

**MAXIMUS**

CHEMONICS-ARABSOFT



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**Prepared for:**  
U.S. Agency for International Development  
Health Insurance Organization, Egypt

**Contract Number:**  
263-0170-C-00-3042-00

## FINAL INSTALLATION PLAN

**Deliverable #28**

**USAID Project Number: 263-0170**  
[Develop a Detailed and Updated Management Information System for the  
Egyptian Health Insurance Organization, Cost Recovery Program]

**Prepared by:**  
The MAXIMUS, Chemonics, Arabsoft Project Team

**Date:**  
May 23, 1996

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May 23, 1996

Dr. Nabil El Mehairy  
Chairman  
Health Insurance Organization  
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Cairo, Egypt

Dear Dr. El Mehairy:

MAXIMUS is pleased to submit the *Final Installation Plan* for the Health Insurance Organization (HIO) Management Information System (MIS) Project. The plan describes the strategy to be used by the HIO MIS Project as it installs hardware and software at HIO sites.

The scope of this plan is necessarily large; the HIO MIS is to be installed at more than 80 sites, of several different types, throughout Egypt. It is also detailed. The plan describes preparations and coordination needed before installation and the actual installation process, including testing. Also included is a section on maintenance contracts for hardware, software, and other electrical equipment.

Please pay close attention to Section 3, Installation Responsibilities. Successful implementation of the HIO MIS depends on installation responsibilities being met by both HIO and the contractor. For project implementation to proceed on schedule, both parties must fulfill their responsibilities in a timely manner.

We look forward to your comments and suggestions. If you have any questions about this plan, please do not hesitate to contact me.

Sincerely,

Leslie Graham  
Chief of Party

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Ref: Project Number 263-0170-C-00-3042-00

Dear Mr. Abdou Rahmaan:

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Leslie Graham  
Chief of Party

cc: Dr. Nabil El Mehairy, HIO Chairman  
General Faisal Taie, HIO

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**SECTION 1**

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**INTRODUCTION**

# 1 INTRODUCTION

This document presents the Installation Plan for the Management Information System (MIS) being developed for the Health Insurance Organization (HIO) under a contract funded by the United States Agency for International Development (USAID). This document delineates the responsibilities of the HIO and the contractor during the installation phase. Installation schedules are presented, as are testing and acceptance criteria for the hardware. The maintenance contract mechanisms are described, and the processes for site inventory and equipment turnover is outlined.

**SECTION 2**

---

**INSTALLATION LOCATIONS AND PACKAGES**

## 2 INSTALLATION LOCATIONS AND PACKAGES

In September 1995 the MAXIMUS contract was amended to further define the software being developed and the sites to be implemented using contract resources. Site types to receive automation are:

- o polyclinics (58),
- o hospitals (15),
- o branch facilities (8),
- o pharmaceutical stores (estimated 4),
- o HIO Headquarters in Roxy (1), and
- o the central HIO MIS Center (1).

The number of polyclinics and hospitals where the MIS is to be installed is further defined by branch. Exhibit 2-1 lists the number of polyclinics and hospitals, by branch, where the MIS is to be installed.

**Exhibit 2-1  
POLYCLINICS AND HOSPITALS, BY BRANCH, WHERE THE MIS IS TO BE  
INSTALLED\***

Branch	Polyclinics	Hospitals
Cairo	19	5
Northwest Delta	25	3
Canal	4	2
East Delta	10	5
Mid Delta	0	0
Giza	0	0
Mid Upper Egypt	0	0
South Upper Egypt	0	0
<b>Total</b>	<b>58</b>	<b>15</b>

None of these facilities are to be student-only facilities. All must serve, at least in part, Law 32 and Law 79 beneficiaries. For pharmaceutical stores, some branches have

---

\* Numbers of polyclinics and hospitals by branch are subject to change due to budget, costs, or outstanding issues. Totals are minimum numbers of sites where MIS will be installed.

physical locations for their stores; other maintain a logical store within the branch facility itself and directly distribute pharmaceuticals to hospitals and pharmacies. It is currently estimated that four actual pharmaceutical stores which will be automated. Branches with logical stores will have store automation included within the branch automation. The contract does not include resources for automation of medical zone offices, employer/student general practitioner clinics, and contracted provider facilities.

Exhibit 2-2 lists the software packages to be installed by site type. With the exception of branches, every site of a specific type will receive the set of software packages listed under that site type in Exhibit 2-2. Some sites may not make use of all the software packages installed. For example, polyclinics not having pharmacies will not use the Polyclinic Drug Control Module. However, the package will exist on the site machine should a pharmacy later be opened at that site.

**Exhibit 2-2  
SOFTWARE MODULES BY LOCATION**

Module	Site Type				
	HQ	Branch	Polyclinic	Hospital	Store
Beneficiary Registration/Eligibility Check	X	X	X		
Drug Control & Inventory	X	X	X	X	X
Patient Records			X	X	
Cost Accounting	X	X	X	X	
Medical Quality Assurance			X	X	
Admission/Discharge/Transfer				X	
Contracted Pharmacy		X			
Periodic Medical Exams		X			
Management Reporting	X	X			
Computer Operators	X	X	X	X	
Contracted Providers		X			

Only the Cairo, Northwest Delta, Canal and East Delta Branches will receive the set of branch software packages listed in Exhibit 2-2. The remaining branches will receive a package entitled "Aggregation Module" which will capture data necessary for management decision making at the Headquarters level.

The Headquarters packages listed in Exhibit 2-2 will be placed either at the MIS Center (Al Ahram Street) or at the HIO Headquarters (Roxy) location. Some packages will be located at the MIS Center but accessible from the Headquarters location via telecommunications lines.

**SECTION 3**

---

**INSTALLATION RESPONSIBILITIES**

### **3 INSTALLATION RESPONSIBILITIES**

Both the contractor and the HIO have responsibilities during the installation phase. These responsibilities are closely tied and must be completed on schedule so as not to impact the effectiveness of the other party. These responsibilities are described in the following sections.

#### **3.1 HIO Installation Responsibilities**

The HIO is responsible for areas of system implementation which pertain to individual sites, and for areas which pertain to the overall system sustainability. The following are HIO responsibilities pertaining to system implementation at individual sites:

- o Provision of space for a computer room in each facility and designation of space in the departmental areas which will receive automation (i.e., beneficiary registration, pharmacy, medical supply, etc.). In some cases this may mean consolidating or moving existing departments to make more efficient use of limited computer hardware.
- o Site renovation, as necessary, outside of the facility's computer room. This renovation may include fixing of plumbing leaks which could damage computer equipment or cables; the replacement of electricity cabling which is below specification; the building of partitions, windows, security screens, stairs, awnings, etc., which promote or deter access to the terminals in areas outside the computer room; or the alteration of countertops in terms of height or depth to fit terminals or to ease use by employees.
- o Supply of furnishings according to the furnishings matrix provided by the contractor.
- o Access to the facility by contractor or contractor-appointed personnel according to site preparation or installation schedules.
- o Procurement and distribution of expendable computer supplies (paper, magnetic tapes, printer ribbons, etc.) as outlined in the supplies matrix provided by the contractor.
- o Procurement and installation of telecommunications lines. This consists of an X.25 line ordered through EgyptNet for each facility plus one dial-up telephone line (with handset) to be installed in the computer room of each facility. HIO responsibility carries through to the service and upkeep of these lines using EgyptNet service personnel.
- o Provision of appropriate personnel. In each facility the HIO must supply both the required number of personnel and personnel with the appropriate

qualifications to operate the system. The number of personnel necessary and qualifications is specified by the contractor. These personnel must be fully dedicated to their positions as described in the job descriptions developed by the contractor.

- o Reproduction of training materials and user manuals. The contractor supplies the HIO with a camera-ready copy of these items. The HIO is responsible for the printing and distribution.
- o Commitment of facility manager to necessary procedural changes.

The HIO is also responsible for a number of overriding issues which pertain to installation and overall sustainability of the computer system. HIO responsibility in these areas is described below.

- o Data conversion, initiation, and upkeep. The HIO has responsibility for securing data tapes from the SIO and PIO, working with these organizations to upgrade the quality of data received, and processing data tapes and updates in a timely manner. In addition, the HIO has responsibility for building and maintaining a number of master data tables. These include:
  - . beneficiary data tables,
  - . governorate, markaz, sheyakha and other code tables,
  - . physician tables for each site,
  - . master ICD-9 table,
  - . master procedure table, and
  - . master drug table.

The contractor has developed the software to facilitate the HIO's management of these tables. The HIO must appoint staff to oversee, review, and update these tables on a regular basis.

- o Pay scales. The HIO will need to review and revise its pay levels to avoid significant turnover in its computer-trained personnel. The cost to the HIO of replacing trained personnel on an ongoing basis should be factored into the cost of pay modifications.
- o Shift work. The contractor has based all estimates of hardware (and in particular terminal) requirements on the assumption that HIO staff will work shifts to use the equipment to its fullest. Descriptions of shift work needs are given in the functional designs.

- o Information systems organizational structure. The required organizational structure for sustaining the information system was outlined in the contractor deliverable *Recommendations for Information Systems Organizational Structure*. This deliverable included a staffing plan for transitioning the HIO MIS Center from a mix of contractor and HIO personnel to HIO personnel only. The deliverable also provided organizational structures for the branch, polyclinic, and hospital facilities, and related these facilities to one another and to the MIS Center. The HIO must begin implementing this structure immediately and develop the management personnel capable of maintaining a structure of this type.
  
- o Help desk. The structure and procedures for building and maintaining a help desk at the branch and MIS Center level are detailed in the contractor deliverable *Recommendations for System Support Capability*. The HIO must appoint the personnel to meet these needs and put in place the telephone lines necessary to provide support (one dedicated telephone line in each branch computer room plus two dedicated lines at the MIS Center).
  
- o Document libraries and updates. Certain documents are "living" documents. These include system documentation, training materials, and user manuals. The HIO must dedicate individuals to the revision and distribution of these documents.
  
- o Budgets. The HIO is now or will be responsible for a variety of items related to the computer system which have associated costs. The HIO must now begin to research these items and include these estimated costs in future budgets. These items include but are not limited to:
  - . computer supplies (HIO responsibility beginning in 1997);
  - . ongoing telecommunications expenses (HIO responsibility beginning in 1997);
  - . salary costs from any adjustments to salary or shift work related to computer system use;
  - . maintenance or replacement of computer equipment (HIO responsibility beginning in 1998);
  - . maintenance of computer facilities including air conditioners, fire protection systems, furnishings, etc.; and
  - . printing costs for training materials and user manuals.

### **3.2 Contractor Installation Responsibilities**

Contractor responsibilities in the area of system installation and implementation include:

- o Completion of software modules to meet functional design requirements (with documented alterations as necessitated by on-site testing).
- o Timely procurement of equipment.
- o Site preparation of the computer room in each facility plus cabling to terminal locations outside the computer room. Specifications to the HIO of additional site preparation or renovation needs outside contractor scope.
- o Configuration of equipment and loading of software such that all machines for a facility type have equivalent configurations and errors are not introduced onto individual machines during the loading process.
- o Loading of site-specific, HIO-developed databases including beneficiary data and physician tables.
- o Specification to the HIO of furnishing, personnel, and supply needs for each site.
- o Training of HIO trainers who can present the MIS courses as developed under the contract.
- o Development and monitoring of the site implementation schedule. Communication to the HIO and within contractor staff of the implementation schedule and required completion dates for implementation items.

### **3.3 Other Issues of Responsibility**

There are areas of HIO operation which are in need of enhancement if the HIO is to make the greatest use of the management information system being installed. The HIO is ultimately responsible for making these changes, but the magnitude of the effort may cause the HIO to require outside assistance. Three areas in particular need attention.

1. **Introduction of Coding Standards (ICD-9, Procedure, and Drug coding)**  
In order for information systems to succeed, certain information must routinely be coded. The HIO must make decisions about who will do this coding and then how to train the staff chosen. For example, coding of diseases in the medical record (ICD-9) could be done by the physicians, nurse assistants, or trained medical records coding staff. Who is to do the coding will reflect on the training strategy to be used.

2. **Medical Records Format**

At the request of the HIO, the Patient Records Module of the MIS has been developed to integrate with a new medical records format which was designed by an HIO consultant. This format design includes space for collecting clinic examination notes and other information not previously collected by HIO physicians. The HIO has yet to develop the process of integrating this new record format into daily operations. Although the MIS can operate without this new record format in use, there is some confusion for the medical personnel who see the patient records form produced by the system and do not understand the rationale behind its design.

3. **Cost Accounting Principles and Practice**

The MIS includes an automated module for cost accounting. This module is an extension of the manual cost accounting process which has been in place and used effectively for years at the Northwest Delta Branch (NWDB). In order for the other HIO branches to use the automated cost accounting module, these branches must begin collecting financial information in the same way as is done in the NWDB. The process is well defined in NWDB, but cost accounting departments must be set up in the other branches, and the accountants trained in cost accounting principles and the manual data collection procedures.

In each of these areas, the contractor has provided some assistance to the HIO. For example, the contractor has developed a one-day training workshop targeted to HIO physicians explaining ICD-9 coding and its necessity for medical quality and for the MIS. However, the contractor does not have the level of personnel that would be required to deliver this training to the thousands of HIO physicians.

It is likely that, as system installation continues, additional responsibilities will arise which, while clearly outside the contractor's scope of work, will impact on system success if not addressed. These additional areas will be brought to the attention of the HIO and USAID through quarterly progress reports, implementation reports, and direct letters. In this way, all issues can be assessed and decisions made so that system implementation can continue smoothly.

As a final note on responsibility, the HIO has, over the past two years, taken on the task of developing new software modules which are outside the scope of the MAXIMUS contract. This is an effort which demonstrates the level of technical expertise and commitment to the MIS within the HIO. Under the MAXIMUS contract amendment of 1995, the computer servers being procured were changed to provide greater expandability. This was done expressly to encourage this work by the HIO. At the same time, the contractor was restricted to procuring only terminals and machine power to handle the contracted software.

We suggest that, to make the greatest use of resources, the HIO work closely with the contractor on all site preparation. If the HIO can supply terminal placement information the contractor can include this in hardware installation drawings. It would also be possible to arrange for cabling for all terminal needs through the contractor's cabling vendor if the HIO could provide the funds for procuring the additional cable. This does, however, mean

financial commitment on the part of the HIO. Also it should be noted that the HIO will need to procure the extra terminals, port boards, storage, and user licenses necessary for the expanded system.

**SECTION 4**

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**MANAGEMENT PLANS FOR INTEGRATED RESPONSIBILITIES**

## 4 MANAGEMENT PLANS FOR INTEGRATED RESPONSIBILITIES

Installation of the HIO MIS requires intense coordination across sites, activities, and personnel. This section discusses the dependencies between installation activities and shows the overall installation plan. This plan will acquire specific dates for each branch based on the number of sites to be implemented and specific branch needs. However, the schedule laid out in this section clearly shows the essential dependencies. It is these areas which must be closely tracked as a delay in an early area directly propagates to delays further down the line of activities. With a clearly defined management plan and with firm commitment on the part of all responsible parties, installation can become a routine operation.

In each branch, the implementation cycle follows a set pattern. This pattern is as follows:

### 1. **Branch Data Conversion and Data Initiation Process**

This has approximately an eight-month lead time and is a critical path to further implementation steps. The data that are being converted or initiated under this step comprise the beneficiary data (coming from the SIO and PIO) and all other base tables that contain branch- or site- specific data (e.g., physician table). Exhibit 4-1 details the high-level tasks of this data conversion process against an eight-month time line. This time line is subject to acceleration or delay depending on the following factors:

- o speed and work hours of data conversion clerks;
- o availability of needed HIO beneficiary information, and ability to access this information quickly (organization of branch files); and
- o number of beneficiaries in the branch.

Exhibit 4-2 is a PERT chart of data conversion activities. On this chart, the heavy solid lines between tasks 2, 3, 7, 8, and 12 represent critical dependencies.

### 2. **Branch Technical Support Staff Training**

The primary line of support for the system is through the help desk/training staff located at the branch level.\* One of the data conversion activities is the placement of a computer in the branch location. As soon as this computer is placed, branch computer operators must be trained and a cadre of individuals selected as the technical support specialists. These individuals undergo a course of training during the period in which data conversion is happening (approximately six months). These individuals are then prepared as technical

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\* See deliverable documents *Recommendation for Information Systems Organizational Structure* and *Recommendations for System Support Capability* for further information on help desk and job descriptions.

**Exhibit 4-1  
DATA CONVERSION MANAGEMENT SCHEDULE (ILLUSTRATIVE BRANCH)**

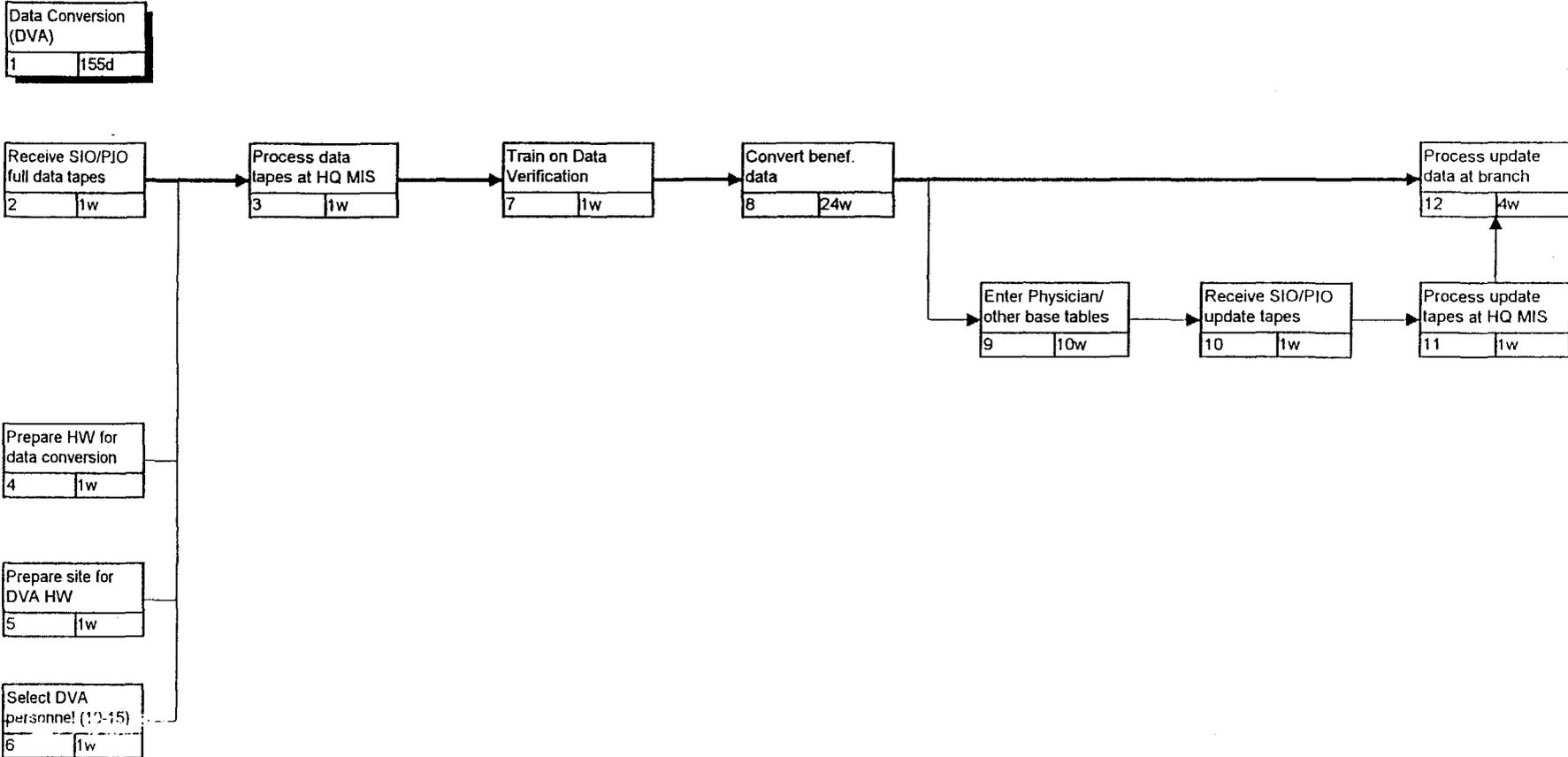
Name	Resp.	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				Month 7				Month 8					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1 Data Conversion (DVA)																																			
1.1 Receive SIO/PIO full data tapes	HIO																																		
1.2 Process data tapes at HQ MIS Center	MAX																																		
1.3 Prepare HW for data conversion (DVA)	MAX																																		
1.4 Prepare site for DVA HW	MAX																																		
1.5 Select DVA personnel (10-15)	HIO																																		
1.6 Train on Data Verification Application	MAX																																		
1.7 Convert benef. data	HIO																																		
1.8 Enter Physician/ other base tables	HIO																																		
1.9 Receive SIO/PIO update tapes	HIO																																		
1.10 Process update tapes at HQ MIS Center	MAX																																		
1.11 Process update data at branch DVA	HIO																																		

4-2

Project: CRHP    Noncritical     Critical     Summary     Milestone 

Date: 3/18/96

## Exhibit 4-2 DATA CONVERSION ACTIVITIES



support specialists and trainers for the facility installations. The subjects covered in this training include:

- o introduction to computers, MIS, and computer operations;
- o UNIX;
- o Oracle;
- o each of the polyclinic, hospital, and branch applications;
- o training techniques, with emphasis on the use of the MIS training materials developed under this contract; and
- o resolving system problems and working the help desk.

3. **Ongoing Polyclinic Implementations**

Implementation starts in one polyclinic to adjust procedures for the specific branch. This implementation is timed so that it occurs in the final weeks of data conversion. The majority of data for this test polyclinic will be converted by this point, but data updates will not be available until the end of the installation period. This single implementation is used to integrate lessons learned, and is followed by a cycle of five polyclinic implementations at one time.

Exhibit 4-3 details the activities involved in polyclinic implementations. The illustrative time line in Exhibit 4-3 shows the schedule for the first polyclinic in a branch, with installation timed to conclude at the same time as data conversion (see Exhibit 4-1). The first sixteen activities shown are milestones; they must be complete before training can begin, but they can be completed well in advance of the training date. The remaining nine activities are dependent upon the first sixteen being fully complete. The total installation time for a polyclinic set is approximately nine weeks.

The twenty-five activities and the time line remain the same for all further sets of concurrent polyclinic installations. For example, a set of five polyclinics begins implementation and all five are completed nine weeks later. The final activity, on-site support, is conducted by both branch staff and staff from facilities which have been using the MIS for some time. Therefore, as more clinics come online, the installation cycles of polyclinic sets can begin to overlap; a new set of five polyclinics can begin implementation even before the on-site support for the previous set is complete.



4. **Ongoing Hospital Implementations**

After the first set of five polyclinics is implemented, hospital implementations begin. Hospital implementations occur approximately two at a time. Exhibit 4-4 details the activities involved in hospital implementation. These activities are very similar to those for polyclinic implementation. The first fifteen activities are shown as milestones — they must be complete before training can begin but can be completed well in advance. As with polyclinic installations, installation sets for hospitals can begin to overlap as more hospitals come online and experienced personnel are available to provide on-site support to the newly implemented hospitals.

5. **Branch Medical Supply Department (MSD) Implementation**

As the number of polyclinics implemented reaches approximately fifty percent of those in the branch, the Medical Supply Department Application at the branch is brought online. This application requires data from the polyclinic and hospital pharmacies in order to be useful. Therefore, implementation is delayed until sufficient data exist.

Since the branch computer is already operating at this point, the implementation activities consist of the following:

- o designation of current MSD staff for training,
- o acquisition of supplies through existing supply process,
- o loading of any additional data tables,
- o training of end users, and
- o a period of on-site support by branch technical support personnel.

6. **Other Branch Application Implementations**

As facility implementations in a branch come to a close, the remaining branch applications are implemented. The activities required for these implementations mirror those of the Medical Supply Department Application outlined above.

7. **Implementation of the Management and Quality Assurance Modules**

As most of the branch's facilities come online, management and quality assurance data become available and training begins to focus at the management level. Implementation details for the Management and Quality Assurance Modules will be refined as the data become available and manager interest is gauged.

**Exhibit 4-4  
HOSPITAL IMPLEMENTATION SCHEDULE FOR HOSPITAL SET**

4-7

Name	Resp.	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
1 Hospital Set Installation		—————								
1.1 Comp. Rm/cabliing complete	MAX	⊙								
1.2 HIO site prep. complete	HIO	⊙								
1.3 Furnishings in place	HIO	⊙								
1.4 Supplies in place (tapes, ribbons, paper, etc.)	HIO	⊙								
1.5 HW in place/tested	MAX	⊙								
1.6 X.25 line in place/tested	HIO	⊙								
1.7 Dial-up phone line and handset in place	HIO	⊙								
1.8 Other data ready (physicians, etc)	HIO	⊙								
1.9 Other data loaded (physicians, etc)	MAX	⊙								
1.10 Shift work/pay issues resolved	HIO	⊙								
1.11 Personnel selected (CO, A/D/T, MR, DC, CA)	HIO	⊙								
1.12 Training materials printed	HIO	⊙								
1.13 User manuals printed	HIO	⊙								
1.14 Other materials printed (ICD, proc. cards, etc.)	HIO	⊙								
1.15 Load training database	MAX	⊙								
1.16 Intro. to MIS Training	MAX/HIO	—————								
1.17 Physician Training	MAX/HIO		—————							
1.18 Comp. Op (CO) Training	MAX/HIO		—————							
1.19 Load drug inventory	HIO			—————						
1.20 A/D/T Training	MAX/HIO			—————						
1.21 Patient Record (MR) Training	MAX/HIO				—————					
1.22 Drug Control (DC) Training	MAX/HIO					—————				
1.23 Cost Accounting (CA) Training	MAX						—————			
1.24 On-site support by branch staff	HIO							—————		
Project: CRHP Date: 3/18/96		Noncritical ————— Critical ————— Summary ————— Milestone ⊙								

Note: Dates are illustrative for concurrent hospital implementations — sets of two.

**SECTION 5**

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**CRITERIA FOR ACCEPTABLE INSTALLATION**

## 5 CRITERIA FOR ACCEPTABLE INSTALLATION

Installation is a complex process requiring the input of many people and parties. The process must ensure adherence to a predefined level of quality, and at the end of each installation set there must be a mechanism for documentation.

This section describes the process that will be followed during installation and the mechanisms for recording adherence to this process. Documentation of the steps taken will be recorded in Deliverable 29, *Implementation Report*, and provided to both USAID and HIO to show that system implementation followed accepted standards. In Deliverable 29, lessons learned about installation will be noted along with any alterations in the process that may have occurred.

### 5.1 Specifications to be Provided to the HIO

This section describes and presents the standard formats in which the contractor will communicate to the HIO the site-specific requirements for which the HIO is responsible. There are three primary areas: expendable computer supplies, furnishings, and personnel.

#### 5.1.1 Expendable Computer Supplies

The HIO is responsible for providing expendable computer supplies such as computer paper, printer ribbons, back-up tapes, and diskettes to meet the needs of each site operating the MIS. The contractor prepares and submits to the HIO schedules detailing yearly and monthly supply requirements for a specific site or site set (see Exhibits 5-1 and 5-2). The date of delivery of these schedules to the HIO will be recorded in Deliverable 29.

Supply requirements were estimated based on the following factors:

- o the number of beneficiaries visiting a site,
- o software application needs,
- o usage of applications at the site,
- o HIO reporting needs, and
- o data back-up requirements.

Supply estimates are intended for HIO start-up purposes only and to assist the HIO in its budget projections and supplier bid preparations. It is the HIO's responsibility to monitor the consumption of supplies on an ongoing basis and to order additional quantities as needed.

**Exhibit 5-1**

**ESTIMATED SUPPLIES FOR HIO MIS CENTER, CAIRO BRANCH, AND CAIRO BRANCH FACILITIES — ONE YEAR**

<b>No.</b>	<b>Description</b>	<b>MIS Center</b>	<b>Cairo Branch</b>	<b>Clinics</b>	<b>Hospitals</b>	<b>Totals</b>
1	Continuous Computer Paper o 132 characters per line o Size: 28 x 28 centimeter o Weight: 70 grams	120	144	1,140	192	1,596
2	Preprinted Visit Form (unit is 1,000 sheets)	24	12	2,508	96	2,640
3	Black Ribbon Cassette for Genicom 1220 Printer o 1/2 inch o 5 million character	3	2	579	54	638
4	Long-life Ribbon for Genicom 4440 XT Printer o Reinkable o 75 million characters	2	2	0	0	4
5	Floppy Disk o 1.44MB o 3.5 inch	360	120	228	48	756
6	Cartridge Data Tape o 525MB o 1/4 inch	62	50	589	124	825
7	Data Tapes o 2,400 foot o 1,600/800 bytes per inch	24	NA	NA	NA	24

NA = not applicable

Exhibit 5-2 (page 1 of 2)

ESTIMATED SUPPLIES FOR HIO MIS CENTER, CAIRO BRANCH, AND CAIRO BRANCH FACILITIES — ONE MONTH

Site Code	Site	Beneficiaries <sup>1</sup>		Printer Paper (reams)		Printer Ribbon (Genicom 1220)	Printer Ribbon (Genicom 4440)	525MB Tape (one time)	Data Tape 2,400 ft.	1.44MB Floppy Disk
		Count	Daily Usage	Visit Form	132 CPL					
Q0001	MIS Center	NA	NA	NA	10	1	1	62	2	3
B0001	Cairo Branch	NA	NA	3	12	1	1	50	NA	1
	<b>Polyclinics</b>									
C0001	Medinat Nasr	96,740	801	22	5	4	NA	33	NA	1
C0002	El Alf Masken	49,094	407	11	5	3	NA	33	NA	1
C0003	Misr El Gedidah	97,710	809	22	5	4	NA	33	NA	1
C0004	Bab El Shareyah	56,575	469	13	5	3	NA	33	NA	1
C0005	El Matar	8,189	68	2	5	1	NA	33	NA	1
C0006	El Qobba	69,665	577	16	5	3	NA	33	NA	1
C0007	El Azher	13,349	111	3	5	1	NA	33	NA	1
C0008	El Nasr (Helwan)	62,000	513	14	5	3	NA	33	NA	1
C0009	El Moqattam	124,126	1,028	28	5	5	NA	33	NA	1
C0010	Abdeen	27,921	231	6	5	2	NA	33	NA	1
C0011	Shepard	57,223	474	13	5	3	NA	33	NA	1
C0012	Nasser (downtown)	66,315	549	15	5	3	NA	33	NA	1
C0013	Shoubra El Mazalat	26,846	222	6	5	2	NA	33	NA	1
C0014	Shoubra	71,059	588	16	5	3	NA	33	NA	1
C0016	El Gomhoreyah	61,545	510	14	5	3	NA	33	NA	1
C0017	El Maadi	29,159	241	7	5	2	NA	33	NA	1
C0018	Ramsis	18,417	153	4	5	2	NA	33	NA	1

<sup>1</sup> According to Cairo Branch Statistical Department. Data provided on July 1, 1995.

Exhibit 5-2 (page 2 of 2)

ESTIMATED SUPPLIES FOR HIO MIS CENTER, CAIRO BRANCH, AND CAIRO BRANCH FACILITIES — ONE MONTH

Code	Site	Beneficiaries <sup>1</sup>		Printer Paper (reams)		Printer Ribbon (Genicom 1220)	Printer Ribbon (Genicom 4440)	525MB Tape (one time)	Data Tape 2,400 ft.	1.44MB Floppy Disk
		Count	Daily Usage	Visit Form	132 CPL					
C0019	El Maashat	NA <sup>2</sup>	NA <sup>2</sup>	3 <sup>3</sup>	5	1	NA	33	NA	1
C0020	El Entag El Harbey	31,584	262	7	5	2	NA	33	NA	1
	<b>Hospitals</b>									
H0001	Medinat Nasr	NA	59	2	4	1	NA	33	NA	1
H0002	El Nasr (Helwan)	NA	25	1	2	1	NA	33	NA	1
H0003	El Moqattam	NA	34	1	2	1	NA	33	NA	1
H0004	Shoubra	NA	22	1	2	1	NA	33	NA	1
	<b>Totals</b>	<b>967,517</b>	<b>8,152</b>	<b>227</b>	<b>127</b>	<b>56</b>	<b>2</b>	<b>871</b>	<b>2</b>	<b>27</b>

NA = not applicable

<sup>1</sup> According to Cairo Branch Statistical Department. Data provided on July 1, 1995.

<sup>2</sup> Data on assigned beneficiaries and daily use at this site not provided by HIO.

<sup>3</sup> Estimated.

### **5.1.2 Furnishings Matrix**

The HIO is responsible for providing adequate furnishings for MIS operations. Exhibit 5-3 shows a standard furnishings matrix prepared by the contractor and delivered to the HIO detailing the furniture requirements for a specific site or site set. Matrices are delivered to managers of branch MIS Centers in advance to allow time for furniture procurement should it be necessary. The date of delivery of furnishing matrices to the HIO per site set will be recorded in Deliverable 29.

### **5.1.3 Personnel Requirements**

The HIO appoints personnel to work with the MIS both as technicians and as end users. All end-users should be existing personnel from the departments in which the MIS application is placed. Full job descriptions for each personnel category have been developed by the contractor and provided to the HIO. Exact dates when those personnel are required will be communicated in the contractor's upcoming training schedule.

Exhibit 5-4 lists the estimated number of managers, technicians, and end users required per site type throughout the HIO. Exhibit 5-5 provides a more detailed breakdown of technicians and end users required in each work area: computer operations, beneficiary registration, patient records, and drug control. The number of technical positions required is based on the number of terminals assigned to each of these areas. Although Exhibit 5-5 covers Northwest Delta Branch polyclinics only, similar personnel/training tables are being prepared for other HIO sites and will be included in Deliverable 29.

## **5.2 Site Installation Process**

The contractor works closely with AT&T-GIS (its hardware supplier) in the site installation process. This process begins with the delivery of equipment to HIO sites and is followed by:

- o hardware and server configuration,
- o electrical and logic cabling;
- o testing, and,
- o network installation diagrams.

These phases are described in more detail below.

The contractor is responsible for testing all hardware and software systems and ensuring that they operate according to vendor specifications. The contractor will formally hand over equipment to the HIO as sites become fully implemented (i.e., on a gradual basis). Hardware and software inventories will be provided to the HIO with each site delivered to the HIO. At the same time, the contractor and/or AT&T-GIS will demonstrate to the HIO

**Exhibit 5-3 (page 1 of 3)  
REQUIRED FURNITURE BY SITE TYPE**

Location within Site	Required Furniture	Qty.
<b>HIO Headquarters (Roxy)</b>		
Computer Room	CPU Desk: 1.75m x 0.75m	2
	Side Return Table: 1.00m x 0.50m	2
	3 Drawer Cabinet	2
	Storage Cabinet: 1.40m x 1.00m x 0.50m	1
	Data Entry Desk: 0.80m x 0.75m	1
	Chairs	3
Other Departments	Use Existing Furniture	NA
<b>Hospital MIS</b>		
Computer Room	CPU Desk: 1.75m x 0.75m	1
	Side Return Table: 1.00m x 0.50m	1
	3-Drawer Cabinet	1
	Storage Cabinet: 1.40m x 1.00m x 0.50m	1
	Printer Stand: 1.00m x 0.50m	1
	Data Entry Desk: 0.80m x 0.75m	2
	Chairs	3
Pharmacy	Data Entry Desk: 0.80m x 0.75m	4
	Printer Stand: 1.00m x 0.50m	2
	Chairs	4
Reception Area	Data Entry Desk: 0.80m x 0.75m	2
	Printer Stand: 1.00m x 0.50m	1
	Chairs	2
Medical Records Section	Data Entry Desk: 0.80m x 0.75m	2
	Printer Stand: 1.00m x 0.50m	1
	Chairs	2
Accounting Section	Data Entry Desk: 0.80m x 0.75m	1
	Chairs	1
<b>Polyclinic MIS</b>		
Computer Room	CPU Desk: 1.75m x 0.75m	1
	Side Return Table: 1.00m x 0.50m	1
	3-Drawer Cabinet	1
	Storage Cabinet: 1.40m x 1.00m x 0.50m	1
	Printer Stand: 1.00m x 0.50m	1
	Data Entry Desk: 0.80m x 0.75m	TBD
	Chairs	TBD

**Exhibit 5-3 (page 2 of 3)  
REQUIRED FURNITURE BY SITE TYPE**

Location within Site	Required Furniture	Qty.
<b>Polyclinic MIS (continued)</b>		
Registration Section	Registration Counter 0.80m x 0.75m	TBD
	Printer Stand: 1.00m x 0.50m	1
	Chairs	TBD
Pharmacy	Data Entry Desk: 0.80m x 0.75m	TBD
	Printer Stand: 1.00m x 0.50m	1
	Chairs	TBD
<b>Branch MIS</b>		
Computer Room	CPU Desk: 1.75m x 0.75m	2
	Side Return Table: 1.00m x 0.50m	2
	3-Drawer Cabinet	2
	Storage Cabinet: 1.40m x 1.00m x 0.50m	1
	Printer Stand: 1.00m x 0.50m	1
	Data Entry Desk: 0.80m x 0.75m	1
	Chairs	3
Training Center	Supervisor's Desk: 1.75m x 0.75m	1
	Side Return Table: 1.00m x 0.50m	1
	3-Drawer Cabinet	1
	Storage Cabinet: 1.40m x 1.00m x 0.50m	1
	Printer Stand: 1.00m x 0.50m	1
	Data Entry Desk: 0.80m x 0.75m	15
	Chairs	16
Data Verification Section	Storage Cabinet: 1.40m x 1.00m x 0.50m	4
	Data Entry Desk: 0.80m x 0.75m	5
	Printer Stand: 1.00m x 0.50m	1
	Chairs	5
Beneficiary Support Section	Data Entry Desk: 0.80m x 0.75m	2
	Chairs	2
Technical Support Section	Data Entry Desk: 0.80m x 0.75m	4
	Chairs	4

**Exhibit 5-3 (page 3 of 3)  
REQUIRED FURNITURE BY SITE TYPE**

Location within Site	Required Furniture	Qty.
<b>Branch MIS (continued)</b>		
Contracted Pharmacies Section	Storage Cabinet: 1.40m x 1.00m x 0.50m	4
	Data Entry Desk: 0.80m x 0.75m	14
	Printer Stand: 1.00m x 0.50m	1
	Chairs	14
Medical Supply Section	Data Entry Desk: 0.80m x 0.75m	1
	Printer Stand: 1.00m x 0.50m	1
	Chairs	1
Pharmacy Accounting Section	Data Entry Desk: 0.80m x 0.75m	4
	Printer Stand: 1.00m x 0.50m	1
	Chairs	4
Cost Accounting Section	Data Entry Desk: 0.80m x 0.75m	1
	Chairs	1
Periodic Medical Exam Section	Data Entry Desk: 0.80m x 0.75m	1
	Chairs	1
Drug Store MIS	Data Entry Desk: 0.80m x 0.75m	1
	Printer Stand: 1.00m x 0.50m	1
	Chairs	1

TBD = To be determined. Quantity is determined by the number of terminals assigned to the site. Terminals are calculated according to the average number of beneficiaries visiting a site.

NA = Not applicable.

**Exhibit 5-4**  
**ESTIMATED NUMBER OF TRAINEES BY EMPLOYEE TYPE AND SITE TYPE**

Site Type	HIO Employee Type		
	End User	Technician	Manager
<b>Headquarters</b>			
General	0	0	20
MIS	3	27	10
<b>Subtotal</b>	<b>3</b>	<b>27</b>	<b>30</b>
<b>Branch</b>			
Cairo	40	15	10
Northwest Delta	40	18	10
East Delta	25	13	10
Canal	13	11	10
Mid Delta	4	5	10
North Upper Egypt	4	5	10
Mid Upper Egypt	4	5	10
South Upper Egypt	4	5	10
<b>Subtotal</b>	<b>134</b>	<b>77</b>	<b>80</b>
<b>Polyclinics by Branch</b>			
Cairo (19)	229	47	38
Northwest Delta (25)	408	75	50
East Delta (10)	120	30	20
Canal (4)	48	12	8
<b>Subtotal</b>	<b>805</b>	<b>164</b>	<b>116</b>
<b>Hospitals by Branch</b>			
Cairo (4)	60	16	8
Northwest Delta (3)	45	12	6
East Delta (6)	90	24	12
Canal (2)	30	8	4
<b>Subtotal</b>	<b>225</b>	<b>60</b>	<b>30</b>
<b>Total</b>	<b>1,167</b>	<b>328</b>	<b>256</b>

Exhibit 5-5 (page 1 of 2)

NUMBER OF TERMINALS AND TRAINEES IN EACH WORK AREA — NORTHWEST DELTA BRANCH POLYCLINICS

Polyclinics	Computer Operators	Beneficiary Registration Terminals	Beneficiary Registration Clerks	Patient Records Terminals	Patient Records Registrars	Drug Control Terminals	Drug Control Clerks
El Seyouf	3	3	6	3	6	2	4
Loraan	3	4	8	4	8	3	6
Gleem	3	4	8	4	8	2	4
El Raml	3	3	6	3	6	2	4
Smouha	3	7	14	7	14	4	8
Alexandria	3	5	10	5	10	4	8
El Hadrh El Baharaya	3	2	4	2	4	2	4
Moharram Bek El Gedidah	3	6	12	6	12	5	10
Moharram Bek	3	3	6	3	6	3	6
El Nokrashy	3	3	6	3	6	2	4
El Horreyah	3	2	4	2	4	2	4
El Gomhoreyah	3	3	6	3	6	3	6
Sezostrees	3	3	6	3	6	0	0
El Shortah	3	2	4	2	4	2	4
El Mansheyah El Gedidah	3	3	6	3	6	2	4
Mena el Basal	3	2	4	2	4	2	4
Marsa Matrouh	3	3	6	3	6	3	6
Damanhour	3	4	8	4	8	3	6
Etay el Barood	3	2	4	2	4	1	2
Kom Hamadah	3	2	4	2	4	1	2
El Nasr	3	6	12	6	12	5	10

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Exhibit 5-5 (page 2 of 2)

NUMBER OF TERMINALS AND TRAINEES IN EACH WORK AREA — NORTHWEST DELTA BRANCH POLYCLINICS

Polyclinics	Computer Operators	Beneficiary Registration Terminals	Beneficiary Registration Clerks	Patient Records Terminals	Patient Records Registrars	Drug Control Terminals	Drug Control Clerks
El Amraya el Gedidah	3	2	4	2	4	0	0
El Faraanah	3	1	2	1	2	1	2
Kafr El Dawar	3	3	6	2	4	3	6
Borg El Arab El Gedid	3	2	4	2	4	2	4
<b>Total</b>	<b>75</b>	<b>80</b>	<b>160</b>	<b>79</b>	<b>158</b>	<b>59</b>	<b>118</b>

Total Computer Operators: 75  
 Total End Users: 436  
 Total Trainees: 511  
 Total Terminals: 218

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any of the following system tests as verification that they are fully operational when transferred from the contractor's inventory to the HIO's inventory.

### **5.2.1 Hardware and Server Configuration**

This task requires that all network operating systems and operating system software is configured. Each site type receives a specific hardware configuration, including telecommunications equipment. The server configuration process involves:

- o installing UNIX,
- o installing ORACLE system software,
- o installing applications designed for the site type,
- o creating a database,
- o loading lookup tables, and
- o loading data.

A master tape(s) for each site type is created onto which the above listed processes are loaded. Exhibit 5-6 is a checklist for these processes used for polyclinics, hospitals, branches, stores, HIO Headquarters, the MIS Center, and training facilities. The checklist is completed to ensure that appropriate hardware and servers are configured according to site requirements and to note any deviations. Once loaded and tested, each application is approved by the contractor's system administrators.

Copies from the master tape are made for server configuration at each HIO site. Copy versions of the tape are approved by the system administrator. Approval for all six steps as listed above is only required for the master tape.

In addition to installing software applications and data, the contractor ensures that telecommunication equipment (modems and routers) and printers are set up (i.e., configured for specific usage requirements). Exhibit 5-6 includes a separate checklist for these items requiring the approval of the system administrator.

### **5.2.2 Electrical and Logic Cabling**

This installation phase begins with site renovation (Task 3 of the contract) and continues when hardware is delivered to the site. The process includes:

- o grounding the entire system (providing an "earthing well," if necessary);

## Exhibit 5-6 SOFTWARE INSTALLATION CHECKLIST

CRHP - HIO

IMP-HW-02

### SOFTWARE INSTALLATION CHECKLIST

Prepare  **MASTER** (All Signatures Required)  **COPY** (Only Sys. Admin. Signature Required) ←

Site Category:  Branch  Hospital  Training  MIS  
 Polyclinic  Store  HQ  -----

Site Name:  Site Code:  Processor Type:

Installation			Approvals	
<input type="checkbox"/> UNIX Installation	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> ORACLE Installation	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Application Installation	Development Mgr.	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Database Creation	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Loading Lookup Tables	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Loading Data	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
Preparation End Date: -- / -- / 19--	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>

### ON-SITE PREPARATIONS

<input type="checkbox"/> Modem Setup	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Router Setup	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Printers Setup	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>
<input type="checkbox"/> Backup Tapes Setup	Sys. Admin. Initials	<input type="text"/>	Signature	<input type="text"/>

- o supplying and installing all electrical cabling from the main switchboard to the UPS, from the UPS to the distribution box, and from the main switchboard to all terminals and printers; and
- o supplying and installing all logic cabling from the server(s) to computers and terminals.

Exhibit 5-7 is a hardware installation checklist used for tracking delivery of hardware to sites and tasks related to connecting the system. The tasks for connecting the system are listed below. The date that this installation phase is completed will be recorded in Deliverable 29 for each set of sites. The tasks are:

- o delivery of hardware to the site,
- o terminals Arabicization,
- o connection of the UPS,
- o connection of terminals to various departments, and
- o connection of printers to various departments.

Upon completing hardware installation, the contractor delivers a network installation diagram to the HIO (see Section 5.2.4 below), updates its hardware inventory, and ensures that hardware is put under a maintenance contract with the supplier (see Section 6, Maintenance Contracts, for more details).

### **5.2.3 Testing**

Once equipment is configured and cables are in place, a series of steps must be followed to ensure that the hardware is installed and working properly. All network operating systems and operating-system software are tested to ensure that they operate according to project requirements. Exhibit 5-8 is a checklist used to ensure that hardware functions properly at a branch, polyclinic, hospital, store, HIO Headquarters, the MIS Center, or at a training site.

The primary test of hardware is done on the processor by running system diagnostics. In this process, a printout detailing the system's configuration is generated by the system administrator with the assistance of a representative from AT&T-GIS. The printout describes the status of the:

- o memory configuration,
- o processor,
- o diskette,

**Exhibit 5-7  
HARDWARE INSTALLATION CHECKLIST**

**CRHP - HIO**

**IMP-HW-01**

**HARDWARE INSTALLATION CHECKLIST**

**Site Category:**       Branch       Hospital       Training       MIS  
                           Polyclinic       Store       HQ       -----

**Site Name:**       **Site Code:**

H/W	Delivery	Type	Count		Type	Count
<input type="checkbox"/>	Processor	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	UPS	<input type="text"/>
<input type="checkbox"/>	Terminal	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	Modem	<input type="text"/>
<input type="checkbox"/>	Printer	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	Router	<input type="text"/>
<input type="checkbox"/>	-----	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	-----	<input type="text"/>

**End of Delivery Date:** -- / -- / 19--

Connecting UPS        Computer Room Terminal Connections        Terminals Arabiz.

Terminal Connection	Count	Printers Connection	Count
<input type="checkbox"/> <input type="text"/> Computer Room	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Computer Room	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Registration 1/ADT/DVA	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Registration 1/ADT/DVA	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Registration 2/Obsrv./B. Suprt.	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Registration 2/Obsrv./B. Suprt.	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Pharmacy 1/Contracted Pharm1	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Pharmacy 1/ Contracted Pharm1	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Pharmacy 1/Contracted Pharm2	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Pharmacy 1/ Contracted Pharm2	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Medical Supply Department	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Medical Supply Department	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Medical Service Department	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Medical Service Department	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Contracted Facility Department	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Contracted Facility Department	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Cost Accounting Department	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Cost Accounting Department	<input type="text"/>
<input type="checkbox"/> <input type="text"/> Statistical Department	<input type="text"/>	<input type="checkbox"/> <input type="text"/> Statistical Department	<input type="text"/>

Delivery of Site Plan        Update H/W Inventory List        Update Maintenance Contract

**Start Date:**  -- / -- / 19--      **Completion Date:**  -- / -- / 19--

**Implementation Coordinator**

**Exhibit 5-8  
HARDWARE TEST CHECKLIST**

**CRHP - HIO**

**IMP-HW-03**

**HARDWARE TEST CHECKLIST**

**Site Category:**     Branch         Hospital         Training         MIS  
                           Polyclinic         Store             HQ                 -----

**Site Name:**         **Site Code:**         **Processor Type:**

**Run System Diagnostics**        Please Attach Diagnostics Printed Report

		Comments
<input type="checkbox"/>	Memory	<input type="text"/>
<input type="checkbox"/>	Processor	<input type="text"/>
<input type="checkbox"/>	Diskette	<input type="text"/>
<input type="checkbox"/>	Disk Drive	<input type="text"/>
<input type="checkbox"/>	Serial Ports	<input type="text"/>

**Test Peripherals**

		Comments
<input type="checkbox"/>	UPS	<input type="text"/>
<input type="checkbox"/>	Tape Drive	<input type="text"/>
<input type="checkbox"/>	Modem	<input type="text"/>
<input type="checkbox"/>	Router	<input type="text"/>
<input type="checkbox"/>	Terminal(s)	<input type="text"/>
<input type="checkbox"/>	Printer(s)	<input type="text"/>
<input type="checkbox"/>	Hub(s)	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>

**Test Date:**         **Completion Date:**

**System Administrator Name:**

- o disk drive, and
- o serial ports

The above checks enable the contractor to assess whether the hardware is fully operational and to ensure that all system options purchased from the hardware supplier were delivered as requested. Should deviations in the system diagnostics occur, the details are noted on the checklist for follow-up with AT&T-GIS.

The system administrator further checks the operation of hardware by running additional tests on the:

- o UPS,
- o tape drive,
- o modem,
- o router,
- o terminals, and
- o printers.

#### **5.2.4 Network Installation Diagrams**

Upon completing installation at each HIO facility, a facility network diagram is created. This diagram maps the entire electrical and logic cabling system and all equipment installed. Copies are submitted to USAID and HIO as part of Deliverable 4, *Computer Facility Reports*.

**SECTION 6**

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**MAINTENANCE CONTRACTS**

## 6 MAINTENANCE CONTRACTS

The contractor and the HIO share responsibilities for maintenance of electrical equipment. Whereas the contractor is responsible for arranging for maintenance of hardware and software, the HIO is responsible for arranging maintenance of air conditioners and fire systems installed by the contractor.

### 6.1 Hardware and Software

The contractor's sole hardware supplier, AT&T-GIS/Egypt, guarantees all its hardware equipment for at least one year after delivery. Hardware and software are covered under warranties either from the date of installation or three months after delivery of the hardware to a site (whichever is sooner). Upon the expiration of warranties, the contractor notifies AT&T-GIS of its intent to enter into a maintenance and repair contract on specified hardware items.

In 1995, the contractor signed a general service agreement (GSA) with AT&T-GIS for maintenance and repair services on all hardware purchased for the project. The GSA is effective upon the expiration of hardware warranties. A copy of the agreement, valid through January 20, 1998, is provided in Appendix A. A sample equipment installation and maintenance schedule is provided in Appendix B. The schedule is tailored to a particular site and lists all equipment with serial numbers requiring maintenance.

Under the GSA, two types of hardware maintenance services can be procured by the contractor:

1. An **Under Maintenance Contract** is for standard services provided on an ongoing basis
2. A **Time and Materials Contract** is for special services provided on an as-needed basis

Depending on budget considerations and hardware service requirements at different sites, the contractor selects one of the above. For example, processors and UPSs, generally requiring more frequent maintenance (when compared to other hardware), are normally covered by Under Maintenance Contracts. In contrast, terminals, printers, modems, and routers generally require less maintenance, and are normally covered by Time and Materials Contracts. Exceptions to the latter exist and are based on high usage of terminals at a particular site. This is the case at the HIO MIS Center.

In both types of maintenance contracts, AT&T-GIS is obliged to provide service within 24 hours of receiving a request. If a repair cannot be completed within 48 hours from the time of the request, AT&T-GIS will replace the hardware item with an equivalent piece of equipment until the repair is completed. Service calls should be made Saturday through

Thursday from 8 A.M. to 4:30 P.M.. Repair services provided by AT&T-GIS on Fridays, holidays, and after normal working hours are subject to premium pay.

Requests to AT&T-GIS for maintenance are made either by the contractor or the HIO, depending on the type of service or repair needed. Standard (under maintenance contract) requests for services are made by designated HIO branch staff directly to AT&T-GIS. Special (time and materials) requests for services are made by designated HIO branch staff to the contractor's help desk at the HIO MIS Center. In the latter case, the contractor negotiates with AT&T-GIS in advance for the type of repair needed and the cost. The HIO is required to provide access to its sites for hardware maintenance services.

Maintenance of equipment is based on a hardware and software inventory agreed to in advance by the contractor and AT&T-GIS. Any deviation from the contracted inventory after HIO has taken custody of computer equipment would render the maintenance contract invalid where the deviation occurs. It is, therefore, imperative that the HIO not move hardware between sites while the contractor is obliged to provide maintenance (i.e., until the end of the contract). Copies of the contractor's equipment installation and maintenance schedule per facility or set thereof will be included in Deliverable 29, *Implementation Report*.

Hardware and software will be turned over to the HIO on a gradual basis following the project's implementation schedule. As HIO sites become operational and are fully supplied with hardware and software, the contractor will relinquish custody of the hardware to the HIO. However, as soon as hardware is delivered to a site, and even if custody has not formally been exchanged, it is the HIO's responsibility to ensure security of the equipment and to prevent mishandling of hardware and software. Neither the contractor nor AT&T-GIS will be responsible for items stolen from an HIO site or damaged through misuse by HIO staff. The contractor will conduct periodic checks of sites to ensure that project equipment is maintained by HIO staff and used for its intended purpose. If the contractor discovers that HIO staff are not properly maintaining or are misusing equipment, then the HIO MIS Center Director will be notified in writing.

An inventory of nonexpendable property (including hardware, software, office equipment, and furniture) is submitted to USAID annually (since Year 3). Interim inventory updates showing formal transfer of custody of hardware and software to the HIO will be submitted to USAID throughout Years 4 and 5.

## **6.2 Other Electrical Equipment**

Other electrical equipment purchased by the contractor includes air-conditioning units and a fire protection system. These electrical items are installed by the contractor under Task 3 (site preparation) of the contract. Upon completing renovation and installation at HIO sites, the contractor submits site inventory acceptance certificates to the HIO for signature. The signed certificate indicates the HIO's acceptance and custody of all items received from the contractor under the site preparation task. Thereafter, the HIO is responsible for maintaining the sites including but not limited to air-conditioning units and the fire protection system.

The contractor is responsible for providing the HIO with an inventory of the air-conditioning units and fire protection system. Updated inventories showing newly-installed electrical items are submitted to the HIO on an ongoing basis. The inventories are divided by HIO branch site. A sample copy of the site preparation inventory submitted to HIO in March 1996 can be seen in Appendix C. Updates per facility or set thereof will be included in Deliverable 29, *Implementation Reports*.

**APPENDIX A**

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**GENERAL SERVICE AGREEMENT FOR THE PROVISION OF  
ROUTINE MAINTENANCE AND REPAIR SERVICES OF  
COMPUTER HARDWARE AND SYSTEM SOFTWARE FOR THE  
HIO/COST RECOVERY FOR HEALTH PROJECT**

AGREEMENT NO. HI-95-02

GENERAL SERVICE AGREEMENT  
FOR THE PROVISION OF ROUTINE MAINTENANCE AND REPAIR SERVICES  
OF COMPUTER HARDWARE & SYSTEM SOFTWARE  
FOR THE HIO/COST RECOVERY FOR HEALTH PROJECT

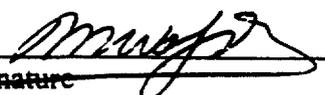
Chemonics International Consulting Division, acting on behalf of the HIO/Cost Recovery for Health Project, and American Telephone and Telegraph-Global Information Solutions (AT&T-GIS/Egypt -- formerly NCR/Egypt), hereby agree and enter into this agreement for the provision of computer hardware related routine maintenance services and as-required repair services to the HIO/Cost Recovery for Health Project, AID Contract No. 263-0170-C-00-3042-00. This agreement consists of three parts in addition to this cover page:

- Part I - Terms of Agreement
- Part II - Work Order Procedures
- Part III - Maintenance and Repair Protocols

The effective date of this Agreement will be the date on which the two parties sign the agreement document. If the parties sign on different dates, the later date will be the effective agreement date. The agreement is effective through January 21, 1996, and is renewable for an additional two years, through January 21, 1998, upon written notice from Chemonics to AT&T-GIS/Egypt.

The parties to this agreement hereby indicate their acceptance of the terms and conditions as set forth in Parts I through IV with the signatures of their authorized representatives shown below:

For AT&T-GIS/Egypt:

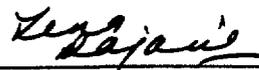
  
Signature

Mohamed Wazehi Esaki  
Name

Customer Support Services Mgr.  
Title

SEPT 1, 1995  
Date

For Chemonics International:

  
Signature

LENA DATANI  
Name

ADMINISTRATIVE MANAGER  
Title

SEPT. 1, 1995  
Date

## PART I

### TERMS OF AGREEMENT

#### 1.1 Definitions

- A. "Supplier" means American Telephone and Telegraph-Global Information Solutions (AT&T-GIS/Egypt -- formerly NCR/Egypt).
- B. "Agent" or "Contracting Agency" means Chemonics International, acting on behalf of the Buyer.
- C. "Buyer" means the HIO/Cost Recovery for Health Project (AID Contract No. 263-0170-C-00-3042-00).
- D. "AID" means the United States Agency for International Development.
- E. "HIO" means the Health Insurance Organization of the Government of the Arab Republic of Egypt.
- F. "Free World Country" means any country which is not a non-Free World country.
- G. "Non-Free World country" means any of the following countries: Afghanistan, Cambodia, Cuba, Iraq, Iran, Laos, Libya, North Korea, People's Republic of China, Syria, and Vietnam.
- H. "Host Country" or "Cooperative Country" means the Arab Republic of Egypt.

#### 1.2 Scope of the Agreement

This agreement gives Chemonics the option to purchase maintenance and repair services for computer-related hardware procured under the Chemonics - AT&T-GIS General Purchase Agreement No. HI-93-01 (GPA) dated December 28, 1993. Services may be purchased by Chemonics on a renewable annual basis. Purchase will be effected through work orders. The three parts of this agreement are:

Part I - Terms of Agreement: Presents the terms and conditions of the agreement.

Part II - Work Order Procedures: Outlines the procedures for processing work orders.

Part III - Maintenance and Repair Protocols: Presents the agreed upon standard procedures and schedules for periodic maintenance and as-required repairs of all categories of computer-related hardware.

### 1.3 Terms of the Agreement

This agreement extends from the date on which the two parties sign the agreement document through January 21, 1996, and is renewable for an additional two years, through January 21, 1998, upon written notice from Chemonics to AT&T-GIS/Egypt. If the parties sign on different dates, the later date will be the effective agreement start date. For equipment installed before the signing of this agreement, maintenance contract fees will be paid retroactively from the expiration of the equipment's warranty.

### 1.4 Procedure to Place Work Orders Under This Agreement

The procurement of routine maintenance and as-required repair services under this agreement will occur only on delivery of a work order from Chemonics International to AT&T-GIS/Egypt. Part II of this agreement describes in detail the steps to be followed by both parties when processing work orders.

### 1.5 Pricing

The prices for routine maintenance and as-required repair services (including replacement parts) under this agreement will be set by AT&T-GIS/Egypt at or below those prices offered to most favored customers under similar terms and conditions. Chemonics International reserves the right to negotiate the prices of each work order under this agreement.

### 1.6 Host-Country Taxes

Pursuant to a bilateral agreement between the United States and the host country government, the Supplier and those of its employees who are not citizens or permanent residents of the host country shall be free of all taxes, fees, levies, customs or impositions imposed under the laws in effect in the host country with respect to all equipment and materials supplied and services performed under this agreement. This exemption includes all customs, duties, and registration fees. In all cases, we will follow Egyptian tax law within the framework of the bilateral agreement.

### 1.7 Payment

Payment due the Supplier under this agreement shall be made in Egyptian Pounds on a net 30 day basis in accordance with the payment procedures established under Part II, Section 2.3.A of this agreement.

1.8 Warranty and Maintenance for Spare Parts

A. With reference to General Purchase Agreement No. HI-93-01, all commodities procured under the GPA and related purchase orders are covered by the Supplier's and manufacturers' warranties as described under Section 1.19 (A. through G.) of the GPA.

B. Furthermore, any replacement part(s) provided and installed by the Supplier in the course of repair work shall be covered under identical terms and conditions as specified in Section 1.19 (A. through G.) of the General Purchase Agreement with the following exception as stated under Section C immediately below.

C. The period of warranty for all provided replacement parts shall be twelve (12) months from the date that the parts are installed in the equipment and the repair work is accepted in writing by the Buyer.

1.9 Subcontracts

A. Subcontracts must comply with the nationality, source, origin, and componentry requirements of this agreement. The Supplier agrees to include the following provisions of this agreement in all subcontracts hereunder:

"Host Country Taxes"  
"Eligibility of Suppliers"  
"Eligibility of Commodities"

B. All subcontracts and purchase orders in excess of \$100,000 shall only be awarded with the prior written consent of the Agent and AID, and such consent, if given, shall not relieve the Supplier from any liability or obligation under this agreement.

1.10 Amendments

Modifications of the terms of this agreement shall be made by amendment signed by the parties.

1.11 Force Majeure

A. Except with respect to default of subcontractors, the Supplier shall not be liable for any excess costs if the failure to perform the agreement arises out of causes beyond the control and without the fault or negligence of the Supplier (Force Majeure) and if the Supplier, within twenty (20) days from the beginning of any such Force Majeure notifies the Agent of such prevention of performance and the cause thereof. Such causes may include, but are not restricted to, acts of the Buyer/AID in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault, or negligence of the

Supplier. If the failure to perform is caused by the fault of a subcontractor, and if such default arises out of causes beyond the control of both the Supplier and the subcontractor, and without the fault or negligence of either of them (Force Majeure), and the Supplier within twenty (20) days from the beginning of any such Force Majeure notifies the Agent of such prevention of performance and the cause thereof, the Supplier shall not be liable for any excess costs due to the failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Supplier to meet the required delivery schedule.

B. In the event of a Force Majeure, the Supplier, unless otherwise directed by the Agent in writing, shall continue to undertake and perform the duties set forth in this agreement as far as is reasonably practical.

C. In the event of a Force Majeure resulting in the suspension of work, this agreement shall be extended by a period equal to that for which the Supplier was prevented from performing.

D. The Supplier shall be entitled to reasonable costs incurred as a consequence of a Force Majeure.

E. If the Supplier's inability to perform by reason of the Force Majeure lasts for more than forty-five (45) days after notice has been given to the Agent, either party may terminate this agreement and the Supplier shall be entitled to any sums which would be payable in case of termination of this agreement by the Agent for convenience.

#### 1.12 Eligibility of Suppliers

A. No equipment, materials or services shall be eligible for AID financing if offered by a supplier or subcontractor included on any list of suspended, debarred, or ineligible bidders used by AID.

B. Except as otherwise provided in paragraph D below, the Supplier must be:

1. An individual who is a citizen or legal resident of the United States or Egypt;
2. A corporation or partnership organized under the laws of the United States;
3. A controlled foreign corporation, i.e. any foreign corporation of which more than 50 percent of the total voting power of all classes of stock is owned by United States shareholders within the meaning of the Section 957 et seq. of the Internal Revenue Code (26 U.S.C. 957); or
4. A joint venture of unincorporated association consisting entirely of individuals, corporations, or partnerships which fit any of the foregoing categories.

C. Citizens of any non-Free World country, firms and organizations located in or organized under the laws of any non-Free World country, and firms and organizations owned in any part by citizens or organizations of any non-Free World country, are ineligible for financing by AID as suppliers of commodities or as agents in connection with the supply of commodities, except that non-U.S. citizens lawfully admitted for permanent residence in the United States are eligible as individuals or owners, regardless of such citizenship.

D. The rules stated in paragraph B above do not apply to suppliers of incidental services which are related to this procurement of service and included as part of this agreement. Incidental services are defined as the installation and erection of AID financed equipment, or the training of personnel in the maintenance, operation or use of such equipment.

### 1.13 Eligibility of Commodities

#### A. Definitions

1. **Source.** The "Source" of the commodity is the country from which the commodity is shipped to the cooperating country, or the cooperating country itself if the commodity is located therein at the time of purchase. However, where a commodity is shipped from a free port or bonded warehouse in the form in which it was received therein, "source" means the country from which the commodity was shipped to the free port or bonded warehouse.
2. **Origin.** The "origin" of a commodity is the country or area in which a commodity is mined, grown or produced. A commodity is produced when, through manufacturing, processing, or substantial and major assembling of components, a commercially recognized new commodity results that is substantially different in basic characteristics or in purpose or utility from its components.
3. **Componentry.** "Components" are the goods that go directly into the production of a produced commodity.

#### B. Rule. Each commodity shall have its "source" and "origin" in the United States (Geographic Code 000) and meet the following componentry rules:

1. If the commodity contains any imported components which were acquired by the producer of the commodity in the form in which the components were imported, then the total cost of such components to the producer of the commodity (delivered at the point of production of the commodity) may not exceed 50 percent of the lowest price (excluding international transportation and cargo insurance) at which the Supplier generally makes the commodity available for export sale (whether or not financed by AID).

2. Any component from a non-Free World country makes the commodity ineligible for AID financing. (See Section 1.1)

#### 1.14 Suspension of Work

A. The Agent may, at any time, by written order to the Supplier (suspension of work order), require the Supplier to stop all, or any part of the work required by the Agreement for a period of up to ninety days from the specific effective date.

B. Upon receipt of such an order, the Supplier shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of additional costs related to work covered by the order.

C. Within the period of the suspension of work order, the Agent shall either:

1. Cancel the suspension of work; or
2. Terminate the work covered by such order as provided in the termination for convenience of the contracting agency clause of this agreement.

D. If the suspension of work order is canceled or the order expires, the Supplier shall resume work. An equitable adjustment shall be made as necessary in the time schedule, the price, or a combination thereof, or any other provisions if the Supplier asserts a claim for such adjustment within thirty (30) days after the end of the period of work suspension. Failure to agree to any adjustment shall be a dispute under the "Disputes, Appeals, and Arbitration" clause (1.24) of the Contract.

#### 1.15 Legal Effect of AID Approvals and Decisions

The parties hereto understand that the agreement has reserved to AID certain rights such as, but not limited to, the right to approve the terms and conditions of this agreement, the Supplier, and any or all plans, reports, specifications, subcontracts, offer documents, drawings, or any other documents related to the negotiated contract and the project of which it is a part. The parties hereto further understand and agree that AID in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by AID to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the project and shall not be construed as making AID a party to the agreement. The parties hereto understand and agree that AID may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the project with parties jointly or separately, without thereby incurring any responsibility or liability to the parties jointly or to any of them. Any approval (or failure to disapprove) by AID shall not bar the Agent, the Buyer, or AID from asserting any right, or relieve the Supplier from any liability which the Supplier might otherwise have to the Agent or AID.

**1.16 Termination by the Agent for Default**

A. The Agent may, by written notice of default sent to the Supplier by registered mail, terminate in whole or part of this agreement:

1. If the Supplier fails to make delivery of the maintenance and repair services within the specified delivery schedule or any extension thereof, or

2. If the Supplier fails to perform any of the other provisions of a work order, or so fails to make progress as to endanger performance of the agreement in accordance with its terms, and, in either of these two circumstances, does not rectify such failure within a period of ten (10) days (or such longer period as the Agent may authorize in writing) after receipt of notice from the Agent specifying such failure.

B. In the event the Agent terminates this agreement in whole or in part as provided in paragraph (A) of this clause, the Agent may procure, upon such terms and in such manner as the Agent may deem appropriate, supplies similar to those so determined, and the Supplier shall be liable to the Agent any excess costs for such similar supplies. However, the Supplier shall continue performance of this agreement to the extent not terminated under the provisions of this clause.

**1.17 Termination by the Agent for Convenience**

A. This agreement may be terminated by the Agent in whole, or in part, in accordance with this clause, whenever the Agent shall determine that such termination is in the best interest of the Buyer.

B. Termination shall be effected by Notice of Termination to the Supplier specifying that termination is for the convenience of the Buyer, the extent to which performance of work under the agreement is terminated, and the date upon which such termination becomes effective.

C. After receipt of a Notice of Termination and except as otherwise directed by the Agent, the Supplier shall:

1. Stop work under the agreement on the date and to the extent specified in the Notice of Termination, and place no further orders or subcontracts except as may be necessary for completion of the portion of the work under the agreement which is not terminated;

2. Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

3. Assign to the Agent, as it may direct, all of the rights, title, and interest of the Supplier under the agreement and subcontracts so terminated, in which case the Agent shall have

the right to settle or pay any claims arising out of the termination of such contracts and subcontracts:

4. With the approval or ratification of the Agent, to the extent the Agent may require, which approval or ratification shall be final and conclusive for all purposes of this clause, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts;

5. Transfer title to the Agent and deliver as directed by the Agent, the completed or partially completed equipment, material, and parts which would be required to be furnished to the Agent under the agreement;

6. Complete performance of the part of the work which has not been terminated by the Notice of Termination; and

7. Take such action as may be necessary for the protection of the property related to the contract which is in the possession of the Supplier and to which the Agent has title.

D. The Supplier shall submit to the Agent its written claim promptly by not later than three (3) months from the effective date of termination, except as the Agent may agree in writing.

E. The Supplier and the Agent shall consult within thirty (30) days of the submission of the claim concerning the whole or any part of the amount to be paid to the Supplier by reason of the termination of work. The agreement shall be amended accordingly and the Supplier shall be paid the agreed amount.

F. In deciding the amount due the Supplier, there shall be deducted (1) all settled claims which the Agent may have against the Supplier in connection with the agreement, and (2) the agreed price for, or the proceeds of sale of property acquired by the Supplier or sold and not otherwise recovered by or credited to the Agent.

G. Any disagreement regarding termination amounts or procedures shall be settled under the section of the contract entitled "Disputes, Appeals and Arbitration". (See below.)

#### 1.18 Disputes, Appeals and Arbitration

A. In the event of disagreement under the agreement, the Supplier shall submit a written statement to the Agent briefly describing the nature of the problem, the position of the Supplier regarding the issue, and a narrative of facts in support of the Supplier's position.

B. Within ten (10) days after receipt of the Supplier's statement, the Agent shall decide the issue and deliver a written statement of the decision to the Supplier, including the reasons supporting the decision, if adverse to the Supplier.

C. Within thirty (30) days after receipt of the Agent decision or the date such decision was due (whichever occurs first), the Supplier may submit to the Agent a written Notice of Appeal including a detailed description of the facts of the dispute with the dates of events, names of persons involved, references to documentation bearing on the matter (with copies attached), the relevant contract provision(s), the Supplier's contentions and conclusions, and a statement of why the Agent's decision is being questioned.

D. If within thirty (30) days after delivery of a Notice of Appeal, the parties cannot mutually agree to a satisfactory settlement, the matter shall be presented for arbitration following the rules of the United Nations Commission on International Trade Law (UNCITRAL).

#### 1.19 Governing Law and Language

This agreement shall be interpreted in accordance with the laws of the Government of Egypt. The governing language shall be English, and all notices pursuant to the provisions of this contract shall be in English.

#### 1.20 Audit and Records

A. The Supplier shall maintain books, records, documents, and other evidence and shall apply consistent accounting procedures and practices sufficient to reflect properly all transactions under or in connection with the agreement. The foregoing constitute "records" for the purpose of this clause.

B. The Supplier shall maintain such records during the contract term and for a period of three years after final payment. However, records which relate to appeals under the "Disputes, Appeals and Arbitration" clause or litigation or the settlement of claims arising out of the performance of this contract shall be retained until such appeals, litigation, or claims have been finally settled.

C. All records shall be subject to inspection and audit by the Buyer, the Agent, or their authorized agents at all reasonable times. The Supplier shall afford the Buyer or its Agents proper facilities for such inspection and audit. If this is a fixed price contract, it is not subject to audit of costs (except for any cost-reimbursable items) but is subject to audit for compliance with other provisions of this contract.

D. The Supplier further agrees to include in all of its subcontracts hereunder a provision that the subcontractor agree that the Buyer or any of its Agents shall, until the expiration of three (3) years after the final payment under the subcontract, have access to and the right to examine any records of such subcontractor involving the transactions related to the subcontract.

#### 1.21 Assignment

The Supplier may assign neither its obligation to perform under the agreement, nor its rights to receive payment under the contract, except with prior written consent of both the Agent and AID.

1.22 AID Regulations

This transaction is being financed by the U.S. Agency for International Development, and is subject to all applicable AID regulations.

1.23 Notices

Any notice given by either party will be in writing or by telegram, cable, or telefax, and will be deemed duly given or sent when delivered to the following addresses:

To Agent: Chemonics International  
2000 M Street N.W.  
Suite 200  
Washington D.C. 20036 USA  
Attention: Terry Collier

To Supplier: AT&T-GIS/Egypt  
21, Giza Street  
Giza, Egypt

Notices shall be effective when delivered or on the effective date of the notice, whichever is later.

## **PART II**

### **WORK ORDER PROCEDURES**

The Purpose of Part II of this document is to establish the procedures which AT&T-GIS/Egypt and Chemonics International will follow in the procurement of maintenance and repair services. These procedures have been designed to expedite the addition of new equipment to be covered under this warrant.

#### **2.1. Procurement of Maintenance and Repair Contracts**

Original warranties on all equipment are tied to installation at HIO sites. All original warranties are scheduled to expire one year after the date of installation acceptance. Before the expiration of the original warranty, Chemonics International will inform AT&T of its intent to enter into a maintenance contract with AT&T-GIS for equipment installed at a specific site.

The notice of intent will include an Equipment Schedule (see sample in Appendix A) which will be completed according to AT&T's System Installation and Certification. Completion of the Equipment Schedule should be as follows:

A. Immediately upon approving AT&T's System Installation and Certification, Chemonics will complete the Equipment Schedule with the following details: the site of the equipment, the branch name, the class/model number and quantity of each type of equipment, the serial number for each piece of equipment, the installation date, and maintenance requirements (Under Maintenance Contract versus Time and Materials).

B. Chemonics will forward the completed Equipment Schedule to AT&T to specify the maintenance fees required for each piece of equipment listed. Maintenance fees should be at or below the rates given to most favored customers and will remain fixed for the duration of the maintenance and repair contract.

C. After providing the maintenance fees and signing the Equipment Schedule, AT&T will return the schedule to Chemonics for their final review and approval.

D. Once approved by both parties, the Equipment Schedule will be added to the maintenance and repair contract.

#### **2.2. Method of procuring maintenance and repair services for items not covered by this contract.**

For equipment not covered explicitly under this agreement (e.g. terminals), Chemonics reserves the right to request service or repairs to the equipment. This request must be made in writing by Chemonics or its designee.

In response, an AT&T service technician will evaluate the maintenance and repair needs and their associated costs. AT&T will submit their evaluation with complete details to Chemonics for their review and approval. Chemonics' approval of the service terms will be the basis of a work order between AT&T and Chemonics.

The hourly labor rate associated with servicing and repairing equipment will be the LE equivalent of US\$60 per hour, with a minimum charge of two hours. This rate is at or below the prices offered to most favored customers and shall remain for the period of this contract.

2.3. Payment

A. Payment on this contract will be made in quarterly installments. Payment dates will be as follows:

April 21,  
July 21,  
October 21, and  
January 21 of each year.

AT&T is responsible for providing the client with a detailed invoice.

B. Payment for services outside the maintenance contract (see Section 2.2. above) will be net 30 days.

## **PART III**

### **MAINTENANCE AND REPAIR PROTOCOLS**

#### **3.1. Scheduled Maintenance**

All equipment covered under this agreement should receive regularly scheduled maintenance at a minimum of every six months. A maintenance call should include a thorough inspection of the equipment as well as routine maintenance to the equipment. AT&T/GIS will provide written records of its routine inspections, cleanings, maintenance and repairs. Preventive maintenance will be available between 8:00 A.M. and 4:30 P.M. at no premium charge.

#### **3.2. Service Calls**

##### **A. Procedure for obtaining service**

When service is needed on equipment covered under this contract, a call will be placed to the nearest AT&T-GIS service center. If possible, this phone call will be documented by a subsequent fax outlining the nature of the problem.

AT&T-GIS will provide service within 24 hours after receiving a service call. If equipment is not able to be repaired within 48 hours, AT&T-GIS will provide, at no charge, alternate equipment to continue the ongoing operation of the system. This equipment will be provided within 48 hours of the original service call.

If AT&T-GIS fails to supply service in 24 hours, or fails to repair equipment (or provide replacement) within 48 hours, a penalty in the amount of 2.5 percent of the yearly maintenance fee for that piece of equipment will be levied against AT&T-GIS. If after one week, the equipment is still inoperable, an additional 2.5% will be charged for each week that the equipment is down and there is no replacement provided.

##### **B. Friday or holiday service calls**

Saturday through Thursday is considered the normal work week and no premium payment will be made for work performed on these days unless it is an Egyptian national holiday. If service is required on a Friday or a holiday, a premium payment will be made to AT&T-GIS. The total cost of labor for a service representative including premium payment will be the LE equivalent of US\$70.

The authority to authorize a Friday or holiday service call shall lay solely with Chemonics or its designee. If AT&T provides service on a Friday or a holiday without specific authorization, Chemonics will not be liable for the premium payment.

C. Exclusions from the contract:

The following goods and services are not included in this contract:

1. Consumable supplies such as batteries, ribbons, paper etc. Printer heads for dot-matrix printers and print drums for laser printers are consumables.
2. Repair for damage due to fire, water, accidents, natural disasters or improper use or negligence by Chemonics or his designee. Including the failure to operate the equipment in accordance with AT&T/GIS power and environmental specifications.
3. Repair due to improper interconnection with other equipment.
4. Repair for damage resulting from work performed on the equipment by other than AT&T-GIS authorized personnel.

In any of the above cases, Chemonics reserves the right to make use of AT&T repair technicians through the mechanism outlined in Part II, Section II of this agreement.

**GENERAL SERVICE AGREEMENT HI-95-02**

**AMENDMENT 1**

This amendment extends the end date of the Term of Agreement from January 21, 1996, to January 21, 1998.

1. The following paragraph under Part I, Section 1.3 is deleted.

"This agreement extends from the date on which the two parties sign the agreement document through January 21, 1996, and is renewable for an additional two years, through January 21, 1998, upon written notice from Chemonics to AT&T-GIS/Egypt. If the parties sign on different dates, the later date will be the effective agreement start date. For equipment installed before the signing of this agreement, maintenance contract fees will be paid retroactively from the expiration of the equipment's warranty".

2. Part I, Section 1.3 is replaced with the following text.

"This agreement extends from the date on which the two parties sign the agreement document through January 21, 1998. If the parties sign on different dates, the later date will be the effective agreement start date. For equipment installed before the signing of this agreement, maintenance contract fees will be paid retroactively from the expiration of the equipment's warranty".

**For AT&T Global Information Solutions**

**For Chemonics International Inc**

*[Signature]*

Sign

*[Signature]*

*[Signature]*

Name

Lena Dajani

*[Signature]*

Title

Administrative Manager

January 20, 1996

Date

January 20, 1996

**APPENDIX B**

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**SAMPLE EQUIPMENT INSTALLATION AND MAINTENANCE  
SCHEDULE**

Cost Recovery in Health Project  
Health Insurance Organization (HIO)  
Maximus - Chemonics - Arabsoft

**GENERAL SERVICE AGREEMENT HI-95-02**  
**EQUIPMENT INSTALLATION AND MAINTENANCE SCHEDULE**

HIO MIS Center, 20 Al Ahram Street, Heliopolis

**For AT&T-GIS**

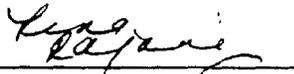
Approval: 

Name: M. WAGDI ZAKI

Title: CUSTOMER SERVICES MANAGER

Date: DEC. 21, 1995

**For Chemonics International Inc.**

Approval: 

Name: LENA DAJANI

Title: ADMINISTRATIVE MANAGER

Date: DEC. 21, 1995

CRHP - Maximus Chemonica Arabsoft

Stock List Sorted By Site

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( Q0001 ) MIS HEAD QUARTER

Room	itm Code	Name	Item No.	Ser./Class	Price	Fee/Year	Contract
(00001) AHAM IST RECEPTION	00000001	PROCESSOR	13	25352182/3433-2000-80	4700.000	376.00	H1-93-08
(00001) AHAM IST RECEPTION	00000010	MONITOR	92	25181139/3298-0235	0.000	0.00	H1-93-08
(00002) AHAM GROUND ROOM 6	00000001	PROCESSOR	48	25319767/3230-0494-80	2290.000	167.00	H1-93-06
(00002) AHAM GROUND ROOM 6	00000001	PROCESSOR	14	25352183/3433-2000-80	4700.000	376.00	H1-93-08
(00002) AHAM GROUND ROOM 6	00000010	MONITOR	93	25181131/3298-0235	0.000	0.00	H1-93-08
(00002) AHAM GROUND ROOM 6	00000010	MONITOR	105	24326658/3298-0235	0.000	0.00	H1-93-06
(00003) AHAM GR. CONFERENCE	00000004	TERMINAL	16	2384515/2226-1100-730	700.000	84.00	H1-93-14
(00003) AHAM GR. CONFERENCE	00000004	TERMINAL	34	2390879/2226-1100-730	700.000	84.00	H1-93-14
(00003) AHAM GR. CONFERENCE	00000004	TERMINAL	36	2391463/2226-1100-730	750.000	84.00	H1-93-08
(00004) AHAM GR. COMP	00000001	PROCESSOR	37	26428800/3230-0020-80	2761.000	167.00	H1-93-14
(00004) AHAM GR. COMP	00000001	PROCESSOR	39	26428802/3230-0020-80	2761.000	167.00	H1-93-14
(00004) AHAM GR. COMP	00000001	PROCESSOR	49	25319766/3230-0494-80	2380.000	173.00	H1-93-06
(00004) AHAM GR. COMP	00000002	PRINTER	73	GPTV008410/HP LAZER	3470.000	862.00	H1-93-06
(00004) AHAM GR. COMP	00000004	TERMINAL	30	2384617/2226-1100-730	700.000	84.00	H1-93-14
(00004) AHAM GR. COMP	00000004	TERMINAL	31	2384714/2226-1100-730	700.000	84.00	H1-93-14
(00004) AHAM GR. COMP	00000004	TERMINAL	32	2384469/2226-1100-730	700.000	84.00	H1-93-14
(00004) AHAM GR. COMP	00000010	MONITOR	106	24326647/3298-0235	0.000	0.00	H1-93-06
(00004) AHAM GR. COMP	00000010	MONITOR	94	24326654/3298-0240	0.000	0.00	H1-93-06
(00004) AHAM GR. COMP	00000010	MONITOR	96	25658257/3298-0240	0.000	0.00	H1-93-14
(00005) AHAM GR. COMPUTER	00000001	PROCESSOR	137	25806135/3355-4000-80	21980.000	0.00	H1-93-14
(00005) AHAM GR. COMPUTER	00000001	PROCESSOR	139	25806131/3355-4000-80	21980.000	0.00	H1-93-14

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(00005) AHAM GR. COMPUTER	00000001	PROCESSOR	1	23510550/3433-2000-80	9715.000	376.00	HI-93-06
(00005) AHAM GR. COMPUTER	00000001	PROCESSOR	2	3624614498/4850-1400	195675.000	14290.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000002	PRINTER	66	9314002869/GENICOM	1116.000	196.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000002	PRINTER	67	9314002868/GENICOM	1116.000	196.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000002	PRINTER	68	9330695022/GENICOM	8325.000	1460.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000003	UNINTERRUPTIBLE POWER SUPPLY	64	943147/AP206	7160.000	0.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000003	UNINTERRUPTIBLE POWER SUPPLY	62	9316008/AP410	17508.000	1751.00	HI-93-06
(00005) AHAM GR. COMPUTER	00000003	UNINTERRUPTIBLE POWER SUPPLY	63	9331014/AP410	14580.000	1751.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000004	TERMINAL	15	2385175/2226-1100-730	700.000	84.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000005	TELECOM EQUIPMENT	141	009590585/CODEX 3345	1400.400	140.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000007	DRIVE	120	9207156/306-23616M	9938.000	1195.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000007	DRIVE	121	24628807/6091-6300-66	0.000	0.00	HI-93-06
(00005) AHAM GR. COMPUTER	00000010	MONITOR	80	21766088/3298-0131	0.000	0.00	HI-93-08
(00005) AHAM GR. COMPUTER	00000010	MONITOR	81	21759592/3298-0131	0.000	0.00	HI-93-06
(00005) AHAM GR. COMPUTER	00000010	MONITOR	138	21774984/3298-0131-80	0.000	0.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000010	MONITOR	140	21775422/3298-0131-80	0.000	0.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000011	3550 SOFTWARE	306	/	0.000	1785.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000011	3550 SOFTWARE	307	/	0.000	1320.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000011	3550 SOFTWARE	308	/	0.000	0.00	HI-93-14
(00005) AHAM GR. COMPUTER	00000012	MIS OFFICE SYSTEM	309	/	0.000	753.00	HI-93-06
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	310	/	0.000	3397.00	
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	311	/	0.000	2341.00	
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	312	/	0.000	2214.00	
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	313	/	0.000	116.00	
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	314	/	0.000	456.00	
(00005) AHAM GR. COMPUTER	00000013	3550 UPGRADE	315	/	0.000	48.00	

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(00006)	AHRAM GROUND ROOM 1	00000001	PROCESSOR	41	25319778/3230-0494-80	2290.000	167.00	H1-93-06
(00006)	AHRAM GROUND ROOM 1	00000001	PROCESSOR	7	25352176/3433-2000-80	4700.000	376.00	H1-93-08
(00006)	AHRAM GROUND ROOM 1	00000004	TERMINAL	17	2385437/2226-1100-730	750.000	84.00	H1-93-08
(00006)	AHRAM GROUND ROOM 1	00000004	TERMINAL	18	2390797/2226-1100-730	750.000	84.00	H1-93-08
(00006)	AHRAM GROUND ROOM 1	00000004	TERMINAL	19	2384625/2226-1100-730	700.000	84.00	H1-93-14
(00006)	AHRAM GROUND ROOM 1	00000008	NETWORK HUB	76	22610210/4261-1003	1880.000	120.00	H1-93-06
(00006)	AHRAM GROUND ROOM 1	00000010	MONITOR	84	25181129/3298-0235	0.000	0.00	H1-93-08
(00006)	AHRAM GROUND ROOM 1	00000010	MONITOR	86	25181136/3298-0235	0.000	0.00	H1-93-08
(00006)	AHRAM GROUND ROOM 1	00000010	MONITOR	98	24326648/3298-0235	0.000	0.00	H1-93-06
(00007)	AHRAM GROUND ROOM 2	00000001	PROCESSOR	5	25352174/3433-2000-80	4700.000	376.00	H1-93-08
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	20	2384687/2226-1100-730	700.000	84.00	H1-93-14
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	21	2390832/2226-1100-730	700.000	84.00	H1-93-14
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	22	2384926/2226-1100-730	750.000	84.00	H1-93-14
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	23	2384724/2226-1100-730	700.000	84.00	H1-93-14
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	24	2384962/2226-1100-730	750.000	84.00	H1-93-08
(00007)	AHRAM GROUND ROOM 2	00000004	TERMINAL	25	2384958/2226-1100-730	750.000	84.00	H1-93-08
(00008)	AHRAM GROUND ROOM 3	00000001	PROCESSOR	42	25319765/3230-0494-80	2290.000	167.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000001	PROCESSOR	43	25319768/3230-0494-80	2290.000	167.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000001	PROCESSOR	44	25319764/3230-0494-80	2290.000	167.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000001	PROCESSOR	45	25319761/3230-0494-80	2290.000	167.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000001	PROCESSOR	9	25352178/3433-2000-80	4700.000	376.00	H1-93-08
(00008)	AHRAM GROUND ROOM 3	00000010	MONITOR	88	25181127/3298-0235	0.000	0.00	H1-93-08
(00008)	AHRAM GROUND ROOM 3	00000010	MONITOR	99	24326652/3298-0235	0.000	0.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000010	MONITOR	100	24326923/3298-0235	0.000	0.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000010	MONITOR	101	24326653/3298-0235	0.000	0.00	H1-93-06
(00008)	AHRAM GROUND ROOM 3	00000010	MONITOR	102	24326929/3298-0235	0.000	0.00	H1-93-06

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Stock List Sorted By Site

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(00009)	AHRAM GROUND ROOM 4	00000001	PROCESSOR	46	25319770/3230-0494-80	2290.000	167.00	HI-93-06
(00009)	AHRAM GROUND ROOM 4	00000001	PROCESSOR	47	25319763/3230-0494-80	2290.000	167.00	HI-93-06
(00009)	AHRAM GROUND ROOM 4	00000001	PROCESSOR	4	25352173/3433-2000-80	4700.000	376.00	HI-93-08
(00009)	AHRAM GROUND ROOM 4	00000002	PRINTER	70	6001224/7080EC	1635.000	237.00	HI-93-08
(00009)	AHRAM GROUND ROOM 4	00000004	TERMINAL	26	2384961/2226-1100-730	700.000	84.00	HI-93-14
(00009)	AHRAM GROUND ROOM 4	00000004	TERMINAL	27	2390860/2226-1100-730	750.000	84.00	HI-93-08
(00009)	AHRAM GROUND ROOM 4	00000004	TERMINAL	28	2384892/2226-1100-730	700.000	84.00	HI-93-14
(00009)	AHRAM GROUND ROOM 4	00000004	TERMINAL	29	2385224/2226-1100-730	700.000	84.00	HI-93-14
(00009)	AHRAM GROUND ROOM 4	00000008	NETWORK HUB	75	22610206/4261-1003	1880.000	120.00	HI-93-06
(00009)	AHRAM GROUND ROOM 4	00000010	MONITOR	83	25181135/3298-0235	0.000	0.00	HI-93-08
(00009)	AHRAM GROUND ROOM 4	00000010	MONITOR	103	24326657/3298-0235	0.000	0.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000001	PROCESSOR	50	25319779/3230-0494-80	2290.000	167.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000001	PROCESSOR	51	25319760/3230-0494-80	2380.000	173.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000001	PROCESSOR	53	25319769/3230-0494-80	2290.000	167.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000010	MONITOR	110	24326921/3298-0235	0.000	0.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000010	MONITOR	107	24326649/3298-0235	0.000	0.00	HI-93-06
(00012)	AHRAM GROUND ROOM 7	00000010	MONITOR	108	24326645/3298-0235	0.000	0.00	HI-93-06
(00013)	AHRAM GROUND ROOM 8	00000001	PROCESSOR	52	25319773/3230-0494-80	2290.000	167.00	HI-93-06
(00013)	AHRAM GROUND ROOM 8	00000001	PROCESSOR	3	25352172/3433-2000-80	4700.000	376.00	HI-93-08
(00013)	AHRAM GROUND ROOM 8	00000001	PROCESSOR	11	25352180/3433-2000-80	4700.000	376.00	HI-93-08
(00013)	AHRAM GROUND ROOM 8	00000008	NETWORK HUB	77	22607326/4261-1003	1880.000	120.00	HI-93-06
(00013)	AHRAM GROUND ROOM 8	00000010	MONITOR	82	25181132/3298-0235	0.000	0.00	HI-93-08
(00013)	AHRAM GROUND ROOM 8	00000010	MONITOR	90	25181140/3298-0235	0.000	0.00	HI-93-08
(00013)	AHRAM GROUND ROOM 8	00000010	MONITOR	109	24326651/3298-0235	0.000	0.00	HI-93-06
(00017)	AHRAM 1ST OFFICE 4	00000001	PROCESSOR	40	26428803/3230-0020-80	2761.000	167.00	HI-93-14
(00017)	AHRAM 1ST OFFICE 4	00000001	PROCESSOR	10	25352179/3433-2000-80	4700.000	376.00	HI-93-08

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Stock List Sorted By Site

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(00017) AHAM 1ST OFFICE 4	00000010	MONITOR	89	25181137/3298-0235	0.000	0.00	HI-93-08
(00017) AHAM 1ST OFFICE 4	00000010	MONITOR	97	25658537/3298-0240	0.000	0.00	HI-93-14
(00019) AHAM 1ST OFFICE 6	00000001	PROCESSOR	54	25319775/3230-0494-80	2290.000	167.00	HI-93-06
(00019) AHAM 1ST OFFICE 6	00000010	MONITOR	111	24326926/3298-0235	0.000	0.00	HI-93-06
(00020) AHAM 1ST CUBE 1	00000001	PROCESSOR	55	25319777/3230-0494-80	2290.000	167.00	HI-93-06
(00020) AHAM 1ST CUBE 1	00000010	MONITOR	112	24326656/3298-0235	0.000	0.00	HI-93-06
(00021) AHAM 1ST CUBE 2	00000001	PROCESSOR	6	25352175/3433-2000-80	4700.000	376.00	HI-93-08
(00021) AHAM 1ST CUBE 2	00000010	MONITOR	85	25181133/3298-0235	0.000	0.00	HI-93-08
(00022) AHAM 1ST CUBE 3	00000001	PROCESSOR	56	25319771/3230-0494-80	2290.000	167.00	HI-93-06
(00022) AHAM 1ST CUBE 3	00000010	MONITOR	113	24326920/3298-0235	0.000	0.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000001	PROCESSOR	58	25319774/3230-0494-80	2290.000	167.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000001	PROCESSOR	59	25319780/3230-0494-80	2290.000	167.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000001	PROCESSOR	57	25319772/3430-0494-80	2290.000	167.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000002	PRINTER	69	6001108/7080EC	1635.000	237.00	HI-93-08
(00023) AHAM 1ST TRAINING	00000010	MONITOR	114	24326642/3298-0235	0.000	0.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000010	MONITOR	115	24326644/3298-0235	0.000	0.00	HI-93-06
(00023) AHAM 1ST TRAINING	00000010	MONITOR	116	24326659/3298-0235	0.000	0.00	HI-93-06
(00024) AHAM 1ST	00000001	PROCESSOR	38	26428801/3230-0020-80	2761.000	173.00	HI-93-14
(00024) AHAM 1ST	00000001	PROCESSOR	60	25317759/3230-0494-80	2290.000	167.00	HI-93-06
(00024) AHAM 1ST	00000001	PROCESSOR	61	25319776/3230-0494-80	2290.000	167.00	HI-93-06
(00024) AHAM 1ST	00000002	PRINTER	72	GPTV8368/HP LAZER	3470.000	862.00	HI-93-06
(00024) AHAM 1ST	00000010	MONITOR	117	24326922/3298-0235	0.000	0.00	HI-93-06
(00024) AHAM 1ST	00000010	MONITOR	118	24326650/3298-0235	0.000	0.00	HI-93-06
(00024) AHAM 1ST	00000010	MONITOR	95	25658380/3298-0240	0.000	0.00	HI-93-14
(00026) AHAM 1ST OFFICE 13	00000001	PROCESSOR	65	25319762/3230-0494-80	2290.000	167.00	HI-93-06
(00026) AHAM 1ST OFFICE 13	00000001	PROCESSOR	12	25352181/3433-2000-80	4700.000	376.00	HI-93-08

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Stock List Sorted By Site

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(00026)	AHRAM 1ST OFFICE 13	00000004	TERMINAL	33	2390981/2226-1100-730	700.000	84.00	H1-93-14
(00026)	AHRAM 1ST OFFICE 13	00000004	TERMINAL	35	2385197/2226-1100-730	700.000	84.00	H1-93-14
(00026)	AHRAM 1ST OFFICE 13	00000010	MONITOR	91	25181138/3298-0235	0.000	0.00	H1-93-08
(00026)	AHRAM 1ST OFFICE 13	00000010	MONITOR	119	24326655/3298-0235	0.000	0.00	H1-93-06
(00027)	AHRAM 1ST OFFICE 14	00000001	PROCESSOR	8	25352177/3433-2000-80	4700.000	376.00	H1-93-08
(00027)	AHRAM 1ST OFFICE 14	00000002	PRINTER	71	6001234/7080EC	1635.000	237.00	H1-93-08
(00027)	AHRAM 1ST OFFICE 14	00000010	MONITOR	87	25181128/3298-0235	0.000	0.00	H1-93-08
(00040)	AHRAM GR. CORRIDOR	00000008	NETWORK HUB	78	226073391/4261-1003	1880.000	120.00	H1-93-06
(00041)	AHRAM IST. CORRIDOR	00000008	NETWORK HUB	74	2264595570/4261-1003	0.000	120.00	LOCAL
(00041)	AHRAM IST. CORRIDOR	00000008	NETWORK HUB	79	22688076/4261-1003	0.000	120.00	LOCAL

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**APPENDIX C**

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**SAMPLE SITE PREPARATION INVENTORY**

SITE PREPARATION INVENTORY

NO	COMMODITY LOCATION/ SITE NAME	ITEM/ GENERIC NAME	BRAND	MODEL	NO UNIT	APPROX. VALUE (LE)	AIRCONDITIONING UNITS			GUARANTEE		MAINTEN CONTRACT REQUIRED	SITE INVENTORY ACCEPTANCE	
							CAPACITY BTU	OUTSIDE UNIT SIN	INSIDE UNIT SIN	DATE INSTALL	END DATE		DATE RECEIVED	RECEIVED & ACCEPTED BY HIO (NAME)
<b>CAIRO BRANCH</b>														
<b>A REGION I POLYCLINICS</b>														
1	EL QOBBA	A/C	YORK	A18	1	3,031	18,000	76231	76667	26-Jan-94	26-Jan-95	yes	23-Jan-95	Mohamed Abdel Hamid Hilal*
2	MISR EL GELIDDAH	A/C	YORK	A18	1	3,031	18,000	76974	76005	1-Feb-94	1-Feb-95	yes	23-Jan-95	Mohamed Abdel Gawad*
3	BAB EL SHAREYAH	A/C	YORK	A18	1	3,031	18,000	76104	76437	3-Feb-94	3-Feb-95	yes	23-Jan-95	Abdel Rahman Mohamed*
4	EL AZHER	A/C	YORK	A30	1	4,046	30,000	9985	8373	7-Feb-94	7-Feb-95	yes	23-Jan-95	Ahmed Sidki*
5	EL ALF MASKEN	A/C	YORK	A30	1	4,046	30,000	9984	8311	7-Feb-94	7-Feb-95	yes	23-Jan-95	Mohamed Abdel Rahim*
6	EL MAIAR	A/C	YORK	A24	1	3,031	24,000	76907	74566	9-Feb-94	9-Feb-95	yes	23-Jan-95	Osama Ahmed Omar*
	Subtotal (Units & Cost)				6	20,216								
<b>B REGION II POLYCLINICS</b>														
7	EL NASR (HELWAN)	A/C	YORK	MC18	1	2,660	18,000	1364	1825	15-Aug-94	15-Aug-95	yes	30-Apr-95	Samir Wahba*
8	EL ENTAG EL HARBEY	A/C	YORK	MC24	1	3,579	24,000	1846	1336	31-Aug-94	31-Aug-95	yes	30-Apr-95	Samir Ahmed*
9	EL MAASHAT	A/C	YORK	MC24	1	3,579	24,000	1847	1828	13-Aug-94	31-Aug-95	yes	31-Apr-95	Atef Ibrahim*
	Subtotal (Units & Cost)				3	9,818								
<b>C REGION III POLYCLINICS</b>														
10	EL MAADI	A/C	YORK	MC18	1	2,660	18,000	1797	1931	30-Aug-94	30-Aug-95	yes		(to be processed shortly)
11	ABDEEN	A/C	YORK	MC18	1	2,660	18,000	1952	1687	31-Aug-94	31-Aug-95	yes		"
12	EL MOQATTAM	A/C	YORK	MC30	1	3,590	30,000	631	770	31-Aug-94	31-Aug-95	yes		"
	Subtotal (Units & Cost)				3	8,910								
<b>D REGION IV POLYCLINICS</b>														
13	RAMSIS	A/C	YORK	MC30	1	3,590	30,000	476	424	5-Jul-94	5-Jul-95	yes	6-May-95	Sayed Mohamed*
14	NASSER	A/C	YORK	MC24	1	3,125	24,000	964	227	6-Jul-94	6-Jul-95	yes	23-Jan-95	Mohamed Said Abdel Fattah*
15	SHEPARD	A/C	YORK	MC24	1	3,125	24,000	905	453	5-Jul-94	5-Jul-95	yes	6-May-95	Hani Mohamed*
16	EL GOMHOREYAH	A/C	YORK	MC24	1	3,125	24,000	360	325	5-Jul-94	5-Jul-95	yes	27-May-95	Abdel Galil*
17	SHOUBRA EL MAZAIAT	A/C	YORK	MC24	1	3,125	24,000	961	452	11-Jul-94	11-Jul-95	yes	6-May-95	Mohamed Kamal*
18	SHOUBRA	A/C	YORK	MC18	1	2,660	18,000	378	326	11-Jul-94	11-Jul-95	yes	17-Jun-95	Abdel Latif*
19	MEDINAT NASR	A/C	YORK	MC24	1	3,125	24,000	1841	1832	15-Aug-94	15-Aug-95	yes		(to be processed shortly)
	Subtotal (Units & Cost)				7	21,875								
<b>E CAIRO BR HOSPITALS</b>														
20	EL NASR (HELWAN)	A/C	YORK	CCR27	1	3,425	24,000	3070	1507	11-Jun-95	11-Jun-96	not yet		(to be processed shortly)
21	SHOUBRA	A/C	YORK	CCR27	1	3,425	24,000	3209	3246	11-Jun-95	11-Jun-96	not yet		"
22	EL MOQATTAM	A/C	YORK	CCR27	1	3,425	24,000	3071	1518	11-Jun-95	11-Jun-96	not yet		"
23	MEDINAT NASR	A/C	YORK	CCR30	1	3,725	30,000	3210	8765	1-Nov-95	1-Nov-96	not yet		"
	Subtotal (Units & Cost)				4	14,000								

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SITE PREPARATION INVENTORY

NO	COMMODITY LOCATION/ SITE NAME	ITEM/ GENERIC NAME	BRAND	MODEL	NO UNIT	APPROX. VALUE (LE)	AIRCONDITIONING UNITS			GUARANTEE		MAINTEN CONTRACT REQUIRED	SITE INVENTORY ACCEPTANCE	
							CAPACITY BTU	OUTSIDE UNIT S/N	INSIDE UNIT S/N	DATE INSTALL	END DATE		DATE RECEIVED	RECEIVED & ACCEPTED BY HID (NAME)
I CAIRO BR MIS CENTER														
24	TRAINING ROOM	A/C	YORK	A24	1	3,650	24,000	82892	83118	3-Oct-94	3-Oct-95	yes	31 Oct 94	Suad Naguib*
25	TRAINING ROOM	A/C	YORK	A24	1	3,650	24,000	82891	82897	3-Oct-94	3-Oct-95	yes	31 Oct 94	Suad Naguib*
26	COMPUTER ROOM	A/C	YORK	A24	1	3,650	24,000	82894	82896	3-Oct-94	3-Oct-95	yes	31 Oct 94	Suad Naguib*
27	STAT DEPT CHIEF	A/C	YORK	A18	1	3,080	18,000	78069	78542	3-Oct-94	3-Oct-95	yes	31 Oct 94	Suad Naguib*
28	DRUG DEPT CHIEF	A/C	YORK	A30	1	4,025	30,000	12278	12400	6-Mar-95	6-Mar-96	yes	17 Apr 95	Fatima Shukri*
	Subtotal (Units & Cost)				5	18,055								
	Grand Total (Units & Cost)				28	92,874								
II HIO MIS CENTER, AL AHRAM														
29	GROUND FLOOR	A/C	POWER	P24CM	1	4,230.48	24,000	N/A	28587	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
30	GROUND FLOOR	A/C	POWER	PO32CM	1	4,230.48	32,000	N/A	18857	12-Dec-94	12-Dec-95	yes	5 May-95	Faisal Taie
31	GROUND FLOOR	A/C	POWER	PO32CM	1	4,230.48	32,000	N/A	18859	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
32	GROUND FLOOR	A/C	POWER	P24CM	1	4,230.48	24,000	N/A	28629	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
33	GROUND FLOOR	A/C	POWER	P24CM	1	4,230.48	24,000	N/A	28588	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
34	GROUND FLOOR	A/C	POWER	P24CM	1	4,230.48	24,000	N/A	28590	12-Dec-94	12-Dec-95	yes	5 May-95	Faisal Taie
35	GROUND FLOOR	A/C	POWER	PO32CM	1	4,230.48	32,000	N/A	18856	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
36	GROUND FLOOR	A/C	POWER	P32CM	1	4,230.48	32,000	N/A	18604	12-Dec-94	12-Dec-95	yes	5 May-95	Faisal Taie
37	GROUND FLOOR	A/C	POWER	P32CM	1	4,230.48	32,000	N/A	18600	12-Dec-94	12-Dec-95	yes	5 May 95	Faisal Taie
38	GROUND FLOOR	A/C	POWER	PO20CM	1	4,230.48	20,000	N/A	37443	12-Dec-94	12-Dec-95	yes	5-May-95	Faisal Taie
39	GROUND FLOOR	A/C	POWER	P32CM	1	4,230.48	32,000	N/A	18599	12-Dec-94	12-Dec-95	yes	5 May-95	Faisal Taie
40	GROUND FLOOR	A/C	POWER	P24CM	1	4,230.48	24,000	N/A	28591	12-Dec-94	12-Dec-95	yes	5-May 95	Faisal Taie
	Subtotal (Units & Cost)				12	50,765.75								
41	GROUND FLOOR	HEAT SYSTEM	GAZA PROJ	N/A	N/A	25,860	N/A	N/A	N/A	1-Feb-95	1-Feb-96	yes	5 May 95	Faisal Taie

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