

**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT**

**In Support of Telecommunications IV**

**USAID Contract Number  
263-0177-C-00-2216-00**

**Quarterly Report No. 9**

**4th Quarter, 1994**



**Overseas Bechtel, Incorporated - Job 22083  
and its subcontractor Teleconsult, Inc.  
World Trade Center, 18th Floor  
Cairo, Baulac, Egypt**

22083-S112-USAID- 277

## Overseas Bechtel, Incorporated

Consulting Engineers

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Eng. Reem Gohar  
Project Officer  
USAID  
106, Kasr El-Aini Street  
Garden City, Cairo, Egypt

February 6, 1995

Dear Eng. Gohar,

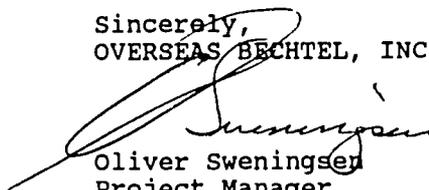
**USAID CMC Contract No. 263-0177-C-00-2216-00  
Quarterly Report No. 9**

This is Quarterly Report No. 9 for the Telecoms IV Expansion Project. Progress is summarized for the CMC Services Contract and host country contracts for Digital Switching Systems (DSS) and Outside Plant (OSP).

Overall the project is estimated to be 84% complete. All Final Acceptance tests and inspections are complete for the 20,000 line #5ESS switch installations at Opera, Giza, Ramsis and Pyramid Exchanges. Facilities work for the Giza 19,000 line #5ESS upgrade began in December.

The OSP Contract is estimated to be 84% complete at Quarter end. Giza Exchange Provisional Acceptance is expected to be delayed approximately 3 months.

Sincerely,  
OVERSEAS BECHTEL, INCORPORATED



Oliver Sweningsen  
Project Manager

OS/ar

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USAID Contracting Officer - 1 copy  
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ARENTO - 10 copies

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# I EXECUTIVE SUMMARY

## Summary Description of Project

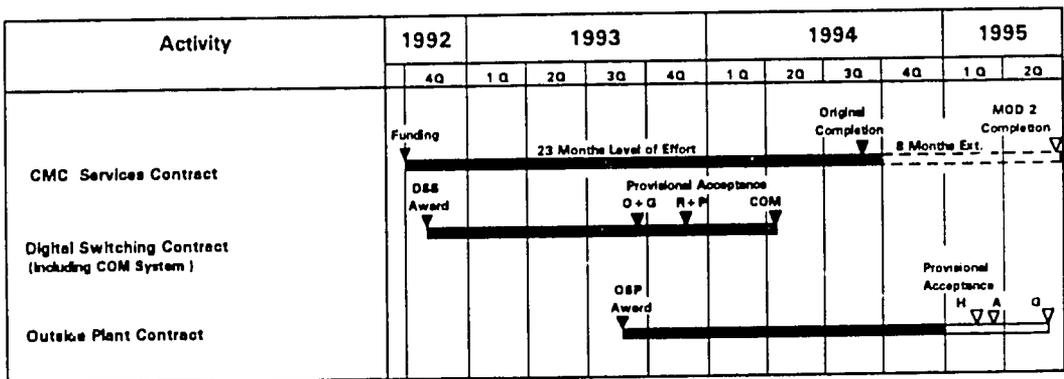
The United States Agency for International Development (USAID) is assisting the Government of Egypt with the expansion of the Cairo telecommunications network under USAID Project No. 263-0177, Telecommunications IV.

Overseas Bechtel, Incorporated (OBI or Bechtel) is contracted with USAID-Egypt to provide construction management and consulting services to the Arab Republic of Egypt National Telecommunications Organization (ARENTO). Bechtel and its subcontractor, Teleconsult, will provide technical advice, support and assistance to ARENTO in the administration of two turnkey contracts that replace and expand central office switching equipment with Digital Switching Systems (DSS), add a Centralized Operations and Management (COM) system and expand the Outside Plant (OSP).

This phase of Telecommunications IV includes:

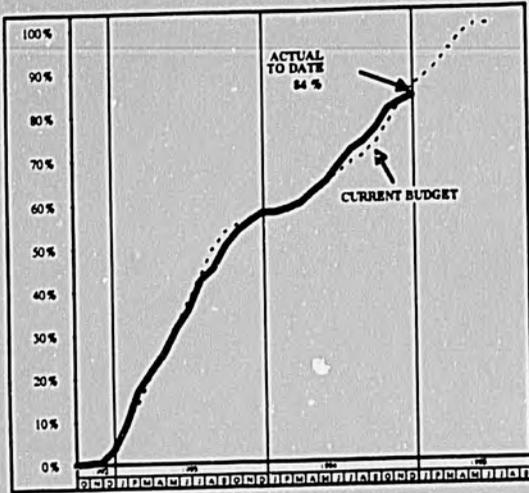
- Four new 20,000 line AT&T #5ESS digital switching systems located in existing ARENTO central office facilities at the Ramsis, Opera, Pyramids and Giza exchanges.
- A centralized operations and maintenance system to monitor and control the network switching nodes.
- Outside plant upgrades at the Heliopolis, Giza and Auto exchange areas.
- Major additions for COM System commissioning and 19,000 line #5ESS upgrade at Giza.

## Executive Summary Schedule

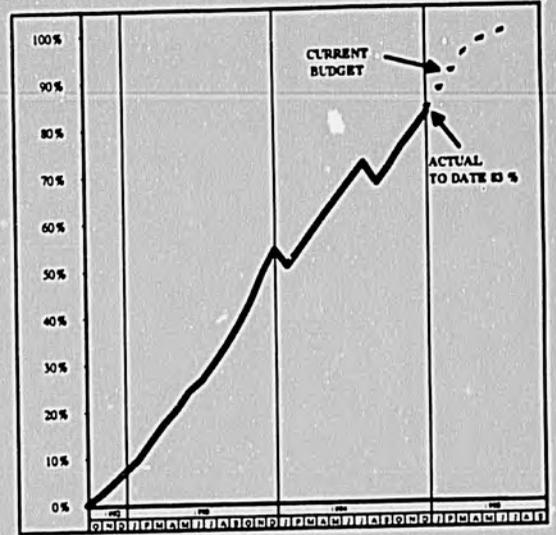


# I EXECUTIVE SUMMARY

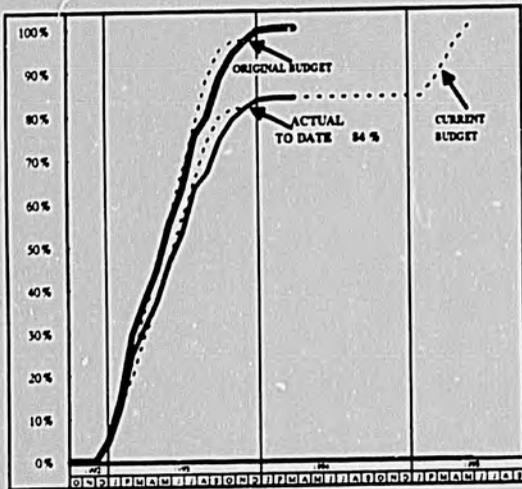
## Summary Curves



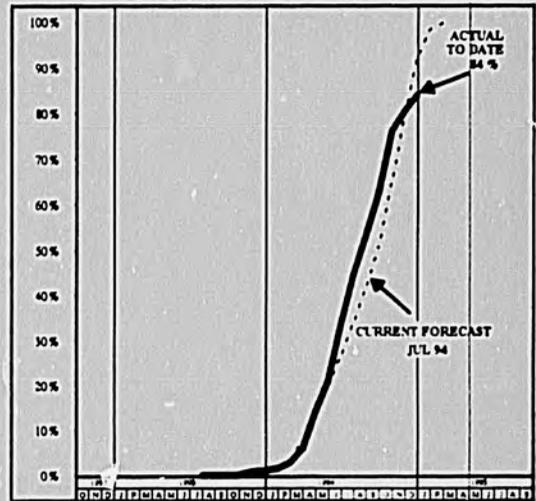
Total Project



Consulting Services



Digital Switching



Outside Plant

# I EXECUTIVE SUMMARY

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## Progress Highlights

### GENERAL

Bechtel and its subcontractor Teleconsult began work on the Construction Management Consulting Contract (CMC) on October 1, 1992. Under its contract with USAID, Bechtel works with ARENTO, as their agent, to administer two host country construction contracts prepared and awarded by ARENTO for the digital switching systems and the outside plant networks funded under the USAID Telecommunications IV Project (263-0177) grant. The tasks performed under this contract are scheduled to be completed by May 31, 1995, with a level of effort staffing. Additional progress information can be found in Monthly Progress and Monthly Financial Reports.

### WORK STATUS

Consulting Services were estimated to be 83% complete against the revised plan which includes Modifications 1 & 2. Bechtel and Teleconsult had a total equivalent staff of five Expatriates and eighteen Nationals.

- The CMC Staffing Plan reflects a May 31, 1995 completion date as proposed in Mods 1 & 2. The level of effort for Expatriates is 86% and Nationals is 83.3% of current forecasts.
- The revised budget for the ATTI DSS Contract (ARENTO Contract 10/92/21) is \$ 28,053,829 and LE 3,197,681 including amendments No. 1, No. 2 and No. 5. Amendment No. 5 with 3.4 million/L.E. 1.2 million to add 19,000 lines of #5ESS switching at Giza was funded by USAID in November. Payment vouchers that total \$ 22,926,341 and LE 1,521,640 have been processed to date.
- The ATTI OSP Contract (ARENTO Contract 7/92/30) was funded on July 21, 1993. The revised budget is \$10,000,000 and LE 10,574,584 including amendment No. 2. Payment vouchers that total \$4,001,078 and L.E. 2,102,837 have been processed to date. Invoices for \$119,645 and L.E. 503,080 were suspended in December awaiting resolution of compacting and grounding issues. Amendment No. 4 to reflect engineered quantities and Variation Orders is being prepared.

### DSS CONTRACT

- All Final Acceptance tests and inspections have been completed for the #5ESS switches. Final Acceptance certifications are being processed for the switches. The COM System is scheduled for Final Acceptance in April.

# I EXECUTIVE SUMMARY

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## Progress Highlights

### **DSS CONTRACT (Cont'd)**

- The letter of Commitment to fund Amendment No. 5 for the 19,000 line #5ESS switch upgrade at Giza was signed on November 21, 1994. ATTI's forecast Provisional Acceptance date is May 8, 1995. Facilities work began in December.

### **OSP CONTRACT**

- The OSP contract is estimated to be 84% complete at the end of December, 1994. Heliopolis is essentially complete, Auto is 94% and Giza is 66%.
- ATTI's Forecast Provisional Acceptance is June 13, 1995, a 3 month delay. ARENTO received notification that work is being delayed in Giza due to permitting problems with the Governorate. It was agreed that a letter would be sent to the Governorate of Giza, and Vice Chairman for Projects would meet with the directors of Giza South and Giza West. ATTI has been requested to update the CPM Schedule to reflect the impact of permitting delays.
- Heliopolis Exchange is in acceptance phase. Sector Provisional Acceptance are scheduled to begin in January. Forecast Provisional Acceptance date is February 28, 1995 based on ATTI's CPM schedule.
- At Auto Exchange, inspections and acceptance testing were slower than expected. All installation activities are essentially complete except for the submarine cable crossing.
- A number of technical discrepancies and safety observations were reported by ATTI's Quality Manager and OBI Field Engineers. ATTI was requested to review internal Quality controls with subcontractors.
- ATTI submitted a revised organization plan for the OSP work that proposes staff reductions and changes. OBI recommended that additional expatriates and National Supervision be added to accelerate work and assure Project completion.

## II WORK STATUS

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### DSS Contract

#### GENERAL

Contract No. 10/92/21 between ARENTO and AT&T International, Inc. (ATTI) was signed on October 15, 1992 and became effective on November 3, 1992. The contract requires ATTI to design, furnish, install and maintain AT&T #5ESS digital electronic central office switches on a turnkey basis. The Contract has been modified to add a COM System and 19,000 line #5ESS upgrade at Giza Exchange.

#### FINANCIAL:

- Amendment No. 5 with \$ 3.4 million and L.E. 1.2 million to add 19,000 lines of #5ESS switching at Giza was funded by USAID in November, 1994. The revised budget for the DSS Contract is now \$28,053,829 and L.E. 3,197,681. (See Exhibit 3.1).
- This period \$526,862 were expended; to date totals are \$4,001,078 and L.E. 2,102,837. (See Exhibits 4.1 & 4.3).

#### SCHEDULE:

- All final acceptance tests and inspections have been completed for the 20,000 line #5ESS switch installations at Opera, Giza, Ramsis and Pyramid Exchanges. The maintenance period is complete for all exchanges except for the 4,000 line RSM transfer at Pyramid.
- The DSS Kick-off Meeting was held for the Giza 19,000 line switching upgrade. The forecast Provisional Acceptance date is May 8, 1995. Facilities work began in December and equipment installation is scheduled for January.

## II WORK STATUS

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### OSP Contract

#### GENERAL

Contract No. 7/92/30 between ARENTO and AT&T International, Inc. was signed on July 15, 1993 and became effective on July 21, 1993. The schedule duration is 600 days with Provisional Acceptance on March 13, 1995.

The Outside Plant Contract is for 23,700 lines in Heliopolis, 18,600 lines in Auto, and 30,900 lines in Giza.

#### FINANCIAL:

- OSP Contract revised budget is \$10,000,000 and L.E.10,574,584 including Amendment No. 2. (See Exhibit 3.2). Amendment No. 4 to reflect engineered quantities and variation orders will begin processing in January. The cost trend is \$10,178,000 and LE 10,690,000.
- Payment Vouchers that total \$4,001,078 and L.E.2,102,837 have been processed to date. (See Exhibit 4.2)

#### SCHEDULE:

- Heliopolis Exchange is essentially complete. Auto is 94% complete and Giza is 66% complete. Sector Provisional Acceptance Certification is scheduled to begin in January.
- The Giza Schedule update submitted with ATTI's December Report forecasted Giza Provisional Acceptance in June, 1995. This is a three month delay. ATTI may be experiencing delay in completing its work, however, more information is required to evaluate the situation. ATTI has been requested to update the Giza Schedule and present a detailed analysis of the impact of permitting delays on the date for Provisional Acceptance.
- A large number of technical discrepancies and safety observations were reported by ATTI's Quality Manager and Bechtel Field Engineers. ATTI has been requested to improve internal quality control and work with their subcontractors to reduce safety hazards and risks of rework.
- ATTI submitted a revised organization plan for OSP work that proposes certain staffing reductions and changes. ATTI supervisors are attempting to oversee multiple construction sites. Additional expatriate and national supervision have been recommended by the Consultant for the accelerated two-shift operations and project close-out. Observations have been communicated to the Contractor.

### **III      PROGRESS STATISTICS**

Exhibit 1.0, CMC Progress Curve

Exhibit 2.1, Heliopolis Exchange OSP Progress Curve

Exhibit 2.2, Auto Exchange OSP Progress Curve

Exhibit 2.3, Giza Exchange OSP Progress Curve

Exhibit 3.1, DSS Cost & Commitment Report

Exhibit 3.2, OSP Cost & Commitment Report

Exhibit 4.1, DSS Quarterly Cash Flow

Exhibit 4.2, OSP Quarterly Cash Flow

Exhibit 4.3, Giza 19K Upgrade Cash Flow

Exhibit 5.1, DSS Change Order Summary

Exhibit 5.2, OSP Change Order Summary

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT**  
**COST AND COMMITMENT REPORT (Exhibit 3.1)**  
**D.S.S. CONTRACT**  
 December, 1994

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>1. GIZA EXCHANGE</b>							
1.1	Switching Equipment - 24,000 Lines	\$3,485,462	74,000	\$0	0	\$3,485,462	74,000
1.2	MDF	\$237,048	0	\$0	0	\$237,048	0
1.3	Power System	\$111,791	0	\$0	0	\$111,791	0
1.4	Standby Power System	\$289,639	24,900	\$0	0	\$289,639	24,900
1.5	HVAC System	\$78,930	0	\$0	0	\$78,930	4,461
1.6	Fire Detection System	\$0	22,304	\$0	0	\$0	17,843
1.7	Security System	\$28,550	0	\$0	0	\$28,550	0
1.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
1.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$6,990	3,000
1.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
1.11	Installation and Testing for Cutover and Provisional Acceptance	\$472,446	280,961	\$0	0	\$472,365	280,962
1.12	Spare Parts and Consumables - CIF	\$338,627	0	\$0	0	\$337,889	0
1.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$11,271	0
1.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
1.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
1.16	Testing	\$6,689	0	\$0	0	\$0	0
<b>1.</b>	<b>GIZA EXCHANGE Total</b>	<b>\$5,067,167</b>	<b>405,165</b>	<b>\$0</b>	<b>0</b>	<b>\$5,059,934</b>	<b>405,166</b>
<b>2. RAMSIS EXCHANGE</b>							
2.1	Switching Equipment - 20,000 Lines	\$3,428,956	78,000	\$0	0	\$3,425,616	78,000
2.2	MDF	\$54,628	0	\$0	0	\$54,628	0
2.3	Power System	\$102,620	0	\$0	0	\$102,620	0
2.4	Standby Power System	\$334,500	26,700	\$0	0	\$334,500	26,700
2.5	HVAC System	\$53,218	0	\$0	0	\$53,218	0
2.6	Fire Detection System	\$0	22,304	\$0	0	\$0	22,304
2.7	Security System	\$28,550	0	\$0	0	\$28,550	0
2.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
2.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$6,990	3,000
2.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
2.11	Installation and Testing for Cutover and Provisional Acceptance	\$440,533	122,268	\$0	0	\$440,379	122,268
2.12	Spare Parts and Consumables - CIF	\$343,023	0	\$0	0	\$345,496	0
2.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$11,271	0
2.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
2.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
2.16	Testing	\$6,689	0	\$0	0	\$0	0
<b>2.</b>	<b>RAMSIS EXCHANGE Total</b>	<b>\$4,810,702</b>	<b>252,272</b>	<b>\$0</b>	<b>0</b>	<b>\$4,803,268</b>	<b>252,272</b>

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT**  
**COST AND COMMITMENT REPORT (Exhibit 3.1 cont'd)**  
**D.S.S. CONTRACT**  
 December, 1994

III  
PROGRESS STATISTICS

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
				This Period		Total ITD	
		U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>3.</b>	<b>OPERA EXCHANGE</b>						
3.1	Switching Equipment - 20,000 Lines	\$3,428,956	78,000	\$0	0	\$3,425,615	78,000
3.2	MDF	\$54,628	0	\$0	0	\$50,651	0
3.3	Power System	\$101,721	0	\$0	0	\$101,721	0
3.4	Standby Power System	\$456,100	31,000	\$0	0	\$456,100	31,000
3.5	HVAC System	\$53,218	0	\$0	0	\$53,218	0
3.6	Fire Detection System	\$0	22,304	\$0	0	\$0	22,304
3.7	Security System	\$28,550	0	\$0	0	\$28,550	0
3.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
3.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$6,990	3,000
3.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
3.11	Installation and Testing for Cutover and Provisional Acceptance	\$457,072	122,268	\$0	0	\$456,923	122,268
3.12	Spare Parts and Consumables - CIF	\$344,510	0	\$0	0	\$340,080	0
3.13	Tools and Equipment - CIF	\$10,995	0	\$0	0	\$10,995	0
3.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
3.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
3.16	Testing	\$6,689	0	\$0	0	\$0	0
<b>3.</b>	<b>OPERA EXCHANGE Total</b>	<b>\$4,949,435</b>	<b>256,572</b>	<b>\$0</b>	<b>0</b>	<b>\$4,930,844</b>	<b>256,572</b>
<b>4.</b>	<b>PYRAMID EXCHANGE</b>						
4.1	Switching Equipment - 24,000 Lines plus RSM Host Equipment	\$3,888,228	78,400	\$0	0	\$3,888,227	78,400
4.2	MDF	\$279,700	0	\$0	0	\$279,700	0
4.3	Power System	\$134,927	0	\$0	0	\$134,927	0
4.4	Standby Power System	\$289,639	24,900	\$0	0	\$285,947	24,900
4.5	HVAC System	\$53,218	0	\$0	0	\$53,218	0
4.6	Fire Detection System	\$0	22,304	\$0	0	\$0	22,304
4.7	Security System	\$28,550	0	\$0	0	\$28,550	0
4.8	Raised Floor and Partitions	Included	0	\$0	0	\$0	0
4.9	Documentation / Documentation Office	\$6,990	3,000	\$0	0	\$6,990	3,000
4.10	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
4.11	Installation and Testing for Cutover and Provisional Acceptance	\$515,976	323,466	\$0	0	\$515,895	323,466
4.12	Spare Parts and Consumables - CIF	\$382,167	0	\$0	0	\$378,475	0
4.13	Tools and Equipment - CIF	\$10,846	0	\$0	0	\$10,846	0
4.14	Insurance and Transportation	Included	0	\$0	0	\$0	0
4.15	Maintenance Personnel	No Charge	0	\$0	0	\$0	0
4.16	Testing	\$6,689	0	\$0	0	\$0	0
<b>4.</b>	<b>PYRAMID EXCHANGE Total</b>	<b>\$5,596,930</b>	<b>452,070</b>	<b>\$0</b>	<b>0</b>	<b>\$5,582,776</b>	<b>452,070</b>

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
COST AND COMMITMENT REPORT (Exhibit 3.1 cont'd)  
D.S.S. CONTRACT  
December, 1994**

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>5. COM SYSTEM</b>							
5.1	Software Right-to-use Licenses	\$1,945,126	0	\$0	0	\$1,556,098	0
5.2	MFOS, TFS and SDAD Equipment	\$797,527	0	\$0	0	\$159,505	0
5.3	DATAKIT Equipment	\$442,640	0	\$0	0	\$322,312	0
5.4	Modems for basic MFOS	\$89,917	0	\$0	0	\$17,983	0
5.5	USP	\$211,146	0	\$0	0	\$42,229	0
5.6	Standby Power System	\$0	0	\$0	0	\$0	0
5.7	HVAC Equipment	\$53,377	0	\$0	0	\$42,702	0
5.8	Fire Detection System	\$0	3,000	\$0	0	\$0	600
5.9	Security System	\$0	0	\$0	0	\$0	0
5.10	Raised Floor, Ceiling, Lighting And partitions	\$12,558	14,477	\$0	0	\$10,047	2,895
5.11	Documentation (2 sets)	included	included	\$0	0	\$0	0
5.12	Insurance and Transportation to Site	included	included	\$0	0	\$0	0
5.13	Engineering Installation and Testing for Cutover and Provisional Acceptance	\$93,304	80,300	\$0	0	\$66,645	64,240
5.14	Spare Parts (3 years) CIF	\$234,939	0	\$0	0	\$82,780	0
5.15	Tools and Test Equipment - CIF	\$0	0	\$0	0	\$0	0
5.16	Insurance and Transportation	included	included	\$0	0	\$0	0
5.17	Maintenance Personnel - For One (1) Year after Provisional acceptance	Free of Charge	Free of Charge	\$0	0	\$0	0
5.18	Software Maintenance - Untile Final Acceptance	Free of Charge	Free of Charge	\$0	0	\$0	0
5.19	Testing	included	included	\$0	0	\$0	0
5.20	Training Unix System V	\$64,614	0	\$0	0	\$0	0
5.21	Training SMS (2 classes)	\$71,916	0	\$0	0	\$0	0
5.22	Training TFS	\$27,529	0	\$0	0	\$0	0
5.23	Training SDAS	\$27,918	0	\$0	0	\$0	0
5.24	Training DATAKIT	\$45,390	0	\$0	0	\$0	0
5.25	Training 3B2 Maintenance	\$38,756	0	\$0	0	\$0	0
5.26	Price Adjustment for Training (Item 5.20 to 5.25)	(\$96,643)	321,821	\$0	0	\$0	0
5.27	Contract Price Reduction For Training (Item 5.20 to 5.25)	(\$35,000)	0	\$0	0	\$0	0
	<b>TOTAL FOR COM SYSTEM</b>	<b>\$4,025,014</b>	<b>419,598</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
	One Time Price discount for the COM System	(\$100,000)	0	\$0	0	\$0	0
<b>5.</b>	<b>COM CENTER Total</b>	<b>\$3,925,014</b>	<b>419,598</b>	<b>\$0</b>	<b>0</b>	<b>\$2,300,302</b>	<b>67,735</b>
<b>6.</b>	<b>PROGRAM MANAGEMENT</b>	<b>\$334,002</b>	<b>156,406</b>	<b>\$20,554</b>	<b>0</b>	<b>\$249,217</b>	<b>87,825</b>
<b>7.</b>	<b>TRAINING PROGRAM</b>	<b>To be determined</b>		<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>

**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
COST AND COMMITMENT REPORT (Exhibit 3.1 cont'd)  
D.S.S. CONTRACT  
December, 1994**

III  
PROGRESS STATISTICS

Item No.	General Description of Supplies and / or Services	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>9.</b>	<b>GIZA UPGRADE 13,000 LINE</b>						
	<b>A. EQUIPMENT &amp; MATERIALS-CIF</b>						
9.1	Switching Equipment	\$1,927,912	85,260	\$0	0	\$0	0
9.2	MDF	\$70,620	0	\$0	0	\$0	0
9.3	Power System	\$49,653	0	\$0	0	\$0	0
9.4	Raised Floor	Included	Included	\$0	0	\$0	0
	<b>B. INSTALLATION AND SUPPORT SERVICES</b>						
9.5	Insurance and Transportation	Included	0	\$0	0	\$0	0
9.6	Installation & Testing For Cutover Provisional Acceptance	\$51,000	619,263	\$0	0	\$0	0
9.7	Program Management	\$9,000	109,282	\$0	0	\$0	0
	<b>C. MAINTENANCE PROGRAM</b>						
9.8	Spare Parts and Consumables	\$69,148	0	\$0	0	\$0	0
9.9	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
9.10	Maintenance Personnel	No Charge	No Charge	\$0	0	\$0	0
<b>9.</b>	<b>GIZA UPGRADE 13,000 LINE TOTAL</b>	<b>\$2,177,333</b>	<b>813,805</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>10.</b>	<b>GIZA UPGRADE 6,000 LINE</b>						
	<b>A. EQUIPMENT &amp; MATERIALS-CIF</b>						
10.1	Switching Equipment	\$1,099,466	21,000	\$0	0	\$0	0
10.2	MDF	\$16,356	0	\$0	0	\$0	0
10.3	Power System	\$22,383	0	\$0	0	\$0	0
	<b>B. INSTALLATION AND SUPPORT SERVICES</b>						
10.5	Insurance and Transportation	Included	0	\$0	0	\$0	0
10.6	Installation & Testing For Cutover Provisional Acceptance	\$23,000	357,674	\$0	0	\$0	0
10.7	Program Management	\$4,000	63,119	\$0	0	\$0	0
	<b>C. MAINTENANCE PROGRAM</b>						
10.8	Spare Parts and Consumables	\$28,041	0	\$0	0	\$0	0
10.9	Insurance and Transportation to Site	Included	0	\$0	0	\$0	0
<b>10.</b>	<b>GIZA UPGRADE 6,000 LINE TOTAL</b>	<b>\$1,193,246</b>	<b>441,793</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>
<b>TOTAL</b>		<b>\$28,053,829</b>	<b>\$3,197,681</b>	<b>\$20,554</b>	<b>\$0</b>	<b>\$22,926,341</b>	<b>\$1,521,640</b>

- (1) Prices are as per Amendment #2 (COM Center included)  
(2) Amendment #5 for Giza 19,000 line upgrade is included.

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT**  
**COST AND COMMITMENT REPORT (Exhibit 3.2)**  
**O.S.P. CONTRACT**  
 December, 1994

Item	Description	Budget (Contractual Obligation)		Cost			
				This Period		Total TD	
		U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>HELIOPOLIS EXCHANGE</b>							
1.	Manholes, Handholes, and Vaults	556	6,840	\$0	0	\$83	1,026
2.	Conduit Systems	0	38,539	\$0	0	\$0	5,781
3.	Feeder Cable and Associated Equipment	1,338,358	209,076	\$0	0	\$801,454	31,361
4.	Distribution Segment	726,109	1,334,047	\$0	0	\$324,754	200,107
5.	Existing Plant	0	36,793	\$0	0	\$0	28,002
7.	Preliminary Engineering	0	0	\$0	0	\$0	0
9.	Documentation	5,500	24,153	\$0	0	\$825	3,623
10.	Maintenance	0	144,923	\$0	0	\$0	21,738
11.	Rock	0	0	\$0	0	\$0	0
12.	Extra Depth	0	0	\$0	0	\$0	0
13.	False Digging	0	0	\$0	0	\$0	0
14.	Extra Concrete	0	0	\$0	0	\$0	0
15.	Extra Reinforced Concrete	0	0	\$0	0	\$0	0
16.	Locking Manhole Cover	0	0	\$0	0	\$0	0
<b>HELIOPOLIS EXCHANGE TOTAL</b>		<b>\$2,070,522</b>	<b>LE 1,794,370</b>	<b>\$0</b>	<b>0</b>	<b>\$1,127,116</b>	<b>291,639</b>
<b>AUTO EXCHANGE</b>							
1.	Manholes, Handholes, and Vaults	5,105	77,635	\$0	0	\$766	11,645
2.	Conduit Systems	8,613	990,282	\$0	0	\$1,292	148,542
3.	Feeder Cable and Associated Equipment	935,599	191,151	\$287,586	0	\$445,033	28,673
4.	Distribution Segment	854,190	1,833,613	\$188,237	0	\$435,249	275,042
5.	Existing Plant	245,971	681,590	\$0	0	\$36,896	133,857
7.	Preliminary Engineering	0	243,443	\$0	0	\$0	222,750
9.	Documentation	5,500	24,153	\$0	0	\$825	3,623
10.	Maintenance	0	144,923	\$0	0	\$0	21,738
11.	Rock	0	0	\$0	0	\$0	0
12.	Extra Depth	0	0	\$0	0	\$0	0
13.	False Digging	0	0	\$0	0	\$0	0
14.	Extra Concrete	0	0	\$0	0	\$0	0
15.	Extra Reinforced Concrete	0	0	\$0	0	\$0	0
16.	Locking Manhole Cover	0	0	\$0	0	\$0	0
<b>AUTO EXCHANGE TOTAL</b>		<b>\$2,054,977</b>	<b>LE 4,186,789</b>	<b>\$475,822</b>	<b>0</b>	<b>\$920,061</b>	<b>845,871</b>

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
COST AND COMMITMENT REPORT (Exhibit 3.2 cont'd)  
O.S.P. CONTRACT  
December, 1994**

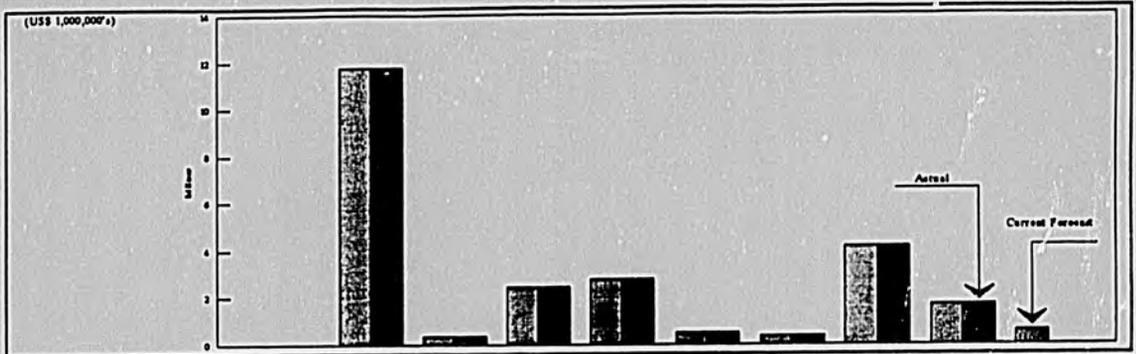
III  
PROGRESS STATISTICS

Item	Description	Budget (Contractual Obligation)		Cost			
		U.S. Dollars	Egyptian Pounds	This Period		Total ITD	
				U.S. Dollars	Egyptian Pounds	U.S. Dollars	Egyptian Pounds
<b>GIZA EXCHANGE</b>							
1.	Manholes, Handholes, and Vaults	20,009	246,240	\$0	0	\$3,001	36,936
2.	Conduit Systems	0	788,647	\$0	0	\$0	118,297
3.	Feeder Cable and Associated Equipment	1,382,521	344,844	\$0	0	\$207,378	51,727
4.	Distribution Segment	1,120,583	2,251,199	\$0	0	\$168,087	337,680
5.	Existing Plant	0	85,680	\$0	0	\$0	23,949
7.	Preliminary Engineering	0	304,304	\$0	0	\$0	45,646
9.	Documentation	5,500	24,153	\$0	0	\$825	3,623
10.	Maintenance	0	144,923	\$0	0	\$0	21,738
11.	Rock	0	0	\$0	0	\$0	0
12.	Extra Depth	0	0	\$0	0	\$0	0
13.	False Digging	0	0	\$0	0	\$0	0
14.	Extra Concrete	0	225	\$0	0	\$0	34
15.	Extra Reinforced Concrete	0	552	\$0	0	\$0	83
16.	Locking Manhole Cover	0	0	\$0	0	\$0	0
<b>GIZA EXCHANGE TOTAL</b>		<b>\$2,528,612</b>	<b>LE 4,190,766</b>	<b>\$0</b>	<b>0</b>	<b>\$379,292</b>	<b>639,712</b>
<b>COMMON ITEMS</b>							
6.	Warehouse Inventory	0	0	\$0	0	\$0	0
8.	Training	491,387	0	\$0	0	\$73,708	0
9.4	Documentation Center (Ramsis)	11,000	24,153	\$0	0	\$1,650	3,623
17.	Program Management	2,617,636	1,332,777	\$236,242	0	\$1,499,251	369,115
18.	Price Discount	0	(1,000,000)	\$0	0	\$0	(47,123)
<b>COMMON ITEMS TOTAL</b>		<b>\$3,120,022</b>	<b>LE 356,929</b>	<b>\$236,242</b>	<b>0</b>	<b>\$1,574,609</b>	<b>325,615</b>
<b>SUB-TOTAL OSP CONTRACT</b>		<b>\$9,774,134</b>	<b>LE 10,528,854</b>	<b>\$712,064</b>	<b>0</b>	<b>\$4,001,078</b>	<b>2,102,837</b>
<b>CONTINGENCIES</b>		<b>\$225,866</b>	<b>LE 0</b>				
<b>TOTAL OSP CONTRACT</b>		<b>\$10,000,000</b>	<b>LE 10,528,854</b>	<b>\$712,064</b>	<b>0</b>	<b>\$4,001,078</b>	<b>2,102,837</b>

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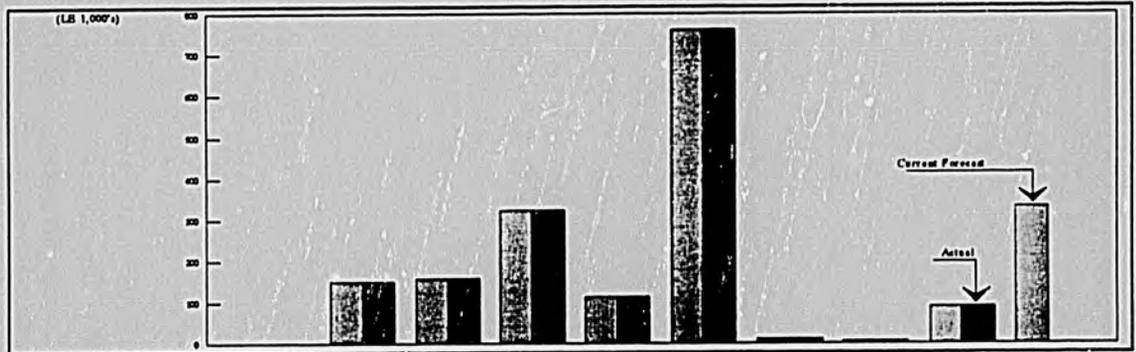
### III PROGRESS STATISTICS

#### CONSTRUCTION MANAGEMENT CONSULTING CONTRACT QUARTERLY CASH FLOW REPORT (Exhibit 4.1) DSS CONTRACT December, 1994



Description	1992				1993				1994				1995	Total To Date
	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter		
Budget	Quarterly	30	\$11,746	\$375	\$2,479	\$2,805	\$488	\$343	\$4,166	\$1,676	\$610	\$24,071		\$24,071
	Cumulative	30	\$11,746	\$12,119	\$14,598	\$17,403	\$17,891	\$18,234	\$22,399	\$1,076	\$24,063		\$24,071	
Actual	Quarterly	30	\$11,746	\$375	\$2,479	\$2,805	\$488	\$343	\$4,166	\$1,676				
	Cumulative	30	\$11,746	\$12,119	\$14,598	\$17,403	\$17,891	\$18,234	\$22,399	\$24,076				

US Dollars Financed By USAID



Description	1992				1993				1994				1995	Total To Date
	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter		
Budget	Quarterly	0	150	159	323	113	744	12	5	0	130		1,612	
	Cumulative	0	150	309	632	744	1,505	1,517	1,522	1,612	1,612		1,612	
Actual	Quarterly	0	150	159	323	113	744	12	5	0				
	Cumulative	0	150	309	632	744	1,505	1,517	1,522	1,612				

Egyptian Pounds Financed By ARENTO

18.

**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
 QUARTERLY CASH FLOW REPORT (Exhibit 4.1 cont'd)  
 DSS CONTRACT  
 As of December 31, 1994**

Description / Duration		4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter	2nd. Quarter	3rd. Quarter	4th. Quarter	1st. Quarter
		11/92 - 12/92	01/93 - 03/93	04/93 - 06/93	07/93 - 09/93	10/93 - 12/93	01/94 - 03/94	04/94 - 06/94	07/94 - 09/94	10/94 - 12/94	01/95 - 03/95
US Dollars Financed By	F	\$0	\$11,746,185	\$372,607	\$2,479,309	\$2,804,647	\$487,798	\$343,109	\$4,165,824	\$1,674,173	\$609,598
USAID	A	\$0	\$11,746,185	\$372,607	\$2,479,309	\$2,804,647	\$487,798	\$343,109	\$4,165,824	\$1,674,173	
Egyptian Pounds Financed By	F	0	150,115	158,731	322,723	112,894	760,670	11,695	4,812	90,237	330,207
ARENTO	A	0	150,115	158,731	322,723	112,894	760,670	11,695	4,812	90,237	

Description / Duration		Disbursement To Date	Balance To Go	Total Cost
US Dollars Financed By	F	\$24,073,653	\$609,598	\$24,683,251
USAID	A	\$24,073,653	\$0	\$24,073,653
Egyptian Pounds Financed By	F	\$1,611,877	\$330,207	1,942,085
ARENTO	A	\$1,611,878	\$0	1,611,878

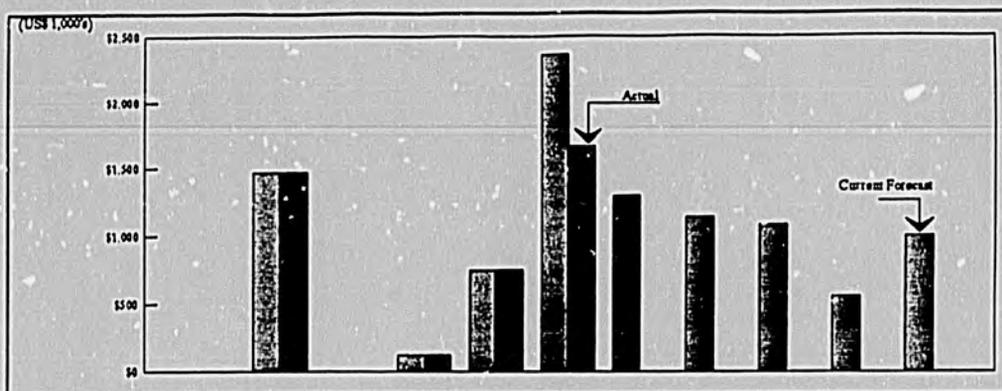
**NOTES:**

- (1) The COM center is incorporated in the current forecast
- (2) F = Current Forecast For Disbursement  
 A = Actual Disbursement
- (1) \$1,147,311 and L.E. 90,236.8 were paid by ARENTO last quarter.

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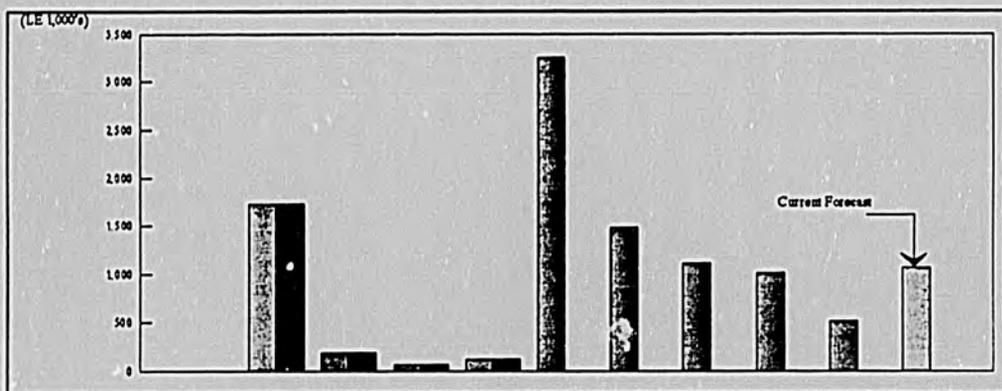
### III PROGRESS STATISTICS

#### CONSTRUCTION MANAGEMENT CONSULTING CONTRACT QUARTERLY CASH FLOW REPORT (Exhibit 4.2) OSP CONTRACT December, 1994



Description	1993		1994				1995			1996	Total To Date		
	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter			
Budget	Quarterly	\$0	\$1,466	\$0	\$1,124	\$7,446	\$7,362	\$1,293	\$1,140	\$1,080	\$553	\$1,007	\$4,699
	Cumulative	\$0	\$1,466	\$1,466	\$1,590	\$2,336	\$4,698	\$5,992	\$7,133	\$8,213	\$8,767	\$9,774	
Actual	Quarterly	\$0	\$1,466	\$0	\$1,124	\$7,446	\$1,643						\$4,001
	Cumulative	\$0	\$1,466	\$1,466	\$1,590	\$2,336	\$4,001						

US Dollars Financed by USAID  
(US\$ 1,000's)



Description	1993		1994				1995			1996	Total To Date		
	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter			
Budget	Quarterly	0	1,729	193	62	119	3,243	1,483	1,110	1,099	512	1,729	5,326
	Cumulative	0	1,729	1,923	1,984	2,103	5,346	6,830	7,940	8,949	9,461	10,524	
Actual	Quarterly	0	1,729	193	62	119	0						2,103
	Cumulative	0	1,729	1,923	1,984	2,103	2,103						

Egyptian Pounds Financed by ARENTO  
(LE 1,000's)

CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
 QUARTERLY CASH FLOW REPORT (Exhibit 4.2 cont'd)  
 OSP CONTRACT  
 As of December 31, 1994

Description / Duration		3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter
		07/93 - 09/93	10/93 - 12/93	01/94 - 03/94	04/94 - 06/94	07/94 - 09/94	10/94 - 12/94	01/95 - 03/95	04/95 - 06/95	07/95 - 09/95	10/95 - 12/95	01/96 - 03/96
US Dollars Financed By	F	\$0	\$1,466,120	\$0	\$124,338	\$746,026	\$2,362,359	\$1,293,403	\$1,140,402	\$1,079,932	\$554,692	\$1,006,862
USAID	A	\$0	\$1,466,120	\$0	\$124,338	\$746,026	\$1,664,594					
Egyptian Pounds Financed By	F	0	1,729,328	193,213	61,743	118,553	3,244,820	1,482,794	1,109,606	1,008,946	511,972	1,067,880
ARENTO	A	0	1,729,328	193,213	61,743	118,553	0					

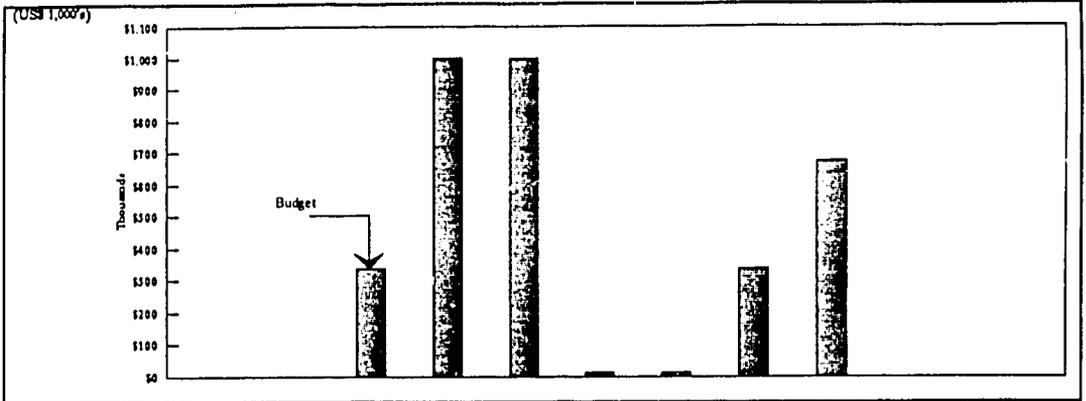
Description / Duration		Disbursement To Date	Balance To Go	Total Cost
US Dollars Financed By	F	\$4,698,843	\$5,075,291	\$9,774,134
USAID	A	\$4,001,078	\$0	\$4,001,078
Egyptian Pounds Financed By	F	\$5,347,657	\$1,181,198	\$10,528,855
ARENTO	A	\$2,102,837	\$0	\$2,102,837

NOTES:

- (1) F = Current Forecast For Disbursement
- (2) A = Actual Disbursement

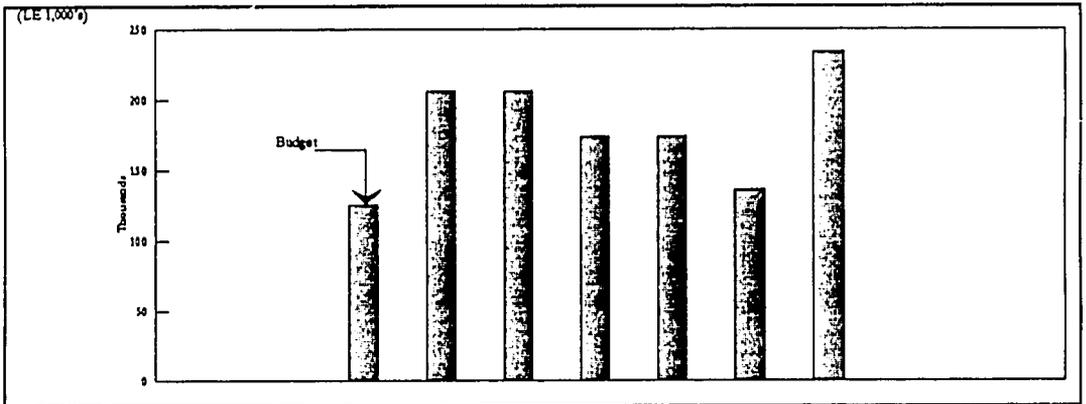
### III PROGRESS STATISTICS

#### CONSTRUCTION MANAGEMENT CONSULTING CONTRACT MONTHLY CASH FLOW (Exhibit 4.3) DSS CONTRACT-GIZA 19K LINE UPGRADE December, 1994



Description	1994										Total To Date		
	December	January	February	March	April	May	Jun	July	August	September		October	
Budget	Monthly	\$0	\$0	\$337,058	\$998,254	\$998,254	\$13,180	\$13,180	\$337,838	\$672,816			\$0
	Cumulative	\$0	\$0	\$337,058	\$1,335,312	\$2,333,566	\$2,346,746	\$2,359,926	\$2,697,764	\$3,370,580			\$0
Actual	Monthly	\$0											\$0
	Cumulative	\$0											\$0

**US Dollars**  
(US\$ 1,000's)



Description	1994										Total To Date		
	December	January	February	March	April	May	Jun	July	August	September		October	
Budget	Monthly	0	0	125,560	206,003	206,003	174,125	174,125	135,904	233,880			0
	Cumulative	0	0	125,560	331,563	537,566	711,691	885,816	1,021,720	1,255,600			0
Actual	Monthly	0											0
	Cumulative	0											0

**Egyptian Pounds**  
(LE 1,000's)

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CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
 MONTHLY CASH FLOW (Exhibit 4.3 cont'd)  
 DSS CONTRACT - GIZA 19K LINE UPGRADE  
 As of December 31, 1994

Description / Duration		1994	1995									
		December	January	February	March	April	May	June	July	August	September	October
US Dollars	F	\$0	\$0	\$337,058	\$998,254	\$998,254	\$13,180	\$13,180	\$337,838	\$672,816		
	A	\$0										
Egyptian Pounds	F	0	0	125,560	206,003	206,003	174,125	174,125	135,904	233,880		
	A	0										

Description / Duration		Disbursement To Date	Balance To Go	Total Cost
US Dollars	F	\$0	\$3,370,580	\$3,370,580
	A	\$0	\$0	\$0
Egyptian Pounds	F	0	1,255,600	1,255,600
	A	0	0	0

NOTES:

- (1) F = Current Forecast For Disbursement
- (2) A = Actual Disbursement

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**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
AMENDMENT AND IMMEDIATE ACTION CHANGE ORDER (IACO) SUMMARY (Exhibit 5.1)  
DSS CONTRACT  
December, 1994**

AMENDMENT NO.	IACO NO.	C.A NO.	DATE EXECUTED BY ARENTO	Net (2)	
				USD	LE
ORIGINAL CONTRACT	-	-	03-Nov-92	\$26,262,479	1,953,923
<b>APPROVED CHANGES :</b>					
AMENDMENT NO. 1	N/A	1	09-Feb-93	(\$153,826)	21,336
AMENDMENT NO. 2	N/A	2	24-May-93	\$3,925,014	419,598
AMENDMENT NO. 3	---	---	06-Jun-94	\$0	0
AMENDMENT NO. 4	---	---	31-Jul-94	(\$39,144)	0
AMENDMENT NO. 5	---	---	22-Nov-94	\$3,370,579	1,255,598
<b>SUB-TOTAL APPROVED CHANGES</b>				<b>\$7,102,623</b>	<b>1,696,532</b>
<b>TOTAL CONTRACT</b>				<b>\$33,365,102</b>	<b>3,650,455</b>
<b>PENDING CHANGES :</b>					
<b>SUB-TOTAL PENDING CHANGES</b>				<b>\$0</b>	<b>0</b>

USAID GRANT NO. 263-0177 (TELECOM IV)		USAID GRANT NO. 263-K-620 (CBP)		ARENTO FINANCED NOTE (1)	
USD	LE	USD	LE	USD	LE
\$20,868,108	0	\$4,707,743	0	\$686,628	1,953,923
(\$109,872)	0	\$0	0	(\$43,954)	21,336
\$2,500,000	0	\$0	0	\$1,425,014	419,598
\$0	0	\$0	0	\$0	0
(\$34,927)		(\$4,217)			
\$2,355,201	0	(\$4,217)	0	\$1,381,060	440,934
\$23,223,309	0	\$4,703,526	0	\$2,067,688	2,394,857
\$0	0	\$0	0	\$0	0

**NOTES :**

- (1) ARENTO financed local currency includes L.E. 452,775 for Auto exchange, plus L.E. 1,522,485 for Giza, Ramsis, Opera & Pyramids exchanges.
- (2) The total contract value of U.S.D. \$ 30,033,667 includes U.S.D. \$ 4,707,743 financed under USAID grant No. 236-K-620 and U.S.D. \$ 2,067,688 financed by ARENTO for Auto exchange & COM System.

**CONSTRUCTION MANAGEMENT CONSULTING CONTRACT  
AMENDMENT AND IMMEDIATE ACTION CHANGE ORDER (IACO) SUMMARY (Exhibit 5.2)  
OSP CONTRACT  
December, 1994**

AMENDMENT NO	IACO NO	CA NO	DATE EXECUTED BY ARENTO/OBI	Nac (1)		AMOUNT FINANCED BY USAID		AMOUNT FINANCED BY ARENTO	
				USD	LE	USD	LE	USD	LE
<b>ORIGINAL CONTRACT</b>	-	-	<b>22-Jul-93</b>	<b>\$9,776,134</b>	<b>10,528,854</b>	<b>\$10,000,000</b>	<b>0</b>	<b>\$0</b>	<b>10,528,854</b>
<b>APPROVED CHANGES :</b>									
Amendment No 1			22-Dec-93	---	45,730.10	---	---	---	45,730.10
Amendment No 2			31-Jul-94						
Amendment No 3			31-Jul-94						
<b>SUB-TOTAL APPROVED CHANGES</b>				<b>\$0</b>	<b>45,730</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>45,730</b>
<b>TOTAL CONTRACT</b>				<b>\$9,774,134</b>	<b>10,574,584</b>	<b>\$10,000,000</b>	<b>0</b>	<b>\$0</b>	<b>10,574,584</b>
<b>PENDING CHANGES :</b>									
VO5					23,042.00				23,042.00
VO7				\$973.00	276.00	\$973.00			276.00
VO6A				N/A	N/A				
VO12				N/A	N/A				
IAVO-01A				\$0.00	76,629.60				76,629.60
IAVO-01B				(\$395.18)	(183.79)	\$395.18			(183.79)
VO13				\$7,380.00	0.00	\$7,380.00			
<b>SUB-TOTAL PENDING CHANGES</b>				<b>\$7,958</b>	<b>99,764</b>	<b>\$8,748</b>	<b>0</b>	<b>\$0</b>	<b>99,764</b>

**NOTES :**

- (1) Amendment No 1 incorporates changes in the wording of Clause 68 entitled "Transfer of Title to ARENTO". Amendment No 1 has no cost impact.
- (2) Amendment 3 is for the identification of Giza scope of work with no cost impact.
- (3) VO5 & VO7 incorporate additional works.
- (4) VO6A & VO12 incorporate Technical changes.
- (5) IAVO-01 (Immediate Action Variation Order):
  - A) incorporates Extra-Overs work.
  - B) incorporates field changes in Heliopolis exchange.
- (6) VO13 is for 30 Locking Manholes for Warehouse Inventory.
- (7) All pending changes are under incorporation in Amendment No 4.

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