

# MAXIMUS



*Hospital Management Information System (HMIS)*



Prepared for:  
U.S. Agency for International Development  
Curative Care Organization, Egypt

Contract Number:  
263-C-00-97-00072-00

## QUARTERLY PROGRESS REPORT

Q2, 1999

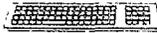
April 1 – June 30, 1999

USAID Project Number: 263-0254-3-96052

[Develop a Detailed and Updated Management Information System for the  
Cairo Curative Organization, Health Policy Support Program]

Prepared by:  
MAXIMUS Inc.

Date:  
July 29, 1999



July 29, 1999

Dr. Adel Youssef  
Director of Naser Institute  
Cairo, Egypt

Dear Dr. Youssef,

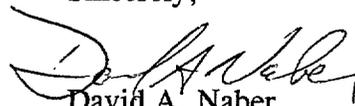
MAXIMUS is pleased to submit the Second Quarter 1999 Quarterly Progress Report (QPR) for the Health Policy Sector Project (HPSP), Cairo Curative Organization Health Management Information System (CCO HMIS). This report covers the period April 1 through June 30, 1999. The Project Management Plan submitted on August 18, 1998 served to provide status for previous quarters and also as the Annual Implementation Plan (AIP) for 1999. All status in this QPR is benchmarked against that AIP.

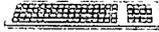
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- o Giza Systems was awarded the contract for installation and integration services for the network at Naser Institute as well as CCO;
- o Substantial progress was made in the development of functional designs for the F&MAS;
- o Coordinators for various HMIS modules – laboratory, blood bank and ADT – were identified at facilities;
- o Software for terminal emulation and Windows 98 was both purchased and installed; and
- o Training progressed substantially and Naser Institute shadows were welcomed to the project and began training.

Should you have any questions about the content of this report or wish to discuss any issues mentioned, please feel free to contact me directly

Sincerely,

  
David A. Naber  
Chief of Party



July 29, 1999

Dr. Mohsen Mohamed  
Curative Care Organization  
Cairo, Egypt

Dear Dr. Mohsen,

MAXIMUS is pleased to submit the Second Quarter 1999 Quarterly Progress Report (QPR) for the Health Policy Sector Project (HPSP), Cairo Curative Organization Health Management Information System (CCO HMIS). This report covers the period April 1 through June 30, 1999. The Project Management Plan submitted on August 18, 1998 served to provide status for previous quarters and also as the Annual Implementation Plan (AIP) for 1999. All status in this QPR is benchmarked against that AIP.

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Should you have any questions about the content of this report or wish to discuss any issues mentioned, please feel free to contact me directly.

Sincerely,

David A. Naber  
Chief of Party



July 29, 1999

Sameh El Gayyar  
USAID  
Cairo, Egypt

Reference: Contract No. 263-C-00-97-00072-00

Dear Dr. El Gayyar,

MAXIMUS is pleased to submit the Second Quarter 1999 Quarterly Progress Report (QPR) for the Health Policy Sector Project (HPSP), Cairo Curative Organization Health Management Information System (CCO HMIS). This report covers the period April 1 through June 30, 1999. The Project Management Plan submitted on August 18, 1998 served to provide status for previous quarters and also as the Annual Implementation Plan (AIP) for 1999. All status in this QPR is benchmarked against that AIP.

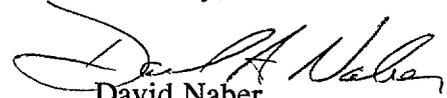
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- o Software for terminal emulation and Windows 98 was both purchased and installed; and
- o Training progressed substantially and Naser Institute shadows were welcomed to the project and began training.

In addition, you recently requested a copy of our deliverable list with expected due dates. Please note that this list is included as part of the QPR, and can be found in Section 3.

Should you have any questions about the content of this report or wish to discuss any issues mentioned, please feel free to contact me directly.

Sincerely,

  
David Naber  
Chief of Party

Cc: Dr. Mohsen Mohamed, CCO Chairman  
Dr. Adel Youssef, Director of Naser Institute

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## 1 NARRATIVE: OVERVIEW OF THE QUARTER

This is the Second Quarter, 1999 Quarterly Progress Report (QPR) for the MAXIMUS CCO HMIS project. This report covers the period from April 1, 1999 through June 30, 1999. It provides an overview of the major events and accomplishments of the quarter, a summary of progress by task, deliverables status, the status of hardware ordered, and a discussion of major issues.

### 1.1 Background

This is a cost plus fixed fee, completion-type contract. A letter contract was signed by USAID and MAXIMUS on July 1, 1997 signaling the award of this contract. However, definitization of the contract was still outstanding. The definitized contract was signed January 7, 1998. At the same time, USAID issued a letter to MAXIMUS requesting presentation of a cost proposal for the following changes:

- o substitution of Dar El Shifa and Red Crescent Hospitals for Naser Institute and Pyramids Hospitals;
- o substitution of the Veterans' Administration Health Information Systems Technology (VISTA) software package for the software solution proposed in the BAFO;
- o deletion from the contract of the Contractor's responsibility for communications line charges (later for all network communications expenses); and
- o addition of technical support for the installation of the VISTA software in Naser Institute. This technical support consists of implementation planning, system analysis and training assistance. The support does *not* include commodity procurement, telecommunications or site preparation nor actual HMIS implementation as defined in the contract.

These changes were incorporated into a new, amended contract which was signed during the period covered by this QPR. This amended contract includes a nine-month extension to the project end date.

In summary, there have been a number of changes to the contract. Primary modifications to the scope of work since the original contract signing include:

- o change in the software selected for the HMIS;
- o change in personnel staffing plan;
- o change in deliverables (this consolidation and definitization of deliverables was covered in the Project Management Plan, Deliverable #1); and

- o addition of technical assistance for Naser Institute as part of the project.

These changes are still being integrated into the project, as they are new to the modified contract. It is expected that the magnitude of these changes will continue to add complexity to the project as time goes on. In particular, the contractor is concerned that the Naser Institute is not fully the responsibility of the contractor. This issue has continued to impact the project this quarter, as hardware delivery and installation is still not fully completed. MAXIMUS is only responsible for technical assistance for the HMIS and F&MAS implementations; some definition is still ongoing as to who is responsible for site preparation, equipment procurement, installation and maintenance. This situation has been monitored over the past two quarters and should continue to receive attention in subsequent periods.

## 1.2 Expected Results

The amended contract has twenty-six tasks:

1. Project Orientation and Planning, Monitoring and Reporting
2. Revise Existing Departmental Operations or Procedures Manuals
3. Physical Site Preparation
4. Review HMIS Functional Design
5. Develop the HMIS Technical Design, Enhance and Finalize
6. Order and Deliver Hardware, Software and Telecommunications
7. Coordination and Supervision of Installation
8. Plan, Provide and Customize HMIS Application Software
9. Provide Complete System and User Documentation
10. Plan and Conduct Training
11. Hardware/Software Testing, Implementation and Maintenance
12. Conversion from Manual to Automated Systems
13. Post-Implementation Audit
14. Interim Report on PCS and F&MAS Implementation
15. Identify and procure Departmental Protocols and Procedures

16. Develop Management and Organizational Infrastructure for the MNS Knowledgebase
17. Provide and Adapt Applications for Medical Protocols and Diagnostic Aids
18. Provide and Adapt Applications for Nursing Protocols, Interventions and Procedures
19. Provide and Adapt Applications Software for Critical Care Area Support and Ancillary Support Services
20. Install and Test MNS Hardware and Software
21. Integrate MNS Modules with PCS
22. Develop MNS Technical and User Manuals
23. Conduct Training for MNS Users and Counterparts
24. Implement the MNS System
25. Post-Implementation Audit and Evaluation
26. Final Report on the Total HMIS System Implementation

Descriptions of the expected results of each task have been provided in the Project Management Plan, and are not repeated here for the sake of brevity. In some cases, there are slight revisions to the task activities because of the inclusion of technical assistance for Naser Institute. These revisions are noted in the QPR. The remaining sections of this QPR describe activities that took place during the second quarter of 1999. Tasks for which no activities were planned during the quarter are not included in the discussion.

### 1.3 Current Activities Including Subcontracting

MAXIMUS is the prime contractor for this project. Additionally, there are two contractors providing project support. ICL, as a subcontractor to MAXIMUS, provides the F&MAS software and implementation. Arabsoft, as a subcontractor to MAXIMUS, provides some technical staff – currently this is one Training Manager. All project activities are interrelated and supported by this MAXIMUS Project Team, in order to successfully fulfill the goals of the project.

During the period covered by this report the following significant activities or events occurred.

- o The computer training room at CCO Headquarters was completed, including networking capabilities;
- o Giza Systems was awarded the contract for installation and integration services for the network at Naser Institute as well as CCO;
- o Substantial progress was made in the development of functional designs for the F&MAS;
- o Coordinators for various HMIS modules – laboratory, blood bank and ADT – were identified at facilities;
- o Software for terminal emulation and Windows 98 was both purchased and installed; and
- o Naser Institute shadows were welcomed to the project and began training.

#### 1.4 Performance

The following sections review the activities in progress during this quarter and comment on the status of each. The main headings are tasks as shown in the Project Management Plan, which is the amended task list per the contract, signed in January 1998. Only those tasks for which work was performed this quarter are discussed.

##### 1.4.1 Physical Site Preparation (Task 3)

The computer training room was completed at CCO Headquarters in April, with the delivery and installation of network cards and a network hub. However, the project experienced problems with power for this room in the first part of the quarter. After much time and effort on the part of the project staff, the building contractor and local electrician, a solution to the problem was derived. By distributing the power delivered to the room, the project limited the chance of damaging equipment as a result of low or inconsistent voltage.

As mentioned previously, the contractor's sole role in the Site Preparation task for Naser Institute is to provide input to the Naser Institute/USAID regarding placement of the workstations, cabling, etc. During this quarter, a thorough walk through of the hospital helped to identify a server room, MIS staff room and cable locations. Also this quarter, it was expected that a vendor would be selected to perform the installation of cabling for the network at Naser. The anticipated vendor – Giza Systems – submitted a bid late in the quarter that was higher than expected, and a decision was still pending whether or not to request bids from other vendors.

## 1.4.2 Review HMIS Functional Design (Task 4)

The following sections discuss progress with the HMIS functional designs.

### 1.4.2.1 VISTA

The project continued functional design activities this quarter, including the production of documentation. Continuing progress was made in developing a matrix of functionality comparisons between CCO and NI requirements and VISTA. These matrices comprise part of Deliverable 4, the Functional Design Documents.

Specific progress was made in the functional analysis and design of the Patient Identification, ADT and Scheduling (PIMS) module. Project staff met with application coordinators assigned to this module in order to incorporate CCO's business processes into the functionality of the module. A functionality matrix was submitted by the project to CCO consultants for review and comment. It is expected that next quarter the module will be ready for internal testing and review, and eventual use by CCO. It was decided by CCO that El Helal hospital would be the first facility to install and run the PIMS module when it is ready for testing.

### 1.4.2.2 F&MAS

Last quarter, a contract was signed with ICL to develop and implement a Financial and Management Administrative System (F&MAS) customized to meet the needs of the CCO and NI. Work progressed throughout the quarter in the area of financial analysis and design. In early May, ICL delivered the final drafts for all but one of the modules of Phase I of the finance project. Modules of Phase I include the following: general ledger, budgeting, decision support, patient billing, accounts receivable, payroll administration and personnel, and stock and inventory control.

In the upcoming quarter, work will focus on the detailed designed documents for Phase I, and functional analysis for phase II modules as well as analysis on the integration of the F&MAS with VISTA.

## 1.4.3 Develop the HMIS Technical Design, Enhance and Finalize (Task 5)

During this quarter, the contractor continued with activities necessary to finalize VISTA design changes. This included the creation and documentation of programming specifications to guide the development of any new code as required. These specifications were finalized during the quarter, and submitted as Deliverable 6, Programming Specifications and Conventions.

Also during this quarter, work continued in documenting descriptions of the overall hardware, software, and telecommunications architecture of the CCO HMIS. This

document will form the Detailed Hardware, Software, and Telecommunications Specifications (Deliverable 7) which will be completed in the upcoming quarter.

#### 1.4.4 Order and Deliver Hardware, Software and Telecommunications (Task 6)

Before the beginning of this quarter, the bulk of the hardware (for the 3 CCO hospitals and HQ) had cleared customs and was ready for installation. This order included 127 workstations, 182 printers, spare parts and other peripheral items for the computers. These items were procured for the three CCO hospitals and CCO headquarters.

During the previous period, the project suffered delays in two separate hardware orders. The first related to a server order for CCO hospitals that experienced problems in the processing stage of the order. This delay extended into the early part of this quarter. The other shipment, coordinated by the USAID IRM for Naser Institute, experienced similar delays.

After a great deal of effort, the order arrived in Egypt in late April. Subsequent delays in clearing the equipment through customs were incurred, and it was not delivered to CCO until May.

The second order for Naser Institute was eventually received in late May. The order also included some equipment for CCO. To date, we still have not received the servers for Naser Institute, which was done in a separate order. An order of printers for Naser Institute, as well as additional printers for CCO has also yet to be done. These delays impact other aspects of the project for which the delivery of the hardware was a prerequisite.

USAID is responsible for the networking/telecommunications equipment they are procuring for all facilities (the 3 CCO hospitals, CCO HQ, and Naser Institute). The contractor maintains concerns that delays in delivery and installation of the networking equipment will delay beta testing of VISTA and MNS Knowledgebase software.

The project plan is to install all of the servers at CCO Headquarters, install and test all of the necessary components, and then transfer them to the facilities. It is anticipated that the first installation at facilities will begin sometime in August. Installation of equipment for Naser Institute is contingent upon the cabling effort that is likely to be done by Giza Systems.

Terminal emulation software was procured during the quarter from NCR. After analysis performed in the previous quarter, it was determined that NCR's product, Dynacom, most adequately met the project's terminal emulation needs. The product was also installed and tested during the quarter.

Other software to be procured during the quarter included Windows NT licenses, and Arabic 98, the Arabic version of Windows.

Work on the Final HMIS Installation Plan (Deliverable 8) progressed during the quarter, and it is expected to be finished during the upcoming quarter.

#### 1.4.5 Coordinate and Install Hardware, System Software and Telecommunications (Task 7)

This task is largely being conducted by NCR Egypt. The completed, signed off NCR installation reports, which constitute Deliverable 9, will be produced as installation progresses.

System software and hardware have been installed at CCO Headquarters. No installation at CCO hospitals has been completed to date. Installation of equipment at the hospitals is not planned until shortly before software is to be installed. In the contractor's experience, early installation tends to lead to damaged or lost equipment. In addition, delays as described in Task 6 have hindered the project's ability to deliver and install other hardware.

For Naser Institute, USAID is responsible for arranging and coordinating delivery, installation and testing of all the items procured directly by the agency.

#### 1.4.6 Conduct Training Plans (Task 10)

The following training activities were realized this quarter.

##### 1.4.6.1 Training Plans

During the quarter, deliverables 15 and 16 - Systems Training Plan and End User Applications Plan, respectively - were both submitted. The training plan (Deliverable 14) and Management User Applications Plan (Deliverable 17) had both been submitted in previous quarters.

##### 1.4.6.2 HMIS Training Delivery

During the quarter, the project completed twenty four training courses, of which three were held off-site at the NCR IT Training Center in Agouza. 1092 person-days of formal classroom training were delivered to CCO/NI counterparts. All training materials for these courses have been developed and customized.

As of the end of the quarter, Group II, consisting of analysts, programmers and administrators was nearly finished with their training. Early next quarter, a graduation ceremony will be conducted for Group II members. Group II included the first members from Naser Institute to be trained.

The following table (Exhibit 1-1), details this quarter's training delivery. Note that the total number of persons who received training is not cumulative. Rather, this number is the total number of students enrolled in classes, with the potential for repeats due to students enrolled in multiple classes.

**Exhibit 1-1  
HMIS TRAINING DELIVERED DURING THE QUARTER**

Description	CCO HQ	Heliopolis	Dar El-Shefa	El Helal	Naser Institute	Total
Group 1 Counterparts - OJT	2	1	2	2	-	7
# Classes	4	4	4	4	-	4
#Person-Days	42	32	90	44	-	208
Group 2 Counterparts - Onsite	1	5	2	2	7	1
# Classes	8	8	8	8	8	8
#Person-Days	45	162	90	63	207	567
Group 2 Counterparts - Offsite	1	3	2	1	5	12
# Classes	1	1	1	1	3	3
#Person-Days	5	15	10	5	49	84
HMIS Applications Counterparts OJT	5	5		1		11
# Classes	2	3				3
#Person-Days	40	98		3		141
HMIS Applications - Onsite Classes					12	12
# Classes					6	6
#Person-Days					92	92
<b>TOTALS</b>						
Counterparts	4	9	6	5	12	59
# Classes	13	13	13	13	11	24
#Person-Days	92	209	190	112	256	1092

**Exhibit 1-2**  
**ACTUAL COURSES DELIVERED DURING THE QUARTER**

Course Name	# Trainees	Training Site	Class Duration	Training Material	Start	End	Person/ Days
Introduction to CCO-MAXIMUS HMIS project	13	HQ	2	Complete	18 Apr.	19 Apr.	26
Introduction to " M "	13	HQ	4	Complete	20,21,22,26 Apr.		52
VISTA modules overview & kernel concepts	13	HQ	2	Complete	27,28 Apr.		26
	13	HQ	1	Complete	29 Apr.	29 Apr.	13
FileMan	14	HQ	9	Complete	2 May	13 May	126
	12	HQ	10	Complete	16 May	27 May	120
ScreenMan	12	HQ	3	Complete	June 1	June 3	36
Pharmacy, Surgery, Dietetics	12	HQ	5	Complete	June 6	June 10	60
Dietetics, MailMan	12	HQ	5	Complete	June 20	June 24	60
Pharmacy, Surgery, Radiology, Lab., B.B.	12	HQ	4	Complete	June 27	June 30	48
Introduction and overview to system analysis	4	NCR	4	Complete	5 Apr	8 Apr	16
Introduction programming logic	4	NCR	2	Complete	14 Apr	15 Apr	8
Windows NT Fundamentals	4	NCR	5	Complete	13 Jun	17 Jun	60
	2	HQ	19	Complete	1 Apr	30 Apr	38
Mailman - HMIS Apps.	3	HQ	19	Complete	1 May	30 May	57
	4	HQ	3	Complete	27 Jun	29 Jun	12
OJT - Naser HMIS Apps.	5	HQ	36	Complete	1 Jun	29 Jun	36
Introductory Training - HMIS Apps.	17	NI	2	Complete	1 Jun	2 Jun	34
Training Basics	4	HQ	5	Complete	6 Jun	10 Jun	20
Training Methods	4	HQ	2	Complete	13 Jun	14 Jun	8
Training Tools	4	HQ	3	Complete	15 Jun	17 Jun	12
Training Management	4	HQ	4	Complete	20 Jun	23 Jun	16
Totals	59						1092

1.4.7 Conversion from Manual to Automated Systems (Task 12)

Most applications will build new databases from the day that conversion commences, which is the "go live" day according to the contract. The only data to be loaded from existing magnetic media will be the most recent year's financial data including charts of accounts and billing codes.

Analysis was done during this quarter to begin planning this conversion. Results of this will be continued in the upcoming quarter, and comprise the Data Conversion Plan (Deliverable 20).

5

#### 1.4.8 Develop Management and Organization Structure for MNS Knowledgebase (Task 16)

The MNS Knowledgebase is viewed as a sophisticated web-based intranet operating over the TCP/IP being developed to interconnect the Pilot Hospitals. In support of this, an Internet Service Provider from within Egypt was selected last quarter to supply the connection from CCO Headquarters to the Internet, with web hosting for the Knowledgebase. (Note: the CCO has requested that the Knowledgebase be housed at CCO headquarters, as opposed to Red Crescent Hospital, as is stated in the contract. The contractor is in agreement with this. CCO and Naser Institute will be responsible for all telecommunications links between the hospitals and the CCO headquarters to make the Knowledgebase available to hospital users).

Analysis for the design and planning of the MNS Knowledgebase continued during the quarter. A List of Available Protocols, etc. (Deliverable 23) was developed, and is expected to be finalized and submitted next quarter. This document will serve as a guide in the selection process for determining the profile of the knowledgebase.

It was suggested that a meeting be held in July, bringing together CCO key staff and project staff to discuss how the knowledgebase could be most beneficial to the CCO. The results of this meeting should help to finalize the Plan for the Management and Organizational Infrastructure of the MNS Knowledgebase (Deliverable 24), that had already been started.

## 2 MAJOR ISSUES

This section reviews the major issues that arose during the quarter, as well as those that remain from previous quarters. Issues listed in this QPR as resolved will not appear in subsequent QPRs.

### 2.1 Hardware

The following issues arose relating to hardware.

#### 2.1.1 Hardware Orders

**Issue:**

During the previous period, the project suffered delays in two separate hardware orders. The first related to a server order for CCO hospitals that experienced problems in the processing stage of the order. This delay extended into the early part of this quarter. The other shipment, coordinated by the USAID IRM for Naser Institute, experienced similar delays.

**Resolution:**

After much follow-up and persistence, the first order arrived in Egypt in late April. Subsequent delays in clearing the equipment through customs meant that equipment was not delivered to CCO until May. The second order was eventually received in late May. However, these delays have impacted other aspects of the project for which the delivery of the hardware was a prerequisite.

#### 2.1.2 Printers

**Issue:**

As mentioned in previous QPRs, all of the dot matrix printers that were ordered and delivered were without network cards. CCO has recently expressed an interest in implementing a larger proportion of dot matrix printers than laser printers because of the impact in cost of repair, maintenance and consumables. However, networkable printers of this type are still difficult to find on the market.

**Resolution:**

The project is investigating options to impact the final order for additional equipment. This issue has yet to be fully resolved, and warrants further discussion in future periods.

## 2.2 Arabic Emulator

### Issue:

Information entered in the Run-Time Environment (RTE) and the terminal emulator must be processed by this software and output in a correct format. However, the software provided by the RTE vendor did not adequately serve this function.

### Resolution:

NCR's Dynacom has been procured.

## 2.3 Training

### Issue:

During the quarter, some shadow candidates were either transferred or removed from the project without the project being formally informed. This has a direct impact on the quality of the trainees, the quantity of trainees maintained, and the cost of training (lost cost on removed trainees, and cost of training replacements).

### Resolution:

In order that the project be able to maintain an adequate number of qualified shadows in each group, it is important that movement is kept to a minimum. If changes must be made, it has been requested that the project receive ample notice, and that substitute trainees are provided. This issue has yet to be fully addressed, and warrants further discussion in future periods.

## 2.4 Site Preparation

The following issues arose this quarter relating to site preparation.

### 2.4.1 Dar El Shefa Hospital

#### Issue:

During this quarter, several departments at Dar El Shefa, including outpatient clinics, outpatient registration and scheduling and some inpatient admissions were transferred across the street to another building. This was done without notifying the project. The building across the street has not been cabled, and the shifting of departments also affects the cabling that was done to the original building.

#### Resolution:

NCR will have to prepare the new building for automation, and may need to do rework of the original building. This will have cost and schedule implications for the project. Also, steps must be taken to be sure that the project will be informed about these types of changes well in advance of their execution.

#### 2.4.2 Heliopolis Hospital

**Issue:**

Some cables were physically torn down during the quarter.

**Resolution:**

First, an assessment will have to be done of the severity of the damage. Responsibility will need to be determined as far as replacing/repairing the damaged cabling. Also, a standardized, monthly letter should be sent to hospitals kindly asking them not to tear down the cabling.

#### 2.5 Year 2000 Preparations

**Issue:**

Last quarter it was determined that the project itself is well prepared for Year 2000. It was stated in the previous QPR and in meetings throughout the quarter that where the problem may lie, however, is in the infrastructure of the CCO and NI. There is a possibility that severe problems with electricity, water and medical equipment will be experienced.

**Resolution:**

Preparations for potential infrastructure problems have yet to be fully realized. Contingency planning should be done for each facility, including steps to be taken should a loss of electricity, water, or proper functioning of medical equipment occur. If this activity is not assumed by the CCO, it is suggested that MAXIMUS, which has experience in Y2K planning, do an assessment of the potential impact, and be contracted to perform such contingency planning as soon as possible.

### 3 STATUS OF PROJECT DELIVERABLES

Work on several deliverables was accomplished during this quarter. The following table, Exhibit 3-1 shows the status of all deliverables, as per the 1999 Annual Implementation Plan (AIP). Note that a new column for due dates and delivered/expected dates was added to this exhibit, at the request of USAID. The "due date" is an internally set date that the project uses to monitor its own progress. Delivered/expected dates are either the date a deliverable was actually submitted, or the expected date which will be listed only if there is a variance between the internal due date and expected delivery date.

**Exhibit 3-1  
STATUS OF DELIVERABLES**

No.	Name	Due Date	Percent Complete	Delivered/Expected
1	Detailed Project Management Plan		100%	11/98
2	Revisions to Existing Operations/Procedures	11/00	0%	
3	Blueprint Plans for HMIS Facilities	7/99	80%	8/99
4-1 to 4-12	Final Agreed-Upon Functional Design (FAFD) for PCS/VISTA Modules	Staggered	10%	
4-13 to 4-21	Final Agreed-Upon Functional Design (FAFD) for F&MAS Modules	Staggered	60%	
5-1 to 5-12	Detailed Design Document (DDD) for PCS/VISTA Modules	Staggered	10%	
5-13 to 5-21	Detailed Design Document for F&MAS Modules	Staggered	20%	
6	Programming Specifications and Conventions		100%	5/99
7	Detailed Hardware, Software and Telecommunications Specification	8/99	60%	
8	Final HMIS Installation Plan	8/99	50%	
9	System Installation and Installation Reports	8/99	0%	10/99
10	Source Code	11/00	0%	
11	HMIS Test Plan	9/99	0%	
12	Hardware/Software Technical References (English)	8/99	25%	
13-1 to 13-21	End User and Management Documentation	Staggered	0%	
14	Training Plan (Overall)		100%	6/99
15	Systems Training Plan & Materials		100%	6/99
16	End User Training Plan & Materials		100%	6/99
17	Management Training Agenda & Materials (includes Evaluation Report)		100%	3/99
18	HMIS Acceptance Test Report	9/99	0%	
19	HMIS Maintenance Plan	11/00	0%	
20	Data Conversion Plan	5/99	25%	8/99
21	HMIS Post-Implementation Audit Report	11/00	0%	
22	PCS & F&MAS Implementation Interim Report	11/00	0%	
23	List of Available Protocols and Procedures, Materials, Software, Etc.	6/99	90%	8/99
24	Plan for Management and Organizational Infrastructure for MNS	6/99	25%	8/99
25	Knowledgebase Web Server and Web Page Authoring Tool Set	7/99	60%	8/99
26	Medical Diagnosis and Treatment Support Applications Software	7/99	0%	9/99
27	Install & Test MNS Knowledgebase	7/99	0%	9/99
28	MNS Technical and User Manuals	8/99	0%	9/99
29	Training Program for MNS Users	8/99	0%	9/99
30	MNS Test Report and Maintenance Plan	8/99	0%	9/99
31	MNS Post-Implementation Audit Report	10/99	0%	11/99
32	Final Report on Total HMIS System Implementation	11/00	0%	

**Appendix A (page 1 of 6)  
PROJECT STATUS SUMMARY**

CCO HMIS QPR STATUS VISTA (PCS), MNS Knowledgebase and F&MAS			1999									
ID	Task	Dur	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
1	VISTA Project Planning and Startup	days 926	[Progress bar]									
2	(Pre-Planning - Vendor (Stateside	days 25	[Progress bar]									
3	Final Pre-Deployment Prep	days 7	[Progress bar]									
4	Proj. Monitoring and Administration	days 750	[Progress bar]									
5	Recruit/Hire Local Analysts/Programmers	days 45	[Progress bar]									
6	Interview/Test CCO Analysts/Programmer	days 24	[Progress bar]									
7	Deploy VISTA/MUMPS Finance Expert	days 14	[Progress bar]									
8	Project Deliverables	days 457	[Progress bar]									
95	F&MAS Module	days 254	[Progress bar]									
96	Analysis Task	days 116	[Progress bar]									
97	Quality Review	days 2	[Progress bar]									
98	Data Modeling	wks 2	100	[Progress bar]								
99	Moduling for Application 1	wks 4	[Progress bar] %100									
100	Moduling for Application 2	wks 4	[Progress bar] %100									
101	Moduling for Application 3	wks 4	[Progress bar] %100									
102	Moduling for Application 4	wks 4	[Progress bar] %90									
103	Quality Review	days 2	[Progress bar] %100									
104	Testing and approving app's 1,2,3,4	wks 2	[Progress bar] %75									
105	Data Modeling	wks 6	[Progress bar] %66									
106	Moduling for Application 5	wks 4	[Progress bar] %0									
107	Moduling for Application 6	wks 4	[Progress bar] %0									
108	Moduling for Application 7	wks 4	[Progress bar] %0									
109	Moduling for Application 8	wks 4	[Progress bar] %0									
110	Quality Review	days 4	[Progress bar] %0									
111	Testing and approving app's 5,6,7,8	wks 2	[Progress bar] %0									

Project: CCO VISTA Implementation Date: Jan. 28, 1999	Task	[Progress bar]	External Tasks	[Progress bar]
	Progress	[Progress bar]	Project Summary	[Progress bar]
	Milestone	◆	Split	.....
	Summary	[Progress bar]	Rolled Up Split	.....

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PROJECT STATUS SUMMARY**

CCO HMIS QPR STATUS VISTA (PCS), MNS Knowledgebase and F&MAS			1999							
ID	Task	Dur	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
112	Design Task	days 87								
113	(Database Design (phase 1	wks 2								
114	(Application Design (phase 1	wks 2								
115	Quality Review	days 3								
116	(Database Design (phase 2	wks 2								
117	(Application Design (phase 2	wks 2								
118	Quality Review	days 3								
119	Programming Task	days 104								
128	Quality Assurance	days 99								
129	(Internal Testing (phase 1	wk 1								
130	(End User Testing (phase 1	wks 2								
131	(Internal Testing (phase 2	wk 1								
132	(End User Testing (phase 2	wks 2								
133	End User Training	days 104								
134	(Training (phase 1	wks 4								
135	(Training (phase 2	wks 4								
136	Implementation Phase	days 144								
137	Implement HQ, Hosp1, Hosp2	wks 21								
138	Implement Hosp3, Hosp4	wks 12								
140	Prepare Sites for Networking	days 60								
141	HQ Renovation/Cabling	days 30								
142	EI Helal Renovation/Cabling	days 30								
143	Dar El Sheifa Renovation/Cabling	days 30								
144	Heliopolis Renovation/Cabling	days 30								
145	Rework of Pilot Hosp Sites	days 30								

Project: CCO VISTA Implementation Date: Jan. 28, 1999	Task		External Tasks	
	Progress		Project Summary	
	Milestone		Split	
	Summary		Rolled Up Split	

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PROJECT STATUS SUMMARY**

CCO HMIS QPR STATUS VISTA (PCS), MNS Knowledgebase and F&MAS			1999								
ID	Task	Dur	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
147	Hardware Procurement, Installation	days 418	[Gantt bar from Feb to Sep]								
148	Order PCs and Printers for all sites	day 1	[Gantt bar in Feb]								
149	Receive PCs and Printers for all Sites	days 2	[Gantt bar in Feb]								
150	Receive Server for HQ	day 1	[Gantt bar in Feb]								
151	Order Servers for all Sites	day 1	[Gantt bar in Feb]								
152	Receive Servers for all Sites	wks 2.4	[Gantt bar in Feb, %100]								
153	Setup LAN at HQ	days 5	[Gantt bar in Feb]								
154	HW Setup/Installation Hospital 1	wks 2	[Gantt bar in Feb, %0]								
155	HW Setup/Installation Hospital 2	wks 2	[Gantt bar in Feb, %0]								
156	HW Setup/Installation Hospital 3	wks 2	[Gantt bar in Feb, %0]								
158	MUMPS Installation and Training	days 171	[Gantt bar from Feb to May]								
159	Install MUMPS at HQ	day 1	[Gantt bar in Feb]								
160	Evaluation of MUMPS Training Package	wks 2	[Gantt bar in Feb]								
161	TOT by Local MUMPS Consultant	wks 3 2	[Gantt bar in Feb, %100]								
162	MUMPS Training for CCO	wks 12	[Gantt bar in Feb, %100]								
164	MNS Knowledgebase	days 255	[Gantt bar from Feb to Sep]								
165	Define Network Architecture	days 158	[Gantt bar from Feb to May]								
166	Order Server, other	days 7	[Gantt bar in Feb]								
167	Obtain telecomm/internet connections	days 40	[Gantt bar in Feb, %100]								
168	Survey Market for protocols, MD tools	days 20	[Gantt bar in Feb, %95]								
169	Complete buy list with CCO/USAID	days 5	[Gantt bar in Feb, %0]								
170	Buy Web Tools	wks 2	[Gantt bar in Feb, %0]								
171	Install HW, network, tools	days 7	[Gantt bar in Feb, %0]								
172	Build Web Server	days 15	[Gantt bar in Feb, %0]								
173	Build Applications	days 20	[Gantt bar in Feb, %0]								

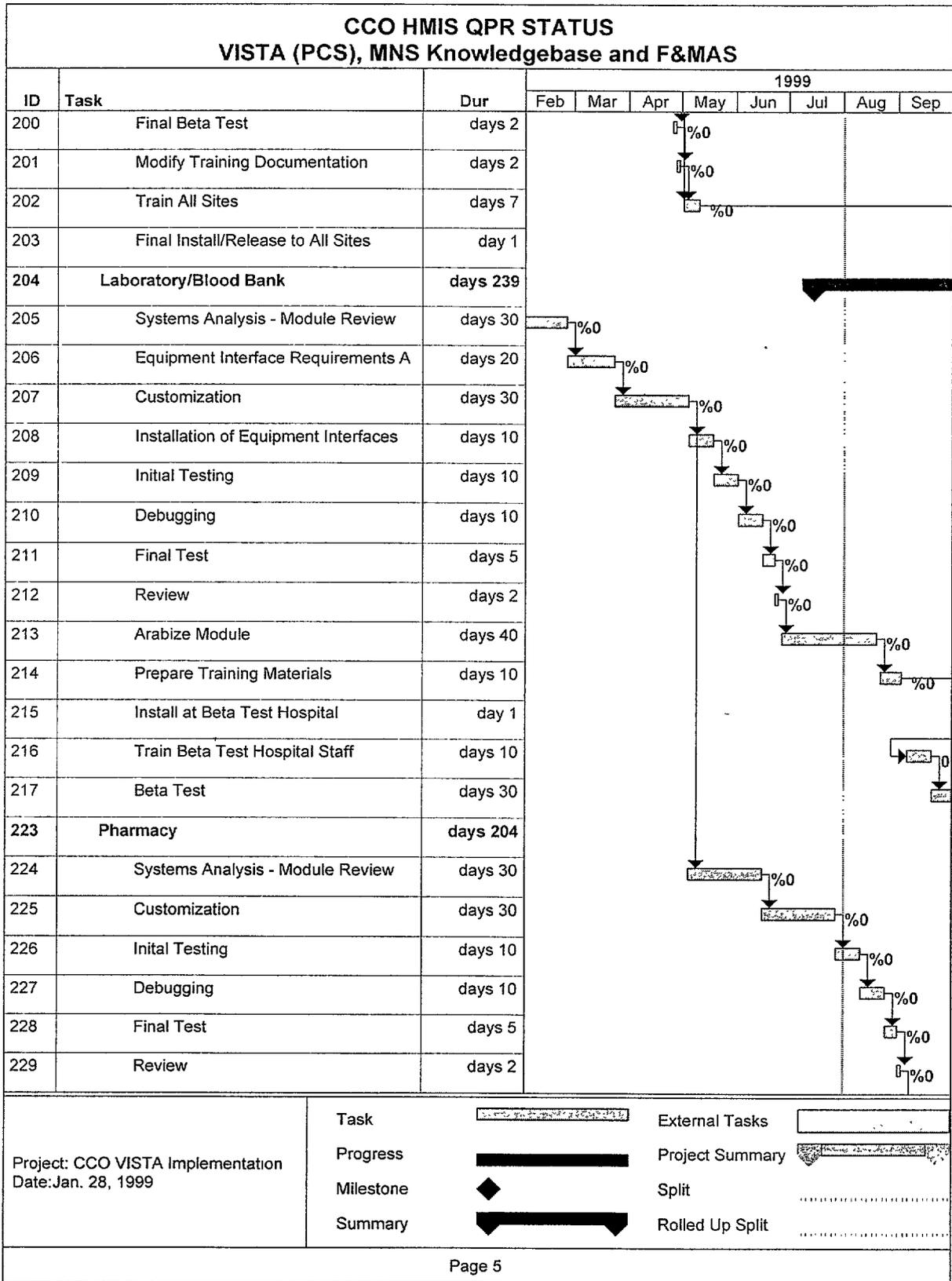
  

Project: CCO VISTA Implementation Date: Jan. 28, 1999	Task	[Gantt bar]	External Tasks	[Gantt bar]
	Progress	[Gantt bar]	Project Summary	[Gantt bar]
	Milestone	◆	Split	[Gantt bar]
	Summary	[Gantt bar]	Rolled Up Split	[Gantt bar]

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PROJECT STATUS SUMMARY**



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PROJECT STATUS SUMMARY**

CCO HMIS QPR STATUS VISTA (PCS), MNS Knowledgebase and F&MAS										
ID	Task	Dur	1999							
			Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
230	Arabize Module	days 30								
240	Radiology	days 179								
257	Medical Record Tracking	days 179								
274	Text Integrating Utility/Authorization Su	days 179								
Project: CCO VISTA Implementation Date: Jan. 28, 1999		Task		External Tasks						
		Progress		Project Summary						
		Milestone		Split						
		Summary		Rolled Up Split						
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