

REPORT

Capacity Building in Records Management at the Ministry of Finance

**Building Equity and Economic Participation (BEEP) Project
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1. BACKGROUND

The Building Equity and Economic Participation (BEEP) Project, in an effort to strengthen the capacity of the Ministry of Finance (MoF) to use information technology for enhanced work performance and solutions, procured computer systems for the staff and hired a consultant for nine months to oversee installation, training and general upgrades. Success of the Ministry, in achieving its goals, will depend not only on the use of technology, but largely on having the right information for the right decision at the right time.

Government documents constitute a strategic but under-utilized resource for public administration. They cost considerable sums of money to create and maintain every year. They grow at an annual rate of some 12%, and so do the time and resources needed to service them. This assignment reviews the present manual records management systems in the Ministry of Finance with a view to enhancing systematic control of the documents and providing rapid access to information. It looks specifically at the systems in the Accountant General's Office, the Office of the Secretary to the Treasury, and the State Planning Secretariat. Its recommendations seek to build on existing structures and systems with a view to reducing duplication and improving functionality. These recommendations are intended to be in keeping with Government's commitment to building processes of participation, consultation and accountability in the work place.

1.1 Structure and Functions of the Ministry of Finance

The basic structure of the Ministry of Finance consists of the Secretariat of the Secretary to the Treasury, the Office of the Budget (OB), the Accountant General's Department (AGD), and the State Planning Secretariat (SPS). The Secretary of the Treasury is the technical and administrative head of the Ministry and reports directly to the Minister of Finance. The Director of Budget and the Accountant General report to the Secretary of Treasury. The Chief Planning Officer heads the State Planning Secretariat and also reports directly to the Minister of Finance.

The Secretariat of the Secretary to the Treasury is responsible for duty and tax concessions, the tendering and procurement process, and day-to-day administration of the Ministry. The Office of Budget under the overall direction of the Secretary to the Treasury consists of the Budgeting Division, Fiscal and Monetary, and Debt Management Divisions. It is responsible for the formulation

of the national budget, collection and collation of expenditure, revenue and external debt data. It reviews and analyzes fiscal data and presents monthly fiscal reports to the Minister.

The Accountant-General's Department has nine sections whose primary functions are public financial accounting, debt servicing, pensions and gratuities payments, and monitoring compliance of financial rules and regulations.

The State Planning Secretariat consists of four main divisions, the Macroeconomics Division, Enterprise Monitoring Division, the Project Cycle Division (PCD), and the BI and multilateral organization division. The Secretariat has an administrative office and a Management Information Unit. It has responsibilities for the formulation and implementation of the public sector investment program, policy analysis and programming and monitoring of public sector enterprises.

The Ministry of Finance plays a critical role in decision making with regard to the development of Guyana and therefore requires access to timely and accurate information.

1.2 Methodology

The approach to this technical assistance assignment is in keeping with the terms of reference of the Consultant's contract, which is attached as Annex 1. The report is structured to reflect the scope and aims of the work, including requirements for computerization.

Subsequent to an initial briefing from the USAID/IGI Liaison Office, discussions were held with a number of targeted officials to gain a better understanding of their role and function in the Ministry, their approach to seeking information, the degree to which the Registry system met their needs, and finally their views on, and requirements for, computerization.

Parallel to this was an in-depth examination of the Registry operations and filing systems. Several meetings were held with the Registry staff and the Administrative Assistant, with a view to understanding the nature of the records, the quantity and types held, how they were defined, how they were requested by users, procedures for filing and retrieving, methods of charge-out and follow-up, difficulties encountered in meeting the users' demands, the current retention

period, and the available space and staff. Visits were made to the storage areas to view the filing system and condition of the records.

2. CURRENT ISSUES IN RECORDS MANAGEMENT

Records are an organization's corporate memory. As the principal source of information, records constitute a vital administrative tool with which the work of an organization is accomplished. The explosion of paper - an influx that will not end - and the problems of overflowing cabinets, difficulty in locating records, high storage costs and the loss of valuable records are some of the common symptoms signaling improper records management. Records management has become a corporate-wide responsibility and administrators today focus on the use of information technology as a solution to some of the problems.

Records are of four types: documents, drafts, publications and relational information.

- **Documents** are records showing the history of the decision-making process and the final results.
- **Drafts** are working copies - information that is being worked on, and still subject to change and revision. Once a draft is signed and authenticated, it becomes a document. Drafts are not documents, and record-keeping practices that preserve them as such are fundamentally flawed.
- **Publications:** After the approval process is over, the decision and methods of implementation need to be available to those affected. This involves copying (publication) and distribution.
- **Relational Information:** is discrete bits of information that can be manipulated and linked to show logical or natural associations between and among them.

All records have a life cycle. They are born, reproduced, processed, consulted, reviewed, filed, brought back for consultation and eventually destroyed or permanently stored. The value of information in records changes with time and circumstance. A quarterly activity report that kept staff working overtime six months ago may never be used again. Whereas an invoice that was paid 14 months ago is suddenly crucial in resolving a payment dispute. A good records manager, in today's world, must adopt strategies that would control the growth of records, reduce the stock and improve the quality of access and cost-effectiveness of records management.

A well-designed classification system imposes order and logic on records. To properly classify records, one must understand the records, their environment, and their function. A Records Manager must have an ability to analyze the functions of the organization, inter- and intra-departmental relationships, and be able to establish recordkeeping strategies that will ensure control and easy access. Traditionally records managers have been involved with paper-based records but with the impact of technology their role has broadened. Their training not only includes the development of professional skills of analysis and the ability to apply theory to the working environment, but the application of skills to deal with the changing technological environment.

3. REVIEW OF FINDINGS

It was not possible to see a copy of the statutory basis for the Ministry's records management programme but, the Consultant was advised that Public Service regulations indicate that all records created or acquired by an employee of the Service in the course of conducting Government business is the property of the Guyana government.

3.1 The Registry

The **Goal** of the Registry system is to protect and manage the recorded information assets of the Ministry of Finance for effective use by staff in the performance of their duties and in the general decision making process.

The Registry of the Ministry of Finance is, in concept, a centralized registry unit that services the Accountant General's Department and the Secretariat of the Secretary to the Treasury. It is divided into three sections:

- (a) Accountant General's (AG) records
- (b) Secretary to the Treasury (ST) records, and
- (c) Personnel records.

The **records of the Accountant General's Office** deal with transactions of the AG's department. Similar files may be held in the Secretariat to the Treasury but, for purposes of day-to-day operations and internal control, separate files are held. The official **documents of the Secretary to the Treasury** comprising of correspondence, memos, reports concerning policy and procedures, organization, programme development indicate the performance of the functions of the Ministry and formation of policy and programme initiatives. The **Personnel** records deal with every government employee in the government of Guyana, and the function is one of paymaster and the control of pension payments. Each agency employee has two files - a personnel file, and a Leave, Advances and Superannuation file. A third file is opened for an employee who has received a scholarship or sent on training.

These three sections of the Central Registry maintain a total volume of approximately 300,000 files.

The Central Registry has a staff of six clerks and a Senior Registry Supervisor. Overall responsibility is borne by The Deputy Secretary to the Treasury, while day-to-day administrative responsibility is assigned to the Principal Assistant Secretary. The Senior Registry Supervisor should seek the guidance of these senior officers in circumstances which could call for major or minor modifications to the Registry system.

3.2 State Planning Secretariat:

The records of the **State Planning Secretariat** which, prior to 1997, were part of a central registry, are now decentralized and maintained by divisions. The files are stored in book cases and maintained by three separate division - the Macro Economic Policy Division, Enterprise Monitoring and Private Sector Division, and the Project Cycle Division.

No standardized classification system is adopted. The files in the Macro economic Policy Division are broadly grouped by subject, then sub-divided, with each file being given a numerical code, e.g.

Administration

Administrative Matters (gen)	1/10-0
SPS/Finance Merge	1/10-1
SPS/Reorganization/Restructuring	1/10-1(a)

Restructured SPS/Finance	1/10-1(b)
Matters Relating to Vehicles	1/10-8
Agriculture	
Ministry of Agriculture (General)	1/11-0
PEU Sea Defense General	1/11-1
Secondary Towns Infrastructure Project	1/11-22
Aids/Loans and Grants	
CDB General	1/16-0
CDB Step Fund facility	1/16-1
CIDA Programme Support Unit	1/16-8
EEC Sector Programme/Planning & Monitoring Committee	1/16-20
EEC Policy Committee	1/16-20(a)
Social Sector	
Simap General	1/12-0
Simap IDB	1/12-1
Simap World Bank	1/12-3
Remedial Water Gen. (GS&WC)	1/13-0
Remedial Water ODA	1/13-1
World Bank Water Supply	1/13-3
Cemco General	1/14-0
Cemco Education	1/14-1
Cemco Health	1/14-2
Tender Board	1/14-4

In addition there are a number of files stored in book cases and in the CPO's personal cabinet.

In the Projects Cycle division, the files are divided by broad subject areas and sub-divided, e.g.

- Agriculture
 - Agriculture sector loans
- EEC
- Sea Defenses
- Projects

The Enterprise Monitoring and Private Sector division maintains files for each corporation, subdivided by files for salary reviews, and capital expenditure programme for each corporation. The main sort would be by agency. Files are also maintained for Donor Beneficiaries.

A major constraint to this decentralization arrangement is that senior officers are burdened with mail distribution and correspondence sharing. The inability to locate a file quickly when required still exists, and there is no system for retention and disposal scheduling. A well-staffed, and efficiently organized central registry would ensure effective procedures for distribution, filing and retrieval of records. On the other hand, access to files outside of working hours, including weekends, is critical to senior officers who work these hours.

3.3 The Registry Classification Systems

Records classification is the task of assigning the most appropriate title and code to a record for easy identification and retrieval. It involves the development and application of a system for grouping and arranging related documents in logical order according to certain common characteristics. A properly developed classification system comprises a records classification scheme and related classification and indexing procedures.

Each divisional registry of the Ministry of Finance has its own classification system or filing system.

The system for the **Accountant General's Department** uses an alphanumeric subject arrangement, apparently based on the transactions performed by each unit of the Department. The records for this department are arranged in alphabetical order by primary subject, then subdivided into secondary subjects by a number and further subdivided with numbers representing specific files. A typical listing of some headings is shown below:

- A1 - Agents to Guyana Government
- A2 - Auditing and Accountant
- A3 - Accounts (Account Books and Forms)
- C1 - Committees and Commissions
- C2 - Corporations
- C3 - Conferences
- C3/2 - External Conferences

- C4 - Currency
- C5 - Circulars
- D1 - Developments
- D2 - Deposits
- D3 - Debts
- L1 - Loans raised by the Government of Guyana
- L1/1- External Loan Repayment
- L1/1/1 Compensation and Commutation of Loans
- L1/1/2 Statement of Outstanding Loans and Repayment of Principal and Interest
- L2 - Leave
- L4 - Loans granted by the Government of Guyana

The coding system for these records, which are mainly transactional, is simple, effective and generally understood by the staff.

The records for the **Secretariat of the Secretary to the Treasury** are first grouped to represent a divisional structure (they all begin with the letters ST) and are subdivided numerically to represent subject and functions of the Secretariat:

- ST:1 Financial Administration
- ST:1/5 Warrants
- ST:2 Aids, Assistants and Grants
- ST:3 Loans
- ST:3/2 Loans Overseas
- ST:3/2/1 Loans - United Kingdom
- ST:3/2/1/1 Guyana Sea Defense Project
- ST:3/2/1/3 Aveling Barford Ltd., UK

This classification produces a four figure reference number and sometimes five - which begins to get cumbersome.

The Secretariat of the Secretary to the Treasury is also responsible for accidents and losses of government property in all Ministries and maintains an Index for each Ministry. These indexes cover numerous files and must be taken into consideration in any thrust towards computerization.

Personnel records are grouped by the letters Pf, followed by the Alphabet of the person's surname and a number assigned consecutively, e.g. Pf K3475. The Personal file, which contains Government Order to appoint the member of staff, payment vouchers, approval for payments, contracts on gratuity, would be assigned the principal staff number, e.g. PfK3475. The Leave and Advances file, which contains guarantees for loans or absences, leave passage allowance, etc. is assigned the employee's number followed by "/1", e.g. PfK3475/1. The Scholarship file is assigned T3.

The personal file is sometimes used by the Public Service Management (PSM), which is attempting to develop a Personnel Records Keeping System (PRKS) for purposes of human resource development. It may be necessary to link these systems at a later when a Wide Area Network is planned.

3.4 Indexing and Access to the Records

Indexes are useful tools that allow staff to have multiple methods of retrieving information. In addition, they are helpful in implementing and maintaining classification systems. The index for a subject filing system will list all descriptive terms in alphabetic order and will link these headings to their respective filing codes. The accurate coding of records and an up-to-date index are of the utmost importance to a subject filing system. Each piece of correspondence is read carefully to determine the subject term that describes the contents most accurately and the index checked to determine if a subject file already exists, or if a new subject needs to be added to the index and a new file folder prepared. When documents contain several important subjects, a cross-reference may be needed or the document may be copied and filed in two different locations. New subject terms are created for records not listed in the index.

Systems such as these are very successful when the classification is consistent. It is therefore critical that the selected headings be standardized and that the **creation of new subject terms be the responsibility of one well trained and competent person only**. That person should also be responsible for **maintenance of the index**. In addition, one person should be made responsible for ensuring the orderly conduct of filing work.

Access to the records of these three divisions is indirect, in that it requires the use of an index to determine the location of a file. The indexes (large bound books) are shelved in the staff area on the second floor in book cases, while the

records are placed in file folders and stored in cabinets in two large rooms on the ground floor. The index was developed to help users to locate records using the different subject headings; it was also developed to help the staff add new headings and to indicate the subject under which the records are to be filed. **The data elements used in the index to describe the file folder in which the records are held are: date, title assigned to file, and the index number.**

3.5 Procedures for Incoming Mail:

The mail is received, opened, read to determine the subject heading, checked for enclosures, and stamped. The book index is then checked to determine if a subject file already exists and if so the number is written on the correspondence, which is then sorted by departments, photocopied if necessary, and placed in their appropriate files. The files are then delivered to sections of departments, where upon a Clerk signs a Movement Book for receipt of mail.

3.6 Requests for Files:

Officers in need of records may telephone the registry staff directly or may request information through the department's secretary or clerk, who then goes to the section of the registry where the bound index volumes are stored in open book cases. A thorough search is done and when the correct index number is retrieved, this information is written on a piece of paper and handed to the registry clerk. This is a very time consuming exercise that is performed repeatedly, throughout the day, by many persons. The registry clerk then goes to the storage room on the lower level, searches for the file and delivers same to the secretary.

3.7 Control of the Flow of Files

The Central Registry does not maintain a file or list of users. Instead each section of the Registry maintains a Movement Book in which the department's secretary or clerk signs for receipt of files. It was therefore not possible to accurately determine the number of persons who use the registry or the number of daily transactions. The data elements in the Movement Book vary for each registry. The Accountant General's Registry has the following data elements:

Date on which the file was removed from the Registry

File Number: e.g. V1/8

Departmental Unit: (which borrowed the file), e.g. Inspection Section
Signature: of department's personnel.

The Personnel Registry has the following data elements for its Movement Book relating to Leave and Advances

File Number
Personnel Name
Date Sent
Date Returned
To Whom Sent
Section
Signature

The Pension Movement Book identifies the

Date Sent
Pensioner's Name
Designation e.g. Painter
File Number
Signature of person receiving

The Movement Book of the Secretariat of the Secretary to the Treasury captures:

Date Borrowed
File Number
Name of File
Signature
Date Returned
Signature

3.8 Storage and Security

The location of the Registry staff and indexes is on the second floor of the building while the filing cabinets are housed in two areas on the ground floor. This situation does not lend itself to productivity and creates inefficiencies. It appears that this may have been the result of renovations which were being undertaken during the Consultant's visit. The cabinets were in no particular order and cabinets with files belonging to ST were found adjacent to those of the Accountant

General's Office or to Personnel file cabinets. The Cabinets should be arranged in some logical order. A voluminous number of files, many of them personnel, were seen scattered over tables in one of the storage areas that had undergone recent repairs. These files were exposed to potential damage and permitted uncontrolled access. Insufficient planning and cumbersome heavy cabinets may be partly the cause of this. But maximizing the value and benefits of the Ministry's information resources is critical to performance and proper care and attention must be given to the records at all times. There is no security of access to files, in particular personnel files. It seems that the door to the main filing room is not usually locked. Filing areas should be secured at all times, with restricted access as far as possible.

The filing storage has a significant impact on the efficiency and the effectiveness of the record keeping systems. Inappropriate and insufficient filing cabinets, and a lack of trained staff are mainly the cause for the large volume of files left scattered on tables, but more importantly no officer seems to have the responsibility for ensuring that the files are accurately and properly stored in the cabinets. It is imperative that an officer be assigned this task and appropriate resources allocated to remedying the situation. **Resources will be required to purchase about 20 new filing cabinets.**

3.9 Advantages of the existing system

The system itself provides a degree of security in that individuals unfamiliar with the coding system would have difficulty locating specific files readily. Its flexibility allows the organization of large volumes of records which are subdivisions of broad subjects. It was designed on the basis of functionality, has some degree of logic and the staff are familiar with it.

However, the interrelationship of information within these functions is not established. Computerization can bring out these relationships. A note field can be added as a data element in each record and a staff member assigned to writing a short abstract on file content or any aspect which is relevant to other departments.

3.10 Areas for Improvement

Based on the information needs of the officials interviewed, the existing concept of the filing system can be retained. Improvements will have to be made to control vocabulary used in the subject headings, and the logic of the system explained to new staff. A written set of rules or guidelines will have to be

prepared to enable greater understanding of the system's logic and to ensure consistency and accuracy in filing and the avoidance of duplicating filing locations. Appendix III is a draft outline of the content of such guidelines. In view of the high cost of space, policies for disposal of records, or retirement of documents to the national archives, may have to be reviewed. At present records relating to transactions can be destroyed seven years after an audit of accounts has taken place.

The following are other areas of concern expressed by persons interviewed:

- There is no routing card to track the flow of a file. As a result the registry staff resort to frequently going through officers' desks to search and retrieve files resulting in delays.
- Files are often returned to the registry without appended documents.
- Need for improvements to the indexing system to make it easier to identify personnel files for different persons with the same name, or to avoid duplication of files for the same person. The present solution to this problem is to await a visit by the particular individual to clarify identify. Use of the person's official ID, followed by an identifying number or letter to indicate a particular Ministry, has been suggested by some persons interviewed as the best solution. **Approval of this recommendation will require a policy decision, but will not be difficult to implement after the existing records have been computerized.**
- Insufficient staff to cope with the increased volume of records; occasionally, unqualified temporary staff are hired to assist. Training is required if they are to be effective.
- The filing cabinets, many of which are not efficiently designed, are insufficient to house the huge number of files. Lateral filing cabinets would be more appropriate.
- Greater effort should be spent in recruiting the right staff; there is a general malaise in the Service and a lack of motivation.
- The system should provide for access to files by regions or Ministries, since this is a more functional approach.

4. A SIMPLE COMPUTERIZED SYSTEM

The two major priorities in terms of computerization are:

- creation of a database of the indexes of the central registry and the State Planning Secretariat. This will bring together, in one alphabetical sequence, the terms used in the classification system, and reduce the delays experienced in searching the individual volumes; and
- creation of a database of persons to whom files are assigned - in order to track file movement.

4.1 Functional Specifications

The selected system must have a Graphical User Interface (GUI) such as Windows. The advantages are that the system will be intuitive and easy to learn, since most users are familiar with Windows 95.

It must be able to create multiple databases and to provide the option of selecting a specific database from which the following functions can be performed:

- Update: add, change or delete records by bringing up a predefined or system worksheet;
- Query: search on any field and view results;
- Report: predefined/System default or Adhoc reports and be able to edit, add, delete or import data to the report and save;
- Add or change database definition;
- Add or change worksheets -
- Provide context sensitive or general help.

The system must be flexible enough to perform the following basic reports and statistics:

- a list of files checked out two days ago; this will serve as a follow up to retrieving files;
- a list of files requested by staff and not issued; this will help the Registry to retrieve files from users who have not returned them;
- Quarterly or annual statistics on the number of files added or closed; checked out and checked in; the number of reservations made.

After a period of a two or three years, the system can be used as a management tool to identify those files which were never used and could be treated as inactive and retired to less expensive storage areas.

Each record in the main database could include the following data elements:

- *File Number:
- *Title:
 - Type : (confidential, ordinary)
 - Status: (active, closed, canceled)
 - Location: (if more than one storage area)
- *Date File Opened:

At present the registry indexes contain only those elements with an *.

The borrowers database could consist of:

- User Number:
- Surname:
- Given Names:
- Title:
- Department:
- Phone1:
- Phone2:
- Date of Information:

Depending on the system design, “tracking” data could be held in a separate database or the main database could be used to track file movement and requests by users. If the main database is used for tracking, other elements which may have to be included are: “date borrowed” and “date due” “reserved by”.

The file number field of the main database will be the key used to separate the records based on departments, or functions, e.g. ST17 or ST19 records which deal with Losses and Shortages for different Ministries can be sorted by the concerned department and downloaded to a PC for subsequent study and/or ease of access to the actual files.

4.2 Criteria for Software Selection

This type of function requires software built on relational technology. The system must be able to:

- accommodate an unlimited number of records;
- provide secured access-control at the user, database and system levels;
- menu driven, intuitive, user-friendly interface, Windows and multi-user-based - LAN support; query-by-form;
- smart data entry to add new records;
- sort on any field and provide a report on disk or paper;
- perform key-word and in context searches;
- add new fields;
- review the history of a file;
- hierarchical thesaurus support;
- maintain statistics;
- year-2000 compliant;
- provide context sensitive help and on-line documentation, both at the system and application levels
- provide support for full-text documents and the ability to use multimedia data.

There are a number of packages that meet these requirements. MINISIS and GENCAT are two that are used in the region. The former is used in government ministries in Trinidad & Tobago and Venezuela and by the Association of Caribbean States Secretariat and ECLAC. The latter is used by the University of the West Indies. MINISIS has an agent in Trinidad who offers full vendor support and training. The software is also used by national and special libraries, hospitals, financial and research institutions.

The Standard MINISIS Application (SMA) is being recommended since it is an integrated, multi-platform, relational database management tool and addresses the Ministry's need to manage text-oriented information. It is designed to comply with international standards and to handle records and library management.

While the Standard MINISIS Application (SMA) allows the organization to maintain a thesaurus, the enormous number of terms, which are to be held in the database, requires the high-end MINISIS thesaurus management software "Stemma". Stemma provides integrity check at data entry and enhances search capabilities for in-depth research; for example, performing a broad or "narrower" search, based on a structured thesaurus, or allowing right and left truncation of search expression, as well as proximity searching. The cost of Stemma is US\$500.

MINISIS also enables validation, at the time of data entry, against an Authority Table, and can provide a modification data to indicate when records were changed.

Database managers are given the option to create their own Data Entry Worksheet, Query Form and Report Specification when a database is initially defined, or use the default generated by the system.

Annex IV and V provide additional information on the software. The distributor for the Caribbean is:

Dale Alexander
CHACH Instruments Limited
6 Pond Street
Beaulieu Gardens
Tacarigua, TRINIDAD.
Tel: (868) 640-6404; (868) 640-9709.
Email: chach@opus.co.tt

The importance of closely-based continuing support cannot be overemphasized. In addition, MINISIS has been developed over a 15 year period by the International Development Research Centre of Canada, who is totally committed to its continuing development.

4.3 Developing a Working Prototype

It would take three days to develop a working prototype. It is recommended that this be linked to the training of staff. The agent in Trinidad, who has considerable experience in working with these types of systems should be requested to install the software, develop the prototype, and train the staff. During the training period, the prototype will be further developed based on the experiences of the users. Data entry would be done on completion of the prototype.

4.4 Initial Input Requirements

There may be approximately 360,000 records, including those of the State Planning Secretariat. Six data entry operators could complete the exercise in six weeks at G\$3.00 per record.

Total data entry cost =	US\$ 7,200
Cost of Software for a 20-user LAN support version	\$3,900
Plus Annual technical support fee of 15%	585
Total cost of data entry and software	<u>US\$11,685</u>

Note: A ten (10) user network license for Standard application software for Windows 95/NT is \$ 2,900, while the Web Interface, unlimited user license, is an additional \$2,500.

The Registry has no computers; it will need three workstations to operate the system. Discussions with the Head of MISU reveal that there are plans to assign two workstations to the Registry. Resources will have to be provided for an additional PC. Seventeen other PCs or workstations in the four main Divisions of the Ministry can be used to access the software via the LAN.

4.5 Training

A critical aspect of support is user training. Most software providers cater for some form of training. MINISIS has developed an intensive, user-specific hands-on training programme, designed to ensure a high level of knowledge retention. It focuses on the practical application of the knowledge gained. The training experience is further enhanced through the employment of a “Learning-by-Discovery” methodology, which caters to the learning needs of adults. The training is delivered onsite and would vary from 3 days for end users to 7 days for database managers. The cost of training would depend on the number of participants - a course for 15 end-users would be \$1850 and for 2 database managers \$450. Travel and per diem for the tutor would be an additional \$2,000. It is also critical that participants have basic computer skills and are familiar with Windows 95 prior to MINISIS training.

The total cost of data entry, software and training would be: **US\$ 13,685**

5. Recommendations

5.1 Short Term

Implementation of the proposed plan of action requires a team leader with information management skills. In view of the absence of these skills in the Registry, it is recommended that a Technical Committee, comprising of the Head of the Management Information Systems Unit, the National Archivist, the Senior Registry Supervisor, and representation from the SPS, AG and ST departments, be put in place to:

- implement the simple computer system, outlined in 3 above, to include the files of the Accountant General, the Secretariat of the Secretary to the Treasury and the State Planning Secretariat;
- implement the computer training programme and other records management training which will prepare employees to carry out their records responsibilities efficiently and with motivation;
- provide for proper storage equipment, and take action to ensure that all files and filing cabinets are restored to their correct location;
- that a written set of rules or guidelines be prepared to ensure greater understanding of the records management system and accuracy in filing.

On completion of data entry, the Committee would need to identify a group of individuals, preferably one from each department, to study the data and make recommendations for rationalization of terms used and to identify inter-relationships.

5.2 Medium-term

It is common today for organizations to establish several different systems, variously called document management, information management, records management. These systems typically cannot communicate with each other, creating separate “islands of information”. A consistent subject approach provides a mechanism to achieve uniformity. Some systems today can add synonyms to a thesaurus during the input process to bridge individual differences in perception. The integrated database management software recommended for records management can handle a variety of database applications, e.g. library, full-text document handling.

- **It is important for the Ministry to develop a strategy for information assets management, rather than continue to proliferate diverse applications. There is a need to bring these**

systems together in one comprehensive system that can effectively manage the Ministry's information assets.

The National Archives recently acquired state-of-the-art microfiche equipment. Its resources, in terms of supplies, may be limited.

- **The Technical Committee should explore the possibility of an agreement between the two institutions to have critical records microfiched and linked to the computer index.**

Electronic documents, including electronic mail, should be subject to the same management controls as other government records, including disposition requirements. **The Technical Committee** should

- **initiate and seek approval of policies, standards and procedures to ensure that electronic documents are used effectively for government business, and**
- **ensure that staff are aware that information residing on electronic mail systems constitutes a government record and must be managed as such.**

RECORDS MANAGEMENT

Goal: To protect, control, file and easily retrieve information from the Registry
ACTION PLAN

Objectives	Tasks	Person Responsible	Time Table		
			3Q 1988 2Q 1999	4Q 1998	1Q 1999
To appoint a Technical Committee to implement the Action Plan	1. Approval of Recommendation by MoF Selection & appointment of Committee End Product: Committee in Place	Minister of Finance	x		
To acquire necessary software to meet the needs of Registry	2. Purchase software End Product: Request to USAID	Ministry of Finance	x		
To provide training in the use of software to users in the Ministry	3. Contract Vendor to develop prototype and training 15 users and 2 database managers, End Product: Request to USAID. Vendor contract.	Ministry of Finance	x		
	4. Provide training to 15 users & 2 database managers. End Product: 15 users and 2 Dbs. managers trained and competent to use applications			x	
To contract 6 data entry operators to input 360,000 records	5. Input data for all indexes to database End Product: Index database created	Special contract with MISU staff or private firm.		x	
	6. Registry staff to compile input data for users database. End Product: Users database completed				
To prepare a crash programme for Registry staff to restore files to cabinets	7. Registry staff to use 3x5 cards to compile data from staff lists, based on information outlined in report. End Product: Data for users database compiled	Registry staff - guided by MISU	x		
To prepare a programme and train Registry in basic records management	8. Registry staff trained in basic records management. End Product: Staff trained to be more efficient in their duties, and motivated to work in the Registry.	Archivist as Member of the Committee, supported by Senior Registry supervisor.		x	x
To prepare simple rules/guidelines on procedures to be used in the Registry	9. Establishment of a Manual which existing and new staff can use in day-to-day duties. End Product: Staff Manual of procedures			x	x

6.1 IMPLEMENTATION OF ACTION PLAN

Step 1:	Minister of Finance to approve report	August 1998
Step 2:	Technical Committee selected and appointed by Minister	August/September 1998
Step 3:	Ministry of Finance to submit request to USAID for funds to purchase software, develop prototype, train Registry, MISU database managers and departmental staff; and undertake data entry. <u>Vendor:</u> CHACH Instruments Limited, 6 Pond Street, Beaulieu Gardens, Tacarigua, Trinidad. Tel. (868) 640-6404	August 1998
Step 4:	Ministry of Finance and MISU to arrange basic computer training for Registry staff, as part of network operations.	September, 1998
Step 5:	After prototype is developed and staff trained in MINISIS, MoF will contract private firm or staff of MISU to undertake data entry.	4 th Quarter 1998
Step 6:	In the absence of a trained Records Manager, The Head of MISU and the technical Committee will be expected to undertake overall responsibility for the day-to-day functioning of the system.	

Total Time estimated to develop prototype and train staff in use of MINISIS is two weeks.
Total time for data entry = six weeks.

TERMS OF REFERENCE

BUILDING EQUITY AND ECONOMIC PARTICIPATION (BEEP) PROJECT GUYANA

Date: 25 March 1998 **Period of Service:** April - June 1998
Summary of Service: A computer professional to support capacity building in MoF Records Management
Ministry to be Served: Ministry of Finance
Designated Advisor: Coby Frimpong
Level of Effort: 15 days **Person Days of Training:**

APPROVALS	
Chief of Party: _____	Date: _____
Designated Minister: _____	Date: _____
_____ USAID: _____	Date: _____
_____ USAID: _____	Date: _____

1. Purpose

- Concise statement of basic focus/objective of the technical assistance and/or training.

The purpose of this assistance is to the management of records held in the Registries of the State Planning Secretariat, Accountant General's Office, and the Office of the Secretary to the Treasury.

2. Background

- Describe the basic problem or issue to be addressed.
Based on assessments conducted early in the BEEP Project, the information bases in the MoF were found to be less than adequate in their content and structure and therefore, unable to fulfill the management information requirements for sound policy analysis and decision-making. In response to these constraints, the BEEP Project procured computer systems for the MoF and hired a consultant for nine months to oversee installation, training and general upgrades in the Ministry's ability to make full use of the new equipment. While useful work has been done, delays in the arrival of the

equipment coupled with extensive renovations at the MoF have slowed progress towards completion of the stated objectives. This TOR provides a follow-on to the initial nine-month consultancy to conclude selected tasks that will contribute to the Ministry's enhanced performance and effectiveness.

- Relate to specific elements of the Inception Report and project work plan.

A key issue identified in the BEEP Inception Report and subsequent work programs of the MoF and MTTI is the development and maintenance of data bases for the purpose of enhancing policy analysis and decision-making. Support of this nature will contribute ultimately to more efficient and productive use of the Government's resources. The precursor to this assistance was a comprehensive MIS Needs

Assessment Study carried out by a BEEP short-term consultant in May 1996. The findings and recommendations presented by the consultant were further refined during the period July to October 1996, in the context of defining the MoF's strategic objectives and work program outputs.

- Refer to any related BEEP activity (previous or proposed).

During 1996 and 1997, preliminary work was done to assess data base needs in terms of their required content, existing and potential information sources, hardware and software elements and human resource capacities. In 1997, training was conducted and preparations made for the arrival of the new computers and related equipment. This present assistance is a follow-on to that earlier work.

- Define the desired outcome.

Capacity building in the design and implementation of information technology solutions and effective use of computer resources for enhanced work performance and output at the MoF. The requirements will also be identified for training Ministry staff to operate and maintain the recommended system.

3. Scope of Work

- Description of the desired services and basic activities to be completed in rendering the service.

The consultant will provide the following services:

- a) Review the present, manual records management system that is now in place in the registries of the State Planning Secretariat, Accountant General's Office and the Secretary to the Treasury's Office and assist users of these services to define their precise requirements for computerization.
 - b) Review the data definitions currently used by the Ministry to classify and reference documents, circulars, ministerial and general instructions, personnel records and correspondence etc. If necessary, obtain the users' clarification of the existing data definitions as well as their consensus on any modifications that computerization may necessitate for technical reasons.
 - c) Develop functional specifications for a simple and efficient system that will satisfy users' objectives. The functional specifications must include graphic illustrations and descriptions (in non-technical language) of the features of the proposed system, exactly how it will function, what it will be capable of producing, its input and processing requirements, as well as the work and information flows, and display screens. If applicable, access and security considerations must be adequately addressed.
 - d) Indicate the requirements for further steps in the process towards developing and implementing the proposed computerized system. The requirements should be represented in a plan of action that will identify (a) decisions that need to be taken; (b) the estimated time entailed in developing a working prototype of the recommended software programme subject to MoF approval of the functional system specifications; (c) estimated data entry requirements; (c) training that would be needed for those persons who will operate and maintain the system; and (d) any other factors deemed to be crucial to the conversion from a manual to a computerized registry system.
- Specify the Department(s) and/or key person(s) within the Ministry that will be the primary focus of this assignment.

MISD Manager, Secretary to the Treasury, Accountant General, Chief Planning Officer and other personnel of the State Planning Secretariat.

- Specify any critical deadlines or requirements to coordinate with other BEEP activities and/or STTA assignments.

The stipulated services must be fully delivered by the end of July 1998.

- Estimated level of effort: In country: 14 days Travel: 1 day Total: 15 days

4. Deliverables

- List and clarify all deliverables expected from the consultant and specify deadlines for each.

The consultant will submit a report corresponding to the Scope of Work stipulated in Section 3 of this document. The report will provide the following:

- Recommendations for a computerized records management system capable of meeting the requirements defined precisely by the Ministry of Finance. The recommendations will include functional specifications, in non-technical language, of the proposed system, how it will function, what it will be capable of producing, its input and processing requirements, work and information flows, and access and security features, if applicable.
- A plan of action that will detail the further steps in the process towards development and implementation of the recommended system. The plan will identify (a) decisions that need to be taken by the Ministry; (b) the estimated time entailed in developing a working prototype of the recommended software programme subject to MoF approval of the functional system specifications; (c) estimated data entry requirements; (c) training requirements for the MoF's operation and maintenance of the system; and (d) any other factors deemed to be crucial to the conversion from a manual to a computerized registry system.
- For any reports required, specify format and any other requirements.

Documentation and outputs required in these Terms of Reference are to be submitted in hard copy and on a 3.5" disk, using Word (any version up to 6.0 for Windows) or Word Perfect(up to 6.1 for Windows).

5. Qualifications of the Consultant

- Education, degrees, formal training:

At minimum, a first degree in computer science or a related field and five years' experience in the design and development of management information technology solutions.

- Computer literacy :

Software development, network implementation, knowledge of electrical and physical environments for computers, industry standard relational database construction, user friendly software interfaces construction, and training.

Annex II

Persons Contacted During Visit

USAID/IGI International Liaison Office

Mr. Coby Frimpong, Chief of Party
Mrs. Margo Singh, Senior Program Coordinator
Mr. Daniel Wallace, Project Manager

Ministry of Finance

Ms. Carole Hebert, Secretary to the Treasury
Mr. Mahase Pertab, Deputy Secretary to the Treasury
Mr. Edward Laine, Accountant General
Mr. Clyde R. Roopchand, Chief Planning Officer, State Planning Secretariat
Mr. Kheedmat L. Budhu, Head, Project Cycle Management
Ms. Denise deSouza, Division Head, Enterprise Monitoring & Private Sector Development
Ms. Kathleen Jackman, Senior Planner, State Planning Secretariat
Ms. Amina Dukham, Administrative Assistant
Ms. Esther Ackloo, Senior Registry Supervisor
Ms. Rachel Andrade, Head, Management Information Systems Unit
Ms. Pauline Wickham, Secretary to Chief Planning Officer.

National Archives

Mr. Ivor Rodrigues, Archivist

Public Service Management

Mr. Moolchand Harricharan, Chief Management Services Officer (Ag.)
Ms. Janice Wilson, Management Services Officer

Annex III

Draft Outline of Guide to Records Management

- Chapter 1 - Introduction to Records Management
- What is Records Management
 - Why Records Management
 - The Life Cycle of Records
 - Functions of the Ministry of Finance
- Chapter 2 - Records Creation and Copy Control
- Why Records Creation and Copy Control
 - How to Improve Quality and Productivity of Records and reduce their costs
 - Centralized versus Decentralized Records Systems
 - Procedures and Practices of the Ministry of Finance
- Chapter 3 - Records Classification and Indexing
- What is Records Classification
 - What is Indexing
 - Why Records Classification and Indexing
 - Levels of Classification Activity
 - Types of Records Classification Schemes
 - Common Systems Used in Records Classification and Criteria of an Effective Classification System
 - The Registry Classification Schemes and filing systems
- Chapter 4 - Records Disposal
- Factors to consider in managing disposal
 - Recommended Approach
- Chapter 5 - Records Centre and Archives Facilities
- What are Records Centres
 - What are Archives
 - Differences between Records Centres and Archives

Annex IV

MINISIS: Information Management Tools

Introduction

Impact

Users

Contact

Resources

Introduction

Organizations involved in information management in the South require appropriate tools, including software, to produce and manage information in a variety of languages and character sets. During the 1970s, IDRC and its developing country partners recognized the need to create a computer-based system to store, manage, and retrieve information. MINISIS, a versatile software package of information management tools, was developed with these needs in mind. Over the intervening years, MINISIS has been constantly evolving in step with the rapidly changing world of computing, especially the personal computer revolution. MINISIS has enjoyed tremendous growth since the 1970s, to the point where it is currently being used at universities, government ministries, research institutions, libraries, museums, and other organizations in more than 60 countries in both the South and the North. To promote the spread and evolution of this tool, IDRC has established MINISIS resource centres in Addis Ababa, Beijing, Bombay, Cairo, and Mexico City, which train information providers and technicians in developing countries. The main office at IDRC headquarters in Ottawa continues to co-ordinate all MINISIS activities, which include software development, technical support, special services, marketing, and promotion.

MINISIS is an economical, integrated, multi-platform, object-oriented relational database management tool. It addresses the needs of organizations to manage primarily text-oriented information. These include requirements for:

- Versatile database design modeling;
- Rapid application development;
- Low-cost development and usability;
- Adaptability to a variety of applications;
- Flexible information retrieval and reporting;

- Multi-script, multilingual text, and communication;
- Compliance to international standards for information exchange.

Developed over a 15-year period, the MINISIS Suite of products consists of four components: the MINISIS database engine, SMA (a general information management system), a World Wide Web (WWW) interface, and STEMMA (a versatile thesaurus management application). The integrated Suite enables effective data organization, manipulation, and access, as well as the ability to handle any character set and language. Regardless of the supported platform, the same SMA can be used to create a diverse range of applications.

The MINISIS Suite also contains several tailored applications for specific needs. For example, special applications for archival, museum and library collections have been created to enable organizations to manage their unique information collections. The MINISIS toolkit is then used to build special applications, or create new and different databases. The SMA is designed to enable compliance with international standards for data warehousing and data interchange.

MINISIS software addresses a variety of information management uses, including:

- Library management; •Records management; •Museum collection management;
- Banking policy information; •Project information systems; •Germ plasm databases; •Management of archival material; •Inventory management; •Press clippings; •Intellectual property records; •Administrative records; •Multilingual telephone directories; •Legislative information.

IDRC and a network of distributors in North America, Europe, Asia, Africa, the Middle East, and Latin America handle the dissemination of MINISIS software products. A software support plan provides technical assistance, automatic receipt of updates and software enhancements, as well as discounts on major upgrades to the software. In addition, subscribers to MINISIS Support Services have access to electronic resources related to product support including a collection of utilities, tools and applications contributed by users. Such access allows participating organizations to share expertise and to benefit from previous development efforts in information management.

Consulting services are also available including:

- Installation support; •Assistance with data migration; •Application development;
- Program development; •Training; •Information solutions.

MINISIS operates in the following computing environments:

- Windows '95 and NT; •Single user DOS; •Novell or Banyan LAN; •HP/UX;
- SUN/Solaris; •VAX/VMS using Pathworks.

The MINISIS WWW interface is a recent, important addition to the standard software. It allows easy access to MINISIS databases from Web browsers such as Netscape Navigator and Microsoft's Internet Explorer, an extremely useful feature for organizations which have already developed MINISIS applications but would like to make them broadly available via the Internet's World Wide Web.

Impact

•Commercialization of MINISIS products and services - The newly formed MINISIS Marketing Team actively promotes and markets MINISIS tools internationally. As explained by the Director of the MINISIS Systems Group, Terras Gavin, "...the MINISIS Systems Group has made dramatic changes in focus, structure and activity to accelerate the commercialization of the MINISIS Suite of products and services. Simultaneously, we remain sensitive to developing country requirements. We have put in place mechanisms to make MINISIS products and tools easily accessible to potential users in all parts of the world. We look forward to significantly enlarging the MINISIS community of users during the upcoming year." According to MINISIS marketing projections, the recent Windows NT/95 release of the software will allow MINISIS to effectively compete with other information management tools such as Inmagic, Empress, Access and FoxPro.

•Expanded client list for 1996 - This list includes a range of institutions with information management needs in a variety of countries:

- Commission Nationale Algerienne pour L'UNESCO et L'ALECSO (Kouba, Algeria)
- The Academy of Scientific Research and Technology (Cairo, Egypt)
- CAB International (Wallingford, UK)
- IWOKRAMA International Rainforest Programme (Georgetown, Guyana)

- Jordan University of Science and Technology (Irbid, Jordan)
- Department of Agriculture Malaysia (Kuala Lumpur, Malaysia)
- Ali Ben Abdallah Al-Thani Public Library (Doha, Qatar)
- King Faisal University (Al-Ahsa, Saudi Arabia)
- Ministry of Agriculture and Agrarian Reform (Damascus, Syria)
- National Information Centre (Damascus, Syria)
- International Centre for Agricultural Research in the Dry Areas (Damascus, Syria)
- Arab States Broadcasting Union (Tunis, Tunisia)
- Dubai Municipality (Dubai, UAE)
- Sheikh Abdullah Bin Ali Almahmoud Library (Sharjah, UAE)
- Medical Aid for Palestine (Montréal, Canada)
- Archives of the University of Ottawa (Ottawa, Canada)
- Huronian Museum (Midland, Canada)

•Innovative development of multilingual information management tools - MINISIS has pioneered the handling of any language or character set, both in the database, and in the user interface. In 1983 MINISIS became the first text database system, both inside and outside of China, to operate fully in Chinese.

Versions of the software are available in English, French, Spanish, Greek, Japanese, Bahasa, Chinese, and Arabic, and tools are provided to translate application screens, commands, and messages into other languages and character sets. Using these tools, a non-technical user can create new language versions of the software. Users can switch easily between language versions and can build multilingual worksheets, reports, database and field names, etc. MINISIS is also capable of handling data in any language and character set, in the same record and within the same field. Up to 16 different character sets may be accommodated simultaneously. Users may define character set parameters such as sorting sequence, upper/lower case equivalents, and character printing direction so that characters are processed correctly in all parts of the system (e.g. for data entry, reports, searching, etc.).

Users

Organizations in over 60 countries use MINISIS products and services. The diverse user community includes:

- Government ministries: Canada, China, Colombia, Egypt, Ethiopia, Finland, France, Japan, Jordan, Malaysia, Mexico, Morocco, Netherlands, Singapore, Sweden, USA, Venezuela;
- Colleges and universities: Over 70 educational institutions, academies and institutes throughout the world;
- Private companies: manufacturing, mining, petro-chemical, telecommunications, and banking;
- Libraries: national libraries, as well as private, special, and public libraries.

In addition, a variety of non-governmental organizations, hospitals, museums and cultural centres, information centres, archives, financial institutions, legislative bodies, research institutions and chambers of commerce use the MINISIS Suite for a wide range of applications.

Contact

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Resources

An electronic periodical, MINISIS NEWSLETTER, is available at no cost and can be accessed or requested via the contact information above.