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Regional Inspector General for Audit
Dakar

Audit of the Quality of MACS Data at USAID/Mali

Audit Report No. 7-688-95-005
February 17, 1995



U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

**Regional Inspector General for Audit
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UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
OFFICE OF THE REGIONAL INSPECTOR GENERAL FOR WEST AFRICA

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February 17, 1995

MEMORANDUM FOR DIRECTOR, USAID/Mali, Joel Schlesinger

FROM: *Thomas B. Anklewich*
RIG/A/Dakar, Thomas B. Anklewich

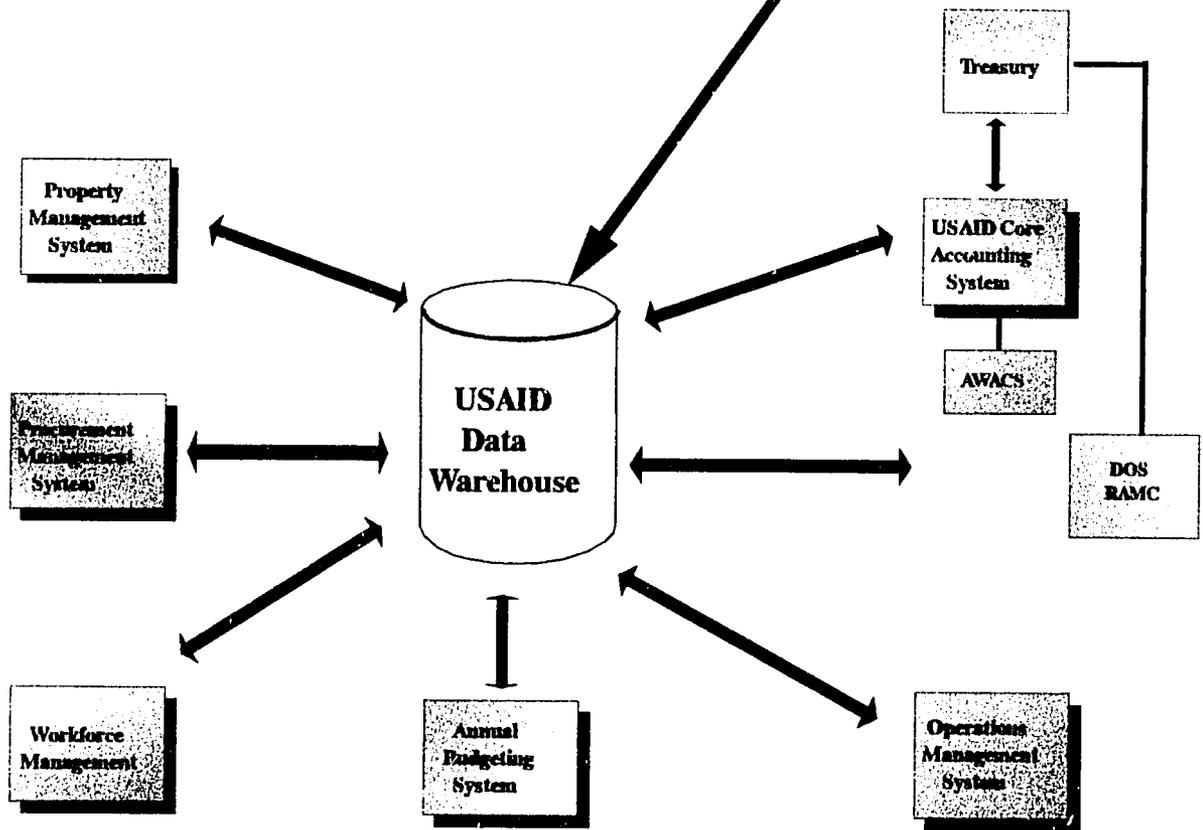
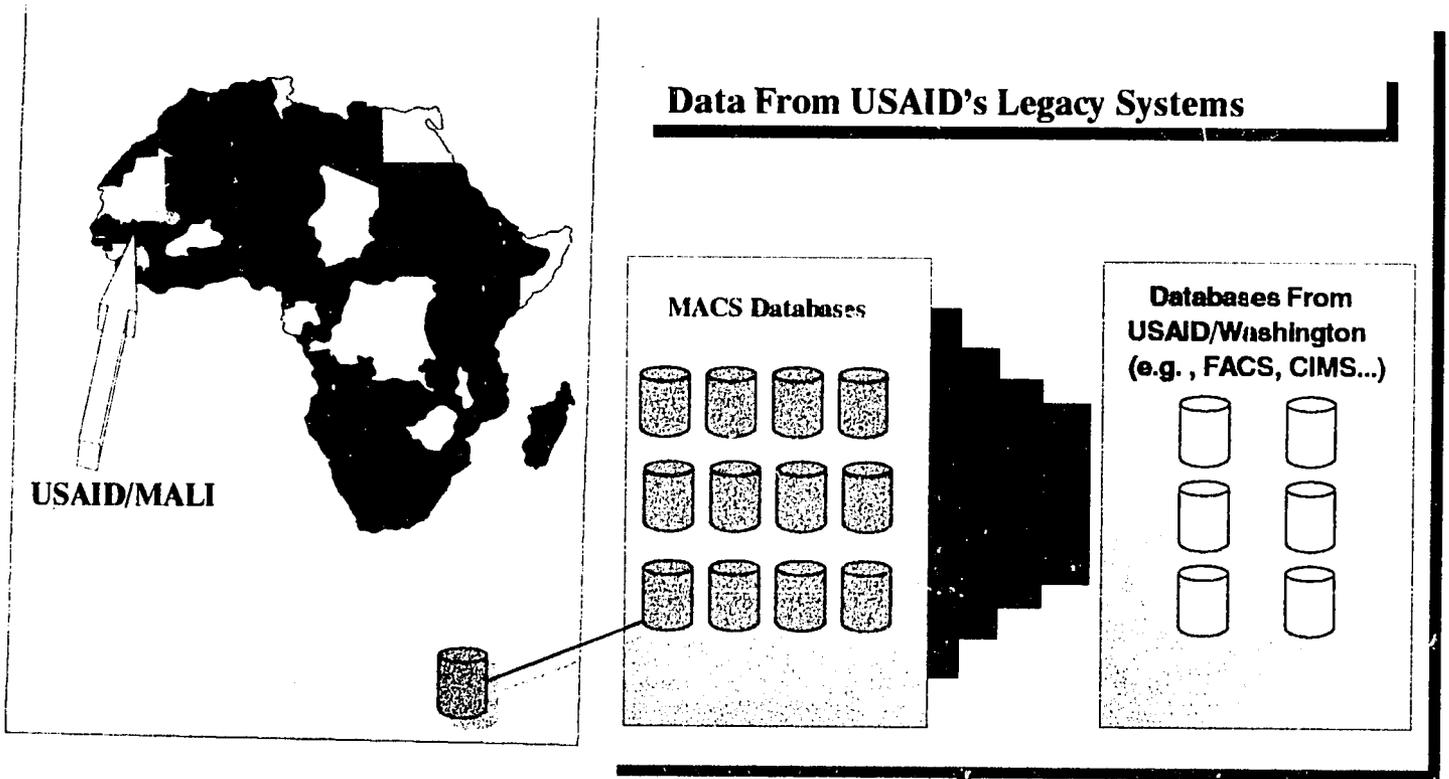
SUBJECT: Audit of the Quality of MACS Data at USAID/Mali
(Audit Report No. 7-688-95-005)

This memorandum is our report on the "Audit of the Quality of MACS Data at USAID/Mali," Report No. 7-688-95-005. We considered your comments to the draft report and have included them as Appendix II. The audit report makes three recommendations. Recommendations No. 1.1, 2, and 3.1 are resolved. Recommendations No. 1.2 and 3.2 are unresolved. Please notify our office within 30 days of the status of actions planned or taken to close the recommendations.

I appreciate the cooperation and courtesies extended to the audit team during the audit.

Summary of Audit Findings

We reviewed six of the 28 MACS files and found problems requiring corrective actions pertaining to three of the six files. We found no significant deficiencies in the other three files. Some of the main problems we found involved the Commitment End Date in the Commitment Transaction File which was not being properly updated and the Life-of-Project, Terminal Disbursement Date and Project Agreement Date elements in the Project Information Master file which were not being entered correctly. Consequently, we recommend that the Mission implement periodic review procedures and train its personnel to properly enter, update and regularly verify the accuracy of these data elements. Additionally, in 25 transactions of the Reservation/Obligation Transaction file we were unable to assess the accuracy of the four data elements we tested. This occurred because the supporting documents for these 25 transactions could not be located. We therefore recommend that the Mission implement a procedure to include the name of the supporting document (i.e. journal voucher number) into the transaction description field for entries made in the MACS. We also recommend that USAID/Mali's Office of Financial Management (OFM) staff receive training in this new procedure.



**Populating the Data Warehouse
Future and Transitional Systems Schematic**

Introduction

In view of the fact that USAID must operate with increasingly scarce funds, the Agency is undertaking a new and aggressive effort to change the way data and information are managed. Such an effort is critical to our agency's future: in the modern work place, be it business or government, a high-quality, reliable information system is no longer a luxury—it is a necessity.

To ensure that the data in the entire USAID system is of high quality—and therefore useful to managers concerned about project status and the rate of expenditures—the Office of Information Resource Management (IRM) is undertaking a major initiative. It is centralizing data collection and improving the management of information by creating a "data warehouse" (see Appendix III paras 4 and 5) that will be a repository for data from all Agency systems. One of the first steps in bringing data to this warehouse is the Project Information and Pipeline Evaluation (PIPE) initiative. The PIPE initiative is a joint IRM and Financial Management project that will combine MACS data from Agency Missions and financial data from USAID/Washington, allowing all Agency managers prompt and comprehensive information on USAID projects worldwide.

For this system to succeed, the MACS data from all missions must be of the highest accuracy. Therefore, in support of IRM's work, the Office of Audit is conducting a series of audits designed to evaluate the quality of data in the MACS files. Our audit of USAID/Mali data is an important part of this effort.

Audit Objective

The audit was designed to answer the following question:

- Is the data in USAID/Mali's Mission Accounting and Control System (MACS) accurate?

Appendix I contains a complete discussion of the scope and methodology for this audit.

Audit Findings

USAID/Mali's MACS data was accurate in 25 of the 39 data elements from the 6 files reviewed. However, the other 14 data elements pertaining to 3 of the 6 files contained significant errors as noted below.

RESULTS OF OUR REVIEW			
MACS Files	Data Elements Reviewed	Elements With Significant Errors	Elements With No Significant Errors *
Budget Allowance Transaction	3	None	3
Reservation/Obligation Transaction	4	4	None
Commitment Transaction	9	4	5
Disbursement Transaction	8	None	8
Advance Transaction	8	None	8
Project Information Master	7	6	1
Total	39	14	25

* Error rates of less than 5% were considered accurate for reporting purposes. Error rates for each of these elements can be found in Appendix IV.

The significant errors in the 14 data elements, as shown in the chart below, were principally caused by three different problems:

1. data was not entered correctly in certain data elements;
2. files were not updated properly; and
3. documents were not maintained properly.

SIGNIFICANT ERRORS			
DATA ELEMENT FILE NAME	NUMBER SAMPLED	ERRORS	ERROR RATE
1. Project Assistance Completion Date (PIM) ¹	27	4	14.81%
2. Project Authorized Amount (PIM)	27	3	11.11%
3. Project Agreement Date (PIM)	27	5	18.52%
4. Terminal Disbursement Date (PIM)	27	4	14.81%
5. Host Country Contribution (PIM)	27	3	11.11%
6. Life of Project (in years) (PIM)	27	9	33.33%
7. Commitment Amount/USAID/W ² (COT) ³	79	6	7.59%
8. Commitment Amount/ Mission (COT)	79	11	13.92%
9. Commitment End Date (COT)	79	7	8.86%
10. Budget Plan Code (COT)	79	4	5.06%
11. Obligation Document Number (ROT) ⁴	80	26	32.50%
12. Reservation Control Number (ROT)	80	26	32.50%
13. Budget Plan Code (ROT)	80	25	31.25%
14. Reservation Amount (ROT)	80	25	31.25%

Since USAID managers worldwide will rely on information in the Agency's data warehouse for making decisions on where and how to allocate scarce resources, it is critical that the data coming from each mission's MACS be accurate and complete. Therefore, the efforts of USAID/Mali to ensure the integrity of data in MACS will contribute to the Agency's overall goal of providing accurate and timely information on worldwide project activity.

¹ Project Information Master File

² USAID/Washington

³ Commitment Transaction File

⁴ Reservation/Obligation Transaction File

An analysis of each problem area and recommendations to correct the problems are discussed in detail below.

1. Data Not Entered Correctly

Data was not entered correctly in six of the seven data elements we tested in the Mission's Project Information Master file. Only the Project Number data element did not contain any errors. In the Commitment Transaction file, data was entered incorrectly in four of eight data elements. These four elements included the Commitment Amount-AID/Washington, Commitment Amount-Mission, Commitment End-Date and the Budget Plan Code. In the Reservation/Obligation Transaction file, only the Obligation Document No. and the Reservation Control No. showed data entry errors. These errors are depicted in the chart below and in Appendix IV.

DATA ELEMENT FIELD	ERRORS CAUSED BY INCORRECT DATA ENTRY	TOTAL NUMBER OF ERRORS
PACD ⁵ (PIM)	2	4
Project Authorized Amount (PIM)	2	3
Project Agreement Date (PIM)	4	5
Terminal Disbursement Date (PIM)	4	4
Host Country Contribution (PIM)	3	3
Life of Project in years (PIM)	9	9
Commitment Amt AID/W (COT)	6	6
Commitment Amt Mission (COT)	9	11
Commitment End-Date (COT)	2	7
Budget Plan Code (COT)	4	4
Obligation Doc. No. (ROT)	1	26
Reservation Control No. (ROT)	1	26

The primary cause of the above errors was the incorrect copying of data listed on MACS supporting documents to the MACS itself. A secondary cause was that

⁵ Project Assistance Completion Date

accounting personnel did not fully understand which values⁶ were to be entered into these fields. Furthermore, the errors were not discovered by Mission personnel because USAID/Mali did not regularly verify whether data was being correctly entered into the MACS. Accordingly, we found accuracy errors in 12 MACS data elements.

Recommendation No. 1: We recommend that the Director, USAID/Mali:

- 1.1 require the Office of Financial Management to implement procedures and assign responsibilities to ensure that MACS transactions are periodically reviewed for accuracy; and**
- 1.2 provide training to Office of Financial Management personnel, emphasizing accurate data entry and the correct procedures for determining the values to be placed in the data elements of the Project Information Master, Commitment Transaction, and Reservation/Obligation Transaction files.**

2. Files Not Updated Properly

Data in two elements of the Mission's Commitment Transaction file and in three elements of the Project Information Master file were inaccurate because information was not updated according to procedures established by the MACS *User's Guide* (Release 19). These procedures detail the need to:

- verify data elements, including the Project Agreement Date, Terminal Disbursement Date, Life-of-Project, and Commitment End Dates, when entering information into the system; and
- periodically review the data elements and adjust them as required.

The two data elements of the Commitment Transaction file that were not always updated included the Commitment End Date and the Commitment Amount-Mission. Specifically, five of the seven total errors in the Commitment End Date and two of the eleven total errors in the Commitment Amount-Mission were the result of these two data elements not being properly updated. In addition, we found four updating errors in three Project Information Master file data elements. These elements included the PACD, Project Authorized Amount, and the Project Agreement Date elements. The chart below summarizes these errors.

⁶ Values in this case constitute dates, amounts, document numbers, etc.

DATA ELEMENT FIELD	ERRORS CAUSED BY FILES NOT BEING UPDATED PROPERLY	TOTAL NUMBER OF ERRORS
Commitment End Date (COT)	5	7
Commitment Amount-Mission (COT)	2	11
PACD (PIM)	2	4
Project Authorized Amount (PIM)	1	3
Project Agreement Date (PIM)	1	5

The information in these data elements was inaccurate because Mission procedures did not ensure that the data was updated when new information was received and because periodic reviews for accuracy were not conducted. For example, documents used to enter information into MACS do not always contain all the necessary data. Thus, sometimes accounting personnel must use estimated information in order to create a file, especially for new projects and contract work. However, if copies of the final, signed documents are not distributed to OFM, then the MACS will not be updated. Such was the case at USAID/Mali.

In addition, when new information was received, Mission personnel did not always make sure the necessary updates were made. Furthermore, although the Controller sent monthly MACS-generated Project Information Master file data reports to project officers for them to review, responses to them were generally not forthcoming.

Furthermore, the information contained in the Commitment Transaction and Project Information Master files were not periodically reviewed for accuracy. If periodic reviews had been conducted, it is likely that the errors described above would have been detected and corrected.

Recommendation No. 2: We recommend that the Director, USAID/Mali:

- 2.1 correct the errors found in data elements of the Commitment Transaction, Project Information Master, and Reservation/Obligation Transaction files identified in this report;**

- 2.2** conduct a Mission-wide training seminar to remind all Mission personnel of their responsibilities to ensure a) MACS data is updated, b) final documents are properly distributed, and c) project officers review and communicate changes needed to the data in the Office of Financial Management's monthly Project Information Master file report; and
- 2.3** establish procedures to ensure that data in the Mission Accounting and Control System files are periodically reviewed to ensure the data is accurate. (Procedures established per Recommendation No. 1.1 should fulfil this requirement.)

3. Documents Not Maintained Properly

U.S. General Accounting Office Internal Control Standards require that all transactions be clearly documented. In addition, these standards require that the supporting documentation be available and easily accessible.

Our review found that four data elements of the Reservation/Obligation Transaction file (Obligation Document Number, Reservation Control Number, Budget Plan Code, and Reservation Amount) contained errors because the Mission could not locate supporting documentation for MACS transactions. Specifically, the Mission could not locate documents supporting 25 ROT transactions (eight of which related to 1311 Reviews). The chart below summarizes these errors.

DATA ELEMENT FIELD NAME	ERRORS CAUSED BY DOCUMENTS NOT BEING MAINTAINED	TOTAL NUMBER OF ERRORS
Reservation Amount (ROT)	25	25
Obligation Document Number (ROT)	25	26
Reservation Control Number (ROT)	25	26
Budget Plan Code (ROT)	25	25

The Mission files supporting documentation according to the operating expense category of the Reservation/Obligation to be made (i.e. rents and leases, utilities, maintenance). Thus, documentation for these transactions should have been located in either an operating expense, Journal Voucher or 1311 Review folder. However, the documentation could not be located because no reference number (i.e. Journal Voucher number) was listed in the MACS to link the MACS transaction to its supporting documentation.

Also, when OFM staff enter transactions into the MACS, the date and nature of the entry are not in a register. The supporting documents for these transactions should then be stored in a folder, as noted above. We observed that the folders for journal vouchers and 1311 Reviews did not have indexes listing the documents stored in each folder. Although there are register entries to show when transactions are processed, there are no indexes in the folders of supporting documents to enable personnel to know when supporting documents were placed into or removed from folders. The register shows that these transactions were processed but supporting documents for these transactions could not be located during the audit fieldwork. This has led us to conclude that the supporting documents were removed from these folders and not refiled properly.

Because the Mission could not locate the supporting documents for 25 of the 80 ROT transactions in our sample, the four audited elements relating to these 25 transactions are also unsupported.

Recommendation No. 3: We recommend that the Director, USAID/Mali:

- 3.1 require the Office of Financial Management to establish and implement a procedure to include the journal voucher number in the transaction description field when journal voucher adjustments are entered into the MACS, and**
- 3.2 train Office of Financial Management personnel on the procedure implemented per Recommendation 3.1 to ensure that documentation to support all transactions entered in the Mission Accounting and Control System can be located.**

Management Comments and Our Evaluation

In response to the draft report, USAID/Mali was in agreement with the audit findings, but provided additional reasons for why the errors occurred and suggested alternative recommendations to correct them. In regard to Recommendation No. 1, the Mission stated that it believed the introduction of a data verification procedure would be more effective at reducing accuracy errors than conducting a training session on what values were supposed to be placed into the MACS. We agree, in part. We agree that a new procedure is needed. But, we also believe that instructing OFM personnel on how to determine and enter correct values in the MACS is needed. Further, since several errors were caused by lack of attention and concentration, retraining, emphasizing accuracy, is warranted. We have, therefore, kept recommendation No. 1 (now No. 1.2), but have added a second recommendation (No. 1.1). Recommendation No. 1.1 adopts the Mission's new data verification procedure and is considered resolved. It may be closed upon RIG/A/Dakar's receipt and review of a copy of the new procedures. Recommendation No. 1.2 is still unresolved.

Concerning Recommendation No. 2.1, the Mission stated that the report does not specifically identify COT and PIM errors and therefore, needed RIG/A/Dakar to provide the necessary detail for the errors so it can make the recommended corrections. RIG auditors pointed out these errors to OFM personnel during the audit. In some cases, OFM personnel made on-the-spot corrections at the time they were identified. However, there is no verification that all corrections were made. Thus, RIG will send a document detailing the COT and PIM file errors to the Mission.

As for Recommendation No. 2.2, the Mission stated that OFM provides MACS-generated monthly project information reports to Project Officers who are instructed to notify the Controller if any changes are needed. However, according to OFM officials, responses to these reports have not been forthcoming. Accordingly, USAID/Mali believes that a Mission-wide training seminar reminding all parties of their responsibilities would be more effective at reducing updating errors than just a seminar involving OFM staff. We agree with the Mission and have reworded the recommendation so that a Mission-wide training seminar is conducted.

Regarding Recommendation No. 2.3, the Mission stated that it planned to introduce new procedures which initiate a daily review of data entered into the MACS. We agree that this procedure should also help ensure that MACS elements are properly updated. As a result, recommendation No. 2. is considered resolved. Recommendation No. 2.1 can be closed upon verification that USAID/Mali has corrected all of the errors identified in the report. Recommendation No. 2.2 can be closed upon receipt of a notice that the Mission-wide training seminar has been held. Recommendation No. 2.3 can be closed upon RIG/A/Dakar's receipt and review of the Mission's new verification procedures.

USAID/Mali took issue with Recommendation No. 3, which called for giving additional training to OFM staff in the Mission's established filing procedures. The Mission stated that if OFM staff took care to reference each document properly, the desired accessibility of source documents could be achieved. Accordingly, OFM has adopted a new procedure to include the journal voucher number in the description field when they enter journal voucher adjustments in to the MACS. We agree that USAID/Mali's new procedure will help link MACS entries to its supporting documentation. However, we feel that training in the new procedure should be given to OFM staff. We have changed Recommendation No. 3 to include the adoption of the Mission's new procedure for referencing MACS transactions to their supporting documents (Recommendation No. 3.1) and to include training to OFM staff in these new procedures (Recommendation No. 3.2). Recommendation No. 3.1 is considered resolved and may be closed upon RIG/A/Dakar's receipt and review of the new Mission procedure. Recommendation No. 3.2 is considered unresolved.

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SCOPE AND METHODOLOGY

Scope

The Office of the Regional Inspector General for Audit, Dakar audited the quality of data maintained in the USAID/Mali MACS files in accordance with generally accepted government auditing standards. Performed at USAID/Mali during the period from October 11, 1994, through November 4, 1994, the audit reviewed 6 files and 39 data elements from a universe of 28 MACS Transaction/Master files and 757 data elements (21.4 and 5.2 percent respectively). These six files contained information whose accuracy is considered critical by agency managers. If the error rate was significant (more than five percent) on any of the data elements, we also evaluated the cause and made the appropriate recommendations.

Methodology

The Office of Audit consulted with Financial Management officials in Washington, D.C. and identified the MACS files and key data elements that would be reviewed for each file. We analyzed USAID/Mali MACS transactions for the period October 1, 1991 to July 31, 1994 from 6 of the 28 MACS Transaction/Master files⁷:

- Budget Allowance Transaction
- Reservation/Obligation Transaction
- Commitment Transaction
- Disbursement Transaction
- Advance Transaction
- Project Information Master

We selected a statistical sample for five of the data files that would provide a confidence level of 90 percent and a precision level of plus or minus 4 percent. We reviewed 100 percent of the records in the Project Information Master file. For each data element reviewed (dollar amounts, dates, document numbers, etc.), we determined whether the data in MACS was supported by information from a source document(s). Based on the results of these determinations, we calculated error rates for each data element and assessed whether the error rate was significant. An error rate of five percent or greater was considered significant. Data elements with an error rate of less than five percent were considered accurate for reporting purposes. We statistically projected the estimated number of errors in the Mission MACS by multiplying actual number of errors in our statistical sample by the total number of entries in each MACS file.

⁷ A listing of MACS Transaction/Master files is in Appendix V.

APPENDIX II

MISSION COMMENTS

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ACTION: ~~AID-1~~
INFO: ~~RIG-1~~ DCM-1 AMB-1

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TO AMEMBASSY DAKAR 0925
BT
UNCLAS SECTION 01 OF 03 BAMAKO 00268

ADM AID

FOR RIG/A/DAKAR, THOMAS B. ANKLEWICH

E.O. 12356: N/A
SUBJECT: USAID MALI RESPONSE TO THE DRAFT REPORT
ON THE AUDIT OF THE QUALITY OF MACS DATA AT
USAID/MALI, (AUDIT REPORT NO. 7-688-95-XXX)

THE SUBJECT REPORT CONTAINED THREE RECOMMENDATIONS.
PLEASE FIND BELOW USAID MALI'S RESPONSE TO EACH.

RECOMMENDATION NO. 1 : WE RECOMMEND THAT THE DIRECTOR,
USAID/MALI PROVIDE ADDITIONAL TRAINING TO OFFICE OF THE
CONTROLLER PERSONNEL TO ENSURE THAT THESE PERSONNEL USE
THE CORRECT PROCEDURES FOR DETERMINING THE VALUES TO BE
PLACED IN THE DATA ELEMENTS OF THE PROJECT INFORMATION
MASTER FILE AND THE COMMITMENT TR\SACTION FILE.

WE FEEL THAT THE ERRORS ENCOUNTERED BY THE AUDITORS IN
THE TWO DIFFERENT FILES CITED ABOVE, THE PROJECT
INFORMATION MASTER AND COMMITMENT TR\SACTION FILES,
OCCURRED FOR DIFFERENT REASONS. CONTROLLER'S OFFICE
PERSONNEL FEEL THAT THE CORRECTNESS OF DATA IN THE
PROJECT INFORMATION MASTER FILE IS NOT TRULY WITHIN
THEIR CONTROL - GETTING THIS DATA CORRECT REQUIRES A
COORDINATED EFFORT ON THE PART OF SEVERAL OFFICES WITHIN
THE MISSION. THE AUDITORS CITED SIX FIELDS WITHIN THIS
FILE IN WHICH THEY FOUND SIGNIFICANT ERRORS, THE PROJECT
ASSISTANCE COMPLETION DATE, THE PROJECT AUTHORIZED
AMOUNT, THE PROJECT AGREEMENT DATE, THE TERMINAL
DISBURSEMENT DATE, THE HOST COUNTRY CONTRIBUTION, AND
THE LIFE OF PROJECT IN YEARS. THE ORIGINAL INFORMATION
AND CHANGES CONCERNING THESE FIELDS ARE AGREED UPON AND
DOCUMENTED BY CIRCULATING AGREEMENTS OR AMENDMENTS
THROUGH SEVERAL OFFICES OF THE MISSION, INCLUDING THE

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CONTROLLER'S OFFICE, BUT THESE DO NOT TAKE EFFECT UNTIL THEY ARE SIGNED BY THE MISSION DIRECTOR. THE CONTROLLER'S OFFICE PREFERS TO ENTER THIS DATA ONLY AFTER THIS FINAL APPROVAL HAS BEEN RECEIVED. THE EXPERIENCE OF CONTROLLER'S OFFICE PERSONNEL HAS BEEN THAT FINAL, SIGNED COPIES OF THESE DOCUMENTS, WHICH SHOULD BE CIRCULATED TO ALL CONCERNED OFFICES, OFTEN DO NOT REACH THEM.

ANOTHER SAFEGUARD EXISTS AT THE MISSION WHICH SHOULD ENSURE THE CORRECTNESS OF DATA IN THE PROJECT INFORMATION MASTER FILE: EACH MONTH THE CONTROLLER'S OFFICE GENERATES MACS, (MISSION ACCOUNTING AND CONTROL SYSTEM), REPORTS P19 WHICH REFLECT ALL DATA IN THE PROJECT INFORMATION MASTER FILE. THESE REPORTS ARE CIRCULATED TO ALL PROJECT OFFICERS WITH REQUESTS THAT THEY VERIFY THE DATA SHOWN, AND RESPOND BY INDICATING ANY ADJUSTMENTS THAT ARE NECESSARY. THE CONTROLLER'S OFFICE'S EXPERIENCE HAS BEEN THAT RESPONSES TO THESE REQUESTS HAVE NOT BEEN FORTHCOMING.

ACCORDINGLY, IN RESPONSE TO THIS RECOMMENDATION, AS CONCERNS THE PROJECT INFORMATION MASTER FILE, THE CONTROLLER'S OFFICE PROPOSES THAT RATHER THAN CONDUCT TRAINING WHICH INVOLVES ONLY CONTROLLER'S OFFICE PERSONNEL, IT WOULD BE MORE EFFECTIVE TO CONVENE A MISSION-WIDE MEETING AT WHICH ALL CONCERNED PARTIES WOULD BE REMINDED OF THEIR RESPONSIBILITIES AND NEW PROCEDURES WOULD BE INITIATED TO ENSURE THAT PROPER DISTRIBUTION OF DOCUMENTS IS MADE AND ADJUSTMENTS TO DATA ON P19 REPORTS ARE COMMUNICATED.

WITH REGARD TO ERRORS DISCOVERED BY THE AUDITORS IN COMMITMENT TRANSACTION FILE DATA, THE CONTROLLER'S OFFICE ACKNOWLEDGES THAT, WHILE THERE ARE OCCASIONAL OMISSIONS FOUND ON COMMITMENT DOCUMENTS, THE PRIMARY CAUSE OF THE ERRORS IS INCORRECT COPYING OF THE DATA BY CONTROLLER'S OFFICE PERSONNEL. IN THIS CASE, THOUGH, WE FEEL THAT INTRODUCING A VERIFICATION PROCEDURE WOULD BE MORE EFFECTIVE THAN CONDUCTING TRAINING IN REDUCING OR ELIMINATING ERRORS. BY ASSIGNING THE SUPERVISORY PROJECT ACCOUNTANT TO REVIEW ALL ENTRIES PRINTED OUT BY THE MACS SYSTEM EACH DAY BY REFERENCE TO COPIES OF THE SOURCE DOCUMENTS IN QUESTION, WE FEEL THAT THE HIGHEST LEVEL OF ACCURACY CAN BE ACHIEVED. ONCE AGAIN, WE FEEL THAT TRAINING WOULD NOT BE THE MOST APPROPRIATE APPROACH, SINCE THE PROBLEM SEEMS TO BE ONE OF ACCURACY RATHER THAN OF FAILURE TO UNDERSTAND THE PRINCIPLES INVOLVED. RECOMMENDATION NO. 2 IS DIVIDED INTO THREE SEPARATE PARTS, AS FOLLOWS: WE RECOMMEND THAT THE DIRECTOR, USAID MAL I

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2.1 CORRECT THE ERRORS FOUND IN DATA ELEMENTS OF THE

COMMITMENT TRANSACTION AND PROJECT INFORMATION MASTER FILES IDENTIFIED IN THIS REPORT;

WHILE THE REPORT GIVES THE NUMBER OF ERRORS THAT WERE FOUND BY THE AUDITORS, IT DOES NOT IDENTIFY THOSE ERRORS SPECIFICALLY. IF RIG/A/DAKAR WISHES US TO CORRECT THOSE ERRORS SPECIFICALLY NOTED BY THE AUDITORS, THEN WE REQUEST THAT THEY SEND US THE NECESSARY DETAIL TO PERMIT US TO DO SO.

2.2 TRAIN PERSONNEL IN THE PROPER METHOD OF UPDATING INFORMATION IN THE MISSION ACCOUNTING AND CONTROL SYSTEM FILES;

AS NOTED IN OUR RESPONSE TO RECOMMENDATION NO. 1, WE BELIEVE THAT A COMBINATION OF IMPROVING COORDINATION OF INFORMATION FLOW THROUGHOUT THE MISSION AND ESTABLISHING A REVIEW PROCEDURE IN THE CONTROLLER'S OFFICE WILL PRODUCE THE BEST RESULTS IN IMPROVING THE OVERALL ACCURACY OF MACS REPORTS.

2.3 ESTABLISH PROCEDURES TO ENSURE THAT DATA IN THE MISSION ACCOUNTING AND CONTROL SYSTEM FILES ARE PERIODICALLY REVIEWED TO ENSURE THE DATA IS ACCURATE.

AS DESCRIBED IN OUR RESPONSE TO RECOMMENDATION NO. 1, THE CONTROLLER'S OFFICE PLANS TO INTRODUCE A DAILY REVIEW OF DATA ENTERED INTO THE MACS SYSTEM.

RECOMMENDATION NO. 3: WE RECOMMEND THAT THE DIRECTOR, USAID/MALI RETRAIN OFFICE OF FINANCIAL MANAGEMENT PERSONNEL ON ESTABLISHED FILING PROCEDURES TO ENSURE THAT DOCUMENTATION TO SUPPORT ALL TRANSACTIONS ENTERED IN THE MISSION ACCOUNTING AND CONTROL SYSTEM IS MAINTAINED AND ACCESSIBLE.

THIS RECOMMENDATION AROSE OUT OF THE AUDITORS' REVIEW OF ENTRIES INTO THE RESERVATION/OBLIGATION TRANSACTION FILE OF THE MACS SYSTEM. THEY FOUND THAT THEY WERE UNABLE TO LOCATE MANY OF THE SOURCE DOCUMENTS THAT CONTAINED THE ORIGINAL INFORMATION THAT WAS USED IN THE ENTRIES. THE MAJORITY OF THESE INSTANCES INVOLVED JOURNAL VOUCHERS, WHICH ARE DOCUMENTS USED TO ENTER ADJUSTMENTS TO THE AMOUNTS OF RECORDS PREVIOUSLY ESTABLISHED. NORMALLY, AFTER MAKING ENTRIES TO THE RESERVATION/OBLIGATION TRANSACTION FILE, THE CONTROLLER'S OFFICE FILES THE RELEVANT SOURCE DOCUMENTS IN ORDER BY RESERVATION OR

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OBLIGATION NUMBER IN FOLDERS ACCORDING TO THE OBJECT CLASS WHICH HAS BEEN CHARGED. HOWEVER, THE JOURNAL VOUCHERS WERE TREATED SOMEWHAT DIFFERENTLY. IN ENTERING THE DATA FROM JOURNAL VOUCHERS IN MACS, CONTROLLER'S OFFICE ACCOUNTANTS USED THE ORIGINAL OBLIGATION DOCUMENT NUMBER AS THE DOCUMENT NUMBER FOR THE NEW TRANSACTION, AND IN THE DESCRIPTION SPACE ON THE MACS SCREEN THEY ENTERED INFORMATION ABOUT THE PURPOSE OF THE ENTRY. THEN, INSTEAD OF FILING THESE DOCUMENTS IN THE OBJECT CLASS FOLDERS, THEY PUT THEM IN A SEPARATE FOLDER FOR JOURNAL VOUCHERS. THEY MAINTAIN THAT THEY USED THIS SYSTEM BECAUSE MOST JOURNAL VOUCHERS CONTAINED ADJUSTMENTS TO SEVERAL OBLIGATION DOCUMENTS, AND IT WOULD HAVE BEEN IMPRACTICAL TO MAKE ENOUGH COPIES OF THE DOCUMENTS TO PLACE ONE IN EACH RELEVANT OBJECT CLASS FOLDER. NEVERTHELESS, WHEN THE AUDITORS DID NOT FIND THE JOURNAL VOUCHER NUMBERS ENTERED IN MACS, THEY LOOKED FOR THE DOCUMENTS IN THE OBJECT CLASS FOLDERS, AND DID NOT FIND THEM THERE. THERE WAS NO REFERENCE TO GUIDE THEM TO THE JOURNAL VOUCHERS, AND IT WAS DIFFICULT TO FIND THE DOCUMENTS BY EXAMINING ALL THE JOURNAL VOUCHERS, SINCE THE ENTRY CONCERNING THE PARTICULAR OBLIGATION NUMBER THAT THE AUDITORS WERE SEEKING WAS OFTEN ONE OF MANY ON A PARTICULAR JOURNAL VOUCHER.

IN ORDER TO RESOLVE THIS DIFFICULTY, THE USAID MALI CONTROLLER'S OFFICE HAS ADOPTED A POLICY OF INCLUDING THE JOURNAL VOUCHER NUMBER IN THE DESCRIPTION FIELD WHEN THEY ENTER JOURNAL VOUCHER ADJUSTMENTS INTO THE MACS SYSTEM, EVEN THOUGH THIS REDUCES THE SPACE AVAILABLE FOR AN EXPLANATION OF THE ENTRY. WE WOULD LIKE TO SUGGEST, IN THE COMMON INTEREST OF ALL USAID MISSIONS, THAT THE MACS SYSTEM BE EXPANDED TO INCLUDE EITHER A LARGER DESCRIPTION FIELD OR A REFERENCE FIELD WHERE THE NUMBER OF A JOURNAL VOUCHER, A CABLE OR OTHER IMPORTANT REFERENCE DOCUMENT COULD BE ENTERED. ONCE AGAIN, WE

TAKE ISSUE WITH RIG/A/DAKAR'S RECOMMENDATION THAT TRAINING IS WHAT IS REQUIRED. WE FEEL THAT BY TAKING CARE TO REFERENCE EACH DOCUMENT PROPERLY, THE DESIRED ACCESSIBILITY OF SOURCE DOCUMENTS CAN BE ACHIEVED.

WE AT USAID MALI FEEL THAT OUR STAFF UNDERSTAND THE DOCUMENTS THEY ARE WORKING WITH AND THE MACS SYSTEM. WHAT WE BELIEVE IS NECESSARY TO ACHIEVE THE GREATEST POSSIBLE INTEGRITY OF MACS DATA IS TO BE MORE THOROUGH IN FOLLOWING UP ON INQUIRIES, VERIFYING INPUT DATA AND ENSURING THAT ALL RELEVANT DATA ARE ENTERED IN CERTAIN FILES. THESE TASKS ARE OFTEN TEDIOUS BUT WE ARE

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ADOPTING PROCEDURES WICH WE EXPECT WILL ENSURE THAT THE
NECESSARY ACURACY IS ACHIEVED.

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USAID'S INFORMATION MANAGEMENT

This new USAID effort to establish a quality information system is described in the Agency's Information Systems Plan (ISP).¹ A primary goal of this plan is to have corporate data managed at the Agency level rather than "owned" by each individual office.

Using an information engineering methodology, models of the Agency's business processes and data requirements were created. These models were then broken into eight logical Business Areas. Each Business Area represents related functions within the Agency that share similar business processes and data needs. Each of these eight areas will be studied in depth, in a process called Business Area Analysis (BAA).

The Business Area Analysis (BAA) provides a greater level of detail on the functions in each area and provides a basis for designing system requirements. Each BAA 1) continues to model the data requirements and business functions, 2) includes this information in the Agency's electronic repository, and 3) reconciles the new models back to the Agency-wide models. This results in a high degree of standardization, stability, and reusability.

Currently three BAA's are being conducted—Core Accounting, Procurement, and Budgeting. The inter-dependencies of these three business areas are high and will require significant sharing of data. Therefore, to facilitate the systems development work, IRM is planning a data warehouse that will allow movement to a data sharing environment.

Populating this data warehouse will begin with transferring MACS transaction level data into the warehouse. The Core Accounting BAA, which includes the AWACS² project, needs a functioning warehouse to provide the most benefit to the Agency.

Smaller initiatives are under way to begin the transition to a corporate database. PIPE (Project Information and Pipeline Evaluation) currently brings in summary MACS and FACS data, to provide project status and pipeline information to Agency managers. In order to make sound decisions, it is important that managers using such information know the quality of the data being used.

¹ *Information Systems Plan, Volume I: Report To Management, February 1993.*

² *AID Washington Accounting and Control System*

USAID/MALI MACS FILES AND ELEMENTS REVIEWED

<u>MACS FILES/ELEMENT</u>	<u>UNIVERSE</u>	<u>NUMBER IN SAMPLE</u>	<u>ERRORS IN SAMPLE</u>	<u>ERROR RATE</u>	<u>PROJECTED ERRORS IN UNIVERSE</u>
BUDGET ALLOWANCE TRANSACTION					
Budget Plan Code	205	58	None	0.00%	None
Transaction Amount	205	58	None	0.00%	None
Project Number	205	58	None	0.00%	None
RESERVATION/OBLIGATION TRANSACTION FILE					
Obligation Document Number	5,540	80	26	32.50%	1,870
Reservation Control Number	5,540	80	26	32.50%	1,801
Budget Plan Code	5,540	80	25	31.25%	1,731
Transaction Amount	5,540	80	25	31.25%	1,731
COMMITMENT TRANSACTION FILE					
Commitment Doc. Number	3,939	79	1	1.27%	*
Earmark Control Number	3,939	79	3	3.80%	*
Call Forward Date	3,939	79	2	2.53%	*
Training Months	3,939	79	2	2.53%	*
Transaction Amount (AID/W)	3,939	79	6	7.59%	299
Transaction Amount (Mission)	3,939	79	11	13.92%	548
Commitment End Date	3,939	79	7	8.86%	349
Budget Plan Code	3,939	79	4	5.06%	199
DISBURSEMENT TRANSACTION FILE					
Obligation Commitment Doc. No.	19,037	80	1	1.25%	*
Reservation/Earmark Control No.	19,037	80	1	1.25%	*
Transaction Type Code	19,037	80	None	0.00%	None
Budget Plan Code	19,037	80	None	0.00%	None
Disbursing Office Code	19,037	80	None	0.00%	None
Federal Outlay Code	19,037	80	None	0.00%	None
Actual Disbursement Amt. (local)	19,037	80	1	1.25%	*
Budget Allowance Disbursement	19,037	80	1	1.25%	*
ADVANCE TRANSACTION FILE					
Advance Number.	4,921	80	2	2.50%	*
Obligation Doc. No.	4,921	80	3	3.75%	*
Commitment Doc. No.	4,921	80	3	3.75%	*
Project No.	4,921	80	2	2.50%	*
Advance Type	4,921	80	3	3.75%	*
Accountability Date	4,921	80	1	1.25%	*
Advance Transaction Amount Local	4,921	80	None	0.00%	None
Currency Amount	4,921	80	None	0.00%	None
PROJECT INFORMATION MASTER FILE					
PACD	27	27	4	14.80%	4
Authorized Amount	27	27	3	11.11%	3
Project Agreement Date	27	27	5	18.52%	5
Terminal Disbursement Date	27	27	4	14.80%	4
Host Country Contribution	27	27	3	11.11%	3
Project Number	27	27	None	0.00%	None
Life of Project (In Years)	27	27	9	33.33%	9

* Error rates of less than five percent were considered accurate for reporting purposes.

MACS TRANSACTION AND MASTER FILES NUMBER OF DATA ELEMENTS	
MACS FILE NAME	# OF ELEMENTS PER RECORD
Operating Expense Budget Master	10
Operating Expense Budget Transaction	12
Budget Allowance Master File	13
Budget Allowance Transaction File (Audited)	12
Reservation Master File	17
Obligation Master File	37
Reservation/Obligation Transaction File (Audited)	20
Project Information Master File (Audited)	115
Project Information Transaction File	25
Condition Precedent Transaction File	96
Project Element Master File	13
Project Element Transaction File	12
Direct Reimbursement Authorization (DRA) Master File	16
Direct Reimbursement Authorization (DRA) Transaction File	17
Earmark Master File	20
Earmark Transaction File	19
Commitment Master File	41
Commitment Transaction File (Audited)	25
Advance Master File	22
Advance Transaction File (Audited)	30
Planned Expenditures Master File	13
Planned Expenditures Transaction File	15
Accrual Transaction File	18
Prepayment Amortization Transaction File	23
Disbursement Transaction File (Audited)	28
Interface Disbursement/Advance File	36
Interface Disbursement/Advance Reject File	35
Prepayment Amortization File	17
Total 28 MACS FILES	757

GLOSSARY OF ACRONYMS

PIPE - Project Information and Pipeline Evaluation

IRM - Information Resource Management

MACS - Mission Accounting and Control System

PIM - Project Information Master file

PACD - Project Assistance Completion Date

COT - Commitment Obligation Transaction File

GAO - General Accounting Office

ISP - Information System Plan

BAA - Business Area Analysis

AWACS - AID/Washington Accounting and Control System

DRA - Direct Reimbursement Authorization

ROT - Reservation/Obligation Transaction File

AID/W - USAID/Washington