonetheless, if the MOF continues to use CR, it will require additional training, which is currently not considered as part of the handover process.
- While the MOF is satisfied with the IT technical training they are receiving in the classroom refresher courses, the MOF believes the amount of "hands on" training could be increased adding value to put to practical use the curricula taught in the classroom.
- IFMIS hardware has benefited from minor repairs and upgrades to power-supplies. It remains relatively identical to the previous system and BE is of the opinion that the existing system has more than enough processing power to support all 266 SUs once they are up and running.
- Internet connectivity remains a serious challenge for many SUs equipped with shared connections; to date the MOF has not been able to implement a viable solution. USAID has been approached to engage senior MOF officials in an attempt to resolve the issue.
- The 132 originally connected SUs account for over 80% of all financial transactions. While it is imperative that the additional 134 SUs be connected as soon as possible, delays should not pose a significant issue in terms of the GOI ability to produce meaningful reports as the most important SUs from which critical reporting is required are currently functional.
- The Ministerial Order did not provide a cut-off date for use of the legacy system or penalties for non-compliance. Additional instructions from senior MOF officials are required.
- MOF DG Accounting and Budget departments have not demonstrated the required commitment to the IFMIS. Additionally, the MOF will need to observe SU uptake to determine compliance and act accordingly.

VIII. RECOMMENDATIONS

To ensure the successful implementation of IFMIS and to enable the GOI to reap the benefits of the total anticipated $29,923,395[14] million USAID has already invested to complete the IFMIS implementation the following steps are recommended:

[14] This number includes an additional $7,839,009 obligated by USAID upon the signing of the MOU to complete the implementation of the IFMIS roll out. There is an anticipated estimated gap of $1.6 million to fully implement the IFMIS as outlined in the MOU. It is this team's belief that the additional obligated funds were sufficient to complete the requirements outlined in the MOU had there not been a delay of seven months from the signing of the MOU to the restart of IFMIS. During this delay, resources were being expended by BE in retaining staff in preparation for the restart. These expended resources are now a large part of the estimated gap of $1.6 million needed to complete the rollout process outlined in the MOU.

Ministry of Finance

- Identify a suitable location for the transfer of the IFMIS servers, including production, test and backup, from the BE compound to ensure MOF operation and control as soon as possible.
- Identify a suitable location for the housing of the Disaster Recovery System.
- The Disaster Recovery Plan should be tested regularly to ensure existing and new employees are able to implement the plan as required.
- The Disaster Recovery System should be physically separated to ensure, in the advent of a serious citywide catastrophe, the backup has a significant chance of surviving intact.
- Additional Ministerial Orders must address the following:
  - The cut-off date for the switch from the manual legacy system to the IFMIS.
  - The shut down date of the legacy system to make the IFMIS the primary and only, accounting record of GOI, which will be subject to audit.
- Ensure that all SUs undertake parallel processing from January 1, 2009 so as to have a full year's financial data on IFMIS. Failing this, efforts should be made to operationalize all SUs as soon as technically possible.
- Establish a high-level IFMIS Steering Committee chaired by the Minister of Finance with the participation of key GOI ministries.
- Establish a working-level Steering Committee chaired by either the DG of IT or Senior Enterprise Resources Planning (ERP) Manager with the participation of key GOI ministries.
- Hire experienced ERP project managers who can provide an organizational perspective and vision.
- Introduce a strong Internet usage policy, improve security measures by installing and maintaining anti-virus and firewall software on all computers (not just FMIS terminals), monitor employee use of the Internet, and where possible disable access to websites and applications which interfere with, or adversely affect, the SUs ability to use critical business functions.
- Appoint an experienced senior level IFMIS project/program manager to ensure ongoing growth and development of the IFMIS.
- Develop a capacity building strategy, especially in the areas of analytical functions.
- The GOI should consider the development of a data warehouse as part of the future growth and development of the IFMIS.

- Acquire strategic knowledge in key area, VSAT technology and FMIS application support, to ensure the MOF is able to understand and manage vendor relationships.
- Introduce a Human Resource sustainability strategy to address possible IFMIS employee attrition.

USAID and Bearing Point

- Facilitate the identification of a suitable location for a production system and Disaster Recovery System together with senior GOI and MOF.
- Discuss the implementation of the Procurement and Performance Budgeting Modules with senior MOF to improve IFMIS and GOI financial management procedures.
- Facilitate MOF access to IFMIS hardware in an effort to address MOF concerns with hands-on experience.
- Engage a training expert familiar with Iraqi or Middle Eastern culture and learning habits to assess the IFMIS training materials.
- Reach an agreement with the MOF as to who will be responsible for funding the financial gaps identified in rolling out a fully functional IFMIS as outlined in the MOU.

IX. CONCLUSION

USAID and its implementing partner BE have gone to great lengths to provide the MOF with a fully functioning FMIS under extremely difficult operational circumstances. From a purely technical point of view, BE has brought the IFMIS to as fully a functional system as can be provided until such time as the MOF and GOI complete the tasks required of them to ensure a fully functioning FMIS. The assessment team reviewed all systems related to the IFMIS currently in place finding they are adequate to meet the current and likely future needs of the GOI.

According to a World Bank study completed in 2003, the average time taken to fully implement a FMIS is seven years. An argument could be made based on the Bank study that the IFMIS has not yet hit the seven-year threshold for implementation and therefore the expectations set forth in the MOU are unrealistic, particularly given the Iraq context. That said, it is the opinion of the assessment team that while there appears to be increased political will within the GOI to implement this system, until such time as all GOI stakeholders see IFMIS as a priority and are willing to take ownership of it, it will likely never be fully implemented, the MOU between USAID and the MOF notwithstanding.

X. USAID RESPONSE TO REPORT RECOMMENDATIONS

USAID/Iraq Responsibilities and Procedures for Technical Team Response to Evaluation/Assessment Recommendations

Evaluations/Assessments are an important management tool, and there needs to be careful consideration of evaluation/assessment recommendations as a basis for management decisions.

All USAID/Iraq evaluations/assessments recommendations are required to have a Technical Team response. The response should start off with brief comments on the findings and utility of the report, setting the tone for the remainder of the response. The technical team should then address each recommendation using the following format:

General Comments on the Report

The FMIS situation assessment report has been reviewed by USAID/Iraq's Economic Growth and Agriculture Office, and its findings and recommendations are deemed to be acceptable, credible, and useful to the Mission. USAID considers that this report has very successfully responded to the analytical questions and program management purposes for which it was commissioned, as stated in the Terms of Reference, and that the quality of the analysis and research that it is based on is of a high standard. The FMIS situation assessment report has been developed in a timely fashion and the USAID/Iraq Economic Growth and Agriculture Office intends to actively use this report as a key management tool during the final phases of the IFMIS program's implementation.

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	**Timeline**	**Follow-Up/Status**
	Identify a suitable location for the transfer of the FMIS servers, including production, test and backup, from the BE compound to ensure MOF operation and control as soon as possible. Identify a suitable location for the housing of the Disaster Recovery System. The Disaster Recovery System should be physically separated to ensure, in the advent of a serious city-wide catastrophe, the back-up has a significant chance of surviving intact.	Accept	MoF	By February 26th 2009	Already incorporated into key immediate term project implementation benchmarks.

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	**Timeline**	**Follow-Up/Status**
	The Disaster Recovery Plan should be tested regularly to ensure existing and new employees are able to implement the plan as required.	Accept	MoF	By May 31st 2009	To be incorporated in benchmarks after MoF takes possession of the Disaster Recovery system.
	Additional Ministerial Orders must address the following: Cut over date from the manual legacy system to the FMIS. Shut down date of the legacy system and make the FMIS the primary, and only, accounting record of GOI which will be subject to audit.	Accept	MoF	January 15th 2009	Already incorporated into Key Immediate-Term Benchmarks. MoF to determine the proper sequencing and timing of such orders.

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	**Timeline**	**Follow-Up/Status**
	Introduce a strong Internet usage policy, improve security measures by installing and maintaining anti-virus and firewall software on all computers (not just FMIS terminals), monitor employee use of the Internet, and where possible disable access to websites and applications which interfere with, or adversely affect, the SUs ability to use critical business functions.	Accept	MoF	2nd quarter of 2009	MoF will drive the pace of implementation.
	Appoint an experienced senior level FMIS project/program manager to ensure ongoing growth and development of the FMIS. Develop a capacity	Accept All	MoF	2nd quarter of 2009	MoF will drive the pace of implementation.

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	Timeline	Follow-Up/Status
	building strategy, especially in the areas of analytical functions. The GOI should consider the development of a data warehouse as part of the future growth and development of the FMIS. Acquire strategic knowledge in key area, VSAT technology and FMIS application support, to ensure the MOF is able to understand and manage vendor relationships. Introduce a HR sustainability strategy to address for FMIS employee attrition				
	Meet with senior GOI and MOF officials to facilitate	Accept	USAID / MoF	By February	Already incorporated into key immediate

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	**Timeline**	**Follow-Up/Status**
	the identification of a suitable location for a production system and Disaster Recovery System.			26th 2009	term project implementation benchmarks.
	Meet with senior MOF officials to discuss the implementation of the Procurement and Performance Budgeting Modules in an effort to improve FMIS and GOI financial management procedures.	Accept	USAID	December 2008	Meetings held with DG of Budget Directorate and updated implementation plan established. Buy-in still does not exist with regard to the Purchasing Module and this will be revisited within the context of the IFMIS Steering Committee discussion.
	Facilitate MOF access to FMIS hardware in an effort to address MOF concerns with hands-on experience.	Partially Accept	MoF	Ongoing	Access to FMIS hardware is currently available at the BE project implementation site, and this will continue

	Recommendation	USAID Response In your response, indicate whether you ***Accept***, ***Partially Accept*** or ***Reject*** the recommendation and provide a brief explanation	Action to be taken		
			Action	**Timeline**	**Follow-Up/Status**
					to be available to the MoF once the production servers are permanently situated under MoF control.
	Training materials should be assessed by a training expert familiar with Iraqi or Middle Eastern culture and learning habits.	Accept	USAID	March 2009	Implementation modalities are being discussed.