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EVALUATION OF THE IN-SERVICE TRAINING PROGRAM IN FINANCIAL MANAGEMENT

SEPTEMBER 2006
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ACRONYMS

BDA	Budget disbursement and accounts
BIS	Budget information system
BOFED	Regional Bureau of Finance and Economic Development
CIDA	Canadian International Development Agency
COA	Chart of accounts
COTS	Commercial off-the-shelf
CSRP	Civil Service Reform Program
DSA	Decentralization Support Activity
EFY	Ethiopian financial year
EMCP	Expenditure Management and Control Program
ETA	Ethiopian Telecommunication Authority
EU	European Union
FIS	Financial information system (Ethiopia)
FMIS	Financial management information system
GOE	Government of Ethiopia
HIID	Harvard Institute of International Development
HTML	Hyper text markup language
IBEX	Integrated budget and expenditure system
IFMIS	Integrated financial management information system
IMF	International Monetary Fund
IT	Information technology
MEDAC	Ministry of Development and Cooperation
MEFF	Macro economic fiscal framework
MIS	Management information system
MOF	Ministry of Finance
MOFED	Ministry of Finance and Economic Development
OTS	Off the shelf

PFM	Public financial management
PIP	Public Investment Program
RFP	Request for proposal
SNNP	Southern Nations Nationalities and People (Ethiopia)
ToRs	Terms of reference
WoredaNET	Nationwide Voice and Data Network for Government Administration
WOFED	Woreda Bureau of Finance and Economic Developments
XML	Extensible markup language
XSL	Extensible style language
USAID	United States Agency for International Development
VSAT	Very small aperture terminal

EXECUTIVE SUMMARY

The Decentralization Support Activity (DSA) commenced its activities in January 1997. DSA found that the budgets of the federal and regional governments were prepared with MS Excel® spreadsheets and accounts were prepared with a COBOL mainframe computer program: the **budget disbursement and accounts** (BDA) system. This was a single-entry, cash-basis accounting system based on the chart of accounts extant at this time. DSA also found weaknesses in human capital: the mere fact that Ethiopia was registering its financial transaction using single-entry, cash basis accounting reflected the level of human capital administering the system. The delegation of financial management to zones and *woredas* (the basic decentralized administrative unit) in 2000 increased the scope of the DSA by a factor of 15 in terms of reporting entities. Despite this increase, DSA still had to be carried out within the original terms of reference (ToRs). The ongoing creation of *woredas* has constantly affected the plans and activities developed by DSA, and it is important to point out that under these changing conditions, DSA has demonstrated not just resilience but the agility to adapt to ever-changing realities on the ground.

In the first three phases of the project, perhaps the most important activity carried out by DSA was to understand and document local conditions and processes. Consequently, this activity reduced the backlog in reporting budget execution.

A second-order impact that moved the project further was the need to develop an information technology (IT) capability that was not in the original ToRs for the DSA but had to be included at a later date (around 2000–2001). A proposal had been made for the European Union (EU) to fund the acquisition of a turnkey integrated financial management information system (IFMIS) product at an estimated cost of €9m. The indefinite delay in this funding, combined with the inadequacy of the systems in use, forced DSA to develop an IT platform that would support the changes stemming from DSA developments. In addition, DSA had to ensure that the stringent information requirements of donors could be met in a timely manner. These were new requirements.

Initially, DSA had to build low-cost basic systems rapidly to support the implementation of the budget and accounts procedural reforms that were not part of the original ToRs and were never meant to be a long-term IT solution for financial management. In 1997, the project had recognized the need to automate the budget preparation and consolidation activities, and an IT consultant was contracted to develop a **budget information system** (BIS) based on Visual Basic® with MS Access® database.

DSA matched improvements they had accomplished at the functional and training levels with an enhanced version of the original COBOL-based BDA system. Making this change meant that each region, ministry, and others could be using different budgeting codes with the risk of incompatible standards being applied. As stated above, one of the key functions of a Ministry of Finance (MOF) in modern financial management is to be the central entity in charge of setting rules and promoting best practices to the rest of the government. In this case, the DSA was not necessarily taking that role—the move from a COBOL-based system to MS Access database was just a logical move to facilitate better financial management along with the objectives of the project.

In terms of the evolution of DSA's assistance, the understanding they had acquired of government financial management systems enabled them to continue with technical assistance that supported greater financial reform. It was recognized that to fully support the reforms, a robust information system must be developed that required significant upgrades to the earlier systems. The long timeline for the DSA saw very major developments in IT strategy and a global move away from earlier, simple batch-type processing to sophisticated online systems with timely capture of data and provision of up-to-date information. This was the basis of de-

veloping the **integrated budget and expenditure system** (IBEX) platform. Moving from a basic COBOL-based solution to a sophisticated state-of-the-art system is a major undertaking.

Consistent with the achievements made during the first three phases, the following overall objectives were set for Phase 4:

- To complete the introduction of the financial transaction platform (the budget and accounts systems) in all regions, all administrative areas, and the subregional governments of the four large regions.
- To provide follow-on support to regions and administrative areas in operating these new systems.
- To institutionalize the reforms within the government.
- To introduce budget planning to improve the accountability and performance of public expenditure.

During Phase 4, DSA began to develop a parallel strategy. On the one hand, it used the advancements in accounting and chart of accounts (COA) to improve cash management by carrying out the following activities:

- Bank accounts were consolidated to use money more efficiently and effectively. Significant savings were realized.
- A system of single-pool accounting was created. This development not only accompanied the procedural reforms designed and implemented by DSA, but also the reality that the focus of operating expenditures in Ethiopia had shifted to *woredas* and regions. Single-pool accounting allowed for the concentration of personnel trained in accounting to manage not just the budgeting process directly linked to the Ministry of Finance and Economic Development (MOFED), but also to support budgeting in all sectors such as health and education.
- Development of cost centers. Once again, improvements in procedural reform combined with the rising importance of *woredas* and regions in budget execution. Regions, as noted above, receive 27% of total federal government expenditures. Regions keep 30% and redistribute 70% to *woredas* based on a block grant formula.
- Improved budget planning. A continuation of the emphasis of DSA was to make budget planning more responsive to policy goals and objectives.
- Documentation of clerical processes continued, with some redesign and standardization of forms.

IT SYSTEMS

The first step in the DSA's move to provide a more modern IT platform was to upgrade the existing COBOL BDA system. In 1998, DSA outsourced the task of converting the COBOL mainframe system to a Windows-based MS Access database application to a private company (AFCOR). In 1997, the project recognized the need to automate the budget preparation and consolidation activities, and an IT consultant was contracted to develop a BIS based on Visual Basic with the MS Access database.

As the DSA developed, it was recognized that the scope of the IT functions (e.g., to take advantage of the availability of WoredaNet) needed to be broadened further and that further upgrades to BDA and BIS were necessary. This work was outsourced to Omnitech, and a series of upgrades were undertaken to:

- Enable BIS to run as a networked application to facilitate budget preparation and with a number of new reports being produced; this version was named "BIS v2."

- Introduce a new double-entry accounting system based on the new COA. This was named "BDA 3 (B)" and used Visual Basic with MS Access database.

- Enable the previous single-entry, earlier COA system to be upgraded to accommodate the new budget classification structure, again using Visual Basic and the MS Access database. This enhanced single-entry system was called "BDA 3 (A)."

BDA 3 (A) was designed to be implemented in regions where budget reform only had been introduced, while BDA 3 (B) would be used in those regions where both budget and accounts reform had been implemented.

Although BIS and BDA were developed using Visual Basic and used relational industry-compatible database systems, they had significant weaknesses (e.g., lack of security features and integration capability; a basic database system; no online capability, etc.).

IBEX

IBEX has been designed and developed as a state-of-the-art product and has all the features one would expect in a well-designed system: has a modular design and standard interfaces, uses international standards, uses industry-standard relational database interfaces, has a security system appropriate to a central government financial system, and has comprehensive backup and recovery features. Those modules completed have been proven in practice; however, a number of modules have yet to be completed and tested fully. None of the users we spoke to voiced any concerns on its performance or reliability,[1] and all the evidence is that it forms a sound basis for a government-wide IFMIS but lacks some of the features that would be expected in a commercial off-the-shelf (COTS) FMIS. It has the potential to be evolved into a commercial product in a market where there are still only a small number of competitors.

TRAINING

The technical assistance provided by DSA (including the training of some 60,000 staff, discussed in Attachment D) has built the basis for a modern financial management system for the Government of Ethiopia (GOE). This has been achieved through the procedural reforms (budgeting and accounting reform, introduction of new COA); training of personnel at the *woreda* and regional levels; the introduction of reorganization changes such as the creation of regional cost centers, concentration of bank account, and creation of single-pool data entry,[2] and the development of IT systems that have accompanied their procedural reforms.

The center of this system is at the *woreda* level, where the information is collected, processed, and entered into the system. The process is done mostly manually and continues to be paper based and paper intensive. Given the unevenness of economic development, some regions and *woredas* are well equipped, but most are not. Some remote and dangerous regions and *woredas* lack even the basic infrastructure essentials (e.g., power, telephones, transport, stationery, etc.) or staff.

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[1] IBEX has not been fully implemented throughout the country, and implementation will requires extensive retraining of staff and conversion and support costs. As with any new financial system, implementation problems are likely.

[2] Single-pool data entry refers to DSA's strategy to centralize the process and data entry of all financial information generated by all central government institutions operating at the *woreda* level. Single-pool data entry relied on accountants trained by DSA in single- and double-entry bookkeeping. This strategy allowed users to enter and process financial information from all social sectors as well as financial information directly related to the Ministry of Finance such as intergovernmental transfers and grants from the central government disbursed to regional and *woreda* levels of government.

The training program has been well tested, with DSA reporting that there is 30% turnover rate on all trainees. Informal advice is that most trained employees leave either to work for nongovernmental organizations or the private sector. This implies that this training is valuable in the country and has impact beyond government to the general economy as a whole. DSA has trained staff across the whole of Ethiopia, thus building human capacity at both the regional and local levels.

Training reduced the backlog in the reporting on budget execution from six years to one. The need for continuous training of personnel, given the turnover rate and the impact of political events on employment at *woredas* and regional governments, makes training even more critical in order to sustain the advances made in the modernization of public financial management in Ethiopia. An impressive achievement is that DSA has trained about 60,000 people over the length of the project.

OVERALL CONCLUSIONS

- The DSA has achieved the main goals set for it in terms of capacity building, providing a basic financial system that uses computers to merge and integrate the detailed data from *woredas* and to accelerate the whole process of financial reconciliation. It has provided a sound basis on which future financial reform can be built. Significant benefits have been achieved, but they have to be sustained and built on. This development has been successfully completed during a period when there were major changes in the financial systems with the devolution of financial management to zones and *woredas*, with huge increases in the numbers of reporting entities—a change process that is continuing.

- As discussed in the full report, integrated financial systems are developed and grow in time. DSA's work has set up the basis for a modern financial system. Great accomplishments have been realized in budgeting and accounting reform, the development of a modern and standardized COA, and the training of thousands of individuals on public finance. The basis for effective public financial management is already built, but there is room for improvement in terms of ensuring even more the timeliness of reports on budget execution; increasing the capacity of managers to analyze and understand data; improving internal controls to create mechanisms to detect corruption; and improving accountability within the chain of command in the Executive Branch and between branches of government and vis-à-vis civil society.

- The design approach undertaken has followed the correct strategy of starting by thoroughly understanding and documenting the current financial processes, using computer technology simply to complement clerical processes and to become more sophisticated as human capacity has developed.

- The basic BIS and BDA systems have achieved their objectives; they are batch systems, however, and do not form a sound basis for longer term developments in financial management. They must eventually be replaced by IBEX or IFMIS.

- The rate of progress of DSA may seem slow by comparison with data for IFMIS implementations in other countries, but given the low skills base in Ethiopia, low infrastructure capacity, and political problems, this is not surprising. In addition, productive use has been made of the earlier systems to achieve real benefits in terms of responsiveness and system information at the same time as system enhancements were being developed. In reality, although the DSA is still under development, it has been in productive use for a number of years.

- The institutional framework for managing the DSA has been less than ideal, with the absence of effective management committees chaired by MOFED. This is a major challenge; besides time and funding, another problem is that DSA and the MOF have not been able to create synergies among themselves. If the accomplishments made by DSA are to be sustained, the center of gravity for the direction and management of decentralized public finance in Ethiopia has to be at MOFED.

- While there exists lines of communication, there does not seem to be a productive dialogue that creates consensus and reaches agreements for joint actions and commitments. Clearly, MOFED lacks capacity and may feel uncomfortable with the leading role that DSA has played in the process of promoting financial reform at the federal and regional levels in Ethiopia. This uncomfortable coexistence that has existed between MOFED and DSA has greater implications and presents risks to the maintenance and sustainability of what has been accomplished by DSA thus far.

- The BDA/BIS systems are capable of providing a basic financial management capacity but do not have an online capability, which could be used for line ministries and regional bureaus of Finance and Economic Development (BOFEDs) in the Addis Ababa area. This is where IBEX would be advantageous. The assessment team has indicated their concerns that continued focus on IBEX development could increase the risk that Phase 4 deliverables would be delayed even further. However, we do not have sufficiently robust detailed information on costs and timeframes to judge whether IBEX should continue or whether it could be overtaken by IFMIS. This is an issue that needs to be debated further, particularly with input from MOFED.

- Another challenge is that DSA may have lost some of its strategic focus and shifted its attention and *raison d'etre* to the development of IBEX and to oppose the introduction of an off-the-shelf (OTS) IFMIS at the federal level. A number of DSA reports were cited that provided reasons why the DSA systems would be more cost effective than an IFMIS. The Phase 4 deliverables are well behind schedule, and the DSA close-out plan[3] is basically finishing the development of IBEX and implementing it at the federal and regional levels. If the Ethiopian Telecommunication Authority's (ETA) plans to connect 450 *woredas* to a very small aperture terminal (VSAT[4]) are implemented, IBEX would be a real advantage (but no dates are being quoted). DSA's close-out plan is based on DSA's achieving the terms of the contract with the United States Agency for International Development (USAID) and not on ensuring that their legacy will be maintained, sustained, and improved by the GOE.

- It is uncertain that an OTS solution will be implemented in Ethiopia. There has to be an explicit consideration of how to adapt or interphase the achievements of DSA with the possibility of an OTS IFMIS implementation in Ethiopia. What is certain is that, in the next three to five years, with or without an IFMIS being implemented by the GOE, the DSA systems and methods will continue to be the only mechanism through which GOE and the international community will be able to access data and information regarding decentralized public finance in Ethiopia.

- Because DSA is essential to keeping decentralized public finance working in Ethiopia, training, which is not explicitly mentioned in the DSA's timeline, is key for sustainability.

- The durability of DSA'a legacy is in the capacity to constantly improve procedural reforms and to provide constant training to staff working at the different government levels. The reality of staff turnover (30%) indicates that training is a constant activity and therefore a must to sustain what has been achieved.

RECOMMENDATIONS

1. Donors take a more proactive role to ensure that MOFED undertakes the process of transferring responsibility and ownership of the reforms implemented by DSA.

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[3] See Attachment F.

[4] A two-way satellite ground station with a dish antenna that is smaller than 3 meters (compared with 10 meters for other types of satellite dishes); used widely for point-of-sale transactions. Nearly all VSATs are now based on Internet Protocols.

2. A management committee be established chaired by MOFED and with a manager appointed to oversee the transfer of responsibility of DSA to MOFED. The person should also be responsible for coordinating the development of IFMIS plans in order to ensure that they are compatible with DSA developments. The manager should also have the authority to make decisions on behalf of the committee but be accountable to the committee.

3. The management committee evaluates the advances of DSA in meeting their deliverables. Important decisions that have to be made are:

    - How much time is needed to move Ethiopia toward a common financial and technological platform? Elements of that discussion will be the introduction of double-entry bookkeeping/modified cash basis accounting to Afar, Somali, and Gambella.

    - Should IBEX development be frozen in favor of focusing resources on the introduction of a standard package based on BDA/BIS Version 3B throughout the country?

    - Determine the institutional structure that needs to be created within MOFED so that it can take over the role and functions that DSA has fulfilled so far in financial management in Ethiopia and the resources and costs required to achieve this. The current institutional structure of MOFED and the human capital it employs would not allow MOFED to take over the vacuum that will be left by DSA.

    - Once the institutional space has been defined and is open, develop a plan that will describe what type of organization needs to be set up, the profile of its employees, infrastructure and equipment, and the type of technical assistance that is needed and develop cost estimates accordingly. Since GOE has fiscal and financial limitations, the costing could be used as the basis of proposals to seek funding from the international community.

4. If the DSA is to be extended by only 12 months, one option would be to consider freezing the development of IBEX and generalize budgeting and accounting reform throughout the country based on BDA/BIS Version 3B. This option is an essential exercise because it would be important to evaluate the opportunity cost of not continuing with the development of IBEX and to generate the parameters that will determine DSA's responsibility in the next year or two. It is important to have a hard date for ending DSA's activities in Ethiopia.

5. If the DSA is extended by 24 months, the best solution is to complete the development and implementation of IBEX and standardize budgeting and accounting reform throughout the country based on IBEX. For sustainability, this is the preferred option. IBEX has the capability to provide a sound basis for an MOF finance information system pending the provision of an alternative based on a COTS IFMIS package.

6. Regardless of the duration of the extension, the funding that will be available by the international community development of DSA systems should be minimized and confined to a "care-and-maintenance" basis only and with all non-core developments (e.g., payroll) being shelved at this stage. The focus should be on implementing a standard finance platform throughout all entities and with all staff trained to the appropriate level as early as possible

7. Donors should help establish in MOFED a structure to manage the ongoing developments of DSA, its rollout, staff training, and issues arising. This will include providing technical and management capacity to establish an office in MOFED that will basically take over the functions that DSA is currently fulfilling (in the long run, this could be the beginning of a significant process to strengthen MOFED and enable it to take a more prominent role in fiscal management in the GOE).

8. MOFED should establish financial management standards in the GOE, in consultation with regions and *woredas*, and for finance accommodation and ancillary services in *woredas*.

1.0 INTRODUCTION

This report is the final deliverable by the consultants engaged by the United States Agency for International Development (USAID) in requirements under the Request for Task Order Proposal 663-T-06-006: Ethiopia—Evaluation of the In-Service Training Program for Financial Management. It incorporates the outcomes of three weeks of intensive consultations and discussions with an extensive range of personnel within the Government of Ethiopia (GOE), with donors representatives, other consultants, and members of the Decentralization Support Activity (DSA) team from the John F. Kennedy School of Government, Harvard University. The project required considerable input from reports and documentation developed by the DSA team and international papers on financial management in government.

The terms of reference (ToRs) for this project required the team to independently assess the implementation and efficacy of the DSA and, more specifically, to assess:

- To what extent the planned inputs were available
- To what extent the planned outputs were realized
- To what extent the planned goals were achieved
- To what extent the results will persist
- The impact of the budget, accounting, and expenditure planning reforms supported by the project
- The financial information systems (FIS) developed by the DSA and the degree to which they can support sound public financial management, pending the rollout of the new GOE **integrated financial management information system** (IFMIS).

Other specific issues included an attempt to validate the achievements of the DSA and provide an informed analysis and commentary on key aspects covering the following:

- The DSA exit strategy and the prognosis for long-term sustainability of the reforms
- GOE ownership of and commitment to the project at all levels
- The appropriateness of the project's design and budget in the context of the Civil Service Reform Program (CSRP)
- Total costs of the DSA to date, by activities funded, on an annual basis
- The project's achievements to date, presented on an annual basis
- The rate of progress of the DSA compared to similar IFMIS projects
- The adequacy of resources and staffing available to the project
- The potential of DSA's achievements to deliver meaningful impacts
- The rationale behind the decision to develop customized FIS

- A comprehensive user satisfaction survey on the budget disbursement and accounts/budget information system (BIS/BDA) and Public Investment Program (PIP) systems
- A technical view on the BIS/BDA and PIP systems, their robustness and reliability
- The rationale behind the development of the **integrated budget and expenditure system** (IBEX) and its added value
- The ability of the DSA systems to support effective public financial management in Ethiopia and whether there are any critical gaps or areas of weakness that need to be addressed
- The institutional framework for management and implementation of the project.

The method adopted by the consultants to seek responses to the ToRs included the following:

- Group discussions and individual briefings with the DSA team
- Collective discussions with representatives of the donors (USAID, Development Corporation Ireland, Development Corporation Netherlands)
- Face-to-face interviews with the state minister, Ministry of Finance and Economic Development (MOFED), senior staff in central and regional centers and in MOFED, management staff in *woredas*, and IFMIS consultant
- Direct questioning of all staff interviewed on their views on the usefulness on the BIS/BDA/IBEX systems and the support provided by DSA
- Visits to regional government zones, regional bureaus of Finance and Economic Development (BOFEDs) and individual *woredas*, both close to Addis Ababa and in the Southern Nations Nationalities and People Region (SNNPR)
- Extensive studies of available documentation, including technical specifications of program modules, briefings on progress of the DSA, documentation on the operation of the systems, World Bank and International Monetary Fund (IMF) reports on implementing financial management systems, and specifications for individual system modules
- Prior experience of the two consultants in other administrations and consideration of reports from other financial management information systems (FMIS) consultancies[5]
- Questionnaires seeking written responses to specific queries
- Internet searches on selected topics
- Where practicable, DSA staff were asked to confirm documented findings.

[5] José I. Larios, an economist with 18 years' international experience, has written functional requirements and implemented IFMIS in El Salvador, Honduras, and Mexico. He has worked in budgeting and financial management systems in Eastern Europe, Central Asia, and Southern Africa. Mr. Allan Maclean, a information technology expert, has 20 years' experience in IFMIS development in Australia, Kosovo, Indonesia, and Brazil (among others). Mr. Maclean is currently an expert advisor for the International Monetary Fund.

Visits were made to zones/BOFEDs and *woredas*[6] in Oromia and SNNP regions to view first hand the procedures and systems in operation; to solicit staff views on the systems, DSA support, necessary enhancements, and the like; and to obtain copies of documentation being produced.

A complete list of institutions visited and persons met is given in Attachment A. However, in the time allowed for this project, we were unable to visit any other line ministries or to have discussions with the Ethiopian Telecommunications Authority (ETA) to understand network developments in Ethiopia and, in particular, the plans for WoredaNet.

A very comprehensive series of DSA documents (64 in total) in "soft copy" format were provided by the DSA team and included technical specifications for components of the FIS,[7] accounting and budget manuals, and so on. In addition, a series of DSA review papers were provided in hardcopy format as well as associated reports from the World Bank, IMF, and other organizations. A complete list of these is provided in the references (section 5.0).

CRITERIA TO EVALUATE DSA'S ACTIVITIES IN ETHIOPIA

The following are some of the key criteria that the assessment team has used to evaluate the work of the DSA over the past 10 years:

1. To build a modern FMIS it is important that a government entity be responsible for leading and guiding the effort. Leading and guiding an effort has different components:

    - Establishing and providing the technical authority to a "central entity" (typically, the Ministry of Finance, MOF).

    - Developing a technical sequence to the reform—namely, reviewing and modifying the chart of accounts (COA)—and migrating from cash-based accounting to a system that allows governments to register and quantify their commitments, account receivables, and account payables.[8]

    - Developing training programs in public sector accounting.

    - Revising current financial reports, validating their usefulness, and asking different stakeholders (i.e., MOF, comptroller, legislative, international donors) about possible new financial reports.

    - Preparing the conditions to migrate data and information to a computerized model.

    - Developing the functional requirements of a computerized system that will be easy to learn by local users, taking into consideration issues such as human and infrastructure development of a country, financial capacity of the host government, and other factors.

    - Developing and implementing computerized systems. This area might take longer and be more expensive than expected. Human and infrastructure elements will influence the length and the cost of a computerized solution as well as the type of computerized solution chosen. There are endless debates about what is more cost effective—a local solution developed in house or an off-the-shelf (OTS) solu-

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6 *Woreda* is the basic decentralized administrative unit and has an administrative council composed of elected members.

7 FIS is the collective name given to the financial systems developed by DSA and thus encompasses BIS, BDA, IBEX, and PIP.

8 See Attachment F.

tion. But what is true and common for either path taken by a government is that development of an FMIS takes time. Although computer-based solutions are important and necessary, at the end of the day the following elements are key for the development of a strong and sustainable FMIS: understanding of local conditions and practices; migrating away from cash-based accounting, new COA, and budget classification; and constant training of personnel. All are key to maintaining the system, working and collecting the data and information that are required to manage the finances of governments and public institutions.

2. It is important to keep remember that a modern FMIS is not a computerized solution.

3. The development of a modern FMIS requires that local conditions be understood and a strategy be developed that builds the accounting and budgeting elements that will allow for the sustained development of the system over time.

4. To sustain the process, it is essential to have the buy-in of the government. This is important because there needs to be a central entity that moves and orchestrates the movement toward a modern FMIS. Buy-in and active and pro-active participation by a central government entity is required to ensure that the reform process is sustainable. Only with this buy-in is it possible to obtain the commitment of staff at all levels of government (e.g., MOFED, government ministries, regions, and *woredas* in the Ethiopian context).

With these points in mind, we consider how DSA faced the challenge of implementing the goals and objectives specified by USAID during the different phases of the project over the last 10 years.

The assessment team considered that, to carry out the ToRs of this assignment, it is important to provide the readers with the flavor of the institutional setting of MOFED and of the federal government vis-à-vis subnational government units. The former and the latter affected and modified the strategy and activities of the DSA. Section 2.0 describes and discusses Ethiopia's institutional context and DSA's approach and activities. Section 3.0 describes the development of computerized systems by DSA throughout the duration of the project. Section 4.0 provides an overall assessment of the project, paying particular attention to activities under Phase 4 of the project and to issues related to the development of IBEX. Section 4.0 also deals with issues related to exit strategy and sustainability, and it provides observations and overall conclusions regarding the sustainability of the project's legacy. Lastly, also in Section 4.0, the assessment team makes recommendations to project funders.

We emphasize that achievement of a successful outcome would have been impossible without the excellent level of cooperation given by all parties consulted who have expressed their views and responded to queries, both oral and in writing, in an open and frank manner. Special thanks and recognition to the members of the DSA team who provided the assessment team with logistical support and access to all team members. We thank and appreciate their patience.

2.0 ETHIOPIA'S INSTITUTIONAL CONTEXT AND DSA'S APPROACH AND ACTIVITIES

Political changes in Ethiopia during the past two decades have been profound, fundamentally changing the structure and organization of government. First, the overthrow of the socialist state meant that in terms of directing economic policy, the Ministry of Planning lost importance vis-à-vis the MOF and the Federal Revenue Administration. However, the loss of importance of the Ministry of Planning did not appear to translate into the technical and institutional strengthening of the MOF. Furthermore, the fact that tax and revenue collection are not part of the MOF's functions has reduced its role to being more the "cash manager" of Ethiopia's federal government. The Ministry of Planning was merged into the MOF, but it does not appear that the capital investment planning function of the Ministry of Planning has been successfully coordinated with the management of the operating expenditures of the MOF.[9]

The original institutional difficulties of the MOF were worsened by the still-evolving process of decentralization, which was deepened in 1995 when a new constitution was proclaimed. This new constitution gave considerable autonomy and power to its nine regional states (Afar, Amhara, Benishagul Gumuz, Gambella, Harari, Oromia, SNNP, Somali, and Tigray) and two urban administrative areas (Addis Ababa, Dire Dawa). Each regional government/administrative area is governed by an elected administration and has within its jurisdiction a number of districts, or *woredas*—each of which is further divided into a number of *kebeles*.[10]

The GOE decentralization program was extended in 2000 from regional- to *woreda*-level, effectively expanding the number of autonomous budget and accounting units by a factor of over 11 (from 64 to over 800), each with significant autonomy in financial matters and managed by elected officials. Today, there are over 800 *woredas* with an average size of around 60–100,000 inhabitants. Yet, the government structure in Ethiopia is still evolving and, for example, a substantial number of new *woredas* and zones have been established in the past six months. These very substantial changes had to be accommodated within the overall scope of DSA's work.

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[9] While the MOF is responsible for large federal programs, such as food security, hydro-electric schemes, university construction, roads, and rural electrification schemes, the fact that DSA exists and is central to the implementation of Ethiopia's operating budget demonstrates that, to be able to manage this large portfolio of capital investments transparently and effectively, the technical assistance and the know-how developed by DSA need to be disseminated and generalized throughout the financial management system of Ethiopia.

[10] *Kebele* is a further administrative unit under the *woredas* and is organized under urban dwellers associations in towns and farmers associations in rural areas.

In this institutional and political setting, MOFED is thus not able to undertake the full central role commonly associated with the MOF in the development of financial management in central government. Key weaknesses include the following:

- It appears that MOFED lacks the human capital that would be expected in the MOF of a central government. Although the Ministry of Planning was merged with the MOF, there is no evidence that the latter has strengthened the MOF's role.
- The fact that the revenue function is not under the roof of the MOF implies that fiscal policy is segmented (revenue collection is separated from spending). This separation implies that budget planning may have some difficulties, because the spending side of the central government may not be well informed about how well tax receipts are being collected; therefore it is difficult to coordinate planned spending levels with planned revenues.
- The institutional weakness of the federal government vis-à-vis regions implies that a significant share of operating expenditures (excluding foreign debt payments and pensions, central government salaries, and military spending) is carried out by regional governments and *woredas*.
- MOFED's own institutional weaknesses are likewise reflected horizontally vis-à-vis other federal government agencies or ministries.
- Ethiopia's main expenditure items are debt payments, pensions, and salaries. According to Dr. Steve Peterson of DSA, 27% of central government's total expenditures are distributed to regions. Of that 27%, 70% is distributed by regions to *woredas*, and the regions keep approximately 30%. Thus, the MOF is, for all practical purposes, the central government's "checking account" that is used to make debt payments and pay for salaries and pensions, and then to redistribute 27% of total expenditures to autonomous regional governments. Thus, MOFED is not able to contribute fully to overall fiscal management in the GOE.
- Significant ongoing expenditures aimed at combating poverty are made outside MOFED's institutional channels. While the logic of bilateral and international organizations is based on sound reasoning—namely, to avoid corruption and political capture by regional or national elites—the perverse impact is that it continually weakens the fragile institutions of economic governance in Ethiopia. Furthermore, it implies that the process of financial accountability has to be executed outside Ethiopian institutional channels. Again, while this practice might be justified in the short run, in the long run it debilitates MOFED institutionally.

2.1 DSA PROJECT: INITIAL INSTITUTIONAL CONDITIONS AND INITIAL DSA ACTIVITIES

The GOE initiated in 1996 the CSRP, seeking to build capacity to implement its devolution agenda; the reform was designed by the Prime Minister's office. A CSRP task force was created that designed five programs (a timeline showing key events is given in Attachment B):

- Top systems management
- Human resource management
- Service delivery
- Ethics
- Expenditure management and control program (EMCP).

The EMCP was subdivided into nine components:

1. Financial legal framework
2. Budget reform
3. Expenditure planning
4. Accounts reform
5. Cash management
6. Audit
7. External audit
8. Financial information system
9. Development of the accounting and auditing profession.

USAID/Ethiopia had a democracy and governance program in operation in Ethiopia and was planning an intervention to assist decentralization in contract with the Harvard Institute of International Development (HIID) when the CSRP program was announced. USAID was approached by the GOE to support the CSRP activity. USAID and HIID recommended to the GOE a project that would focus on the budgeting and accounting components of EMCP. HIID was sole-sourced for this contract.

The main objectives of the first three phases of the DSA were:

- To strengthen the capacity of the public financial management (PFM) system to manage public sector financial transactions.
- To improve the capacity of public sector managers to use information about financial transactions for better control.
- To develop, on the platform of better accounting and financial management and control systems, better planning of the public sector so that budget allocations are driven by policy.

DSA began its activities in January 1997. DSA found that federal and regional government budgets were prepared using MS Excel spreadsheets and accounts were prepared using a COBOL mainframe computer program called the BDA system. This was a single-entry, cash-basis accounting system based on the COA extant at this time. DSA also found weaknesses in human capital: the mere fact that Ethiopia was registering its financial transaction using single-entry, cash-basis accounting reflected the level of human capital administering the system. The delegation of financial management to zones and *woredas* in 2000 increased the scope of DSA by an enormous factor of 11 in terms of reporting entities. Despite this increase, DSA still had to be carried out within the original ToRs.

International experience has demonstrated that countries that manage their financial affairs by relying on single-entry book/cash-basis accounting tend to observe the following problems: planned revenues and expenditures do not match actual revenues and expenditures collected; budget planning is ad hoc and not linked to policy objectives; revenues and expenditures forecast are incremental and thus not rooted in actual information and policy objectives; and, owing to poor planning and weak accounting and monitoring practices, accounts payables or ("floating debt") tends to accumulate. Although the assessment team did not research what were the original conditions of Ethiopia before the inception of the DSA, the objectives and activities of the project suggest that the problems mentioned above might have already existed in Ethiopia.

As discussed above, to modernize public financial management systems it is important to give proper authority to the government entity that will be in charge of setting up the rules and regulations of the financial system. To set up the system, it is important to define the objectives and mission of the organization in charge of managing the system and to understand how the central organization will coordinate activities with other line ministries and with autonomous agencies and regional and local governments. It is important to understand how the budget process works and what the calendar for budgeting is.[11] Furthermore, to meet its objectives, the DSA had to fully understand the budgeting and accounting systems in use.

To meet the main objectives of its first three phases, the DSA carried out the following activities and actions:

- Understand and document local conditions and processes.
- Simplify some of the current processes but without re-engineering them.
- Update backlogs in reporting—a backlog of six years was reduced to one. It is important to clarify this point further. Typically in a given fiscal year—say, Fiscal Year 2001 (EFY 1994)—most public administrations are working on three FYs. That is, the current FY 2001, where the administration is executing the Budget law approved by the legislature. Typically, the MOF will monitor the execution of the FY 2001 through quarterly or monthly reports. But the MOF will also be closing the budget executed in FY 2000 and it will also be engaged in preparing the Budget law for FY 2002. The backlog that DSA reduced from six years to one was the backlog in the production of reports that discussed budget execution. According to the information gathered by the assessment team, it takes about 18–24 months after a fiscal year ends to officially close the books on the budget executed in that fiscal year.
- Provide continuous training.
- Provide ongoing technical support to regions.
- Develop the PIP in the Ministry of Development and Cooperation (MEDAC).
- Develop the macroeconomic fiscal framework (MEFF).
- Promote budget costing.
- Develop block grant formula to distribute funds from regions to *woredas*.

In these first three phases of the project, perhaps the most important activity carried out by DSA was to understand and document local conditions and processes. One of the accomplishments of this activity was the reduction of the backlog in reporting budget execution.

A second-order impact that moved the project further was the need to develop an information technology (IT) capability that was not in the original ToRs for the DSA but had to be included at a later date (around 2000–2001). A proposal had been made for the European Union (EU) to fund the acquisition of a turnkey IFMIS product at an estimate cost of €9m. The indefinite delay in this funding, combined with the inadequacy of the systems in use, forced DSA to develop an IT platform that would support the changes stemming from DSA developments. In addition, DSA had to ensure that the stringent information requirements of donors could be met in a timely manner. These were new requirements.

[11] Budget calendar stipulates when the MOF sends budget ceiling to all budgetary institutions; when those budgetary institutions respond with their preliminary requests; by when final requests are presented to the MOF; by when it consolidates budget; by when it presents draft budget law to the legislative office; and by when the legislative approves a budget law.

The development of a robust IT platform is not a trivial exercise and required significant specialist technical skills. Initially, DSA had to build low-cost basic systems rapidly to support the implementation of the budget and accounts procedural reforms which were not part of the original ToRs and were never meant to be a long-term IT solution for financial management. In 1997, the DSA had recognized the need to automate the budget preparation and consolidation activities, and an IT consultant was contracted to develop a BIS based on Visual Basic with MS Access database.

DSA matched improvements they had accomplished at the functional and training levels with an enhanced version of the original COBOL-based BDA system. Making this change meant that each region, ministry, and others could be using different budgeting codes with the risk of incompatible standards being applied. As stated above, one of the key functions of an MOF in modern financial management is to be the central entity in charge of setting rules and promoting best practices to the rest of the government. In this case, the DSA was not necessarily taking that role—the move from a COBOL-based system to MS Access database was just a logical move to facilitate better financial management along with the project's objectives.

It is important to note a consistent theme of the DSA; namely, the idea that improvements in accounting and financial management should allow a government to plan better and to make budget allocations based on policy. Two observations are noteworthy:

- By understanding current processes and practices, the DSA team acquired a deep knowledge of the strengths and weaknesses of the GOE's financial management systems as a prerequisite to effecting improvements.
- While the technical assistance on macroeconomic fiscal framework, budget costing, and development of block-grant formulas was sound and logical, the institutional weaknesses of MOFED definitely limited the impact of this type of technical assistance. Given the weaknesses of MOFED, it seems that DSA focused its technical assistance where it could have a greater impact—thus the moves in financial management toward modified cash-basis accounting (or double-entry accounting) and toward a modification of the COA in order to standardize financial management practices throughout Ethiopia. Furthermore, the federal government's political decision to decentralize spending to the regions and *woredas* implied that DSA would have to expand their activities to regions.

2.2 DSA'S FOURTH PHASE AND THE GROWING IMPORTANCE OF IFMIS

In terms of the evolution of DSA's assistance, the understanding they had acquired of government financial management systems enabled them to continue with technical assistance that supported the greater financial reform. It was recognized that, to fully support the reforms, a robust information system must be developed that required significant upgrades to the earlier systems. The long timeline for the DSA saw very major developments in IT strategy and a global move away from earlier, simple batch-type processing to sophisticated online systems with timely capture of data and provision of up-to-date information. This was the basis of developing the IBEX platform. Moving from a basic COBOL-based solution to a sophisticated state-of-the-art system is a major undertaking.

Consistent with the achievements made during the first three phases, the following overall objectives were set for Phase 4:

- To complete the introduction of the financial transaction platform (the budget and accounts systems) in all regions, all administrative areas, and the subregional governments of the four large regions.
- To provide follow-on support to regions and administrative areas in operating these new systems.

- To institutionalize the reforms within the government.
- To introduce budget planning to improve the accountability and performance of public expenditure.

During Phase 4, DSA began to develop a parallel strategy. On the one hand, they used the advancements in accounting and COA to improve cash management by carrying out the following activities:

- Bank accounts were consolidated to use money more efficiently and effectively. Significant savings were realized.
- A system of single-pool accounting was created. This development accompanied not only the procedural reforms designed and implemented by DSA, but also the reality that the focus of operating expenditures in Ethiopia had shifted to *woredas* and regions. Single-pool accounting allowed for the concentration of personnel trained in accounting both to manage the budgeting process directly linked to MOFED and to support budgeting in all sectors such as health and education.
- Development of cost centers. Once again, improvements in procedural reform combined with the rising importance of *woredas* and regions in budget execution. Regions, as noted above, receive 27% of total federal government expenditures. Regions keep 30% and redistribute 70% to *woredas*, based on a block-grant formula.
- There were more improvements in budget planning. A continuation of the emphasis of DSA to make budget planning more responsive to policy goals and objectives.
- There was a continuation of the documentation of clerical processes, with some redesign and standardization of forms.

2.3 WOREDA ACCOMMODATION

The assessment team visited a number of *woredas*, viewing first hand reports on the status of finance office accommodation (see Attachment C) and the lack of facilities. We recognize that with devolved responsibilities to regions and *woredas* the accommodation is not MOFED's prime responsibility; however, it does have a role to play in setting national standards for financial management. We consider that these standards should extend to *woreda* accommodation and supporting infrastructure and that MOFED should develop a standard profile for the *woreda* finance offices, including minimum facilities that are required (e.g., telephone, furniture, copier, transport, stationery, etc.). This could be agreed on in consultation with regional governments and *woredas*.

3.0 DEVELOPMENT OF COMPUTERIZED SYSTEMS BY DSA

A computerized information system ties together the individual elements of the FMIS. As such, it is the platform on which the system is implemented, not the system itself. Thus, as DSA made significant advances in reforming functional procedures in Ethiopia, combined with the massive training of human resources in the country, different needs and demands were generated and voiced by all stakeholders. There was a need to improve reporting and to systematize data entry and information management. Thus, a logical step was to upgrade the original basic BDA systems.

3.1 BDA AND BIS

The first step in the DSA's move to provide a more modern IT platform was to upgrade the existing COBOL BDA system. In 1998, DSA outsourced the task of converting the COBOL mainframe system to a Windows-based MS Access database application to a private company (AFCOR). This was followed by an upgrade to include the new COA, again outsourced to a private company (Omnitech).[12]

The main functions of the enhanced BDA were (1) transaction register, (2) budget adjustments, and (3) reporting. In 1997, the DSA recognized the need to automate the budget preparation and consolidation activities, and an IT consultant was contracted to develop a BIS based on Visual Basic with MS Access database.

As the DSA developed, it was recognized that the scope of IT functions (e.g., to take advantage of the availability of WoredaNet) needed to be broadened further and that further upgrades to BDA and BIS were necessary. This work was outsourced to Omnitech, and a series of upgrades were undertaken to:

- Enable BIS to run as a networked application to facilitate budget preparation and with a number of new reports being produced. This version was named "BIS v2."
- Introduce a new double-entry accounting system based on the new COA. This was named "BDA 3 (B)" and used Visual Basic with MS Access database.
- Enable the previous single-entry, earlier COA system to be upgraded to accommodate the new budget classification structure, again using Visual Basic and the MS Access database. This enhanced single-entry system was called "BDA 3 (A)."

BDA 3 (A) was designed to be implemented in regions where budget reform only had been introduced, while BDA 3 (B) would be used in those regions where both budget and accounts reform had been implemented.

[12] Omnitech was contracted over a three-year period to provide technical assistance valued at about $900,000.

One important consequence of this outsourcing was to establish a pool of technical staff in Addis Ababa that understands the MOFED systems and could undertake technical development/support work and thus provide specialist technical assistance to MOFED in the longer term (e.g., after the DSA has ended).

Although BIS and BDA were developed using Visual Basic and used relational industry-compatible database systems, they had significant weaknesses (e.g., lack of security features and integration capability, a basic database system, no online capability, etc.).

3.2 IBEX

In planning for Phase 4, an internal assessment of IT systems was undertaken in August 2003. This assessment, while recognizing that existing versions of BIS and BDA were meeting user requirements, noted that they are based on dated technology and could not satisfy the government's longer term financial information requirements. In addition, a number of developments in Ethiopia were underway that would require these to be further enhanced to maintain their currency. These included the establishment of WoredaNet WAN in Addis Ababa, which would enable government entities in the city to be connected online—enabling more timely financial management reporting and an essential component of any modern IFMIS.

Development of an enhanced system was commenced that sought to:

- Combine the functions of BIS and BDA within the one package.
- Enable online communication through a Web-enabled interface.
- Provide the ability to integrate reports from BOFED/*woredas*.
- Provide an enhanced reporting capability.
- Use international standards.
- Use a modern database system through standard interfaces.
- Use a state-of-the-art security system.

IBEX is developed on a current state-of-the-art technical platform and is designed to achieve considerable integration of the IFMIS functions while ensuring flexibility by using industry accepted "open" standards. In this regard, key features of IBEX are that (1) it builds on the functionality developed in the existing BIS and BDA systems and (2) it is Web (browser) based. This feature enables it to be used via the Internet, thus simplifying its access by communications, focuses on using a centralized system(s) installation, and thereby reduces the need for local client support.

The IBEX application is Web based. It follows the client-server model whereby the interface for all users is presented in a Web browser, though application functionality is performed on a remote application server. The reporting framework represents the second major aspect of the interface design. The requirements surrounding reporting are:

- The reports must be generated on demand by users of the system and respond "quickly."
- Reports should be exportable to Microsoft Excel.
- Reports should print in order to retain their original formatting.

- The reporting framework should be flexible and extensible, allowing for the addition/modification of reports with minimal effort. It is preferable that users are able to develop/modify reports without the requirement for technical assistance.

To meet these requirements, the design provides a reporting framework that uses extensible style language (XSL)[13] transformations of extensible markup language (XML)[14] representations of the data to generate reports.

The use of XML transformations provides both flexibility and extensibility because XSL style sheets, which perform the transformation on the XML data, are files that can easily be added, modified, or deleted without changing any code. The result of the transformation is hyper text markup language (HTML) (or any other text for that matter) that can be streamed back to the client in the response stream and displayed in a browser.

IBEX comprises the following modules:

- **Budget Module**, executes the budget preparation activities performed by government financial offices prior to the commencement of budget execution processes in a new fiscal year.
- **Accounts Module**, manages the tracking of revenues and expenditures for budgetary institutions. More specifically, the accounts module records the financial transactions of the budgetary institutions and their aggregated monthly accounting reports and provides accounting reports for ledgers, financial statements, management reports, transactions, expenditures, and revenues.
- **Budget Adjustment Module**, caters for changes to the budget during budget execution. It specifically enables the recording of budget transfers and budget supplements and the subsequent production of the adjusted budget.
- **Budget Control Module**, helps control spending in accord with the approved budget. It specifically allows for the recording of commitments and payments against or toward a particular budgetary institution.
- **Nationwide Consolidation Module**, consolidates the budget and accounting data for the entire country. This module allows for the generation of regional and national consolidated reports.
- **Disbursement Module**, manages the public treasury functions associated with cash management and disbursing funds between public financial institutions. This module is currently under development.
- **Security System,** a contemporary security system is installed appropriate to the finance department of a central government.

IBEX is being developed and will be implemented as a distributed, Web-based application. At this time, the physical installation of the application hardware, software, data, security software, and others will only be at financial centers—namely, MOFED, line ministries, and the BOFEDs/zones. In Addis, where WoredaNet is available, such centers can be connected now in real time using IBEX.

For BOFEDs where no communication capability currently exists, the standalone version of IBEX will be used with data being transferred by disk or other magnetic media as with current systems. As communication networks become more widely available and their use is cost effective, the number of separate processing centers could be reduced with cost savings and reduced overall security exposure. The development of a shared government network would enable the online connection of *woredas* to be more cost effective.

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[13] XSL is a specification for separating style from content when creating HTML or XML pages.

[14] XML is an open standard for describing data from the W3C (WWWConsortium). It is used to define data elements on a Web page.

The IBEX modules covering budget development and accounts have formats that are very similar with those available with the BDS and BIS systems. Thus, staff training on IBEX will see the same screen formats and go through the same training process for budget and accounts manuals (although additional training will be necessary to use the full capabilities of IBEX as opposed to BIS and BDA).

In the interim, pending the availability of networked access, import and export utilities allow non-networked reporting units to continue working with the BIS and BDA software and/or IBEX standalone version to import their data into the single IBEX system as required. As discussed above, there is merit in standardizing on a single platform for all financial processing. Whether this is IBEX or a BIS/BDA platform depends on a number of factors (e.g., implementation timeframe, costs of training, costs of completing modules in IBEX, timing of the introduction of an IFMIS, availability of funds, etc.), discussed under conclusions (section 4.0).

3.3 CURRENT STATUS OF IBEX

The IBEX system is still under development and its current status is:

1. The Budget Module has been completed and has been in operation in MOFED and Addis Ababa administrative zone for the past two years.
2. The consolidation module is nearing completion and has been used to consolidate nationwide accounts for EFY 1994.
3. The Accounts, Budget Adjustment, and Budget Control modules (collectively referred to as the Accounts Module) are complete and ready for pilot testing.
4. The Disbursement Module and Management Information System (MIS) modules are under development.
5. A Payroll Module has begun.

Target completion dates for items 4 and 5 are:

- Disbursement Module: February 2007
- MIS Module: May 2007
- Payroll: September 2007.

(In the assessment team's view, *payroll* is not a core FMIS component, and its development should be discontinued in favor of completing Phase 4 deliverables.)

3.4 OVERALL ASSESSMENT OF IBEX

IBEX has been designed and developed as a state-of-the-art product and has all the features one would expect in a well-designed system: has a modular design and standard interfaces, uses international standards, uses industry standard relational database interfaces, has a security system appropriate to a central government financial system, and has comprehensive backup and recovery features. Those modules completed have been proven in practice; however, a number of modules have yet to be completed and tested fully. None of the users we spoke to voiced any concerns on its performance or reliability,[15] and all the evidence is that it forms a

[15] IBEX has not been fully implemented throughout the country, and implementation will require extensive retraining of staff, conversion, and support costs. As with any new financial system implementation, problems are likely.

sound basis for a government-wide FMIS but lacks some of the features that would be expected in a commercial off-the-shelf (COTS) FMIS. It has the potential to be evolved into a commercial product in a market where there are still only a small number of competitors.

3.5 CURRENT STATUS OF BIS, BDA, AND IBEX IMPLEMENTATION

Tables 1 and 2 below illustrate the uptake of BIS, BDA, and IBEX systems in federal government and in regions. Upgrading from one version to another depends on the availability of capacity and provision of staff training. The workload in this regard is still growing with the recent addition of a further 40 *woredas* and the high loss rate of trained finance staff. It is compounded by having three distinct software systems—BIS, BDA and IBEX—to support, train, and implement.

TABLE 1. SUMMARY OF BIS AND BDA USAGE

Location	Details
MOFED	• Processed EFY 1995–1997 budgets using BIS v2.1 • Processed EFY 1995–1998 accounts using BDA 3(B) • Prepared EFY 1998 budget using IBEX Budget Module • Currently working on EFY 1999 budget
Federal Public Bodies	• 49 public bodies using BIS v2.1 • MOFED public bodies (Finance and Admin.) using IBEX Budget Module • All federal units using BDA 3(B)
SNNPR	• EFY 1995–1998 budgets prepared using BIS v2.1 • Closed EFY 1995 accounts using BDA 3(A) and using BDA 3(B) for EFY 1996–1998 accounts • BIS and BDA operating at all 12 zones, 4 liyu *woredas*, and BOFEDs
Tigray	• EFY 1996–1998 budgets prepared using BIS v2.1 • EFY 1996–1998 accounts prepared using BDA 3(B) • All 48 *woredas* using BIS and BDA 3(B)
Amhara	• EFY 1996–1998 budgets prepared using BIS v2.1 • EFY 1996–1998 accounts prepared using BDA 3(B) • BIS and BDA operating at all 10 zones • 7 pilot *woredas* using BIS and BDA
Oromia	• EFY 1996–1998 budgets prepared using BIS v2.1 • EFY 1996 and 1997 accounts prepared using BDA 3(A) • BIS and BDA 3(A) operating at all 14 zones • EFY 1998 accounts prepared using BDA 3(B) in all zones and BOFEDs
Addis Ababa	• EFY 1997 budget prepared using BIS v2.1 • EFY 1996–1998 accounts prepared using BDA 3(B) • BDA 3(B) at all sub-cities • EFY 1998 budget prepared using IBEX budget running in BOFED and all sub-cities
Benishangul	• EFY 1997 and 1998 budgets prepared using BIS v2.1 • EFY 1997 accounts prepared using BDA 3(A) • EFY 1998 accounts prepared using BDA 3(B)

Location	Details
Dire Dawa	• EFY 1998 budget prepared using BIS v2.1 • EFY 1998 accounts prepared using BDA 3(B)
Harrar	• EFY 1998 budget prepared using BIS v2.1 • EFY 1998 accounts prepared using BDA 3(B)
Afar	• EFY 1998 budget prepared using BIS v2.1 • EFY accounts prepared using BDA 3(A)
Gambella	• EFY 1998 budget prepared using BIS v2.1 • EFY 1998 accounts prepared using BDA 3(A)
Somali	• EFY 1998 budget prepared using BIS v2.1 • EFY 1998 accounts prepared using BDA 3(A)

Table 2. FEDERAL INSTALLATIONS USING BIS, BDA, AND IBEX

BIS	BDA
EFY 1995 MOFED	**EFY 1995** Central Accounts Department (CAD)
EFY 1996 Ministry of Health Ministry of Education Ministry of National Defense Ministry of Water Resources Ethiopian Roads Authority Ethiopian Agricultural Research Organization	**EFY 1996** MOFED Black Lion Hospital Ministry of Water Resources Central Statistics Authority Ministry of Education Ethiopian Pension Authority Ministry of National Defense
EFY 1997 **A**dditional 15 federal bodies added to above list	**EFY 1997** Additional 124 federal bodies added to the above
EFY 1998 Additional 31 federal bodies added to the above list	**EFY 1998** Additional 39 federal bodies added to the above list
Total using BIS, 53	**Total using BDA, 171**

We do not have a picture of the total target numbers of government bodies that are candidates for use of the BIS/BDA/IBEX systems.

These tables illustrate that the BIS and BDA systems have penetrated considerably throughout the government; however, use of IBEX is limited. The timeframe for universal use of IBEX is subject to more detailed consideration. We believe that there is a risk that completion of IBEX and its rollout to all regions with necessary training of staff could take between one and two years. This, however, needs a more careful assessment of plans and resources and up-to-date monitoring of implementation progress.

4.0. OVERALL ASSESSMENT

4.1 PHASE 4 AND IBEX

The DSA has had considerable success in achieving important reform and capacity building in financial management in the GOE and is consistent with best practice guidelines for implementation of these types of projects. It has been achieved against a background of substantial changes in Ethiopia and in the GOE, with the devolution of financial responsibilities to zones and *woredas*, and with huge changes in the number of reporting entities. None of these was anticipated in the original ToRs for the DSA.

While the procedural reforms are important, the backbone of this reform has been the staff training on budgeting, accounting (single and double entry), and management of information systems. These changes introduced by DSA have exposed Ethiopians in *woredas* and in regional cost centers to a new way of doing their work and new organizational methods. Through training and the reorganization of information capture and processing, these fragile institutions have been capable of (1) moving from single- to double-entry accounting, (2) learning about budget planning and the principles of capital investment, (3) being exposed to intergovernmental block-grant formulas, and (4) being capable of migrating not just from one simple accounting method to another that is more complex but also of migrating data from BIS/BDA 3A to BIS/BDA 3B. To have accomplished all of the above is a significant achievement in its own right, especially given the lack of staff with basic skills in financial systems.

The technical assistance provided by DSA (including the training of some 60,000 staff, see Attachment D for a discussion) has built the basis for a modern financial management system for the GOE. This has been achieved through the procedural reforms (budgeting and accounting reform, introduction of new COA), training of personnel at the *woreda* and regional levels; the introduction of reorganization changes such as the creation of regional cost centers, concentration of bank account, creation of single-pool; and the development of IT systems that have accompanied their procedural reforms.

The center of this system is at the *woreda* level, where the information is collected, processed, and entered into the system. The process is done mostly manually and continues to be paper-based and paper-intensive. Given the unevenness of economic development, some regions and *woredas* are well equipped, but most are not. Some remote and dangerous regions and *woredas* do not even have the basic infrastructure essentials (e.g., power, telephones, transport, stationery, etc.) or staff.

The training program has been well tested; DSA reports that there is a 30% turnover rate on all trainees. Informal evidence is that most trained employees leave either to work for nongovernmental organizations or for the private sector. This implies that this training has a value in the country and has impact beyond government to the general economy as a whole. DSA has trained staff across the whole of Ethiopia, thus building human capacity at both the regional and local levels.

As mentioned above, the training of this staff is what reduced the backlog in the reporting on budget execution from six years to one. The need for continuous training of personnel, given the turnover rate and the impact of political events on employment at *woredas* and regional governments, makes training even more critical in order to sustain the advances made in the modernization of public financial management in Ethiopia. An impressive achievement is that DSA has trained about 60,000 people over the length of the project.

Considering the goals set for the conclusion of Phase 4 on 30 November 2006, the following project deliverables were anticipated (Table 3).

TABLE 3. PHASE 4 DELIVERABLES AND DEGREE OF COMPLETION

Phase 4 Deliverables	Status
All federal public bodies, regions, and administrative areas operate the new cost center budgeting system.	The new cost center budgeting system is implemented in all federal public bodies, administrative areas, and regions. One exception was the delay in Somali region owing to capacity (devolution) infrastructure and security issues at the *woreda* level.
All federal public bodies, regions, and administrative areas operate the new double-entry bookkeeping system and modified cash basis of accounting.	All regions except Afar, Somali, and Gambella use the new accounting system. The Phase 4 proposal schedules the introduction of the new accounting system in the small regions in July 2006. DSA and GOE agreed that the *woreda* capacity in Afar, Gambella, and Somali regions are not adequate enough to implement the new system this year. Instead, the EFY1999 MOFED reform action plan states the strengthening of the budget reform in these regions this fiscal year and the preparation[16] for the introduction of the accounts reform for EFY2000 (July 2007).
A budget planning system that promotes policy and performance-based allocation of public expenditure fully operating in the federal government and one pilot region and underway in others.	*Federal*: Macro economic fiscal framework (MEFF) and Public Investment Program (PIP) implemented. *Regional*: Pilot successful in SNNPR. Regions such as Amhara, Oromia, and Tigray are sharing experience with the pilot region. Encouraging results have been obtained by these regions.
A financial reporting system is introduced in the federal and regional governments and administrative areas.	A financial reporting system has been introduced at the federal level (172 reporting units) and regional governments and administrative areas except delays in Somali region for above-stated reasons (Row 1). All regions submitted EFY1996 accounts to MOFED. EFY 1997 accounts for all regions are expected to be closed and submitted to MOFED by or before November 2006. (Three regions have already submitted their EFY1997 accounts to MOFED.)
Performance measures introduced in the federal and select regional government budgeting systems.	*Federal*: Government was not ready to introduce performance budgeting until late in Phase 4. MOFED wanted DSA to focus on the transaction platform. MOFED decided that the performance budgeting was to be introduced and implemented by East Afritac in March 2006.[17] *Regional*: Performance agreements have been implemented in the SNNP region for three years, and other regions are studying.
Management accounting in select regions.	Management accounts manuals designed and discussed with regions and the federal government. Functional requirements included in IBEX and development completed *(implementation planned during the extension of Phase 4)*.
An appropriate disbursement and cash management system (including a single treasury system) operational in the four largest regions and their subregions.	Completed

[16] Preparation for the introduction of the accounts reform includes key policy decisions by the regional governments and reduction of backlogs.

[17] The DSA has requested several times that the government formally notify it that this deliverable is removed from its contract.

Phase 4 Deliverables	Status
Budget and accounts systems automated: In all regional and zonal financial institutions of the four large regions, at BOFEDs in the small regions, in the BOFEDs and sub-cities of the two administrative areas, and select federal public bodies. In the finance institutions of the four large regions using the new information communication technology (ICT) infrastructure.	The government financial system is running on BIS and BDA for the past five years with accounts reports and budget books produced using these systems in regions and at the federal level. The Phase 4 contract deliverable does *not* specify that automation is to be IBEX. The systems are automated but principally with BIS/BDA. IBEX is an upgrade of BIS, and BDA and is currently being piloted in the Addis Ababa administration, MOFED, and Tigray. The Phase 4 contract states that IBEX will be implemented in the BOFEDs of the four large regions. Implementation is well underway with a successful pilot in Tigray region. To date, the ICT is not working, but if it becomes operational, the project will connect IBEX to it.
The disbursement system is automated in regional finance institutions.	The disbursement module is developed as an integral part of IBEX and is planned to be launched in Tigray (IBEX pilot region) and at the federal level.
Approximately 28,502 staff trained in the budgets, accounts, and budget planning reforms.	Total trained to date: 63,797 Phase 4 contracted: 28,502 Phase 4 delivered: 27,440
The procedures and management of these systems institutionalized in the government (select regional management institutes, bureaus of finance, and the Ethiopian Civil Service College).	Regional management institutes and the Ethiopian Civil Service College did not and may not play a major role in the institutionalization process. Instead, the DSA completion strategy suggests the takeover functions and tasks of the institutionalization process are to be handled by the regional BOFEDs and MOFED.

On the basis of the information made available to the assessment team, advances in finishing deliverables is uneven: there are advances in all areas, but there is every evidence that all of the deliverables above may not be delivered on time (30 November 2006) due to factors beyond the control of the DSA team. An exception is training, where DSA has definitely developed the capacity to train well and constantly around most of the country.

The assessment team believes that the decision to develop IBEX has affected the attainment of all of the deliverables agreed on during Phase 4 of the project. To develop and introduce IBEX are major undertakings. Although the assessment team considers that, from a purely technical point of view, it is sound, the reality is that with a Phase 4 completion date of 30 November 2006, there is not enough time to complete all Phase 4 scheduled deliverables (even if there is a no-cost extension until March 2007).

During interviews with State Minister Mammo Gitto and DSA's government counterpart, Mr. Mosa Mohamed, it is clear that their priority is that DSA introduce and train all federal public bodies and administrative areas on how to operate the new double-entry bookkeeping and modified cash basis accounting. The assessment team agrees with this priority, because the core of DSA's legacy for Ethiopia is the procedural reform and its associated training and because we consider that it is important to move the government to a common financial system platform. That is international best practice.

Section 4.1 of this report outlines the vision that DSA has for IBEX. It is clear, however, that the implementation plan for IBEX cannot be achieved within the Phase 4 timeframe. DSA has presented a plan to complete all Phase 4 deliverables by 30 November 2007, which implies the need for an extension of the DSA project by at least 12 months. The assessment team believes that to fully complete and implement IBEX, and to migrate

most government entities toward a common accounting, budgeting, and IT platform, DSA will likely require more than 12 months. The team did not have time to test the estimates made against prior DSA experience; however, there is a clear risk that the rollout of IBEX could take significantly longer, especially as some of the modules have yet to be completed and tested. In addition, the full benefits of IBEX, including online operation, cannot be realized without a network. No dates were given for the extension of WoredaNet beyond Addis Ababa.

It is known that four communication broadband infrastructures have been conceived for Ethiopia through ETA to provide connectivity services to schools (SchoolNet); a national network for higher learning and research institutions (EthERnet); a national network of government administrations (WoredaNet); and a national network for agricultural research institutions (AgriNet). ETA has published plans to provide very small aperture terminal (VSAT) links to 450 *woredas* across Ethiopia coupled with similar numbers for AgriNet. No implementation dates were available.

The volumes of financial data generated in *woredas* are small, and it is very doubtful whether use of WoredaNet could be cost justified for financial systems alone even if these were re-engineered. However, it could be more cost effective if a government/community-wide communications capability were established in *woredas* with a number of services sharing a common link (e.g., AgriNet, WoredaNet, SchoolNet, and community services). This option should be explored with the ETA.

4.2 EXIT STRATEGY AND SUSTAINABILITY

To ensure ongoing support for the DSA system, a support cell will need to be established in MOFED that will undertake the broad range of functions that is currently undertaken by DSA, including:

- Operating an online help desk
- Ongoing technical and administrative support
- Resolution of technical faults and problems
- Development of new reports, amendments to existing reports, maintenance of the FIS system, and associated reports
- Backup and recovery procedures in MOFED, central government sites, and remote processing centers
- Ongoing training programs—content, planning, and delivery
- Refining and completing the scheduled program in the remainder of the project in order to scale back its final objectives
- Ongoing training
- Maintaining standards.

To undertake these tasks, DSA currently employs a staff of 63, including 35 professionals. While some of the workload can be reduced (e.g., by freezing all systems development and proceeding on a "care-and-maintenance" basis only), there remains a residual set of tasks that will need to be addressed, including any outstanding "rollout" of systems beyond the termination date.

In its exit strategy DSA proposes that the overall reform process be supervised by three committees in MOFED vis-à-vis:

- The Expenditure Management and Control Program (EMCP) steering committee, which should include regional representation from the four large regions and meet quarterly to review activities and maintain national standards.
- A national steering committee with regional and federal membership to be strengthened and meet quarterly.
- A national product development coordination committee to coordinate product development specifications and to maintain quality and appropriateness of the developed IT systems.

DSA proposes three functions for budget and accounts reform:

- Procedural development
- Training
- Support.

An annual budget of $1.341m is proposed. For takeover of the FIS functions, jurisdictions, and benchmarks, we propose a total staff of 30 and an annual cost of $545,000.

Although we were unable to pass a considered judgment on these figures, which will need more scrutiny, discussion, and consideration, we make the following observations:

- The use of a three-committee structure for supervision is inadvisable, given MOFED's track record with committees (the existing EMCP committee has not met for over one year). The difficulty of finding competent staff to participate and the administrative overheads of servicing such bodies (as well as the scheduling meetings, etc.) make it unfeasible. However, a reference body is essential, and one such committee should suffice with delegation of authority to a specific individual appointed to undertake tasks on behalf of, and be responsible to, that committee and thus speed up the management process. The assessment team believes that, while the committees are a good idea, what DSA and MOFED need is a credible mediator that helped both sides reach an agreement as to what the next steps will be, the scope of the activities for the remainder of the project, and the commitments both parties are willing to make to ensure the sustainability of the reforms. A constructive dialogue between DSA and MOFED has to produce a common close-out plan for DSA and a workable transition that ensures that MOFED will be capable of absorbing and sustaining on their own these reforms. Time is short.
- Thus a coordination manager (or chief information officer) should be appointed within MOFED with considerable authority to supervise all aspects of the reform and take decisions on behalf of the committee and be accountable to the committee.
- The training function is so important, given the high turnover of trained staff, that we consider it should be identified as a separate function within the reform initiative and be funded, staffed, and managed separately, albeit in close consultation with the reform initiatives.
- Technical functions (e.g., amendments to basic code within BIS/BDA/IBEX) and others should be contracted out on an as-required basis and on time and materials costing. MOFED should not attempt to hire specialty programming skills from a limited market where it cannot compete in terms of salary or conditions. In addition, it would not be as cost effective as keeping systems on a care-and-maintenance basis, which should minimize the need for such support.

- The plans for the acquisition of an OTS IFMIS must be clarified and integrated with the ongoing support of DSA. As stated by the IFMIS consultant, it is anticipated that both systems must coexist for a number of years, so it will be important that any requests for proposals developed for the IFMIS include a full specification of the operational DSA systems. This will require cooperation between DSA and the contractors developing the IFMIS plans. Discussions were held with the consultant working IFMIS (see Attachment E). International experience of implementing IFMISs in developing countries shows that implementation typically requires an average of seven years.[18] On this basis, the DSA systems are likely to be the only systems available to MOF for a number of years.

The assessment team believes that MOFED does not currently have the human capacity to provide this support and assistance will be required. This could best be provided from the existing DSA team and probably for a period of up to a year initially, but subject to review. Technical support could be contracted out to companies with the necessary capacity and skills with such assistance to be provided on an as-required basis.

4.3 OVERALL CONCLUSIONS

- DSA has achieved the main goals set for it in terms of capacity building, providing a basic financial system with computers being used to merge and integrate the detailed data from *woredas* and speeding up the whole process of financial reconciliation. It has provided a sound basis on which future financial reform can be built. Significant benefits have been achieved, but they have to be sustained and built on. This development has been successfully completed during a period when there were major changes in the financial systems, with the devolution of financial management to zones and *woredas* with huge increases in the numbers of reporting entities—a change process that is continuing.

- As it has been discussed above, integrated financial systems are developed and grow in time. DSA's work has established the basis for a modern financial system. Great accomplishments include:

  — Budgeting and accounting reform

  — Development of a modern and standardized COA

  — Training of thousands of individuals on public finance.

- The basis for effective public financial management is already built, but there is room for improvement in terms of improving even more the timeliness of reports on budget execution; increasing the capacity of managers to analyze and understand data; improving internal controls to create mechanisms to detect corruption; and improving accountability within the chain of command in the Executive Branch and between branches of government and civil society.

- The design approach undertaken has followed the correct strategy of starting by thoroughly understanding and documenting the current financial processes, using computer technology simply to complement clerical processes, and to become more sophisticated as human capacity has developed.

- The basic BIS and BDA systems have achieved their objectives, but are batch systems and do not form a sound basis for future developments in financial management. They must in the longer term be replaced by IBEX or IFMIS.

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[18] See *Implementing Financial Management Information System Projects: The World Bank Experience: Preliminary Results*, Bill Dorotinsky, November 19, 2003.

- DSA's rate of progress may seem slow by comparison with data for IFMIS implementations in other countries, but given Ethiopia's low skills base, low infrastructure capacity, and political problems, this is not surprising. In addition, the earlier systems have been used productively to achieve real benefits in terms of responsiveness and system information at the same time as system enhancements were being developed. In reality, while the DSA is still under development, it has been in productive use for a number of years.

- The institutional framework for managing the DSA has been less than ideal, with the absence of effective management committees chaired by MOFED. This is a major challenge, compounded by time, funding, and the fact that DSA and the MOF have not been able to create synergies between themselves. If DSA's accomplishments are to be sustained, the center of gravity for the direction and management of decentralized public finance in Ethiopia has to be at MOFED.

- While there exists lines of communication, there does not seem to be a productive dialogue that creates consensus and reaches agreements for joint actions and commitments. Clearly, MOFED lacks capacity and may feel uncomfortable with the leading role that DSA has played in the process of promoting financial reform at the federal and regional levels in Ethiopia. This uncomfortable coexistence that has existed between MOFED and DSA has greater implications and presents risks to the maintenance and sustainability of what has been accomplished by DSA thus far.

- The BDA/BIS systems are capable of providing a basic financial management capacity but do not have an online capability that could be used for line ministries and BOFEDs in the Addis Ababa area. This is where IBEX would be advantageous. The assessment team has indicated their concerns that continued focus on IBEX development could increase the risk that Phase 4 deliverables would be delayed even further. However, we do not have sufficient, robust detailed information on costs and timeframes to judge whether IBEX should continue or whether it could be overtaken by IFMIS. This is an issue that needs to be debated further, particularly with input from MOFED.

- Another challenge is that DSA may have lost some of its strategic focus and shifted its attention and *raison d'etre* to the development of IBEX and to question the need for introducing an OTS IFMIS at the federal level. A number of DSA reports were cited that provided reasons why the DSA systems would be more cost effective than an IFMIS. The Phase 4 deliverables are well behind schedule, and the DSA close-out plan is basically finishing the development of IBEX and implementing it at the federal and regional levels. If the ETA plans to connect 450 *woredas* to VSAT, IBEX would be a real advantage (but no dates are being quoted). DSA's close-out plan is based on DSA's achieving the terms of the contract with USAID and not in ensuring that their legacy will be maintained, sustained, and improved by the GOE.

- While there is uncertainty as to whether an OTS solution will be implemented in Ethiopia, there has to be an explicit consideration of how to adapt or interphase the achievements of DSA with the possibility of an OTS IFMIS implementation in Ethiopia. What is certain is that in the next three to five years, with or without an IFMIS being implemented by the GOE, the DSA systems and methods will continue to be the only mechanism through which GOE and the international community will be able to access data and information regarding decentralized public finance in Ethiopia.

- And because DSA is essential to keeping decentralized public finance working in Ethiopia, training—which is not explicitly mentioned in the DSA's timeline—is key for sustainability.

- The durability of DSA'a legacy is in the capacity to constantly improve procedural reforms and constantly train staff working at the different government levels. The reality of staff turnover (30%) indicates that training is a constant activity and therefore essential in order to sustain what has been achieved thus far.

4.4 RECOMMENDATIONS

1. Donors take a more proactive role to ensure that MOFED undertakes the process of transferring responsibility and ownership of the reforms implemented by DSA.

2. A management committee be established and chaired by MOFED and with a manager appointed to oversee the transfer of DSA's responsibility to MOFED. The manager should be responsible for coordinating the development of IFMIS plans to ensure that they are compatible with DSA developments and have authority to make decisions on behalf of the management committee but be accountable to the committee.

3. The committee evaluates the advances of DSA in meeting their deliverables. Important decisions that have to be made are:

    - How much time is needed to move Ethiopia toward a common financial and technological platform? Elements of that discussion will be the introduction of double-entry bookkeeping/modified cash basis accounting to Afar, Somali, and Gambella.

    - Should IBEX development be frozen in favor of focusing of resources on the introduction of a standard package based on BDA/BIS Version 3B throughout the country?

    - Determine the institutional structure that needs to be created within MOFED in order to enable it to take over the role and functions that DSA has fulfilled so far in financial management in Ethiopia and the resources and costs required to achieve this. The current institutional structure of MOFED and the human capital it employs would not allow it to take over the vacuum that will be left by DSA.

    - Once the institutional space has been defined and open, develop a plan that will describe what type of organization needs to be set up, the profile of its employees, infrastructure and equipment, and the type of technical assistance that is needed and develop cost estimates accordingly. Since GOE has fiscal and financial limitations, the costing could be used as the basis of proposals to seek funding from the international community.

4. If the DSA is to be extended by only 12 months, one option would be to consider freezing the development of IBEX and generalize budgeting and accounting reform throughout the country, based on BDA/BIS Version 3B. This option is an essential exercise because it would be important to evaluate the opportunity cost of not continuing with the development of IBEX and to generate the parameters that will determine DSA's responsibility will be in the next year or two. It is important to have a hard date for the ending of DSA's activities in Ethiopia.

5. If the DSA is extended by 24 months, the best solution is to complete the development and implementation of IBEX and standardize budgeting and accounting reform throughout the country, based on IBEX. For sustainability, this is the preferred option. IBEX has the capability to provide a sound basis for an MOF FMIS pending the provision of an alternative based on a COTS IFMIS package.

6. Regardless of the duration of the extension, the funding that will be available by the international community development of DSA systems should be minimized and confined to a care-and-maintenance basis only and with all non-core developments (e.g., payroll) being shelved at this stage. The focus to be on implementing a standard finance platform throughout all entities and with all staff trained to the appropriate level as early as possible.

7. Donors should help establish in MOFED a structure to manage the ongoing developments of DSA, its rollout, staff training, and issues arising. This would include providing technical and management capacity to establish an office in MOFED that will basically take over the functions that DSA is currently fulfilling

(in the long run, this could be the beginning of a significant process to strengthen MOFED and enable it to take a more prominent role in fiscal management in the GOE).

8. MOFED should establish financial management standards in the GOE, in consultation with regions and *woredas*, and for finance accommodation and ancillary services in *woredas*.

5.0 REFERENCES

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Parry, Michael, "Why Governments Need Integrated Financial Management Systems," International Management Consultants, Ltd, April 2004.

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ATTACHMENT A: LIST OF ENTITIES VISITED AND PEOPLE MET: 6–28 JUNE 2006

Donors	**Position**
Michael McCord	Project Development Officer, USAID
Nathalie Thurnberg	Contracting Officer, USAID
Rick Scott	Program Officer, USAID
Ms Antoinette H. Gosses	Deputy Head of Mission, Royal Netherlands Embassy
Martin Burke	Development Specialist, Ireland Aid
Ato Fisseha Alazar	Economic and Aid Adviser, Ireland Aid
DSA Project	**Position**
Dr. Steve Peterson	Chief of Party, DSA Project
Wz Sarah Guebreyes	Project Manager, DSA Project
Adam Abate	IT Director, DSA Project
Eric Chijioke	Adviser, DSA Project
Ato Mebrahtu Araya	Adviser, DSA Project
Anthony Higgins	FM Specialist, DSA Project
James Joseph	Accounts Reform Director, DSA Project
MOFED	**Position**
Ato Mammo Gitto Foli	State Minister, MOFED
Ato Mussa Mohammed	Head, EMCP Coordination Office, MOFED, *Expenditure Management and Control Sub-Program (EMCP)—under the Civil Service Reform Program (CSRP)*
Ato Melaku Kifle	Head of Budget Department, MOFED
Ato Alemu Kifle	Coordinator, Information Systems Administration Center
Ray Walsh	Consultant to MOFED on IFMIS
Oromia BOFED	**Position**
Ato Tolossa Gedefa	Bureau Head, Oromia BOFED
Ato Hailu Efa	Deputy Bureau Head, Oromia BOFED
Ato Getu Bussa	Head, Disbursement and Accounts Department
Ato Tesfaye Geme	Disbursement Team Leader
Alem Gena and Seden Sodo Woreda Finance Offices (South West Showa Zone)	**Position**
Ato Ebisa Leta	Team Leader

Southern Nation Nationalities and People's Region (SNNPR)	
BOFED Awassa	**Position**
Ato Bergude Bancha	Head, Finance and Economic Development Bureau
Ato Tesfaye Woldemichael	Deputy Head, BOFED
Ato Sahle Gebre	Deputy Head, BOFED
Ato Getachew Eshete	Head of Planning and Budget Department
Ato Kedru Abza	Head, Disbursement and Accounts Department
Ato Tadele Teklu	Team Leader Budgeting, BOFED
Alaba Special Woreda	**Position**
Ato Ahmed Alemu	Head, Woreda Finance and Economic Development Office
Dale Woreda	**Position**
Ato Geremew Gebissa	Head, Woreda Finance and Economic Development Office
Sidama Zone Finance	**Position**
Ato Wudeneh Ayele	Deputy Head, Zone Finance and Economic Development Office
Ato Bekele Fole	Budget Expert, Zone Finance and Economic Development Office

ATTACHMENT B: TIMELINE OF KEY EVENTS FOR DSA

Year	Activity	Components
1994–1996	GOE's Civil Service Reform Program (CSRP) prepared	Reform designed by Prime Minister's Office Task Force created—5 programs: 1. Top systems management 2. HR management 3. Service delivery 4. Ethics 5. Expenditure Management and Control Program (EMCP) EMCP divided into seven components: 1. Legal framework 2. Budgeting 3. Accounting 4. Audit 5. Financial information system (FIS) 6. Cash management 7. Development of accounting profession (HIID suggested an eighth component, budget planning, to be combined with budget and accounts)
1994–1996	USAID/Ethiopia Democracy and Governance (D/G) program to assist decentralization	HIID contracted to help design a support program. Project design well advanced before GOE announced CSRP.
1996	GOE unveiled the CSRP with decentralization of responsibilities from Federal to Districts	Little or no consultation with donors.
1996	USAID approached by GOE to support CSRP activity of choice	USAID recommended focusing on budget and accounting components of EMCP. Key points were: 1. Federal transfer formula and revenue to be excluded. 2. USAID refused to include FIS estimated at €9m, due to limited budget of $2.8m. 3. An explicit strategy of dividing components among donors and restricting support to grant financing (this excluded the World Bank). 4. Automation to be implemented separately thru EU funding from budget and accounting reforms but driven by procedural reforms under these projects.

Year	Activity	Components
1996	USAID requested to prepare ToRs for the FIS	HIID advisor prepared ToRs for the FIS and for the budget and accounting activities.
Feb. 1997	DSA began Phase 1	Budget baseline had six components: 1. Dual budget 2. Budget classification chart of accounts (COA) 3. Forms 4. Calendar 5. Legal basis (separate Canadian International Development Agency-funded project prepared draft financial law & regulations) 6. Automation/manual systems.
1997	Cabinet approved in-service training program	Program based on newly developed regional management institutes (RMIs)
1997	DSA identified the need to automate the budget preparation and consolidation activities	IT consultant contracted to develop the budget information system (BIS) using Visual Basic and MS Access database.
2001	Merger of MOF and Ministry of Economic Development and Cooperation (MEDAC)	MOFED formed together with the BOFED.
1998	MOFED outsourced migration of budget dispersion and accounts (BDA) system to AFCOR	BDA migrated from mainframe application to Windows-based MS Access application. Main functions of BDA were: 1. Transaction register 2. Budget adjustments 3. Reporting.
1999	Upgrade of BDA to include new COA by AFCOR	
Feb. 1999	Phase 2 began	
2000	Phase 1: Public Investment Program (PIP) basic work completed	Multi-annual capital budget with MS Access-based program for recording in the MEDAC.
2000–2001	Phase 2: Budget planning at the federal government level begun	DSA supported work on budget costing.

Year	Activity	Components
2001	Accounts reform first rolled out at federal level	
Mar. 2001	Phase 2 completed	
Apr. 2001	Phase 3 began	
2001	Ireland Aid contributed to expanding the training program in Phase 3	
2001	GOE announces the system of district block grants	Number of budget and accounting units increased from 64 to over 700.
2003	Interim assessment of existing FIS systems conducted	Conclusions: 1. Overall information systems development met user requirements in the areas in which they had been implemented. 2. Several areas needed to be addressed to ensure future requirements could be met. Three main factors influenced the decision to upgrade BIS and BDA: • Expected completion of nationwide data and video network: WoredaNET • The government's decision to devolve financial administration to *woredas* • The continued absence of the originally proposed EU IFMIS.
	Phase 4 strategy formulated	Two main components: 1. Complete the budget and accounts reform nationwide by the end of EFY 1999 (2006) with the rollout of BIS and BDA to all regions 2. Upgrade BIS and BDA to IBEX to position them for future sustainability and to meet growing requirements of the financial systems. IBEX strategy was to host a single, centrally located system in BOFED and serve all regional financial institutions.
Sept. 2003	Proposal for Phase 4 submitted	Funds available $10.3m funds required $13.5m—gap of $3.2 min funding.
Mar. 2004	Phase 3 completed	
June 2004	Phase 4 approved	Memorandum of understanding signed between GOE, Development Corporation Ireland, and Netherlands Minister for Development.
Nov. 2004	Rollout of BDA 3B to federal public bodies	
Jan. 2005	Funding gap increased to $4.2m and raised with MOFED	

Year	Activity	Components
Mar. 2005	Budget module of IBEX launched	
May 2005	National election held	Significant changes in senior staff following election result with consequential need for additional training. Civil unrest caused some delays. New *woredas* and zones created.
Aug. 2005	Minister instructed DSA to proceed on activities labeled as "immediate priorities"	
Aug. 2005	DSA terminated contract with Omnitech	DSA recruit 10 former Omnitech staff plus 5 others.
Oct. 2005	New state minister for Finance appointed	H.E. Ato Mamo Gito becomes state minister in charge of finance—responsibilities include management of the reforms under EMCP.
Nov. 2005	New EMCP coordination head appointed	Minister of Finance appointed in September 2005 a new EMCP Coordination Office Head, Ato Mussa Mohammed, former head of the Oromia Finance and Economic Development Bureau. The approval process of the project's Phase 4 proposal was handled by Ato Haile-Giorgis Tereffe (former EMCP head).
Jan. 2006	Activities delayed on account of funding shortfall	Reform and training activities delayed in a number of regions on account of the funding shortfall.
July 2004	Phase 4 continuing	

ATTACHMENT C: AVAILABLE MOFED FACILITIES IN SNNPR

***Woreda*/ Facility**	**Boloso Sore**	**Boreda**	**Konso**	**Wanago**	**Angacha**	**Badawach**	**Bensa**
Vehicle	None	None	None	One			None
Motor cycle	None	None	None				
Computer	None	None	None	One		One, no training	None
FAX	None	None	None			None	
Electricity	None	None		Yes	24 hours		None
Telephone	Yes, satellite	Yes, satellite	Yes, satellite	Yes		One line	None
Adding machine	Yes, but insufficient	Yes, but insufficient	Yes, but insufficient	Yes			None
Photocopier	None	None	None	None			
Vouchers	Yes	Yes	Yes	Yes			
Formats			Yes				
Stationery	No staples, folders for attendance sheets	Yes	Shortage			Yes	
Stores	Few available in *kebeles*	Few available in *kebeles*	Few available in *kebeles*	Few available in *kebeles*	Few available in *kebeles*	Few available in *kebeles*	Few available in *kebeles*

ATTACHMENT D: STAFF TRAINED OVER DURATION OF DSA PROJECT

Training Module	No. of Staff Trained	DSA Phase	Average Education	Average Age	Training Focus
Module 1 accounts training program	4,875	1&2	12th grade	35–40	Single-entry accounting/old COA—training in the existing system in *Amhara, Tigray, Oromia, SNNP, Benishagul Gomuz, Gambella,* and *Addis Ababa.* Training aimed at helping expedite the six-year backlog on closure of accounts.
Budget execution	5,780	3	12th grade	35–40	Single-entry accounting/old COA—training in the existing system. *Amhara, Tigray,* and *SNNPR.* Training aimed at helping devolve financial management to *woredas.*
Budget preparation and management	21,857	3&4	12th grade	35–40	Budget reform training (nationwide) was aimed at helping implement the new cost center budget system using the new COA.
Budget execution	3,401	3&4	12th grade	35–40	Single-entry accounting/new COA *(except Tigray* and *Amhara).* Training aimed at helping implement the budget after the budget reform was introduced.
Double-entry accounting	22,744	3&4	Diploma grads (12 + 1)	20–30	Double-entry accounting/new COA (except *Afar, Gambella*, and *Somali).* Training aimed at helping implement the accounts reform using the new double-entry bookkeeping system and the modified cash basis accounting.
IT training BIS BDA 3A BDA 3B IBEX	 689 54 760 45 **1,548**	3&4			
Expenditure planning	1,700	3&4			

Training Module	No. of Staff Trained	DSA Phase	Average Education	Average Age	Training Focus
Total number of staff trained at 8 June 2006	61,905				

ATTACHMENT E: CONCEPTUAL FRAMEWORK OF AN INTEGRATED FINANCIAL MANAGEMENT SYSTEM (IFMIS)

To better assess the work carried out by Harvard University during the past 10 years in Ethiopia, it is important to provide some background context on what is financial management in central government today. For example, what is an IFMIS? What are its key components? What follows is a short summary of some of the most important elements of an IFMIS.

STEPS NEEDED TO BUILD MODERN FINANCIAL MANAGEMENT SYSTEMS

In an era of diminishing resources and increased demand for accountability and transparency in government, the "stakeholders/shareholders" of the public sector are demanding more effective and efficient use of public resources. Traditionally, control over funds was sufficient for public financial management. Emphasis was placed on compliance with financial regulations, not performance. Audit, external and internal, pre and post, was a primary mechanism. Good public sector financial management requires an "entity" rather than a functional approach to financial management. An entity may be part of a larger government agency, but in central governments worldwide it is usually the MOF. However, it can also be a local government unit (e.g., in Ethiopia, a regional government entity), a quasi-government agency, or a public enterprise. It may require information that is highly aggregated (e.g., budget summaries) or disaggregated (e.g., individual items of expenditure) depending on its role in the overall government structure. Key to an entity is that it integrates its activities to work toward achieving its overall mission and goals. A procedural/functional approach that it is not focused and well designed can deteriorate into purposeless compliance with regulations and procedures, with no regard to effective and efficient achievement of an organization's mission and objectives.

An entity-based, integrated approach to financial management is required to enable effective fiscal management in any organization, including government. Combining financial data with other performance measurements produces a clearer picture of the degree to which an organization is achieving its goals and objectives.

Although computerization has provided the tools to integrate increasingly complex organizations and systems, the information needs of the entity must be carefully defined and the interfaces between the various operating units or information subsystems understood. Sometimes, computerization is seen as the "cure," when in fact it is only the means of implementing an integrated system; it is not the system itself.

Financial systems are dynamic—they grow, evolve, and unfold—they do not suddenly appear. For sustained growth, the foundation must be solid. Growth must be integrated from the beginning. The overall system cannot be successful if any one element fails.

Financial management systems share certain core components: budgeting, cash and debt management, and accounting. Other components can be incorporated—namely, asset management, human resources, payroll, procurement, and others. In the past, control, especially through external audit, was also considered a key component. Today, internal controls remain extremely important, but control structures and techniques in IFMIS emphasize, and exist, in the context of management.

A key foundation in the development of successful financial management systems is a uniform classification of accounts that enables coordination of budgeting and accounting, which ensures that the planning process has feedback from the experience of implementation and that implementation works toward the goals set forth in the budget. A uniform classification also allows for the development of a single database that provides uniformity of information and facilitates its flow between and within entities. Under these conditions, in a computerized system, a transaction would be entered once, and then shared throughout the system. A single cash account improves cash management, allowing entities to maximize returns. A standard-setting agency is essential to establish the technical standards that coordinate the system, but also allow for decentralized execution. Coordinating groups (e.g., management steering committees) help ensure that the system continues to evolve in a way that responds in an integrated manner to the needs of individual units (e.g., ministries, regional governments, *woredas* in the Ethiopian context). In an ideal world, data and processes should not be duplicated; in cases where is a computerized solution, data should be shared electronically.

BUDGETING

Budgeting is a core element of modern financial management systems. Through the budget process, government plans for, implements, and evaluates its policies. In carrying out these three functions, budgeting interacts with and depends on other elements of modern financial management systems—particularly accounting—but also cash management and public debt. Budgetary allocation of resources among competing sectors of activity follows from policy formulation, which is carried out through a country's political process and theoretically, at least, involves the legislative and executive branches of government. The budgetary process has three fundamental processes: *budget formulation*, *budget execution*, and *budget evaluation*.

1. Budget formulation is the translation of government policies and programs into their financial implications. The budget formulation process lays the framework against which implementation of activities and programs delineated in the budget will be measured.

2. Budget execution is the process through which the entity in charge of financial management monitors the execution of the budget as operations are being carried out. To monitor budget execution, reports are required. Examples of typical reports are comparisons between actual and planned expenditures, monthly financial reports which can be compared with execution for the same month in the previous fiscal year.

3. The financial element of budget feedback is provided by the accounting system. Budget evaluation requires periodic reports on the results of operations that provide information or costs incurred and results achieved. This is important since through the evaluation process, decision-makers at all levels can better determine future actions. The effectiveness of budget evaluation depends on the design quality of the uniform COA and other classifiers.

ACCOUNTING

Accounting is the systematic gathering of financial transactions and the compiling and reporting of them in a meaningful and consistent way so that decision-makers can rely on the financial information provided to measure progress toward goals, estimate resources required to accomplish objectives, and allocate resources among competing goals and objectives. One of the most fundamental decisions in designing accounting systems is the basis on which transactions will be recorded. Four basic methods are internationally recognized: cash, modified cash, modified accrual, and accrual.

A **cash-basis accounting** system records income and expenses when cash is received or spent. It has serious limitations because it does not adequately record liabilities, either to provide future services or in recognition of services or goods received for which the bill has not yet been paid. The benefit of cash-basis accounting is that of simplicity, but in unusual circumstances or where there exists a strong parallel encumbrance system, cash-basis accounting fails to adequately control the increasingly complex transactions of modern governments.

Modified cash-basis accounting can include accruals that will be received or are due in the period directly following the end of the fiscal period being reported. Bills that are expected to be paid in the month following the close of the fiscal year, for example, would be accrued as would receipts that were certain to be collected in the following month. Longer term receivables, or commitments that might be received or paid out in several months into the next fiscal year, would not be reflected.

In **modified accrual accounting**, most transactions are accrued in the period in which the benefit is received; others, especially revenue, are recorded on a cash basis. Generally, in modified accrual accounting in the public sector, expenses are accrued and income from taxes, fees, and other sources is recorded when collected. The effect is to bring income in line with actual cash available to pay bills, while ensuring that the recording of the expenses cannot be manipulated by simply delaying until the bill is paid.

In **full accrual accounting**, the financial impact of a transaction is recorded in the period in which it occurs, regardless of whether cash has been paid out or received. This is simplest to understand in regard to the recording of expenses: the expense is recorded when the goods or services are actually received and used in operations. Full accrual accounting uses methods such as depreciation to allocate costs that are paid for in one period but which benefit for several periods. For example, a truck bought from funds in one fiscal year would benefit several future fiscal years.

CASH MANAGEMENT

Cash management is more than the disbursing office for the government; it is a process by which the government manages the flow of public sector resources in such a way as to minimize costs and maximize effectiveness. The cash management function must be proactive in consolidating the cash resources of the government and planning for required cash disbursements. It must work to ensure that excess cash is either invested or used to pay down short term lines of credit. Cash is an asset that both costs the public sector and can serve as a generator of funds.

A central element of cash management is the concept of a single government bank account. A single account, with several subaccounts, allows the cash resources of the government to be managed as a whole. When a single account is used, subaccounts are opened for various line agencies or projects, depending on needs. In deciding whether a subaccount should be opened, the costs of managing a subaccount are weighed against the benefits of segregating expenditures by a particular agency/project. Using a single account means that cash will not idle in one agency's account while the another agency cannot pay its bills. It also eliminates the transaction costs of transferring cash resources from the central account to other government entities.

Lastly, one of the key elements of a good cash management system is a strong capacity for developing cash flow projections based on expected receipts and expenditures. This includes close cooperation with budget execution and an ability to collect cash resources timely and consolidate them quickly in the unified account.

ATTACHMENT F: CONSIDERATIONS ABOUT AN OFF-THE-SHELF IFMIS

The GOE had previously committed in principle to accept an EU loan to acquire an IFMIS following a study undertaken by consultants. This proposal was delayed indefinitely due to the non-availability of EU funding. At least in the past 12 months, however, MOFED has engaged a consultant working directly to the minister to develop a request for proposals (RFP) for acquisition of an IFMIS.

Discussions were held with the IFMIS consultant, who advised that World Bank funding for an IFMIS was forthcoming, that the minister was committed, and that the RFP was under development. He agreed with our comments that a thorough description of the current financial systems would be an essential component of any RFP and that implied describing the DSA systems in detail. He stated that his attempts to elicit cooperation with the DSA team had not been fruitful.

He also agreed that acquisition of an IFMIS would take at least two to three years and possibly longer for regional centers, that IFMIS would be relying on interfacing to the DSA platform, and that this platform would continue to operate for a number of years. International experience suggests that, on average, IFMIS implementation would take seven years.

Assistance with an IFMIS RFP preparation is not in the ToRs for DSA, yet it will be essential to ensure that a full description of the current systems is included in any RFP. It is difficult for us to believe that a single consultant is capable of developing a comprehensive RFP for such a complicated government environment as prevails in Ethiopia. (Recent experience in Indonesia on a similar exercise required a team of 12 staff eight months to scope, document current systems, and specify the design of a new system, plus an RFP.)

We were unable to meet the minister, so we are uncertain of the status and timing of the IFMIS initiative. It is apparent, however, that for the next three to four years, at least, the only processing systems available to MOFED will be the DSA platform. The status of IFMIS needs to be clarified, as it is an important factor in planning for the future of DSA systems.

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