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UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

TELECOMMUNICATIONS IV

EGYPT

263-0177

PROJECT PAPER

AMENDMENT # 2

Dated signed: 02/12/92

UNCLASSIFIED

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number

1

DOCUMENT CODE

3

2. COUNTRY/ENTITY
 Egypt

3. PROJECT NUMBER
 263-0177

4. BUREAU/OFFICE
 Near East

5. PROJECT TITLE (maximum 40 characters)
 Telecommunications IV

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)
 MM DD YY
 07 15 94

7. ESTIMATED DATE OF OBLIGATION
 (Under "B:" below, enter 1, 2, 3, or 4)
 A. Initial FY 88 B. Quarter 4 C. Final FY 92

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 88			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	20,000		20,000	82,000		82,000
(Grant)	(20,000)	()	(20,000)	(82,000)	()	(82,000)
(Loan)	()	()	()	()	()	()
Other U.S.						
1.						
2.						
Host Country		4,350	4,350		12,430	12,430
Other Donor(s)						
TOTALS	20,000	4,350	24,350	82,000	12,430	94,430

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ESF	701	827		40,000		42,000		82,000	
(2)									
(3)									
(4)									
TOTALS				40,000		42,000		82,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	B. Amount

13. PROJECT PURPOSE (maximum 480 characters).

Expand the present Cairo telecommunication system in order to meet some of the public and private sector demand for telecommunication service.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
 09 92

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

USAID/Egypt Controller concurs with the proposed methods of implementation and financing.
 Douglas Franklin
 Controller Office

17. APPROVED
 Signature: [Signature] Date Signed: 2/12/92
 18. DATE DOCUMENT REC IN AID/W. OR FOR AID/V MENTS, DATE OF DISTR:



-1-

D

UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO, EGYPT

ACTION MEMORANDUM FOR THE DIRECTOR

FEB 09 1992

FROM: Christopher Crowley, AD/PDS

SUBJECT: Project Paper Supplement: Authorization Amendment to Increase Funding for the Telecommunications IV Project (263-0177)

ISSUE

The Government of Egypt (GOE) has requested, and USAID has agreed in principle, that the subject project be amended to finance the procurement and installation of critically needed additional telephone switching and ancillary "outside plant" equipment in the greater Cairo area. In order to accomplish this it is estimated that an additional \$42 million will be needed over the life of project (LOP). The purpose of this project paper supplement is to request your approval to increase the previously authorized LOP funding of \$40,000,000 for the Telecommunications IV Project by \$42,000,000, to a total USAID contribution of \$82,000,000, in order to finance the procurement and installation of additional telecommunications equipment for the Arab Republic of Egypt National Telecommunications Organization (ARENTO), the GOE telecommunications utility.

BACKGROUND

In 1977 the Egyptian Telecommunications system was unreliable and unable to meet the growing public demand for telephone service. Telephone service was so inadequate that even next door neighbors could not successfully call one another over the telephone, let alone make calls to the rest of the community or to other cities or countries. As a first step in improving the telecommunications system, USAID in 1977 financed an in-depth telecommunications sector study which resulted in the Egyptian Government launching an ambitious 20-year \$20 billion program to rehabilitate and modernize the telecommunications system. In 1978 AID initiated the financing of certain key aspects of this program. Under the Telecommunications I, II and III projects, \$242 million was provided to finance the cost of U.S. technical assistance for the institutional strengthening of the Telecommunications Organization, replacement of obsolete rotary switching systems in ten central office exchanges in Cairo and Alexandria with new electronic switching systems and their related cable networks, and provision of U.S. technical assistance for the design, procurement and supervision of the installation of the project financed equipment. In addition,

the Commodity Import Program (CIP) provided \$62.5 million to finance a microwave system connecting all telephone exchanges in Cairo and Alexandria. The CIP also provided \$4.7 million this year to procure a Digital Switching System (DSS) to replace an obsolete electro-mechanical switching system exchange in Alexandria.

The Telecommunications IV Project (263-0177) was authorized on September 25, 1988, for \$40 million, with a planned LOP of just over four years from the date of initial obligation, September 27, 1988. The project agreement obligated \$40 million and established a project assistance completion date (PACD) of January 15, 1993. The first amendment to the project agreement, executed November 5, 1991, adjusted the project budget to allow the utilization of the uncommitted balance of project funds to finance additional digital switching systems, outside plant (OSP) equipment, and technical assistance (TA), and extended the PACD until July 15, 1994.

The project consists of providing equipment, technical assistance, consultant services, and studies to assist the GOE in meeting the growing demand for public and private sector telecommunications services. The equipment being procured and installed with project funding includes a 40,000 line central office DSS and OSP facilities in the area adjacent to the Pyramids and a 30,000 line central office DSS and OSP facilities in the area adjacent to the Citadel. On July 11, 1991, the Project Authorization was amended to include expansion of existing and additional digital switching systems in Maadi, Mokattam and Heliopolis, installation of OSP in Mokattam, and studies of telecommunication pricing and operation and maintenance requirements. The OSP systems consist of the cable networks connecting the new digital telephone exchanges to subscribers as well as transmission facilities between the domestic exchanges and the "gateway" international exchanges.

In addition to the equipment noted above, USAID grant assistance is financing the foreign exchange costs of:

- ▶ Consulting engineering services for the procurement and installation monitoring of the DSS, OSP network, and other related equipment;
- ▶ Design, engineering, installation, and maintenance services for the above equipment;
- ▶ Training of engineers and technicians in the operation and maintenance (O&M) of the equipment; and,
- ▶ Consulting services for a Cost of Services Study and an Operations and Maintenance Study.

The result of these activities has been a significant visible improvement in telecommunications service in Egypt. ARENTO has made notable progress since 1980 in greatly expanding the

network's overall capacity, as well as increasing the spectrum of available communications services. In 1981, the entire network contained a mere 510,000 lines; by 1991 this number had quadrupled to 2.15 million. Over the same time period, the total number of international circuits increased from 820 channels to 5,560, and the number of municipalities connected to the domestic direct network was increased from just seven to 189. ARENTO's technical expertise has been expanded and enhanced through participation in internal and external training programs. USAID assistance has been instrumental to many of these improvements.

In addition, during the process of implementing the on-going expansion program, ARENTO has dramatically improved its institutional capacity. To meet AID's requirements for assistance in this sector, ARENTO has made many significant changes. It has changed its basic charter to become an autonomous entity (to satisfy a project covenant), it is in the process of revising its personnel and accounting systems at our behest (in response to the project covenants) and has over the last few years as telephone service improved, substantially increased its tariffs and installation fees. ARENTO as of January, 1988 limited the flat rate for local calls to a six minute duration and as a result increased revenues from local calls by approximately 25 percent.

Based on a May 20, 1991, request by ARENTO (TAB 1) USAID is considering the development of a five year telecommunications sectoral assistance program which would provide, in exchange for key telecommunication sector policy reforms, a substantial amount of additional U.S.-manufactured switching, outside plant, transmission network, and management systems equipment. As detailed below, however, there are urgent equipment needs which can not wait for the development of this proposed long-term program.

CURRENT PROJECT STATUS

An invitation for bids (IFB) for two 30,000 line DSS was issued in April, 1990. American Telephone and Telegraph International (ATTI) was competitively selected to provide the DSS. Subsequently, the contract was amended to include an additional 10,000 line DSS at Pyramids West. USAID is in the process of amending the contract again to include expansion of existing and additional switching systems in Maadi, Mokattam and Heliopolis using previously uncommitted project funds.

The Outside Plant (OSP) IFB was issued to qualified bidders on November 6, 1990. ATTI was competitively selected to provide the OSP under a host country contract effective May 9, 1991.

Fluor Daniel, Inc. was competitively selected to provide

Technical Consultant services for the Project, and began work in Egypt in January 1990. Fluor Daniel is under an AID direct contract which will expire in January 1993.

USAID is in the process of executing a contract with an 8(a) firm, K&M Engineering and Consulting Corporation, to provide technical consultant services for procurement and installation of additional DSS and OSP equipment financed with the previously uncommitted balance of the original LOP funds.

PROPOSED AMENDMENT

On April 9, 1991, (updated January 13, 1992, TAB 2) ARENTO requested that USAID amend the Telecommunications IV Project to finance additional critically needed network operations equipment including associated design and engineering, totalling approximately \$42 million. An illustrative list of the equipment requested includes:

- ▶ Replacement of obsolete electro-mechanical switching systems and installation of:
 - 20,000 line DSS in Giza exchange
 - 20,000 line DSS in Ramsis exchange
 - 20,000 line DSS in Opera exchange
 - 20,000 line DSS in Pyramids exchange;
- ▶ Expansion of OSP for Heliopolis, Giza, and Pyramids exchanges; and,
- ▶ Initial development of a Network Operations Center and an Operations and Maintenance Center

Services for procurement, engineering, design, installation, and training associated with the above equipment were also requested.

The Network Operations Center (NOC) will ultimately consist of a computer center connected to all exchanges whether digital or analog, regardless of origin. Among other things it will provide ARENTO with centralized control capabilities to re-route network traffic to allow for more efficient operation of the national system. The proposed amendment will fund Phase I of the NOC, limited to engineering studies and preliminary design work.

Design, procurement, and installation of an Operations and Maintenance Center (OMC) will be financed by the proposed amendment. Consisting of computer hardware similar to that employed in the individual ATTI DSS facilities currently under installation in Egypt, the OMC will be linked to these exchanges to enable ARENTO to monitor performance and detect (and in most cases correct) from a central location any operational problems in these exchanges.

The above items are considered a complementary part of the current and previously AID-financed projects which had included replacement of obsolete switching systems and expansion of exchanges and associated networks, and are urgently needed to meet specific telecommunications demands in the ARENTO network. In order to procure and install these facilities in the shortest possible time, ARENTO has requested financing via a project amendment.

As in the existing and prior projects, turn-key design and installation of the equipment will be procured using host-country formal competitive procedures. Engineering services will be acquired through full and open competition under AID-direct contracting procedures. ARENTO's host country contracting capabilities have been assessed and a formal certification of ARENTO's fitness to manage host country contracts will be forwarded for your approval in the near future.

JUSTIFICATION FOR PROJECT AMENDMENT

Although AID and other donor assistance have come a long way to improve Egypt's telecommunications system, much remains to be done to provide sufficient telecommunications service required to meet the growing telephone demand. In addition to the traditional telephone demand, the introduction of computers and facsimile machines has led to an increased demand in Egypt of business user service requirements for data, image, text and voice. Egypt's current telephone density is 3.9 telephones per 100 persons (telephone density is 7 per 100 in Turkey, 12 per 100 in Portugal and 50 per 100 in the U.S.). In order to provide the level of telecommunications service required to sustain economic development in Egypt and in accordance with the AID-financed 20 year master plan ARENTO plans to reach a telephone density of 7 per 100 persons by the year 2000. This effort will require the expansion of central office switching capacity by 250,000 telephone lines per year and replacement of obsolete switching systems. ARENTO and Siemens (Germany) have formed a joint venture company for the local manufacture of digital telephone systems. The plant will initially assemble digital switches and may at a later date begin to manufacture major components or complete switches. The planned ultimate capacity of this plant is 200,000 lines per year with start-up slated for 1994. However, at least until the manufacturing plant is producing, Egypt will have to import significant amounts of equipment to meet the increasing demand for telephone service, particularly in Cairo.

The GOE considers that rehabilitating and developing Egypt's telecommunications system will play a key role in the development of all sectors in the Egyptian economy and in particular in tourism and private sector investment.

Accordingly, the telecommunications sector is given substantial attention in the GOE second Five-Year Plan (1987/88 - 1991/92). The GOE recognizes the need for telephone service revenues to cover operating costs and has been increasing user tariffs as the services to customers improve. As a result of these recent tariff increases, ARENTO at present (unlike other Egyptian utilities) is able to meet its operation and maintenance costs, debt service requirements and some investments from revenues generated from the service it provides. However, interest charges on local and foreign loans cost ARENTO approximately 40 percent of its income and the remaining amounts are not sufficient to cover its continuing expansion needs.

The USAID 1987 Country Development Strategy Statement (CDSS) proposed that concessional assistance to the telecommunications sector be phased out. However, due to the current economic situation in Egypt, it is extremely difficult for ARENTO to obtain any commercial loans to finance the cost of its continuing expansion programs. In addition to financial considerations, three other factors justify increased AID financial support for the Telecommunications IV Project: 1) the importance of the orderly expansion and modernization of telecommunications systems in the development of efficiency and enhancement of the profitability in all sectors of the Egyptian economy, particularly to support a growing private industrial sector; 2) previous policy successes in the telecommunications sector; and 3) ARENTO's proven strong project management skills and technical and organizational capabilities during the successful implementation of prior and present AID-financed telecommunications projects. Based on the above, AID is prepared to provide this additional support.

The purpose of this amendment is to facilitate attainment of the original project objective of improving and expanding the telecommunications system of greater Cairo. There is no major change in the scope of the project or the project description/elements, nor are any significant policy issues involved. There is thus no need to modify the economic, technical, and social soundness analyses contained in the Project Paper.

Since the last PP authorization, we have conducted a Host Country Capability Assessment of ARENTO. This assessment (in final draft) indicates that ARENTO has demonstrated the capability to implement contracts. As the rest of the implementation and financing requirements are the same as when the original authorization was signed, it is appropriate for you to approve this PP Supplement and sign Amendment No. 2 to the Project Authorization.

AUTHORITY

Under paragraph 3 of Delegation of Authority No. 653, you have authority (without dollar limitation) to approve an amendment of the project authorization to increase the LOP funding. Under paragraph 5 of Mission Order No. 5-4, your authority has not been redelegated.

RECOMMENDATION

That you approve this Project Paper Supplement and sign the attached Amendment No. 2 to the Project Authorization (TAB 3) and the revised Project Data Sheet (TAB 4) to authorize an additional \$42 million for the Telecommunications IV Project. A revised Project Financial Plan is attached (TAB 5).

APPROVED 

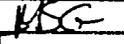
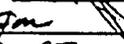
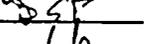
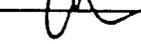
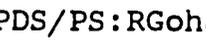
DISAPPROVED _____

DATE 2/12/92

Attachments:

- TAB 1 - Letter, ARENTO to USAID, May 20, 1991
- TAB 2 - Letter, ARENTO to USAID, April 9, 1991, and January 13, 1992
- TAB 3 - Amendment No. 2 to the Project Authorization
- TAB 4 - Amendment No. 1 to the Project Data Sheet
- TAB 5 - Revised Project Financial Plan

Clearances:

- DR/UAD: JHunt: 
- OD/DR/UAD: MGould: 
- AD/DR: PThorn: 
- AD/LEG: TCarter: 
- OD/PDS/PS: RJordan: 
- OD/PDS/P: JMalick: 
- AD/FM: MFranklin: 
- DD: GWachtenheim: 

Drafted: GRWhaley: PDS/PS: RGohar: DR/UAD: 01/21/92: DocID: UAD\TC4AUTH1.192



UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

CAIRO, EGYPT

SECOND AMENDMENT TO
PROJECT AUTHORIZATION

Name of Country: Arab Republic Name of Project: TELECOMMUNI-
of Egypt CATIONS IV

Number of Project: 263-0177

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, the Telecommunications IV Project for the Arab Republic of Egypt was authorized on September 25, 1988 and amended on July 11, 1991. The authorization is hereby further amended as follows:

a. In paragraph 1, the planned obligation for the project is increased from Forty Million United States Dollars (\$40,000,000) over two years from the date of authorization to Eighty Two Million United States Dollars (\$82,000,000) over four years from the date of authorization.

2. The Authorization cited above remains in force except as hereby amended.


Henry H. Bassford
Director

2-12-92
Date