

UNCLASSIFIED

INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D.C. 20523

PROJECT PAPER

TUNISIA: 664-0315

GRANT

TUNISIA: TECHNOLOGY TRANSFER

UNCLASSIFIED

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number

DOCUMENT CODE

3

2. COUNTRY/ENTITY

TUNISIA

3. PROJECT NUMBER

664-0315

5. PROJECT TITLE (maximum 60 characters)

Technology Transfer

4. BUREAU/OFFICE

NE

03

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
 1 | 2 | 3 | 1 | 8 | 4

7. ESTIMATED DATE OF OBLIGATION
 (Under 'B' below, enter 1, 2, 3, or 4)

A. Initial FY 81

B. Quarter 4

C. Final FY 81

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

A. FUNDING SOURCE	FIRST FY 81			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total (Grant)	1450		1450	1450		1450
(Loan)	(1450)	()	(1450)	(1450)	()	(1450)
Other U.S. 1.	()	()	()	()	()	()
2.						
Host Country						
Other Donor(s)	59076	300	59376	59076	300	59376
TOTALS	60526	300	60826	60526	300	60826

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) ST	750	870				1450		1450	
(2)									
(3)									
(4)									
TOTALS						1450		1450	

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

871 872 873 874 660

11. SECONDARY PURPOSE CODE 680

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

A. Code DEL TECH

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To assist GOT in the institutionalization of the capability to effectively and economically acquire and manage technology, especially in engineering and related fields.

14. SCHEDULED EVALUATIONS

Interm MM YY MM YY Final MM YY
 0 | 5 | 8 | 3 | | | 1 | 2 | 8 | 4

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)

17. APPROVED BY

Signature

Martin V. Dagata

Title

Director, USAID/Tunis

Date Signed

MM DD YY
 8 | 3 | 1 | 8 | 1

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY
 1 | 1 | 2 | 3 | 8 | 1

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4. Mr. Frank J. Kerber - Program Office
5. Mr. Salah Mahjoub - Food and Agriculture Officer
6. Mr. Richard S. Stevenson - S & T Officer
7. Ms. Saida Zouiten - S & T Office

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2. NE/TECH/HRST, Barry Heyman
3. NE/MENA/T, James Politte
4. GC/NE, Bruce Janigian
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USAID/Egypt Project Approval Officer

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I. SUMMARY AND BACKGROUND

A. The Problem

Among the matters receiving priority attention by the Government of Tunisia (GOT) in the preparation of its Sixth Development Plan (1982-1986) are education and employment. Education is seen as the vital link to modernization. The GOT annually allocates one-fourth of its national budget to education, making Tunisia's percent of budget invested in education one of the highest in the world. In spite of this commitment the GOT has difficulty in relating the products of the educational system to the needs of the general economy. Chronic unemployment and underemployment, not exclusively confined to the uneducated, exist while at the same time there is a critical shortage of manpower in many highly skilled technology areas.

As the GOT completes development of the Sixth Development Plan it is seeking new ways to address education and employment for high school and college graduates alike. At the college level, the GOT recognizes the need to produce significantly more engineers and related technicians in the next five years. It further recognizes that its access to U.S. scientific and technological expertise through its higher education and research communities is limited. The problem for the GOT is how best to absorb and adapt U.S. technology to meet its own educational and employment needs, a concern that implies a radical departure from established and traditional patterns of technology transfer, primarily those with France.

B. The Proposed Solution: The Project

The GOT has approached the U.S. Government for assistance in solving its short-term need to train more engineering students overseas and its long-term requirement to strengthen its technical training capability and to develop ties between the U.S. technological community and Tunisian higher education institutions.

The GOT initially approached AID with a request for student financial aid. This request was subsequently modified to its present form to assist the GOT in (1, enhancement of curricula at both graduate and undergraduate levels at selected Tunisian technical institutions; (2) support of the GOT program for sending large numbers of GOT-financed students to U.S. technical schools; (3) efforts to develop and maintain institutional links between U.S. and Tunisian research

communities; and (4) development of institutional capacity in planning supply or technical manpower to meet national priority needs.

As the direct bilateral AID program phases out, the Tunisia Mission has intensified efforts to support projects which are likely to produce lasting impacts on Tunisian development. To this end, AID and the GOT have agreed on this project to institutionalize technology transfer in engineering and related fields. During the life of the project approximately 1000 Tunisian students will be placed in U.S. universities at both the graduate and undergraduate levels, a manpower planning system in the fields of science and technology appropriate to Tunisia's needs will be developed and put into operation, procedures for expeditious preparation of student academic dossiers for placement in the United States will be devised and staff will be trained in placement procedures, and Tunisian institutions of technical training will be assisted in enhancing their curriculum and teaching methodologies through the presence of visiting U.S. professors and short-term consultants.

The project will be implemented through the Office of International Cooperation (DCI) of the Ministry of Higher Education and Scientific Research (MHESR). This office will cooperate closely with the Directorate of Higher Education and the Office of the Special Assistant to the Minister for Curriculum Reform (both of MHESR), the newly created Academic Affairs Office of MHESR in Washington, D.C., the Manpower Planning Office of the Ministry of Plan and Finance (MPF), and appropriate offices within the Ministry of National Economy and other ministries as required. The role of these ministries will focus primarily on inputs to manpower planning in technology fields and on some placement of students.

Technical assistance will be provided to the GOT through a host-country contract with a qualified U.S. university, firm, organization or consortium of such organizations and one additional A.I.D. personal services contract with a U.S. expert. The former will provide both long-term and short-term assistance in Tunisia while the latter will assist the Tunisian student placement service in Tunis. -

C. Background

The Tunisian educational system is rooted in the French educational tradition. There is a six-year primary cycle, followed by a seven-year secondary school cycle with specialized curriculum alternatives, one of which is math/science. A baccalaureate diploma is awarded upon graduation which qualifies the student for entry into the university system. The national university system is free for Tunisians and offers two, three and four year programs and graduate programs.

The Ministry of Higher Education and Scientific Research is responsible for most higher education in Tunisia, although other ministries operate specialized institutions related to their own mandate. For example, the Ministry of Agriculture has complete responsibility for the National Agricultural Institute (INAT) and the National Agricultural Research Institute (INRAT).

In the 1980-81 academic year there were almost 32,000 students enrolled in Tunisian schools of higher learning, Of this number over 27,000 were in institutions under the jurisdiction of the MHESR. Approximately 30 percent of the MHESR group were studying engineering or related disciplines (student enrollment details are given in Section III F).

The matter of particular interest for this project is the relatively low number of degrees awarded in technical fields. In the past academic year, the Tunisian technical institutions produced 935 graduates, and over the next five years the GOT expects that their technical schools will produce over 7,000 engineers in all specialities. However, all of these can be absorbed into the work force and the requirements for engineers projected in the Sixth Development Plan will still not be met. Moreover, requirements for certain technical specialities will not be met at all as they are not available in Tunisian institutions.

The GOT has focused on training in the United States as a solution to this problem for three reasons. First, because Tunisia views U.S. institutions as being at the leading edge of technological advance. Second, because access to Western European institutions is more limited for Tunisia than in the past. Third, there is a disproportionate number of Eastern European technical faculty in Tunisia and Tunisian technical students in Eastern Europe, which together with the first reason, has prompted President Bourquiba to publicly state that he wishes to see a significantly increased program of sending Tunisian technical students to the United States.

II. PROJECT DESCRIPTION

A. Goal, Purpose and Assumptions

1. Goal

The goal of this project is the long-term transfer of technology appropriate to national economic development from the United States to Tunisia, and the dissemination and utilization of that technology for economic development and increased national welfare in Tunisia.

2. Purpose

The purpose of this project is to assist Tunisia's higher education and research community to increase their access to U.S. scientific and technological expertise, especially in engineering and related fields, and to assist the Tunisian technical higher education system to increase its efficiency and effectiveness in acquisition and dissemination of technology skills.

3. Assumptions

The key assumption that links the purpose and the goal is that technology transfer can be efficiently and effectively achieved through education, both by sending selected, highly-qualified Tunisian students to U.S. degree programs and by bringing U.S. professors and experts to teach and develop curricula and research programs in Tunisian colleges. The project further assumes that: 1) technology transfer can be facilitated by improving the infrastructure for accessing scientific and technological information by the Tunisian education and research community; 2) the GOT and the AID financed contractor will give their full cooperation and institutional support to the project, such that the project results will serve the GOT development goals for technology transfer as specified in the Sixth Development Plan; and 3) increased access to and utilization of modern technology will be accompanied by economic development and increased national welfare.

B. Project Components

This project will address the creating and reinforcing of long-term links between the United States and Tunisia for technology transfer by assisting the MHESR to establish a workable system for determining technically trained manpower needs and obtaining access to the U.S. technological community. This system will include methods for projecting manpower requirements in technical skills, placement of Tunisian students in U.S. universities and enhancement of the curriculum of Tunisian technical institutions.

The project will consist of the following components:

1. Manpower Planning

Currently GOT manpower planning is carried out on a macro scale by the Directorate of Manpower Planning of the MPF. This Directorate was created in the mid-seventies and received initial assistance from the World Bank, which installed a computerized macro manpower planning model and financed the training of Directorate staff in its use. The sources of data for the MPF are the other line ministries, primarily through their statistical and planning units. For MHESR, the institutional link with the MPF is the Office of Planning, Statistics and Data Processing under the Director of Higher Education. A major responsibility of this office is to determine demand by academic field for higher education. The determinations are based on manpower requests from each ministry and also serve as the starting point for planning for faculty and facilities required to meet the demand for training. A major drawback of the system in use is that it is manual and hence not compatible with the MPF system. In fact, as this office is recently created, it has so far done primarily statistical compilation and has not yet effectively implemented its manpower planning mandate. The proposed project will provide technical assistance to enable this existing office to carry out its assigned work.

This component of the project will assist the MHESR and MPF to develop and put into operation a manpower planning system that is commensurate with the country's needs in the fields of science and technology. Early in project implementation, a manpower planning task force made up of representatives from the MHESR, the MPF, the Ministry of National Economy, and ad hoc members from other relevant ministries and the long-term resident advisor will be created and will direct

technical manpower planning in higher education for the MHESR. Its initial task will be to identify short-term technical assistance needs to strengthen the MHESR manpower planning capability in science and technology and to examine the feasibility of adapting the MPF manpower planning model to the forecasting requirements of the MHESR, thereby establishing a planning system capable of working with supply and demand projections in all technical fields.

The scheduling and monitoring of the short-term consultants in manpower planning will be the responsibility of the resident advisor and his principal counterpart, the Director of International Cooperation (DCI) of the MHESR. However, the task force will be the principal beneficiary of the short-term manpower planning assistance provided by this project and will be the channel through which the consultants will provide assistance to or obtain data from other ministries involved with technical manpower, as either suppliers or end-users.

2. Student Placement

At the request of the President of Tunisia, the MHESR is embarking on a program to send a large number of Tunisian undergraduate and graduate students to the United States for academic training in technical fields. Approximately 220 students will be placed in the United States for academic year 1981-82, before this project begins. The GOT proposes to then place an average of 260 students per year during each of the three years of the project. Prior to departure they will receive English language training at the English Language Center recently established at Sousse, or in other facilities or through secondary school curriculum modification which the GOT may arrange in the future.

A.I.D. financing of this component is limited to technical assistance to the GOT in placement of students for academic degrees in engineering and associated fields. A short-term (six months) advisor in Tunis will work with and train the staff of the MHESR in the design of a system to place Tunisians in U.S. technical institutions and in the preparation of student academic dossiers necessary to make application to U.S. institutions. This advisor will arrive

by January 1982 to begin preparation of dossiers for enrollment of students in the fall of the same year. His principal counterpart will be the Chief of the new Service for Student Placement in the United States, who will be responsible for the preparation of documentation for U.S. placement of Tunisian students. This service is being created separately from other services within the DCI which handle foreign placement of students because of the size of the new program, substantially larger and much more complex than previous experience of the DCI in student placement abroad.

In addition the GOT is in the process of creating a Tunisian Academic Affairs Office in Washington, D.C. to service the participants of this project and to develop institutional contacts and exchanges. This office will be staffed by a Tunisian director and a deputy director qualified in student placement, administration and counselling and familiar with Tunisian technical schools. A.I.D. financing will provide for a long-term consultant in Washington to assist this office to develop a comprehensive placement, counselling and student orientation program. The U.S. advisor services will be procured through the AID funded host-country contract. This activity will begin in the spring of 1982 and continue until near the end of the U.S. financing of the project in December 1984.

The GOT will be solely responsible for the costs, including tuition and maintenance allowances, of the academic training of its students. The GOT will also pay all of the international transportation of the participants, including an annual return trip to Tunisia in order to maintain family contacts and ease the burden of studying abroad and to secure the highest possible rate of return of students to Tunisia after studies are completed.

3. Strengthening Tunisian Scientific and Technological Academic Institutions

The function of this component is to strengthen the institutional capacity of selected Tunisian advanced technological training institutions through the integration of U.S. technical curricula and teaching methods into the undergraduate and graduate programs. Such development will take place at three different levels.

First, it will assist at the national level through the provision of technical assistance to the Directorate of Higher Education of MHERS to address policy questions such as degree equivalency and institutional growth patterns.

Second, at the university level, it will provide six senior-level visiting U.S. engineering professors for nine months each in order to expose Tunisian faculty to U.S. curricula and pedagogical methods at one or two technical institutions and to foster longer term institutional and professional contacts.

Third, at the classroom level it will provide in-service training of Tunisian counterparts on a one-to-one basis by the visiting professors. Each professor will be assigned one or more counterpart faculty members who will work with him during his stay and who will be expected to take over the courses and research programs established by him during his stay. This component will also introduce new course content, teaching strategies and teaching materials through inputs of short-term consultants.

A final feature of this component deals with the limited access of Tunisian officials in higher education to U.S. technology and the U.S. higher education system. AID will finance the cost of course materials and travel within the U.S. for up to 12 short-term study tours by GOT administrators or senior professors associated with advanced training in engineering and related fields. These trips will enable the Tunisian scientific and technological leadership to develop an understanding of how best to transfer U.S. technology to their institutions and to initiate what is intended to be lasting personal and institutional relationships with U.S. professionals and institutions.

The exact timing and program of each study tour, as well as the selection of participants, will be done by the GOT project manager in consultation with the long-term resident advisor.

C. Project Implementation

Since the components of this project cut across ministerial lines and involve more than one office within ministries, a project committee will be established to coordinate efforts. This committee will be chaired by the Tunisian project manager, the DCI for MHESR, and will include the Chief of the Service for Student Placement in the United States and the Director of Higher Education, both from MHESR, as well as representatives from MPF and from other ministries as judged necessary. It will meet periodically and will guide the overall course of the project, giving particular attention to the placement of the visiting U.S. faculty members, the expertise and utilization of short-term consultants and the functioning of the Manpower Planning Task Force. The long-term advisor and chief of party (COP) for the AID financed contractor will serve as technical expert to the committee.

The project will be physically housed in the MHESR. The Tunisian project manager will be the DCI of MHESR. He will be the principal counterpart to the chief of party and the two will cooperate in developing policy issues that impact on project goals, identifying subdiscipline teaching areas for visiting U.S. professors, identifying areas for short-term technical assistance for manpower planning and curriculum development and monitoring the progress of placement of Tunisian students in U.S. universities. For described project activities the Tunisian project manager will designate operational responsibility to the heads of various sections within the MHESR. Student placement and training, including preparation of student dossiers, English language preparation and pre-departure orientation, will be carried out by the special U.S. Student Placement Office within DCI with the assistance of the medium-term advisor, while the assignment of visiting professors and placement of short-term consultants will be handled by the Director of Higher Education in cooperation with the long-term resident advisor.

D. Project Inputs

The total cost of this project is estimated at U.S. \$24,718,000. Of this total U.S. \$ 1,450,000 will be funded by AID with the balance (equivalent to US \$ 23,268,000) contributed by the GOT. AID financed inputs include technical assistance and training. The GOT will provide Tunisian staff and office space, both in Tunisia and in the U.S., facilities for in-country language training, international travel for Tunisian students, all tuition and maintenance fees for Tunisian students, logistical support, international travel for Tunisian administration and faculty members visiting the United States, and partial salaries and international travel for visiting U.S. faculty members. Budget details for both GOT and AID contributions appear in the Financial Analysis section (IIIE).

1) AID Inputs

a) Technical Assistance

A major portion of the U.S. inputs to this project will be the financing of a host-country contract for technical assistance with a U.S. university, firm, organization or consortium of such organizations. This assistance will include two advisors in Tunis. The first, the chief of party, will have as a counterpart the Tunisian project manager, the DCI of MHER, and will work closely also with the Director of Higher Education, MHER and the Special Assistant for Curriculum Development and Reform of MHER. He will coordinate implementation of the key elements of the project, including refinement of manpower planning methodology, assessment of the needs of the technical faculty and curricula, recruitment of U.S. visiting professors, and placement and supervision of project financed short-term consultants. He will serve through the life of the project and will have a background in engineering with relevant experience in teaching and university administration.

The short-term advisor in Tunisia will be a student placement specialist. In order to place him in Tunisia in time to assist with placement for the fall of 1992 he will be hired under a direct AID contract. He will serve for six months and will train the staff of DCI, MHER in establishing a student academic dossier transfer system in cooperation with the Tunisian Academic Affairs Office in Washington, D.C. Another part of the host country contract will be 33 person months of short-term technical assistance. These consultants, under the guidance of the chief of party, will provide expertise on curriculum reform, teaching methodology, manpower planning and other technical and administrative matters as determined to be useful.

AID resources will be used to complement the salaries paid by the Tunisian government to the visiting U.S. professors. The GOT will pay the initial \$20,000 of the salary of each professor. U.S. funds of up to \$27,500 per professor will be added to the GOT contribution to insure recruitment of the most capable individuals possible.

A final element of U.S. financing will be for the services of one foreign student specialist, contracted for 30 months, who will be stationed in Washington, D.C. in the Tunisian Academic Affairs Office. This individual will provide assistance to this office in organizing and operating a large-scale placement and follow-up system in support of Tunisian students.

b. Training

AID funding for training will total U.S. \$65,000. This component will consist of up to twelve short-term study tours for Tunisian higher education administrators and academics. The purpose of the tours will be to provide key Tunisian officials with exposure to contemporary technology training methods in the U.S. and the opportunity to establish long-term personal and institutional ties with the U.S. technology and higher education communities.

2) Government of Tunisia Inputs

The GOT will contribute approximately 94 percent of the total dollar value of this project. The Government will pay the recurring costs of the Student Placement Service within DCI, MHESR. the start up and recurrent costs of the English Language Training Center at Sousse, and the recurrent costs of the Academic Affairs Office in Washington, D.C. It should be noted that the English Language Training Center, the Service for Student Placement in the United States and (in terms of their major task) the Academic Affairs Office in Washington have been created at the initiative of the GOT specifically in order to support the larger program of an increased flow of Tunisian technical students to the United States, to which AID is proposing a limited role of supporting assistance.

The GOT will provide total academic and personal financial support, including one yearly round trip ticket, for Tunisian students sent to the U.S. The GOT will furnish complete administrative and logistical support for the long-term advisor and for the six month student placement specialist in the Office of the DCI, MHESR, and will provide administrative support for the long-term advisor to the Academic Affairs Office in Washington. Finally the GOT will pay for international travel, shipment of personal effects and partial salary for six visiting U.S. professors and will provide administrative support at their host Tunisian engineering institutions and administrative assistance in rapidly establishing themselves and their households in Tunisia in order that they may make the most effective academic contribution as rapidly as possible.

E. Participation of Other Organizations

In addition to the AID contribution to this project, the U.S. Information and Communication Agency (USICA) and the Peace Corps have current and proposed contributions. USICA is providing limited funding toward the start up costs of the GOT English Language Training Center at Sousse. This is a one-time contribution and will not exceed three person-months of technical assistance. The Peace Corps is attempting to secure two volunteers with graduate degrees in engineering, science, math or related fields to teach college level physics, chemistry and math courses in English at the Sousse Center to those students selected for training in the United States. These volunteers will probably be transfers from Peace Corps programs in other countries that are phasing out. If located, they will begin teaching in January 1982 and will depart with the close of the spring semester in 1983.

The American Friends of the Middle East (AMIDEAST) will also participate by helping under a GOT financed contract to place 55 graduate students in U.S. universities for the fall of 1981 semester. The balance of 165 undergraduates will be placed by MHESR initially in intensive English and for the spring semester in engineering courses by the Academic Affairs Office in Washington, possibly with some help from USICA and from an extension of the AMIDEAST contract.

Section III - PROJECT ANALYSIS

A. Social Analysis

1. Beneficiaries

This project is designed to strengthen the institutional capacity of the GOT to manage the planning, implementation and utilization of advanced technology transfer, especially in engineering and related fields. The direct beneficiaries will be the project participants - the planning and student placement staff and policy-makers, professors and researchers at the technical institutions and the undergraduate and graduate students who will study at U.S. universities. Respectively they will receive the benefits of U.S. technical assistance as it relates to manpower planning, curriculum development in technological fields, and placement in U.S. institutions.

The indirect beneficiaries of the project will be the Tunisian populace at large. Historically, improved technological capacity has been accompanied by general economic growth. Hence, to the degree that this project enhances the capacity of Tunisia to acquire and utilize U.S. technology it will assist the economy to achieve the goals of the Sixth Development Plan, thereby benefitting the society as a whole.

2. Social Feasibility

The social feasibility of the project rests on devising strategies to deal effectively with two potential areas of constraint: (1) social dislocation experienced by Tunisian students going abroad to study in the United States; and (2) juxtaposition of traditional Tunisian and American approaches (especially as encountered by six visiting professors) to curriculum design and teaching techniques.

Concerning the first issue, it is expected that approximately 1000 Tunisian students will be placed in the U.S. universities. The wide majority will be undergraduates and hence of relatively young age. For many it will be their first travel opportunity, not to mention the initial experience of living overseas. In addition to making the transition from a secondary school to university academic life, they will be faced with making this adjustment in a foreign language, educational system and country. Moreover, the students will be confronted with prolonged periods away from friends, family and the social environment with which they are familiar. In combination these factors could at a minimum, lessen academic performance, or in the more extreme cases contribute to incidence of dropouts.

While it is not possible to eliminate completely factors that cause adjustment problems encountered by students, this project has a number of elements designed to reduce such problems to a minimum. The intensive pre-departure English language training, including the teaching of technical subjects (for example mathematics, chemistry and physics) in English, will ease the adjustment of studying in a foreign language.

Moreover, the Academic Affairs Office to be established in Washington, through its orientation and monitoring programs will provide a point of reference familiar to the students throughout their period of study. Social familiarity will be provided also through limited clustering of groups of students in the same universities. Finally, the project includes financing by the GOT for one round trip airfare yearly for each student, thus enabling them to maintain personal contact with family and friends.

In relation to the second point, a dominant feature of university level technical training in Tunisia is a marked patterning on the French academic tradition, featuring an emphasis on lecturing as the predominant teaching method and maintenance of distance between teachers and students. This factor, coupled with the large numbers of Europeans on the faculties, brings into question the receptivity toward American professors with a different approach to teaching (emphasis on problem solving and collegiality) and curriculum formulation

While the degree of effectiveness is in large part a function of the individuals who are recruited, the project contains a number of elements to facilitate the acceptance of the visiting professors. Most importantly, this component of the project was suggested initially by officials of the MESR and enthusiastically supported by the deans of the institutions involved. All of the deans with whom this element of the program was discussed had identified specific research and or teaching areas where the U.S. expertise was most critically needed. Second, each visiting professor will be assigned a Tunisian counterpart for the entire academic year, thereby easing the entry of the U.S. teacher into the Tunisian academic community while at the same time providing a vehicle for the direct transfer of teaching methodologies. Third, the American professors will be assigned in clusters of two to four individuals in order to increase the probability of their impact concerning curriculum formulation and introduction of alternative teaching methodologies.

B. Implementation Plan and Project Evaluation

1. Implementation Plan

- July 1981 Project Paper drafted with assistance of PSI Associates Inc. as consultants.
- First 200 Tunisian undergraduates selected by GOT as candidates for U.S. schools of engineering.
- August 1981 USICA assists GOT to sponsor 6-week summer program at English Language Training Center at Sousse for 220 Tunisian students selected to be placed in U.S. engineering schools in Fall of 1981.
- Project Agreement signed.
- September 1981 RFTP issued by GOT.
- November 1981 Proposals received.
- January 1982 Short-term student placement advisor arrives Tunis under A.I.D. contract.
- GOT selects list of student candidates for 240 scholarships for Fall of 1982. Dossier processing starts.
- April 1982 Chief of Party (COP) arrives Tunis.
- May 1982 GOT and COP identify (a) project-related issues to be resolved in the first project year; (b) policy-makers and administrators to visit U.S. in 1982 and 1983; (c) criteria for recruiting faculty members for Fall of 1983; (d) criteria for first phase of technical assistance for curriculum development and (e) composition of Manpower Planning Task Force.
- March 1982 Contractor begins recruitment of faculty for 1982-1983 academic year and short-term consultants to assist the Tunisian institutions,
- June 1982 COP submits Life of Project Plan to GOT and A.I.D. Contractor starts recruitment of faculty members for 1983-1984 academic year. GOT enters into contracts with U.S. faculty members for 1982-1983 academic year.
- August 1982 220 Tunisian students enter U.S. technical schools.
- Office of Academic Affairs in Washington holds orientation sessions in U.S. for arriving students.
- U.S. professors arrive in Tunisia for nine-month contracts for 1982-1983 academic year.

August 1982 Contractor begins recruitment of short-term consultants in manpower planning.

January 1983 COP presents credentials of U.S. faculty for 1983-1984 academic year to the Tunisian project manager. GOT selects list of student candidates for 240 scholarships for academic year 1983-1984.

Manpower planning consultants arrive.

March 1983 GOT enters into contracts with U.S. faculty members for 1983-1984 academic year.

June 1983 Mid-project evaluation completed by COP, GOT and A.I.D.

July 1983 Project Committee meets to review mid-project evaluation.

August 1983 U.S. professors arrive in Tunisia for nine-month contracts for 1983-1984 academic year.

September 1983 240 Tunisian students enter U.S. technical schools.

Tunisian Academic Affairs Office in Washington holds orientation session for arriving students.

January 1984 COP and GOT project manager review institutionalization of project components and policy and program issues.

August 1984 GOT selects list of student candidates for 280 scholarships for Fall of 1984.

September 1984 280 Tunisian students enter U.S. technical schools.

Tunisian Academic Affairs Office in Washington holds orientation sessions for arriving students.

December 1984 Final evaluation report of project completed by COP, A.I.D. and GOT.

COP departs.

2: Project Evaluation

Two evaluations are scheduled for the project, one in June 1983 near the mid-point of the project, and another at the end of the project in December 1984. Both evaluations will be undertaken collaboratively by representatives designated by the GOT and AID and by the chief of party of the AID funded contract. AID costs for project evaluation are funded within the project.

The evaluations will take place concurrently with project implementation and there will be no delay or hiatus in ongoing project activities.

a) Evaluation Timing

The first evaluation will take place in June 1983 at a time when the project will have been active through one complete academic year. This will allow the evaluators to assess the function and effectiveness of the student placement and orientation system and the visiting professor program. Interviews should be held with Tunisian students returned for the summer and with both U.S. and Tunisian faculty members who have been involved in the program.

The Manpower Planning Task Force will have been established for nine months and short-term technical assistance to the task force will have started at least three months before the evaluation. The role and capability of the task force should therefore be clear by the time of the evaluation

Technical assistance in curriculum development for the technical institutions will have been in progress for over a year, and it may be possible to see some impact in the curricula proposed for Fall of 1983.

All policy issues within the project, such as the process for degree equivalency advance evaluation and the role of the Manpower Planning Task Force, should be clearly defined by the time of the mid-project evaluation. The evaluation should recommend any mid-project corrections to be implemented during the balance of the project.

The final project evaluation is scheduled for December 1984 and will focus on the effectiveness of methods and procedures used during the project to augment Tunisian technical training capacity and to improve manpower planning capability. It will make recommendations for future actions to be taken by the GOT.

b) Evaluation Criteria

The success of the project will be judged along two major dimensions:

(i) The efficiency of the project will be seen in whether or not contributions have been made on schedule, technicians have arrived when needed, prescribed roles have been carried out, administrative units, committees and task forces have been established and staffed, resources have been properly managed, U.S. professors have been placed, students have been enrolled and a number of other actions described by the project have been carried out as projected. The evaluation criterion to be applied here focuses on whether or not obligations have been met and prescribed actions have been carried out in a timely manner.

(ii) The effectiveness of the project is measured along a very different dimension. Here one must look at issues such as the degree to which U.S. faculty members have been integrated into Tunisian faculties and properly utilized, the effectiveness of the Manpower Planning Task Force and its acceptance by MHER and other involved ministries, the impact of academic technical assistance on curricula and pedagogical methods, and the degree to which any such impacts appear to affect institutional operation and the quality of technical education. The criterion applied here is the impact of the various project elements and the apparent desirability of such impacts. The evaluation should not hesitate to recommend termination of an ineffectual project element, and should make constructive recommendations for new or altered actions, either for the remainder of this project or to be carried out in the future by the GOT.

C. Administrative Analysis

1. Project Committee

Because the activities of this project involve more than one ministry, and in the case of the MHESR multiple offices within a single ministry, a committee will be established to guide the effort. The committee will be chaired by the Director of International Cooperation (DCI) of MHESR and will include the Director of Higher Education, the Special Assistant to the Minister for Curriculum Development and Reform, the Chief of the Service for Student placement in the United States (all of MHESR), and representatives from the Ministries of Plan and Finance (MPF) and National Economy (MNE). It will meet periodically and its particular role will be to provide overall policy guidance and to assure coordination among key project components such as the placement of U.S. resident faculty members, recruitment and pre-departure preparation of participants, utilization of short-term technical assistance and the functioning of the manpower planning task force. The chief of party (COP) of the technical assistance team will act as a technical advisor to the committee and will coordinate the technical assistance provided by this effort for the life of the project.

2. Manpower Planning Task Force

A second body that will be established and have a role in the project, but which will not be involved in daily operations, will be the Manpower Planning Task Force. This task force will be the meeting ground for the producers and end-users of technically trained manpower. Among its members will be the resident advisor, the Director of Higher Education of MHESR, the head of the statistical and planning unit of the same office, a member of the manpower planning unit within the MPF, a representative of the Ministry of National Economy and ad hoc representatives of other ministries as required.

This task force will determine the appropriate mix of consultant expertise to be provided by the project to 1) develop the MHESR manpower planning capability in science and technology and 2) adapt the World Bank manpower-planning model used by the MPF to be compatible with current MHESR procedures, thereby developing a system capable of forecasting requirements in all technical fields. In the long term it

is expected that this task force will become a permanent body gradually expanding its sphere of activity until it provides guidance on technical manpower planning for all sectors of the Tunisian Economy.

3. Project Coordinator

The project will be physically located in the MHESR. The Tunisian project coordinator will be the DCI of MHESR, who, within the organizational structure of the MHESR, reports directly to the Minister. While it is not anticipated that he will be involved with the details of the project on a daily basis, he will chair the project committee, sign project vouchers, and resolve issues as they may arise among the heads of the technical offices involved with project implementation.

For discrete project activities the project coordinator will designate operational responsibility to the heads of various organizations within the MHESR. For example, the Directorate of Higher Education of MHESR will be the office involved with the placement of visiting professors on Tunisian faculties of engineering, the selection and assignment of short-term technical experts, the handling of degree equivalency issues, the determination of the numbers of students who are to be sent for training in the United States, their fields of study and selection of candidates for placement, and general curriculum development and planning for institutional growth. Moreover, this office will be the principal representative of MHESR in dealing with the MPF in manpower planning efforts.

The Planning, Statistics and Data Processing Office within the Directorate of Higher Education is the unit within MHESR responsible to make projections by academic field for the supply of and demand for university level training. This unit is staffed currently by a Chief trained in statistical analysis and two support staff. The data with which they work is received from the Directorate of Secondary Education of MHESR and from the various ministries which are users of technical manpower. At this time the office produces primarily statistical summaries and not manpower planning projections. A major drawback of the process in use is that it is labor intensive, is not computer based, and hence is not compatible with the MPF system.

A second problem is that not all of the Tunisian universities and schools of higher education are under the jurisdiction of the MHESR. Some are controlled by other line Ministries (i.e.

the National Agriculture Institute (INAT) and the National Agriculture Research Institute (INRAT) are under the jurisdiction of the Ministry of Agriculture), each of which have separate planning units. Hence the projections made by MHESR for higher education requirements are incomplete.

On questions related to curriculum development the chief of party will work with the Special Assistant to the Minister of Higher Education for Curriculum Reform. This office has a staff function, as opposed to the line function of the Directorate of Higher Education, and is responsible for developing the theoretical background of revised curricula which the Directorate of Higher Education will in turn implement.

4. Service for Student Placement in the United States

Preparation of academic dossiers for participants prior to their departure will be the responsibility of the newly created Service for Student Placement in the United States. This service will be located in the DCI of MHESR. It will be staffed by a Chief of Service, a professional assistant with expertise in student dossier preparation and a secretary and the service will report directly to the project coordinator, the Director of DCI of MHESR. This service will be parallel to but outside of other student placement units for other geographic areas which are supervised by the Deputy Director of DCI and are also involved with the placement of students in universities overseas. The rationale for creating a separate service with a unique reporting arrangement is the large volume of students that will be processed and the complex placement information required by U.S. universities. Moreover, it attests to the importance placed on this effort by the GOT. The chief of this unit will be the counterpart for the medium-term six month student placement advisor to be located in Tunis.

5. Academic Affairs Office

An Academic Affairs Office will be established in Washington, D.C. and will work directly with the Student Placement Service in Tunis. It will be directly responsible for fostering long-term educational exchanges with U.S. universities, and in that sense will have a much broader mandate than student placement. However, one of its major responsibilities will be to provide for the orientation and placement of up to 1000 students to be channeled to the United States during the life of the project. It will be staffed by a Director, the former Dean of the Management Institute of Tunis, and a Deputy Director, the former Secretary General of the Engineering Faculty of the University of Tunis, and a secretary.

It is expected that the Director will concentrate on establishing long-term contacts with U.S. universities while the Deputy focuses on matters of student placement and orientation. This Office is responsible to the Minister but on practical matters affecting student placement it will report directly to the project coordinator, the Director of DCI of MHESR. It will have its own operating budget, including funds for office space, a secretary, travel and communications. U.S. financing will support the provision of a long-term (30 month) technician to assist this Service implement workable orientation and placement procedures.

D. Economic Analysis

This project's activities are all aimed at increasing the flow and the relevance of technological information to the Tunisian economy. The value of information is impossible to calculate in advance as it inevitably arises from the uses to which the information is put. Also, such information has value because of the costly errors, the false starts or fruitless endeavors it will help to avoid as more is known about past experiences elsewhere.

Those of the project's activities to be funded by the U.S. are all aimed at improving the selectivity and efficiency of the information or technology transfer process, and at increasing the relevance of the information or technology transferred. Thus, assistance in the placement of students and the matching of their learning characteristics and past accomplishments with those of American educational institutions and programs will reduce the time required, educational wastage, and facilitate increased student learning. Assistance in the recruitment of visiting faculty will increase the range of talents, special skills and background available to Tunisian institutions. The provision of visiting lecturers, seminar leaders, researchers and consultants on curricula, and pedagogical methods will increase Tunisian faculty, researcher, and student contact with recent developments in the American technological community at much less cost than available alternatives, such as random sampling of available materials and ideas.

A preliminary examination of the cost-effectiveness of the U.S. input, and the savings likely to result from these activities funded by the U.S. input to the total project (Tunisian inputs plus the U.S. ones) is positive. Only the range required has been estimated as the benefits of the U.S. inputs (\$1,450,000) may continue for twenty years. In accordance with usual A.I.D. practice, an internal rate of return of 15% or better is assumed to be necessary to justify A.I.D.'s contribution. This assumption yields the following flow of minimum average annual benefits needed to justify A.I.D.'s participation on economic grounds:

Years of Benefits:	5	7	10	15	20
Minimum average annual benefit (US \$000):	432	348	288	250	232

As can be seen, the required benefits are relatively insensitive to the time span of the project's impact because of the high internal rate of return required. The more measurable benefits are concentrated in the early years of activity where the higher rate of return will be.

The most easily measurable results are in improved student placement, where correct placement might readily save the \$52,000 cost of one student over a four year period.

A more conservative assumption might be that proper placement and support for a student will save on the average one half year of time to achieve the degree required. At this rate of savings of approximately \$6,500 per student placed, the U.S. component of \$255,000 for placement assistance would be justified if 40 students are placed in the U.S. over the three year life of the project. The total project cost for placement (U.S. plus GOT costs) is justified if 220 students are effectively placed over the four year life of the Tunisian project (having started with the fall of 1981 academic year for the GOT).

MISSING PAGE
NO. 25

E. FINANCIAL ANALYSIS AND PLAN

1. AID Expenditures

The total AID contribution is US \$1,450,000, to be allocated as follows:

		(U.S. Dollars)
<u>Chief of Party/Faculty and Curriculum Development Adviser: 30 months, Tunis</u>		250,000
<u>Short-term Consultants:</u>		
Faculty and Curriculum Development (23 person-months)	273,000	
Manpower Planning (10 person-months)	<u>120,000</u>	393,000
<u>Salaries for U.S. Faculty (16 @ 27,500)</u>		165,000
<u>Support Services:</u>		
Faculty and Consultant Recruitment	60,000	
Logistics for 12 Tunisian Faculty Tours in United States	<u>65,000</u>	125,000
<u>Placement Services:</u>		
Placement Adviser to GOT/Tunis (6 months)	35,000	
Placement Adviser to GOT/Washington, D.C. (30 months)	95,000	
Travel and Communications (US)	30,000	
Direct Placement Costs (US)	50,000	
Student Orientation Seminars (US)	<u>45,000</u>	255,000
<u>Project Evaluation</u>		<u>20,000</u>
	Subtotal	1,208,000
Contingency and Inflation (20%)		<u>242,000</u>
	TOTAL	\$ 1,450,000

2. Government of Tunisia Expenditures

The total GOT contribution is TD 11,634,000 to be allocated as follows:

Academic training:

(Tuition, room, board, expenses, travel at TD 6000/student/year)

Enter fall 81 - 220 students
fall 82 - 50 students (minimum)
fall 83 - 50 students (minimum)
fall 84 - 50 students (minimum)

Total Entry - 370 students (minimum)

Average 4 academic years per student X 370 students =
1480 student years at TD 6000/yr

(Tunisian Dinars)

8,880,000

Academic Affairs Office in Washington, D.C.
(January 1982 - December 1984)

Salaries	175,000	
Office and Overhead	105,000	
Travel and Communication	<u>35,000</u>	315,000

Salaries

Management, 36 mos. at 800/mo.	28,800	
Chief, Student Placement Service		
36 mo. at 500/mo.	18,000	
Staff, Student Placement Service		
36 mo. at 300/mo.	14,400	
Secretary, Student Placement Service		
36 mo. at 300/mo.	10,800	
Institutional Counterpart to U.S.		
Technicians, 23 mo. at 500/mo.	11,500	
Statistical and Planning Unit		
36 mo. at 500/mo.	18,000	
36 mo. at 400/mo.	14,400	
36 mo. at 300/mo.	<u>10,800</u>	126,700

Logistical Support

Communications	1,300	
Reproduction	2,000	
Translation Services	5,000	
Local Transportation and Per Diem	5,000	
International Travel and Per Diem	15,000	
Conference Facilities	<u>20,000</u>	48,300

<u>English Language Training at the Sousse Center</u>		(Tunisian Dinars)
Salaries of Teachers	24,000	
Scholarships	29,000	
Housing and Food	45,000	
Management Salaries	10,000	
Materiels and Equipment	100,000	
Contingencies	<u>42,000</u>	250,000
 <u>U.S. Professors in Tunisia</u>		
Salaries, 6 years at 10,000	60,000	
International travel, 6 at 2,500	<u>15,000</u>	75,000
 Subtotal		
		9,695,000
 Inflation and Contingency at 20%		
		1,939,000
 Total		
		<u>TD 11,634,000</u>
 at TD 1.00 = US\$2.00, the GOT contribution =		
		US\$23,268,000
 Project Total		
		<u><u>US\$24,718,000</u></u>

F. Technical Analysis

The technical feasibility of this project rests on the following five issues:

- (1) Capability of the Tunisian institutions of higher technical education to absorb and productively use the 6 U.S. professors and 33 personmonths of short-term technical assistance to be furnished;
- (2) Provision by the MHESR of students in sufficient numbers and of sufficient quality for placement in U.S. technical schools;
- (3) Ability of the Office of Academic Affairs to be established by the GOT in Washington, D.C. and the student placement service to be established in Tunis to place up to 280 Tunisian students per year;
- (4) Capability of the Tunisian economy to effectively absorb the 1000 engineers to be educated under this project; and
- (5) Resolution of degree equivalency issues for the students returning to Tunisia with U.S. degrees.

The project, as designed, contains measures to deal with each of these potential constraints.

1. Institutional Development

A major thrust of this project is the strengthening and expansion of the undergraduate and graduate degree granting programs of Tunisian technical schools. The project will provide 6 U.S. professors on nine-month contracts and up to 23 person months of consultants on curriculum and faculty development. The issue is whether or not these institutions can productively use this level of assistance, and whether or not the directors and faculty members are amenable to curriculum reform.

As illustrated by the following table there are two outstanding features of the current configuration of technical faculties in Tunisia.

- (1) In most instances the Tunisian faculty members comprise less than one-half of the total faculties, and
- (2) In two instances there is a heavy dependence on Eastern European professors.

Table 1

Composition by Nationality of Tunisian Technical Faculties

<u>Institution</u>	<u>Number</u>
E.N.I.T.	167 full time faculty 72 Tunisian 50 U.S.S.R 30 French 15 other nationalities, including Bulgarian and British
E.N.S.E.T.	96 full time faculty 55 Tunisian 41 other nationalities, including French and Belgian
Faculté des Sciences Techniques MONASTIR	60 full time faculty 38 Tunisian 22 other nationalities, including French and Belgian
Faculté des Sciences Techniques SPAX	88 full time faculty 56 Tunisian 25 French 7 other nationalities
E.N.I.G.	64 full time faculty 12 Tunisian 12 U.S.S.R 40 other nationalities, including French, Belgian and others
Faculte des Sciences, Tunis	291 full time faculty 244 Tunisian 47 other nationalities

In discussions held as part of the project design process the deans of all of the schools to be included in the project emphasized their desire to obtain more direct access to the U.S. scientific and technological community, especially as that access relates to improving the curricula of undergraduate and graduate degree programs. Among the specific priority areas identified as requiring assistance were:

(1) conceptualization of a series of courses within the industrial engineering track that would synthesize economics, management and industrial processes, directed toward management engineers; (2) design of a geotechnical laboratory course within the civil engineering program; (3) development of a course on the use of solar energy for desalinization; (4) development of a program in biomass engineering; (5) assistance in designing advanced research programs in a variety of engineering subfields; and (6) assistance in the procurement of U.S. equipment for electrical and mechanical engineering laboratories. The 23 person months of short-term consulting services will be used specifically to address these types of questions.

It is probable that the six visiting professors will be concentrated in two of the schools included in the project in order to achieve the critical mass needed to produce an impact on curricula and teaching methods. The 23 person months of short-term consultancies will be used to address the full range of issues described above and will benefit all institutions involved. In the case of the professors there will be the added benefit of daily contact with Tunisian counterparts that will facilitate the informal transfer of current teaching methodologies and research techniques. Given the interest expressed by the Deans of the Tunisian engineering schools as well as MHERS officials in accessing U.S. technology, developing contacts with U.S. institutions and counterbalancing the European (especially Eastern Bloc) influence on engineering faculties; there will be little difficulty in absorbing this level of technical assistance.

2. Tunisian Participant Candidates

With the assistance of this project the MHERS proposes to place an average of 240 participants per year in U.S. universities, beginning in the fall of 1982. Of this number it is anticipated that approximately 180 will be placed annually at the undergraduate level and the balance will be placed in graduate programs. Recognizing that the GOI is intent on providing academic scholarships only to the top ranking students, plus the factors of English language proficiency and the social constraint of a prolonged separation of family and friends which will reduce the pool of candidates, there is the issue of whether or not the Government is capable of generating the proposed number of qualified candidates.

In the Spring of 1981 the Tunisian education system produced 6845 secondary school graduates. Over half majored in the math/science track. This latter group, approximately 4000 individuals, represents the target group for selection of participants at the undergraduate level. The proposed level of 180 students per year represents only 5 percent of the science track graduates, a level which suggests that there is a sufficient number of candidates among whom to select the desired quota of placements per year.

At the graduate level a similar argument prevails with a ratio almost as favorable. In the spring of 1981 the Tunisian technical institutions awarded a total of 826 degrees in science and technological fields, predominantly in engineering. Projections are that the total will gradually increase over the period of the sixth development plan. The goal of placing 60 individuals yearly represents approximately 7. percent of the probable pool from which to select.

While it appears that these targets are reasonable, if they prove to be overly optimistic with the result that the GOT is not able to supply 240 students per year for placement, it does not invalidate the project. Economic analysis indicates that the placement portion of the project has an acceptable internal rate of return at a fraction of the projected placement rate, and the project agreement contains a covenant that commits the government to supply 50 participants yearly as the minimum required to make the project technically and economically sound.

3. Student Placement

As described in the Administrative Analysis, in order to process the placement of students under this project the MHESR is establishing an Office of Academic Affairs in Washington, D.C. and a special Service for Student Placement in the United States within the MHESR in Tunisia. The Washington Office will be staffed by three Tunisians and an American consultant for the life of the project. The Tunis based Service will have two Tunisian professional staff members full time and an American consultant for six months. Given that the GOT expects to develop long-term ties with U.S. institutions, there is an issue of whether or not this level of staffing is adequate.

A generally similar project in Tunisia, the Agriculture Technology Transfer Project, is placing approximately 25 participants a year and is attended by a U.S. resident advisor and a Tunisian counterpart in Tunis and a participant placement specialist in the United States. While this may suggest that student placement is a labor intensive undertaking, it must be pointed out that the preparation of academic dossiers is an activity that requires no more than one-third of the office time of the American advisor and his Tunisian counterpart. Other duties include procurement of commodities, coordination of visits by short-term consultants, coordination of the return of participants to sponsoring institutions, development of work plans for thesis advisors, and monitoring of progress of research of U.S. graduate students in Tunisia. The project director in the United States, in addition to placement of participants, is concerned with commodity procurement, logistics in support of thesis advisor travel to Tunisia and orientation and English language training for participants.

In this project the Student Placement Service in Tunis will only deal with the preparation of academic dossiers (student selection will be the responsibility of the Directorate of Higher Education of MHESR). The Academic Affairs Office in the United States will not be concerned with either commodity procurement or language training and there is money in the project to contract for procurement of orientation services. Moreover, it must be pointed out that placement of

participants in highly specialized graduate programs in agriculture is considerably more labor intensive than enrolling students in general undergraduate engineering curricula.

These factors, taken in combination, lead to the conclusion that the proposed staffing is adequate for the level of effort required to place 240 student per year.

4. Engineers in the Tunisian Economy

Over the next five years it is expected that Tunisian technical schools will produce, at a maximum, 3500 engineers. Given the unrefined nature of current manpower planning, projections suggest the need for twice that number for the same time period. To illustrate, the Directorate of Industry within the Ministry of National Economy has conducted a loosely designed survey of 5000 small, medium and large scale industries and has determined that by 1986 there will be a need for 2000 engineers (1600 trained to the undergraduate level and 400 to the graduate level) in the private sector. When the rough projections of requirements in the public sector are added to those of private industry it is apparent that suppliers cannot meet anticipated demand and that neither the engineers trained in Tunisia nor those educated in the United States will encounter difficulties in being absorbed into the economy.

5. Degree Equivalency

The question of degree equivalency has surfaced in a number of AID projects in Tunisia (most notably the Agriculture Technology Transfer Project referred to above) which have degree training in the United States as a component. In brief the problem is that degrees, especially at the graduate level, are not automatically recognized as equivalent to degrees awarded by Tunisian institutions. Candidates who earn degrees in U.S. universities must present their credentials to the Tunisian Degree Equivalency Board which decides, on a case by case basis, whether or not the degree will be recognized. In instances where the degree is not accepted the Board can require that the candidate perform a range of activities from passing a comprehensive examination to preparing a second thesis or dissertation. In addition to the personal trauma of not having a degree recognized, the problem this poses to candidates is that either they are not eligible for employment, or, if eligible, they cannot receive salary payment until the Board's requirements are satisfied.

This issue has been discussed fully with the Director of Higher Education within the MIESR, who is also chairman of the Equivalency Board. While there was not agreement on automatic equivalency for degrees earned in the United States, based on the listings of U.S. higher education accreditation associations, there was agreement to examine the findings of such associations as a preliminary step toward granting automatic equivalency. It will be the responsibility of the long-term resident advisor to procure such information for the Equivalency Board and to assist in the analysis with a view toward adapting it for the Tunisian context.

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

January 7, 1982

MEMORANDUM

TO: NE/TECH/HRST, Dick Norton,
Project Chairperson

FROM: NE/PD, Stephen F. Lintner,
Bureau Environmental Coordinator

SUBJECT: TUNISIA- Technology Transfer Project (664-0315) - Environmental
Clearance

The subject activity is exempted from environmental analysis by the provisions of 22 CFR 216.2(c) Categorical Exclusions, "A.I.D., Environmental Procedures."

cc: GC/NE. B. Janigian
AID/Tunis, R. Stevenson, Mission Environmental
Officer
AID/Tunis, S. Carlson, Regional Legal Advisor

Moreover, the academic program for each participant will be reviewed by the Board prior to the participant's departure for the United States. In this review, the Board will give a preliminary judgement as to the probability of recognizing the degree once it is earned and will specify what must be added to the normal degree program to cause it to be recognized as equivalent. The project agreement will contain a covenant to this end. Assistance in the preparation and presentation to the Board of the proposed academic programs will also be a responsibility of the resident advisor.

Finally, the fact that the Tunisian government is financing the entire cost of the training is the most significant indication that equivalency will be granted in most cases. This is a radical change from previous academic training programs in which the scholarships were provided by the donor countries. It is unlikely that the Tunisian government will spend \$12,000 per trainee per year towards a degree that will not be recognized in Tunisia upon completion.

G. Environmental Analysis

This project consists entirely of technical assistance to higher education and to planning and administrative processes. There is no element of the project which has any potential for direct negative environmental impact. A negative environmental determination is therefore recommended.

H. Complementarity with Other Donor Assistance

The Technology Transfer Project, in focusing on undergraduate and graduate engineering training abroad and on development of Tunisian institutional capability for technical higher education, nicely complements the on-going and planned efforts of two other donors to the GOT, The World Bank and the United Nations Development Program (UNDP). The World Bank is currently negotiating with the Ministry of Education for a multi-million dollar project to assist the Tunisian primary and secondary school system. Assistance will include facilities, equipment and curriculum development. The Bank project paper is expected to be completed by November 1981 and implementation is expected to begin in 1982.

The UNDP has an on-going project in Tunisia dealing with employment generation and vocational training. The total value of the UNDP project is \$ 1M and project life is 1978 through 1982. A follow-on project is currently being developed at a level less than \$1 million and a scheduled project life of 1982 through 1985.

The three projects therefore do not duplicate efforts to assist the Tunisian labor force and educational system but are complementary.

ANNEX A

LOGICAL FRAMEWORK

ANNEX A

TECHNOLOGY TRANSFER PROJECT

LOGICAL FRAMEWORK

Narrative Summary

Indicators

Purpose to Goal Assumptions

Goal: Long-term Technology Transfer to Tunisia

1. Graduates of project-sponsored training in U.S. serving on S&T faculties in Tunisia
2. Technology manpower needs being met in Tunisia
3. Regular flow of published cooperative research between the U.S. and Tunisia
4. Graduate research being conducted on Tunisian topics in U.S. and elsewhere abroad.

1. U.S. technology is relevant and adaptable to Tunisia. GOT continues to recognize benefits of U.S. technologies.
2. Tunisian researchers will be motivated (by peer recognition) to produce publishable research.
3. Subjects relevant to Tunisia and Tunisian researchers will be stimulating to U.S. researchers.
4. Tunisian graduates will be motivated to join Tunisian faculties.

Purpose: Institutionalization of GOT capability to effectively and economically acquire and manage technology

PACD: December 31, 1984.

1. 1000 Tunisian students successfully pursuing academic degrees in engineering in U.S. institutions.
2. Course offerings in Tunisian technical institutions increased in quantity, quality and relevance.

Output to Purpose Assumptions

1. GOT English training is sufficient for Tunisian students to function in the U.S.
2. GOT continues commitment to Tech transfer objectives throughout 6th Plan.
3. Faculties at Tunisian technical institutions receptive to U.S. curriculum and pedagogical innovations.

Inputs:

Total project cost: \$24.72 Million

Total U.S. contribution: US \$1.45 million: 33 personmonths of consultative services; recruitment and salary support for 6 U.S. faculty; student placement advisors in Tunis and Washington; 12 study tours in U.S; resident advisor in MHESR.

Total GOT contribution: US \$23.27 Million: All travel for students, tuition, room, board expenses; travel and salaries for 6 resident professors; administrative support in Tunis and Washington D.C.

Purpose Level:

Indicators, continued

3. MHESR and NPF has capability to accurately forecast labor needs in S&T sector.
4. Student placement services at both MHESR and Washington have capacity to screen, place and support students in U.S.
5. Institutional links developed between faculties of Tunisian technical institutions and U.S. contractor institutions.

Outputs:

Indicators

Input to Output Assumptions

- | | | |
|--|--|---|
| <ol style="list-style-type: none">1. Management planning task force established and functioning2. Tunisian institutions of higher technological studies are strengthened.3. Student placement offices within MHESR and Washington, D.C. are fully functional | <ol style="list-style-type: none">1. Task force established within the Minister of Higher Education composed of representatives from GOT ministries and Tunisian academic institutions by fall, 1982.2. -6 U.S. faculty recruited and placed in Tunisian technical institutions on 9 month contracts.
-Faculty seminars conducted
-Curriculum offerings examined at all 6 engineering schools.3. 1000 graduate and undergraduate Tunisian students recruited and placed in U.S. universities during life of project according to schedule. | <ol style="list-style-type: none">1. GOT can meet foreign exchange commitments through PACD.2. GOT and AID funded salaries for U.S. professors resident in Tunisia are attractive to U.S. professors.3. GOT can identify and prepare students for U.S. university studies according to project implementation schedule.4. U.S. universities and consortia respond to RFTP5. Tunisian students accepted into appropriate U.S. academic programs on schedule.6. GOT legislation amended to include application fees. |
|--|--|---|
-

ANNEX B

**LETTERS OF REQUEST
FROM THE GOVERNMENT
OF TUNISIA**

Rec'd CTR
3/16/81
(Signature)

Tunis, le 197...

664-315

N° 01/C

Le Ministre de l'Enseignement Supérieur
et de la Recherche Scientifique

A

Monsieur le Directeur de l' A. I. D.

O B J E T : Coopération Tuniso-Américaine : Projet de Transfert de
Technologies.

REFERENCE : Projet Tunisien.

---:§:---

LETON	INFO
DIR ✓	
PER	
EDU	
PROG ✓	
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PRC	
CONT ✓	
HPN	
S&T ✓	
F&A	
RD	
FFP	
RLA ✓	
RHUDO	
P.C.	
EMC/ADMIN	
POL	
ECON	
CHRON ✓	
ET	

Mé référant au projet tunisien de transfert de technologie,
j'ai l'honneur de vous informer que le Ministère de l'Enseignement
Supérieur et de la Recherche Scientifique souhaiterait que ce programme
soit articulé autour des axes suivants :

1) - La partie américaine faciliterait l'envoi aux U.S.A d'étudiants
tunisiens pour entreprendre des études universitaires et post-universitaires
dans des filières techniques et scientifiques. Il serait souhaitable à
cet égard que le calendrier de cet envoi soit envisagé pour la période
allant de Janvier 1982 à Janvier 1986, conformément aux prévisions du
VI Plan Tunisien.

2) - La partie américaine contribuerait au développement du
Centre National Universitaire de Documentation Scientifique, en enrichissant
sa bibliothèque d'ouvrages scientifiques et techniques et en le dotant
d'un matériel informatique (Hard ware et Soft - ware).

.../...

3) - La Tunisie souhaiterait obtenir le concours des U.S.A pour le développement de ses Institutions Universitaires Techniques et Scientifiques.

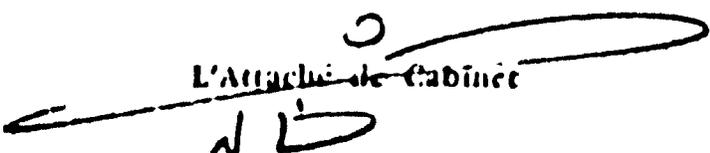
Le recrutement de professeurs américains hautement qualifiés renforcerait de manière significative son cadre enseignant.

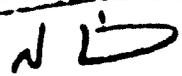
4) - Il est vivement recommandé d'envisager la constitution d'un conseil consultatif regroupant les bénéficiaires de la technologie transférée et ceux qui la dispensent.

Opérant sous le patronage du Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, ce conseil aurait pour tâche d'assurer la coordination et le suivi des actions programmées et de faire part à ce département de ses réflexions et de ses recommandations.

Espérant que ce projet rencontrera votre agrément, je vous prie d'agréer mes salutations distinguées.

 Le Ministre de l'Enseignement Supérieur
et de la Recherche Scientifique


L'Attaché de Cabinet


KII. GUEZMIR

000 01/c2

**Le Ministre de l'Enseignement Supérieur
et de la Recherche Scientifique**

A

**Monsieur Le Directeur de l' A.I.D.
Avenue de la Liberté - Tunis -**

Je voudrais tout d'abord vous exprimer toute ma satisfaction pour l'attitude encourageante des Autorités Américaines Compétentes visant à contribuer à l'essor socio-économique de la Tunisie par l'établissement d'un programme de transfert de Technologie.

Le Ministère de l'Enseignement Supérieur et de la Recherche Scientifique tout en approuvant le projet américain dans ses grandes lignes souhaiterait amener les précisions suivantes :

1- Le conseil consultatif de sciences et de technologie proposé existe et a déjà procédé à la réalisation de certaines actions.

La Direction de la Recherche Scientifique au sein de notre Département chargée d'en assurer le suivi, a procédé à la mise en place des structures de recherche appropriées.

Ces structures de recherche ont fait l'objet d'un projet de loi.

Une fois cette loi adoptée, une coopération pourrait s'établir entre notre Conseil National Scientifique et les Centres Américains de Recherche.

2- Nous proposons que l'envoi d'étudiants tunisiens aux Etats Unis s'étale de 1982 à 1986, période correspondant au programme de notre sixième Plan.

Etant assuré que les Autorités Américaines Compétentes réserveront à ce projet la suite escomptée, notre Département reste à votre entière disposition pour vous fournir tout renseignement complémentaire dont vous aurez besoin.

**Le Ministre de l'Enseignement Supérieur
et de la Recherche Scientifique**



**Directeur
de la Coopération Internationale**

KH. GUEZMUR

ANNEX C

**NEAR EAST ADVISORY COMMITTEE
GUIDANCE CABLE ON
PROJECT IDENTIFICATION DOCUMENT
AND USAID TUNIS RESPONSE CABLE**

QUALIFIED CANDIDATES WILL BE AVAILABLE IN ADEQUATE NUMBERS; (C) CLARIFICATION IS NEEDED ON TRAINING PROGRAMS INCLUDING TIME FRAMEWORKS, I.E. LONG TERM, SHORT TERM, AND TYPE OF TRAINING I.E. ACADEMIC VS ON THE JOB OR SOME COMBINATION OF AREAS OF CONCENTRATION. "SCIENCE" SHOULD BE DEFINED IN ORDER TO ESTABLISH SUBJECT PARAMETERS. ALSO, PP SHOULD INDICATE IF RETURNING TUNISIANS WILL HAVE DIFFICULTY IN HAVING U.S. DEGREES ACCEPTED BY GOI; (D) PP SHOULD FULLY DESCRIBE THE ORGANIZATION AND FUNCTIONING OF PARTICIPANT SELECTION PROCESS. CRITERIA FOR SELECTION SHOULD BE DEVELOPED. WILL PARTICIPANT PLACEMENT REQUIRE SPECIAL ORGANIZATION?; (E) GIVEN FUNDING CONSTRAINTS AND PROBLEMS AID HAS EXPERIENCED IN LOCATING PROFESSORS WITH A 3 LEVEL FRENCH FLUENCY AND WILLING TO RELOCATE FOR AT LEAST ONE YEAR, NEAC QUESTIONED WHETHER IA IS ESSENTIAL TO PROJECT STRATEGY. CONSIDERATION SHOULD BE GIVEN TO INVOLVING PROFESSORS ON A SHORT TERM BASIS AS WELL AS INVOLVING FRENCH SPEAKING CANADIANS; AND (G) ECONOMIC ANALYSIS SHOULD BE INCORPORATED IN THE PP.

3. GIVEN THE ABOVE EXPRESSED CONCERNS OF NEAC, APPROVAL DECISION OF TECHNOLOGY TRANSFER PP, 664-2315, WILL BE MADE IN AID/W.

4. COPY OF HRC ISSUES PAPER HANDCARRIED TO R. STEVENS-ON BY M.E. DUBOURT.

5. PRIOR TO SUBMISSION OF PP, AID/W WOULD APPRECIATE CABLE RESPONSE PARA 2A AND B ABOVE. HAIG
ST

REF ID: A12-1
INFO: AMB DOM
ECON CHRON/12

DEPARTMENT OF STATE
TELEGRAM

4/29/81

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FM SECSTATE WASHDC
TO AMEMBASSY TUNIS PRIORITY 4507
BT
UNCLAS STATE 106963

AIDAC

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E.O. 12065:N/A

TAGS:

SUBJECT: NEAR EAST ADVISORY COMMITTEE (NEAC) REVIEW OF
TECHNOLOGY TRANSFER PID, 664-0315

1. ON APRIL 7, 1981, NEAC REVIEWED AND APPROVED TECHNOLOGY TRANSFER PID.
2. THE FOLLOWING ISSUES WERE DISCUSSED AND SHOULD BE ADDRESSED DURING THE PREPARATION OF THE PP: (A) USAID/T SHOULD FULLY EVALUATE WHETHER OR NOT THIS PROPOSED PROJECT WILL BE SUFFICIENT TO FACILITATE THE INSTITUTIONALIZATION OF TUNISIAN CAPABILITY TO MANAGE PLANNING, IMPLEMENTATION AND UTILIZATION OF TECHNOLOGY TRANSFER; (B) THE PID IDENTIFIES A PROJECT THAT WILL COST AID DOLS. 3.25 MILLION, BUT THE FUNDING AVAILABLE FOR THIS ACTIVITY IS ONLY DOLS. 1.45 MILLION. NEAC DID NOT UNDERSTAND IF USAID/T PLANS TO STREAMLINE THE PROJECT TO COINCIDE WITH UNMARKED FUNDS OR ALLOCATE ADDITIONAL FUNDS TO COVER THE COST OF THE ENTIRE PROPOSAL. IF ONLY DOLS. 1.45 MILLION IS AVAILABLE, AID/W WOULD APPROPRIATE INDICATION OF WHICH INPUTS WOULD BE FUNDED BY AID AND AT WHAT LEVEL; (C) THE GOVT COMMITMENT FOR FINANCING STUDENTS SHOULD BE CLARIFIED. DOES THIS PROJECT REPRESENT A SUBSTANTIAL INCREASE IN THE NUMBER OF STUDENTS PRESENTLY SPONSORED PER ANNUM? USAID/T MUST ENSURE THAT

DEPARTMENT OF STATE
TELEGRAM

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 664-315

Page 1 of 13 Pages

FROM Amembassy TUNIS	CLASSIFICATION UNCLASSIFIED CPU SY. TUNIS
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ACTION: SecState WASHDC

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UNCLAS TUNIS

3258

AIDAC FOR WHITE AA/NE FROM GELABERT

AID(9)
 INFO/
 D.
 PROC
 CCNT
 S&T
 RLA
 CF

E.O. 12065: N/A

SUBJECT: Project Identification Document for
 Technology Transfer Project, 664-0315

REFS: (A) STATE 106963, (B) AIDTO CIRCULAR A-43,
 79
 6 February, 1979, (C) Redélegation of Authority 133.2
 (D) TUNIS 1695, (E) Memo from Wheeler of 11 December,
 1978 re. Mission Directors Conference of 14-16
 November, 1978

ICA
 Mr. Miller

1. I am dismayed and disappointed by your decision
 to withdraw my authority to approve the proposed
 Technology Transfer Project. Given the stated AID/W
 policy of delegation of authority for Mission
 approval up to \$ 5,000,000 (per Refs B and C), the
 discussions concerning the PID and PP process at:

UNCLASSIFIED BY S&T:RSStevenson:my CLEARANCE:	<i>[Signature]</i>	DRAFTING DATE 04/27/81	TEL EXT 310/311	CONTENTS AND CLASSIFICATION APPROVED DIR:WFGelabert <i>[Signature]</i>
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PROG:ELaughter *[Signature]*
 CONT:SBChouika(Info)

4/29 / 81 11:00

Form No. 1

UNCLASSIFIED

CLASSIFICATION

OUTGOING

the 1978 Mission Director's meeting (per Ref E) and standard NE Bureau operating procedures, I would have thought that if a PID were so poor as to warrant the drastic action taken that some advance notice would have been communicated to the Mission so that field personnel might at least attempt to clarify issues. Neither I nor the Project Committee which proposed the project nor the Mission's Senior Level Interagency Advisory Committee which reviewed and approved the PID felt the project to be poorly conceived or the PID to be unclear or otherwise inadequate.

2. By Ref D the PRC was given the earliest possible description of the nature of the proposed project and encouraged to communicate with the Mission. However, the only words received from AID/W were a) acknowledgment of receipt of the PID and the scheduling of a NEAC meeting, b) a copy of the issues paper prepared for the NEAC, which arrived Tunis 4/10/81, after the date of the NEAC

and c) a verbal, second-party message on April 2 that there are quote some problems with the PID unquote. No tangible comment or request for clarification was received from the PRC or anyone in NE Bureau prior to the NEAC.

3. Elements of the GOT request for the proposed project have arisen in the last two months in response to a statement by President Bourguiba to the effect that he wished to see a multiple increase in the number of Tunisians studying for degrees in scientific and technical disciplines in the United States. This statement reflected recurring student unrest over limited university capacity and a continuing GOT realization that European universities are progressively less available to Tunisians and that Tunisia has become increasingly dependent on the Soviet bloc for technical training. The project is based, however, on repeated conversations during the last 18 months with the GOT concerning the need for increased

technical training to meet national planning objectives (e.g. 2000 additional engineers needed during the period of the sixth 5 year plan which will start next year) and the preference of the GOT to see an increased percentage of overseas training take place in the U.S.

4. The GOT has already moved to set up intensive English language training through this summer for 50 technical degree students in expectation of placing them in the US in September. It is starting to design a program of English language training and technical subjects taught in English for 200 students for the 81-82 academic year in expectation of placing them in US Universities in the fall of 82. The GOT has asked that AID assistance to the overall selection, preparation and placement process be expedited on a priority basis so as to be able to give assistance starting in the fall. The embassy believes this project to be of high political priority.

5. The subject PID proposes a project focused on assisting the GOT to develop the capacity to better manage its own resources. As the GOT has taken a decision to move quickly on its overall program, the more rapidly AID can bring its assistance into effect the greater will be the impact of AID assistance and the savings to the GOT from improved program design and development.
6. Because of the time constraints on this project I am particularly distressed by your decision to withdraw my authority to approve the Project Paper. AID/W approval of the PP will add approximately two months to the process (2 weeks of transit and distribution, 3-4 weeks for PRC and NEAC action, and 3 weeks for a NEAC authorizing cable) thus pushing obligation into August or possibly September.
7. It is urgent that the PID to PP to Project Agreement sequence for the proposed project be moved forward as expeditiously as possible within the constraints of proper project design. Toward

this end we requested by Para 11, Ref B assistance to the GOT in designing the needed USAID assistance and in preparing the RFTP for a host country contract.

8. In response to specific issues raised in Para 2, Ref A, we offer the following:

A. Quote USAID/T should fully evaluate whether or not this proposed project will be sufficient to facilitate the institutionalization of Tunisian capability to manage planning, implementation ~~and utilization of technology transfer unquote.~~

Response: discussions to date indicate that the proposed assistance, working with the substantially greater GOT resources and the program the GOT is proposing will be sufficient to build an institutional capability in the GOT to plan, implement and utilize technology transfer. The issue will be examined in more detail in the course of preparation of the pp.

B. Quote the PID identifies a project that will cost AID Dols. 3.25 Million, but the funding

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available for this activity, is only Dols. 1.45 Million. NEAC did not understand if USAID/T plans to streamline the project to coincide with earmarked funds or allocate additional funds to cover the cost of the entire proposal. If only Dols. 1.45 Million is available, AID/W would appreciate Mission indication of which inputs would be funded by AID and at what level unquote. Response: the PID identifies a GOT project that will cost as much as \$ 22,600,000 (equivalent) ~~if all is carried out as planned. It further~~ suggests a U.S. contribution of no more than \$ 3,250,000, but on page 14 states quote USAID/TUNIS recognizes that at present only \$ 1,450,000 is available for funding of this proposed project... In the course of development of the Project Paper the scope and degree of the AID financed portion of the program will be further defined so as to be consistent with available resources unquote. Available US

L- 3258

resources are \$ 1,450,000. As scaled to meet US funding limitations the project will retain all line items on p.14 of the PID but portions of some will be picked up by GOT and other donors or dropped entirely. In the absence of additional funds or other donors the current estimates for elements of US funding to \$ 1,450,000 level are (thousands of dollars): resident advisor 300, contractor activities in US 400, short term consultancies 250, library data retrieval system 150, ~~books and periodicals 150~~, project evaluation 50, contingency and inflation 150. These levels will maintain viability of the project, though not at the level of assistance requested by the GOT. The distribution of the \$ 1,450,000 is subject to change in the development of the PP and the Mission will cable the final budget proposed for the PP.

C. Quote the GOT commitment for financing students should be clarified. Does this

project represent a substantial increase in the number of students presently sponsored per annum? USAID/T must ensure that qualified candidates will be available in adequate numbers; unquote. Response: Tunisia is a country with a serious and deteriorating foreign exchange problem. There are not more than a dozen Tunisian students at all levels currently in the US other than those with USG or UN funding. Therefore this project clearly reflects a substantial increase to ~~in the GOT commitment/training of Tunisians in~~ the US.. About the commitment, we cannot repeat cannot be clearer than the statement on page seven of the PID, quote the GOT will be responsible for funding all student travel, tuition, room and board expenses unquote. USAID cannot repeat cannot quote ensure unquote that qualified candidates will be available in adequate numbers. However the steps being taken by the GOT now, plus the various outputs of the project, are designed to increase the pool

of available qualified candidates.

D. Quote clarification is needed on training programs including time frameworks, i.e. long-term, short-term, and type of training i.e. academic vs on the job or some combination of areas of concentration "Science" should be defined in order to establish subject parameters. Also, PP should indicate if returning tunisians will have difficulty in having U.S. degrees accepted by GOT; unquote. Response: we cannot specify numbers of long-term, short-term, on-the-job or other trainees and areas of concentration in advance of their selection, which we hope will be influenced by a mechanism to be created through this project. The project will help to make operational (see descriptions of output one in PID, page one, page 4ff., and Appendix I, logical framework;) a Tunisian capability to make the most efficient decision on that mix. Examples of disciplines involved are listed on page six of the PID. Further specification will

be in PP.

E. Quote PP should fully describe the organization and functioning of participant selection process. Criteria for selection should be developed. Will participant placement require special organization? unquote. Response: we concur that the PP will have a fuller description of how trainees will be selected, but AID/W should note that the USG is not funding training under this proposal. As for the special organization for placement, PID output three (page 6) states quote the project will assist the GOT by providing the institutional support for the placement... This support will consist of... evaluating and registering the students in Tunisia, placing them in U.S. universities, assistance in locating scholarships... Counseling the students... evaluating student performance unquote. USG funding will in large part be to support a U.S. contractor to do the above, as can be seen in the Budget on page 14 of the PID.

F. Quote given funding constraints and problems AID has experienced in locating professors with a 3 level French fluency and willing to relocate for at least one year, NEAC questioned whether TA is essential to project strategy. Consideration should be given to involving professors on a short-term basis as well as involving French speaking Canadians; unquote. Response: the issue expressed here reflects confusion as to what is proposed as USG funded TA for this project. Proposed TA does principally consist of short-term consultancies (many of which would be university professors or administrators), plus only one resident advisor. In regard to faculty members for 1-2 year stays, U.S. support under this project includes only assistance in selection and placement. Moreover, in regard to French language fluency, the director of the School of Engineering of the University of Tunis advises us that he wishes the American faculty members to lecture in English in order to further the

English language training program and preparation ...
for study in the U.S.

G. Quote economic analysis should be in incorporated
in the PP unquote. Response: we concur that economic
analysis will be include in the PP.

9. In view of the expressed policies of AID and
in response to the pressing time constraints on
implementation of the proposed assistance I urge
you to reconsider your decision and to reinstate
my authority to approve the project paper for

the proposed project.

MACK



ACTION: AID-8
INFO: AMB DCM
ECON CHRON/12

DEPARTMENT OF STATE
TELEGRAM

R 090649Z MAY 81
FM SECSTATE WASHDC
TO AMEMBASSY TUNIS 4738
BT
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E.O. 12065: N/A

TAGS:

SUBJECT: TECHNOLOGY TRANSFER PROJECT 664-0315

REF: (A) STATE 106963, (3) TUNIS 03258

1. FOR GELABERT FROM WHITE, AA/NE.
2. I HAVE REVIEWED RATIONALE PRESENTED IN REF 3 AND AM PERSUADED THAT THE PROJECT CAN BE APPROVED AT THE MISSION.
3. THE QUESTIONS RAISED AT THE NEAC REGARDING THE USG FUNDED TECHNICAL ASSISTANCE, THE MIX OF AID INPUTS IF ONLY DCLS. 1.75 MILLION ARE AVAILABLE, AND THE GGT COMMITMENT TO U.S. TRAINING HAVE BEEN ADEQUATELY CLARIFIED. WITH REGARD TO THIS COMMITMENT, THE ESTABLISHMENT BY THE GGT OF ENGLISH LANGUAGE TRAINING PROGRAMS IS ENCOURAGING SIGN.
4. IN PROCEEDING WITH PP, THE MISSION MAY WANT TO CONSIDER, AS A MEANS OF SIMPLIFYING PROJECT MANAGEMENT, ELIMINATION OF ONE OR MORE CATEGORIES FOR AID SUPPORT, E.G., LIBRARY DATA RETRIEVAL SYSTEM OR BOOKS AND PERIODICALS AND LETTING THE GGT PICK UP THESE ITEMS, INCLUDING FOREIGN EXCHANGE AND LOCAL CURRENCY COSTS. FOR THOSE ITEMS SUPPORTED BY AID, OUR RESOURCES COULD BE AVAILABLE FOR BOTH FOREIGN EXCHANGE AND LOCAL COSTS. ADDITIONALLY, IN CONSIDERING U.S. CONTRACTORS FOR RESIDENT ADVISOR, SHORT TERM CONSULTANTS, AND PARTICIPANT ADMINISTRATION MISSION SHOULD CONSIDER POSSIBILITY OF SINGLE CONTRACTOR, SUCH AS INSTITUTE FOR INTERNATIONAL EDUCATION, COUNCIL FOR THE INTERNATIONAL EXCHANGE OF SCHOLARS, OR AMIDEAST. HAIG

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ANNEX D

Issues Paper

The following issues have been identified by the Near East Advisory Committee (NEAC) in its approval of the Project Identification Document (PID) of the Technology Transfer Project, and by the project committee in the design of the project. Each issue is followed by a discussion of the corrective strategies included in the project to deal with the points of contention, or by an analysis of why the issue is no longer considered significant.

1. Issue: Contracting Modality for Technical Assistance

As designed, the project has a combination of two contracting modes for procuring technical assistance. The first will be a host-country contract with a qualified U.S. university, private firm or consortium. This contract will provide for a resident advisor (Chief of Party) in Tunis for 3 years, a long term (30 months) advisor to the Tunisian Academic Affairs Office in Washington, D.C., and thirty-three person months of short-term technical assistance in Tunisia. It will also provide for the recruitment and placement of six American visiting professors in Tunisian engineering schools. The second mode is an AID direct personal services contract to procure the services of a medium term (6 months) advisor in Tunisia to assist the MHESR to develop a system for placing students in the United States. Is this combined mode of contracting the most efficient approach for procuring the required technical assistance?

Discussion

In settling upon a final contracting mode the factors taken into consideration were: (1) furthering achievement of the project goal: to institutionalize the technology transfer process, (2) controlling the management burden on the Mission, and (3) expediency in implementing the project. Clearly from the point of view of contributing to the achievement of the project goal the best approach would have been one institutional host country contract. Indeed a critical element in institutionalizing the transfer of technology is to develop the Tunisian capacity to procure, in the broadest sense of the term, such technology from the United States. Moreover, in the long term, a host country institutional contract would entail the least management burden on the Mission. However, for the project to assist in placement of Tunisian students for the academic year beginning in the fall of 1982 the medium term advisor (6 months) must be in place, in Tunisia, by January to oversee this effort. Such a quick response is not possible through a host country institutional contract. Hence the combination of contracting modes for procuring technical expertise is a reasonable mix with which to address long range institution building, Mission management burden, and project implementation concerns.

2. Issue: American Visiting Professors

Given the cost involved, the logistical support required and the difficulties experienced in the past by the Near East Bureau in recruiting quality faculty with French language skills, the NEAC, in its review of the PID, as well as the Mission project committee questioned the feasibility of this project component.

Discussion

While recognizing the potential difficulties in recruiting the types of individuals required, it was the judgement of the design committee that from the perspective of establishing long-term linkages between the United States and Tunisia in technology transfer, this project element is essential. The visiting professors will not only be able to offer professional expertise in their specific fields which may be currently lacking in Tunisian technical institutions, they will offer a teaching approach that emphasizes problem solving and collegiality among professors and between professors and students as an alternative to the present Tunisian system.

The presentation of this approach over an entire academic year in the close confines of a university department will have an influence on Tunisian professors and students. Moreover, the visiting professors will be faculty member of U.S. universities and their presence in Tunisia for a long period of time will not only afford the opportunity for technology transfer via personal professional relationships, but it could set the stage for the development of long term institutional ties.

Concerning French language ability, each of the deans of the technical institutions concerned has indicated that it would be acceptable, and in some cases preferable for the U.S. faculty members to lecture in English. This will be particularly true if they teach graduate level courses as most students in technical institutions find it necessary to learn English in order to absorb advanced technical material from the U.S.. The institutions wish to encourage proficiency in English and depending upon the subject and level to be taught, it may be possible on a case-by-case basis to remove French fluency as a recruitment criterion.

Concerning the ability to attract qualified individuals, the budget allows for a total U.S. and GOT salary contribution for each professor of \$47,500 (\$27,500 in dollars and the equivalent of \$20,000 in Tunisian Dinars) plus international travel and limited shipment of personal effects. This is for a nine month period rather than the twelve month period indicated in the concern of the NEAC on this issue. This will allow professors to supplement their income through conventional methods of teaching; summer school and consulting, and is an adequate salary to attract highly qualified personnel.

Given the above, the question still must be asked as to whether the placement of six visiting professors for one academic year in a milieu dominated by dozens of European academicians is sufficient to establish a critical mass for a significant impact.

The project design will counteract some of the potential for diffusing the efforts of these professors by concentrating them in one or at most two institutions. Because the deans of the technical institutions concerned have strongly requested this project element, there is good reason to believe that they will take measures to integrate the U.S. professors into their faculties, allowing them to make a positive impact. Moreover, the importance of one type of long term tie which can only arise through such sustained personal contact is a compelling reason to include this project element, even in the face of some question as to the degree of impact the professors can achieve.

3. Issue: Project Components

It was pointed out that the project appears to have two completely separate components: the major portion concerned with institutional development and the minor portion which assists the Government of Tunisia to place students in the United States. Why not concentrate resources on the major objective and drop the smaller component? What is their relationship?

Discussion

The original request from the Government of Tunisia (GOT) was for assistance in placing Tunisian students in technical degree programs in the United States. More specifically the GOT requested scholarships such as they had been accustomed to receive from France and from Eastern European nations. AID responded that its budget could not accommodate a large number of scholarships and that its policies required that scholarships be in specific support of a project with an objective more narrow than general technical education. AID responded that it would consider providing assistance in developing the actual placement process so that the GOT could carry it out effectively in the future on its own, while at the same time providing technical assistance to improve the training capacity of Tunisian technical institutions and the technical manpower planning capability of the Ministry of Higher Education and Scientific Research in order to reduce the future requirement to send Tunisians abroad to study.

The placement assistance is therefore viewed as bridging assistance for a near-term but urgent requirement while the major component of the project is directed at alleviating the condition which has brought about the near-term need.

The major component could proceed effectively without the minor component, from an AID programming viewpoint. Both elements, however, are cost effective and respond in different ways to the same basic problem, a shortfall in internal capacity to train engineers and other technical professionals. Both elements are justified and do fit rationally within a single framework. Moreover, as the placement element was the original request from the GOT and represents the more visible and pressing need, it would not be politique to withdraw this limited offer of assistance to what the GOT considers a critical development problem.

4. Issue: Degree Equivalency

The Mission project designers, as well as the NEAC, questioned the probability of academic degrees earned in the United States being recognized as equivalent degrees awarded by Tunisian universities, thereby facilitating employment possibilities for students upon return. The NEAC also questioned the steps taken to facilitate the granting of equivalency.

Discussion:

The granting of equivalency to some participants trained in the United States under other AID projects has been a continuing difficulty, in some cases affecting the ability of the individual affected to find employment and/or receive salary. In keeping with ongoing Mission efforts to resolve the equivalency issue, Committee members in the design of this project held detailed discussions with the Chairman of the Degree Equivalency Board. The Chairman assured USAID representatives that the Tunisian government was not about to spend \$12,000 per student per year without recognizing in most cases the degrees earned in the United States as equivalent to those awarded in Tunisia. Moreover, it was agreed that the Equivalency Board will review the study program of each participant prior to the student's departure to the United States and give preliminary reading as to the granting of equivalency. In cases where study programs are found to be deficient, the Equivalency Board will recommend changes that could be made to assure the satisfaction of equivalency requirements.

The Project Agreement contains a covenant to this end.

5. Issue: Student Selection Process

The NEAC in its review of the PID, questioned the organization and functioning of the student selection process and requested that a description of this process as well as the development of criteria for selection be included in the PP.

Discussion:

The selection of students for degree training in the United States will be the responsibility of the Directorate of Higher Education within the MHEER. For those students entering U.S. universities at the undergraduate level the pool from which candidates are selected will be the secondary school graduating class in the science stream, throughout the country. In the 1980 academic year they totaled approximately 3,500 individuals. The MHEER will advise secondary school principals early in the academic year of the number of GOF financed scholarships to the United States and request that a preliminary list of candidates be submitted. The primary criterion will be academic achievement. Complementary criteria such as maturity and emotional stability will be developed by the MHEER with the assistance of the resident advisor. After the preliminary selection is made by the Directorate of Higher Education, the names of potential candidates will be passed to the Service for Student Placement in the United States, also of the MHEER, for the preparation of academic dossiers. When completed, these dossiers will be transferred to the Academic Affairs Office in Washington, D.C. for placement in U.S. universities.

For students entering at the graduate level the process will be similar. The only difference will be the pool from which they are selected - graduates of the six technical schools in Tunisia, 836 in the spring of 1981.

6. Issue: GOT Commitment to the Project

The NEAC queried the GOT commitment to the project and placed particular emphasis on USAID/Tunis ensuring that adequate numbers of qualified candidates are available.

Discussion

With the assistance of this proposed project the GOT plans to send an average of 240 students per year to U.S. universities over the life of the project. This is a tenfold increase over the current annual number of Tunisian Government financed students in the United States. As noted above the size of the pool from which candidates are to be selected compared to the number of individuals selected (3500 secondary schools from which to choose 180 students at the undergraduate level and 826 university graduates from which to choose 60 students at the graduate level) clearly indicates that supply will be adequate.

The GOT commitment to identify, select and place the best students in each category is shown by the formation of a Special Service within the MESR for the preparation of academic dossiers for students to be awarded scholarships to the United States, and the establishment, with staff and operating budget, of the Academic Affairs Office in Washington. However, the most significant demonstration of GOT commitment is the submission of a budget, totaling approximately \$ 12 million, to finance the scholarships for Tunisian students in U.S. universities.

7. Issue: Insuring the return and retention of Tunisian Students upon completion of Their degree studies in the United States.

The GOT plans to invest a significant amount of scarce foreign exchange and a significant amount of credibility and political capital by sending up to 1000 undergraduates and graduates to U.S. engineering schools over the next four academic years. While the reasons for this crash program are complex, the result is that the GOT has committed itself to a radical and costly effort in overseas student placement.

Such a large commitment by the GOT to U.S. higher education at a critical stage in GOT economic development causes one to ask how best to protect that investment. Should the GOT take measures not heretofore taken to insure not only that the students they sponsor in the U.S. return to Tunisia immediately after training, but also that the returning students remain in Tunisia and work in their areas of expertise.

Discussion

The AID Mission in Tunisia has been the only major sponsor of Tunisian students in the United States. Other countries, especially France and the USSR, finance significant numbers of Tunisian students in their countries, but unlike AID sponsored students, who are in relatively narrowly defined areas related to specific assistance projects, the French and Russian sponsorship is for more general student aid.

The AID experience on returning students to Tunisia has been mixed, according to AID studies. Initial return following training is very high, over 90 percent. The underlying reason is the type of visa issued at the time the Tunisian participants went to the United States to study. Thus USAID experience indicates that through appropriate visa policy it is possible to insure the return of sponsored students. (See AID survey "Employment Status of Tunisians with AID Financial graduate degrees from U.S. Universities, 1957-1980).

The AID studies also show, however, that once the U.S. trained Tunisian has returned, the likelihood of remaining in Tunisia to work is rather low. Indeed it appears that after the visa stipulations are met, the U.S. trained Tunisian is likely either to return to the U.S. or to go to work in a third country. Thus, at least in the short-term, the newly acquired skills are not directly applied to GOT development.

Undoubtedly this is not an absolute loss to Tunisia. The Tunisians working outside of the country have relatives at home to whom they may send money or gifts. Moreover, as the GOT is quick to point out, they will probably return home eventually to live and work. When they do, they will be even better prepared to assist GOT development.

The problem of insuring the return and retention of Tunisian participants in this project is not considered to be an issue over which AID can exert any further influence. AID is not sponsoring the students, nor is the assistance given a direct function of the number of students sent. Rather AID is providing technical assistance to the GOT to establish a system to facilitate placing the large number of students contemplated. Moreover, the assistance given to place students represents only 17.5 percent of the total project, and the major or institutional development aspect of the project is not significantly dependent upon a high rate of return of Tunisian students. The issue is still raised here in anticipation of problems which may arise for the GOT, and in the expectation that the AID sponsored contractor may offer some advice as part of the technical assistance given under this project.

The problem of returning students after training is completed is primarily an issue of maintaining strong family and cultural ties with Tunisia while the students are studying in the U.S. The GOT recognizes this and has budgeted for one round-trip ticket per year per student. The cost of maintenance for three months during summer vacation is roughly equal to the plane fare involved. The GOT has determined that it is important for the students to spend 3 months of each year with their families and friends in Tunisia. This feature of the project design will greatly contribute to a resolution of this issue.

8. Issue: Restriction on Assisting Certain Technical Institutions due to Comingling of Funds

The issue was raised at the meeting of the Director's Development Advisory Committee as to whether the Ecole Nationale d'Ingenieurs à Tunis (E.N.I.T.) and the Ecole Nationale d'Ingenieurs à Gabès (E.N.I.G.) qualify for assistance under this project because of past and present involvement of the Soviet Union and other eastern bloc countries with these two institutions.

Discussion

Under normal conditions these two institutions would be selected to benefit from the U.S. faculty placement component of the project as well as the short-term technical assistance in curriculum development. E.N.I.T. and E.N.I.G. are two of Tunisia's six technical schools and E.N.I.T. is the largest and most important of the engineering institutions. Further research will have to be done to determine whether or not the U.S.S.R. or other Eastern Bloc countries have projects with either of these two institutions, whether or not they are completed, whether the current faculty members coming from these countries can be considered as part of a larger cultural exchange program with Tunisia (e.g. there are Soviet professors on the faculty of the Bourguiba Institute, a U.S. assisted project), or if they are simply contracted for by the GOT and the exact terms of their employment (i.e. are they being subsidized by the U.S.S.R.?). Until such information is obtained, the issue of comingling cannot be resolved.

Should these two institutions be excluded from project involvement because of comingling of funds the project committee has determined that the objectives of the project will not be affected. Faculty placement and technical assistance will be directed and concentrated on the four remaining engineering schools and such other technological institutions as may be mutually decided upon by the project Chief of Party and the MIESR. Conversations with officials of the MIESR indicate that should E.N.I.T. or E.N.I.G. be excluded from direct assistance under the project the first preference of the MIESR would be to shift resources to provide more short term curriculum development assistance to the Faculty of Science at Tunis, an institution already included in the project but for assistance in only a limited number of subject areas.

In any case, the Project Agreement is written so as to leave the identification of specific institutions to be assisted to the subsequent mutual agreement of the GOT and AID, and the detailed plan for implementation of the technical assistance will form a part of the host country contract which is subject to AID approval.

The MESR and other concerned Ministries in the GOT have been advised in writing of this issue and the possibility that it may not be possible to include E.N.I.T. and E.N.I.G. in the project.

ANNEX F

JUSTIFICATION FOR SECTION 612(b) DETERMINATION

Recommendation to Purchase Tunisian Dinars with U.S. Dollars

Over the life of the Project approximately \$0.5 million will be used to support local currency expenditures that the Tunisian government and U.S. contractors will make for specific items in support of this Project. Dollar funds will be used in association with GOT disbursement of Tunisian dinars for the costs of travel, per diem, and shipment of household effects of project consultants, related project support costs such as secretarial and interpreting services, special costs associated with training, in-country seminars and workshops and related miscellaneous costs. The U.S. contractors will purchase dinars with U.S. dollars provided by the Project in accordance with procedures prescribed by A.I.D. The contractor will be responsible for expenditures which will be made in accordance with the agreements reached between USAID and the GOT in the Project Agreement.

One reason for using dollar funds in conjunction with Tunisian dinar costs is that this represents an additional real resource to the Tunisian economy and supports efforts by the Tunisian government to implement new initiatives. Although Tunisia is a near-excess foreign currency country, the amount of U.S.-owned local currency available to A.I.D. is restricted to that which is not allocated for other priority purposes. Accordingly, availability of excess local currency at any point in time cannot be predicted. Most of the local currency costs to be financed by A.I.D. under the Project are for personnel collaborating under the Project.

The Tunisian contribution to this Project, well in excess of \$2.0 million equivalent in foreign exchange and local currency, is evidence of their support of and interest in this innovative activity.

Given the above considerations and the fact the Technology Transfer Project is fully consistent with the congressional mandate of the Foreign Assistance Act, we have concluded certain local currency project costs should be dollar funded.

5C(2) PROJECT CHECKLIST

A. GENERAL CRITERIA FOR PROJECT1. Continuing Resolution

Unnumbered; FAA Sec. 634A;
Sec. 653(b)

(a) Described how authorizing and appropriations Committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million for that amount)?

FY 1981 Congressional Presentation. Yes.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial other plans necessary to carry out the assistance and (c) a reasonably firm estimate of the cost to the U.S. of the Assistance?

Yes. Yes.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

Future legislation permitting GCT payment for application fees is expected shortly.

4. FAA Sec. 611(b); Continuing Resolution Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the principles and Standards for Planning, Water, and Related Land Resources, dated October 25, 1973?

Not applicable.
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

Not applicable.
6. FAA Sec. 209. Is project susceptible for execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

No.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of International trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

May indirectly increase international trade.

8. FAA Sec. 61(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

May indirectly increase international trade.
9. FAA Sec. 612(b), 636(h); Continuing Resolution Sec. 508. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

Determination being made to expend dollars rather than U.S.-owned near-excess dinars for the small amount of local costs.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

Near excess. See above.
11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes.
12. Continuing Resolution Sec. 522. If assistance is for the production of any commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

Not applicable.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106, 107. In assistance being made available: (include only applicable paragraph which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

Project is aimed at (c), self-help efforts to improve Tunisia's capacity in technology.

(5) [195; ISDCA of 1980, Sec. 304]for energy, private voluntary organizations, and selected development activities; if so, extent to which activity is: (i) (a) concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; (b) facilitative of geological and geophysical survey work to locate potential oil, natural gas, and coal reserves and to encourage exploration for potential oil, natural gas, and coal reserves; and (c) a cooperative program in energy production and conservation through research and development and use of small scale, decentralized, renewable energy sources for rural areas;

Largely involved with training and assisting with training in technology areas.

(ii) technical cooperation and development, especially with U.S. private and voluntary or regional and international development, organizations;

(iii) research into, and evaluation of, economic development process and techniques;

(iv) reconstruction after natural or manmade disaster;

(v) for special development problems, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance.

(vi) for programs of urban development, especially small laborintensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

c. [107] is appropriate effort placed on use of appropriate technology? (relatively smaller, cost-saving, labor using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor.)

d. FAA Sec. 110(a): Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least developed" country)?

Yes.

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

No.

f. FAA Sec. 281(b). Describes extent to which program recognizes the particular needs, desires, and capacities of the people of the country utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Responds to Tunisia's urgent need for more trained technical personnel and ability to train them.

g. FAA Sec. 102(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes.

2. Development Assistance Project Criteria (Loans Only)

Not applicable.

3. Project Criteria Solely for Economic Support Fund

Not applicable.

5C(3) - STANDARD ITEM CHECKLIST

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

Yes.

2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?

Yes.

3. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will commodities be insured in the United States against marine risk with a company or companies authorized to do a marine insurance business in the U.S.?

Does not discriminate.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

No such procurement.
5. FAA Sec. 603. Is the shipping excluded from compliance with requirement in Section 901 (b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates?

Merchant Marine Act will be complied with.
7. FAA Sec. 621. If technical assistance is financed, to the fullest extent practicable will such assistance, goods and professional and other services be furnished from private enterprise on a

Yes. Not utilized

contract basis? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will provision be made that U.S. carriers will be utilized to the extent such service is available?

Yes.

9. Continuing Resolution Sec. 505. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

Yes.

B. Construction

Not applicable.

C. Other Restrictions

1. FAA Sec. 122(b). If

Not applicable.

development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

2. FAA Sec 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

Not applicable.

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes

4. Continuing Resolution Sec. 514. If participants will be trained in the United States with funds obligated in FY 1981, has it been determined either (a) that such participants will be selected otherwise than by their home governments, or (b) that at least 20% of the FY 1981 fiscal year's funds appropriated for participant training will be for participants selected otherwise than by their home governments?

Yes (b).

5. Will arrangements preclude use of financing:

a. F.A. Sec. 104(f). To pay for performance of abortions as a method of family planning or to, motivate or coerce

Yes.

persons to practice abortions; to pay for performance of involuntary sterilization as a method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property?

Yes.

c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?

Yes.

d. FAA Sec. 662. For CIA activities?

Yes.

e. FAA Sec. 636(1). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained.

Yes.

f. Continuing Resolution Sec. 504. To pay pensions, annuities retirement pay, or adjusted service compensation for military personnel?

Yes.

g. Continuing Resolution Sec. 506. To pay U.N. assessments, arrears or dues.

Yes.

h. Continuing Resolution Sec. 597. To carry out provisions of FAA section 209 (d) (Transfer of FAA funds to multilateral organizations for lending.)

Yes

i. Continuing Resolution Sec. 509. To finance the export of nuclear equipment fuel, or technology or to train foreign nationals in nuclear fields? **Yes.**

j. Continuing Resolution Sec. 510. Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? **No.**

k. Continuing Resolution Sec. 516. To be used for publicity or propaganda purposes within U.S. not authorized by Congress. **No.**

ANNEX G

PROJECT COMMITTEES

1. USAID Tunis Project Committee

Ms. Saida Zouiten, Assistant S & T Officer, Chairperson

Mr. William Kaschak, Assistant Program Officer

Mr. Steven Carlson, Regional Legal Advisor

Mr. Frank Kerber, Program Office

Mr. Richard Stevenson, Science and Technology Officer

Mr. Said Ben Chouikha, Controller (Acting)

Mr. Salah Mahjoub, Assistant Food and Agriculture Officer

Ms. Greta Cherchad, Training Officer

2. Also participating in the design of the project were:

Mr. Hedi Fatnassi, Deputy Director of International Cooperation,
Ministry of Higher Education and Scientific
Research

Mr. Khaled Guezmir, Director of International Cooperation,
Ministry of Higher Education and Scientific
Research

Mr. Bechir Mahjoub, Director of Higher Education
Ministry of Higher Education and Scientific
Research

Mr. Mahmoud Triki, Ministry of Higher Education and Scientific Research

Dr. Elizabeth Abramowitz, PSI Inc., consultant

Mr. David Phillips, PSI Inc., consultant

3. Director's Development Assistance Committee: USAID, Tunis
- Mr. Martin Dagata, Director, Chairperson
- Mr. David Leibson, Assistant Director, Office of Housing (RHUDO, Tunis)
- Mr. Edmund Auchter, Program Officer
- Mr. Said Ben Chouikha, Controller (Acting)
- Mr. John Fliginger, Agriculture Development Officer
- Ms. Dorothy Young, General Development Officer
- Mr. Buddy Dodson, Food for Peace Officer
- Mr. Richard Stevenson, Science and Technology Officer
- Ms. Dale Gibb, Health and Family Planning Development Officer
- Mr. Anthony Wallace, Economic and Commercial Counsellor,
US Embassy, Tunis
- Mr. Robert E. Miller, Public Affairs Officer, USICA, Tunis
- Mr. Charles Graham, Director, Peace Corps
- Mr. Steven Carlson, Regional Legal Advisor
- Mr. Robert Parker, Country Director, Catholic Relief Services, Tunisia
- Mr. Leonard Coppold, Country Director, CARE MEDICO, Tunisia.

ANNEX H

REFERENCES AND BIBLIOGRAPHY

A. References for the Project Paper are as follows:

Government of Tunisia publications:

1. L'Enseignement et la Formation Supérieurs en Chiffres, MHERS/Office of Statistics and Planning, 1990/81 (with statistical tables).
2. Guide de la Formation dans les Institutions d'Enseignement Supérieur en Tunisie. MHERS, Tunis, 1980.
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4. Journal Officiel de la République Tunisienne "L'Administration Centrale". Chapter 3, June 26, 1981, pp 1550-1552.
5. Journal Officiel de la République Tunisienne, Decret No. 80-1002 du 6 août 1980. August 22, 1980, pp 2072-2074.
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9. Handbook for U.S. Foreign Student Advisers. National Association of Foreign Student Affairs, Washington, D.C., 1979
10. Tunisia: A Country Study. Area Handbook Series. The American University, Foreign Area Studies. Second Edition. Washington, D.C., 1979.

11. GOT Economic Projections for 1981 (Unclassified Memorandum) State Department, February 19, 1981.
12. Preliminary Sixth Plan Projections, March 24, 1981 (Unclassified Memorandum), State Department, Tunis
13. Employment Status of Tunisians with AID-Financed Graduate Degrees from U.S. Universities: 1957-1980. USAID/Tunis, 1980 (Unpublished Report)
14. Tunisia: Economic Position and Prospects of Tunisia; Review of the Fifth Development Plan, 1977-1981. Special Economic Report, Washington, D.C., May 2, 1977.
15. Tunisia: Social Aspects of Development. Report No. 2950 - TUN, Washington, D.C., June 10, 1980.

B. Additional Bibliography

(copies of all of the following have been supplied to MIESR)

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2. Accrediting Standards and Guidelines: A Profile. Dorothy G. Petersen. (Reprint from the Educational Record Vol. 59, No. 4, 1978 by American Council on Education, Washington, D.C.)
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4. The Balance Wheel for Accreditation: Organization, Membership and Publications List. Council on Postsecondary Accreditation. Washington, D.C., July 1980.
5. Interpretative Guidelines for Recognition Provisions. The Council on Postsecondary Accreditation. Washington, D.C., April 15, 1981.
6. Fact Sheet. The Council on Postsecondary Education. Washington, D.C.

7. Provisions and Procedures for Becoming Recognized as an Accrediting Agency for Postsecondary Educational Institutions or Programs. The Council on Postsecondary Accreditation. Washington, D.C., April 15, 1981.
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10. The National Guide: 1981 Supplement. American Council on Education.
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12. Communiqué of World Higher Education. Institute of International Education, Vol. 3, Number 2, Spring 1981.
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18. Procedures for Course Review: The Program on Non-Collegiate Sponsored Instruction. American Council on Education, Office on Educational Credit and Credentials. Washington, D.C., January 1980.

UNITED STATES GOVERNMENT

Memorandum

TO : Martin V. Dagata, Director

DATE: August 27, 1981

FROM : *William C. Muchak*, Assistant Program Officer
Richard S. Stevenson, Science and Technology OfficerTHROUGH: Edmund L. Auchter, Program Officer *E*

SUBJECT: Project Authorization Technology Transfer (664-0315): A Grant of \$1.45 million

Issue: Your approval is required for a grant of \$1,450,000 to the Government of Tunisia from the Section 106 Special Development Activities appropriation under the FY 1981 Continuing Resolution. The grant is for project 664-0326: Technology Transfer.

Discussion: The project is fully described in the project paper and draft project agreement, both of which are attached. The project will assist the government to institutionalize the process of technology transfer. ~~As~~ such it will:

1. assist in the development of technical curricula and the introduction of new teaching methodologies, at both undergraduate and graduate levels, in the major Tunisian technology and science faculties including engineering;
2. enhance the development of a manpower planning system that is commensurate with Tunisia's needs; and
3. facilitate the placement of approximately 1000 Tunisian students in U.S. universities in engineering and related fields.

A. Technical Assistance

Technical Assistance for this project will be provided through a combination of: (1) a host country contract between the Government of Tunisia, represented by the Ministry of Higher Education and Scientific Research, and a qualified U.S. university, private firm or consortium; and (2) an A.I.D. direct personal services contract with a specialist in the placement of foreign students in U.S. institutions. This mix of contracting modes satisfies the conflicting demands placed by requirements to achieve the project purpose (institutionalize the technology transfer process) and to respond to the COT request to place students in U.S. universities beginning in the fall of 1982.



B. Environmental Considerations

A discussion of the environmental considerations, pointing out that the project contains no elements that could have a negative impact on the environment, was included in the PID submitted to Washington for review. The Mission subsequently was authorized (STATE 106963 and STATE 120971) to proceed with preparation of the Project Paper. Neither of these cables addressed the environmental question specifically, but they did convey NEAC approval of the PID, with its argument for a negative determination.

C. Notification to Congress

This project was included in the FY 1980 CP. AID/W confirmed (STATE 220153) that no additional notification was required.

D. Human Rights Clearance

There are currently no human rights issues in Tunisia under the Foreign Assistance Act of 1961 as amended. Nor is Tunisia cited for human rights violations in the most recent addition (February 1981) of the Congressional Foreign Relations Committee's "Country Reports on Human Rights Practices".

E. Justification for Section 612 (b) Determination

The justification for Section 612 (b) Determination is contained in the attached project authorization.

F. Authority

You have the authority to authorize this project pursuant to the Administrator's May 27, 1980 Delegation of Authority (No. 133.2) to AA/NE and the latter's redelegation to you on June 9, 1981 (STATE 12067).

Recommendation

That you approve the attached project authorization.

AGENCY FOR INTERNATIONAL DEVELOPMENT
UNITED STATES A. I. D. MISSION TO TUNISIA

AMERICAN EMBASSY
TUNIS TUNISIA

PROJECT AUTHORIZATION

Name of Country: Republic of Tunisia Name of Project: Technology Transfer

Number of Project: 664-0315

1. Pursuant to Section 106 of the Foreign Assistance Act of 1961, as amended (the "FAA"), I hereby authorize the Technology Transfer Project for Tunisia involving planned obligations of not to exceed One Million Four Hundred Fifty Thousand Dollars (\$1,450,000) in grant funds over a one-year period from date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project.

2. The Project consists of assistance with the placement of Tunisian students in United States institutions of higher education and assistance with the revision of Tunisian manpower planning for technically trained persons and Tunisian curricula for the training of university students in engineering and related technical disciplines.

3. The Project Agreement(s) which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

(a) Source and Origin of Goods and Services

Goods and services, except for ocean shipping, financed by A.I.D. shall have their source and origin in Tunisia

or the United States except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States and Tunisia.

(b) Condition Precedent

Prior to any disbursement or to the issuance of any Commitment documents under the Project Agreement to finance the long-term technical assistance contract, Tunisia shall furnish in form and substance satisfactory to A.I.D. evidence that the Tunisian Project Committee for the coordination of project elements has been established.

4. I hereby determine in accordance with Section 612(b) of the FAA that: (a) the expenditure of United States Dollars for the procurement of goods and services in Tunisia, as authorized above, is required to fulfill the purposes of this project, (b) the purpose of this project cannot be met effectively through the expenditure of United States-owned local currencies for such procurement; and (c) the administrative official approving local cost vouchers may use this determination as the basis for his certification as required by Section 612(h) of the FAA.

Martin V. Dagata

Martin V. Dagata
Director
USAID/Tunisia

8/21/51
Date

<u>Clearances:</u>	PROG:EL	Auchter	<i>EL</i>	Date	<i>8/21</i>
	PROG:WCK	Kaachak	<i>WCK</i>	Date	<i>8/21</i>
	S&T	IRSS	Stevenson	Date	<i>8/21</i>
	CONTI	Abennacer	<i>AB</i>	Date	<i>8/21</i>
	RLA	ISE	Carlson	Date	<i>8/21</i>

Drafter: RLA:ISE Carlson (IND) 10/24/51 *ISE*

A.I.D. Project No. 664-0315

Date: AUG 31 1981

PROJECT GRANT AGREEMENT

Between

THE REPUBLIC OF TUNISIA

And

THE UNITED STATES OF AMERICA

For

TECHNOLOGY TRANSFER

BEST AVAILABLE DOCUMENT

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ANNEX 1

THE PROJECT

ANNEX 2

GRANT PROJECT STANDARD PROVISIONS

A.I.D. Project No. 664-0315

GRANT AGREEMENT

DATED AUG 31 1981

BETWEEN

The Republic of Tunisia ("Tunisia" or "Grantee")

AND

The United States of America, acting through the Agency for International Development ("A.I.D.").

ARTICLE 1: The Agreement.

The purpose of this Agreement is to set out the understandings of the Parties named above ("Parties") with respect to the undertaking by Tunisia of the Project described below and the financing thereof by the Parties.

ARTICLE 2: The Project

SECTION 2.1. Definition of Project. The Project, which is further described in Annex 1, will consist of assistance with the placement of Tunisian students in United States institutions of higher education and assistance with the development of both Tunisian manpower planning for technically trained persons and Tunisian curricula for the training of university students in engineering and related technical disciplines. Annex 1, attached, contains the detailed project description cited in this Section and identifies those elements of the Project for

which grant financing will be employed. Within the limits of the above definition of the Project, elements of the description contained in Annex 1 may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2, without formal amendment of this Agreement.

ARTICLE 3: Financing

SECTION 3.1. The Grant. To assist Tunisia to meet the costs of carrying out the Project, A.I.D., pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant Tunisia under the terms of this Agreement not to exceed One Million Four Hundred Fifty Thousand (\$1,450,000) United States ("U.S.") Dollars (the "Grant"). The Grant may be used to finance foreign exchange costs, as defined in Section 6.1, and local currency costs as defined in Section 6.2 of goods and services required for the Project.

SECTION 3.2. Tunisian Resources for the Project.

(a) Tunisia agrees to provide or cause to be provided for the Project all funds, in addition to the Grant, and all other resources required to carry out the Project effectively and in a timely manner.

(b) The resources provided by Tunisia over the life of the Project are estimated to be approximately the equivalent of

Twenty-Three Million Two Hundred and Sixty Eight Thousand (\$23,268,000) U.S. Dollars, including costs borne on an "in-kind" basis, but in no event less than twenty-five percent (25%) of the total cost of the Project.

SECTION 3.3. Project Assistance Completion Date.

(a) The Project Assistance Completion Date ("PACD"), which is December 31, 1984, or such other date as the Parties may agree to in writing, is the date by which the Parties estimate that all services financed under the Grant will have been performed for the Project as contemplated in this Agreement.

(b) Except as A.I.D. may otherwise agree in writing, A.I.D. will not issue or approve documentation which would authorize disbursement of the Grant for services performed subsequent to the PACD or for goods furnished for the Project, as contemplated in this Agreement, subsequent to the PACD.

(c) Requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters, are to be received by A.I.D. or any bank described in Section 7.1, no later than nine (9) months following the PACD, or such other period as A.I.D. agrees to in writing. After such period, A.I.D., by giving notice in writing to Tunisia, may at any time or times reduce the amount of the Grant by all or any part thereof for which requests for disbursement, accompanied by necessary supporting documentation prescribed in Project

Implementation Letters, were not received before the expiration of said period.

ARTICLE 4: Conditions Precedent to Disbursement.

SECTION 4.1. First Disbursement. Prior to the first disbursement under the Grant or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, Tunisia will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.: a statement of the name of the person holding or acting in the office of Tunisia specified in Section 8.2, and of any additional representatives, together with a specimen signature of each person specified in such statement.

SECTION 4.2. Additional Disbursement. Prior to disbursement under the Grant or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made as described below, Tunisia will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D.:

- (a) for the Tunis-based student placement specialist: evidence that there is a counterpart for that person in the Government of Tunisia; and
- (b) for the long-term technical assistance contract, evidence that the Tunisian Project Committee for the coordination of

project elements has been established and that there are counterparts in the Government of Tunisia for the long-term advisor to be financed by that contract.

(c) Prior to the disbursement of funds under the technical assistance contract for salary, per diem, transportation and related costs for manpower planning consultants, Tunisia will, except as the Parties may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D. evidence that the Tunisian manpower planning task force has been established.

SECTION 4.3. Notification. When A.I.D. has determined that the conditions precedent specified in Sections 4.1 and 4.2 have been met, it will promptly notify Tunisia.

SECTION 4.4. Terminal Dates for Conditions Precedent.

(a) If all of the conditions specified in Section 4.1 have not been met within 90 days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D. at its option may terminate this Agreement by written notice to Tunisia.

(b) If the conditions specified in Section 4.2(a), (b) and (c) have not been met, respectively, within 90, 120 and 365 days from the date of this Agreement, or such later date as A.I.D. may agree to in writing, A.I.D. at its option may cancel the then undischursed balance of the Grant, to the extent not

irrevocably committed to third parties, and may terminate this Agreement by written notice to Tunisia.

ARTICLE 5: Special Covenants.

SECTION 5.1. Number of Students. Tunisia agrees that it will send at least fifty (50) Tunisian students per year to the United States for long-term academic training in engineering and related technical fields of study for the life of the Project.

SECTION 5.2. Washington, D.C. Office. Tunisia agrees that it will maintain its Washington, D.C.-based student placement activities throughout the life of the Project.

SECTION 5.3. Degree Equivalency. Tunisia agrees that the academic programs of the long-term students will be reviewed prior to their departure for the United States and that such review will include comments to the affected person concerning the changes, if any, which should be made to that program to permit the recognition in Tunisia of the degree sought as being equivalent to the relevant Tunisian degree.

SECTION 5.4. Application Fees. Tunisia agrees that it will see to it that Tunisian funds are made available to pay application fees in a timely manner for students who will apply for entrance to United States institutions of higher education in the fall of 1983.

SECTION 5.5. Project Evaluation. The Parties agree to establish an evaluation program as part of the Project. Except

as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at periodic points thereafter: (a) evaluation of progress toward attainment of the objectives of the Project; (b) identification and evaluation of problem areas or constraints which may inhibit such attainment; (c) recommendations as to how such problems or constraints should be addressed; and (d) evaluation, to the degree feasible, of the overall development impact of the Project.

ARTICLE 6: Procurement Source.

SECTION 6.1. Foreign Exchange Costs. Disbursements pursuant to Section 7.1 will be used exclusively to finance the cost of goods and services required for the Project having their source and origin in the United States (Code 000 of the A.I.D. Geographic Code Book as in effect at the time orders are placed or contracts entered into for such goods or services) ('Foreign Exchange Costs'), except as A.I.D. may otherwise agree in writing, and except as provided in the Project Grant Standard Provisions Annex, Section C.1(b) with respect to marine insurance.

Ocean transportation costs will be financed under the Grant only on vessels under flag registry of the United States or Tunisia, except as A.I.D. may otherwise agree in writing. If A.I.D. determines either that there are no vessels under flag

registry of Tunisia generally available for ocean transportation, or that Tunisia has no access to U.S. flag service, A.I.D. in a Project Implementation Letter may agree to finance under the Grant ocean transportation costs on vessels under flag registry of any country included in A.I.D. Geographic Code Book 941.

SECTION 6.2. Local Currency Costs. Disbursements pursuant to Section 7.2. will be used exclusively to finance the costs of goods and services required for the Project having their source and, except as A.I.D. may otherwise agree in writing, their origin in Tunisia ("Local Currency Costs").

ARTICLE 7: Disbursement

SECTION 7.1. Disbursement for Foreign Exchange Costs.

(a) After satisfaction of conditions precedent, Tunisia may obtain disbursements of funds under the Grant for the Foreign Exchange Costs of goods or services required for the Project in accordance with the terms of this Agreement, by such of the following methods as may be mutually agreed upon:

(1) by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, (a) requests for reimbursement for such goods and services or (b) requests for A.I.D. to procure commodities or services in Tunisian behalf for the Project or,

(2) by requesting A.I.D. to issue Letters of Commitment for specified amounts (a) to one or more U.S. banks, satisfactory to A.I.D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, under Letters of Credit or otherwise, for such goods or services, or (b) directly to one or more contractors or suppliers, committing A.I.D. to pay such contractors or suppliers for such goods or services.

(b) Banking charges incurred by Tunisia in connection with Letters of Commitment and Letters of Credit will be financed under the Grant unless Tunisia instructs A.I.D. to the contrary. Such other charges as the Parties may agree to may also be financed under the Grant.

SECTION 7.2. Disbursement for Local Currency Costs.

(a) After satisfaction of conditions precedent, Tunisia may obtain disbursements of funds under the Grant for Local Currency Costs required for the Project in accordance with the terms of this Agreement by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, requests to finance such costs.

(b) The local currency needed for such disbursements may be obtained:

- (1) by acquisition by A.I.D. with U.S. Dollars by purchase; or
- (2) by A.I.D. (A) requesting Tunisia to make available the

local currency for such costs, and (B) thereafter making available to Tunisia, through the opening or amendment by A.I.P. of Special Letters of Credit in favor of Tunisia or its designee, an amount of U.S. Dollars equivalent to the amount of local currency made available by Tunisia, which dollars will be utilized for procurement from the United States under appropriate procedures described in Project Implementation Letters.

The U.S. Dollar equivalent of the local currency made available hereunder will be, in the case of subsection (b)(1) above, the amount of U.S. Dollars required by A.I.D. to obtain the local currency, and in the case of subsection (b)(2) above, an amount calculated at the rate of exchange specified in the applicable Special Letter of Credit Implementation memorandum hereunder as of the date of the opening or amendment of the applicable Special Letter of Credit.

SECTION 7.3. Other Forms of Disbursement.

Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

SECTION 7.4. Rate of Exchange.

Except as may be more specifically provided under Section 7.2, if funds provided under the Grant are introduced into Tunisia by A.I.P. or any public or private agency for purposes of carrying out obligations of A.I.D. hereunder, Tunisia will make such arrangements as may be necessary so that such funds

may be converted into currency of Tunisia at the highest rate of exchange which, at the time the conversion is made, is not unlawful in Tunisia.

ARTICLE 8: Miscellaneous.

SECTION 8.1. Communications.

Any notice, request, document or other communication submitted by either party to the other under this Agreement will be in writing or by telegram or cable, and will be deemed duly given or sent when delivered to such party at the following address:

To Tunisia:

Ministère des Affaires Étrangères
Direction de la Coopération Internationale
Avenue Mohamed V
Tunis, Tunisia

To A.I.D.:

Agency for International Development
c/o American Embassy
144, Avenue de la Liberté, 1002 Belvédère
Tunis, Tunisia

Alternate Address for cables: Director, USAID

Amembassy TUNIS

All such communications will be in English or French. Other addresses may be substituted for the above upon the giving of notice.

SECTION 3.2. Representatives.

For all purposes relevant to this Agreement, Tunisia will be represented by the individual holding or acting in the office of Minister of Foreign Affairs and A.I.D. will be represented by the individual holding or acting in the office of Director, USAID to Tunisia, each of whom, by written notice, may designate additional representatives for all purposes other than exercising the power under Section 2.1 to revise elements of the detailed description in Annex 1. The names of the representatives of Tunisia, with specimen signatures, will be provided to A.I.D., which may accept as duly authorized any instrument signed by such representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

SECTION 3.3. Standard Provisions Annex.

A "Grant Standard Provisions Annex" (Annex 2) is attached to and forms part of this Agreement.

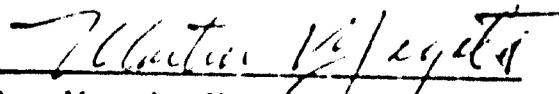
SECTION 3.4. Language of Agreement.

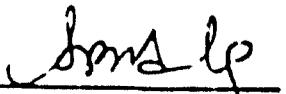
This Agreement, its Annexes and Project Implementation Letters, are prepared in both English and French. In the event of ambiguity or conflict between the two versions, the English language version will control.

IN WITNESS WHEREOF, the Republic of Tunisia and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

UNITED STATES OF AMERICA

REPUBLIC OF TUNISIA


By: Martin V. Sagata
Director
USAID/Tunisia


By: Ahmed Ben Arfa
Director General of International Cooperation
Ministry of Foreign Affairs

ANNEX 1

A. THE PROBLEM

Among the matters receiving priority attention by the Grantee in the preparation of its Sixth Development Plan (1982-1986) are education and employment. Education is seen as the vital link to modernization. The Grantee annually allocates one-third of its national budget to education, making Tunisia's percent of budget invested in education and training one of the highest in the world. The Grantee is making considerable effort to relate the products of the educational system to the needs of the general economy.

As the Grantee completes development of the Sixth Development Plan it is seeking new ways to address education and employment for high school and college graduates alike. At the college level, the Grantee recognizes the need to produce significantly more engineers and related technicians in the next five years. It further recognizes that its access to U.S. scientific and technological expertise through its higher education and research communities is limited. The problem for the Grantee is how best to absorb and adapt U.S. technology to meet its own educational and employment needs.

B. THE PROJECT

The Grantee has approached the U.S. Government for assistance in solving its short-term need to train more technical students overseas and its long-term requirement to strengthen its technical training capability and to develop ties between the U.S. technological community and Tunisian higher education institutions.

The Grantee has requested assistance from A.I.D. in (1) enhancement of curricula at both graduate and undergraduate levels at selected Tunisian technical institutions; (2) support of the Grantee program for sending a large number of Grantee-financed students to U.S. technical schools; (3) efforts to develop and maintain institutional links between U.S. and Tunisian research communities; and (4) development of institutional capacity in planning the supply of technical manpower to meet national priority needs.

A.I.D. has intensified efforts to support projects which are likely to produce lasting impacts on Tunisian development. To this end, A.I.D. and the Grantee have agreed on this project to institutionalize technology

transfer in engineering and related fields. During the life of the project approximately 1000 Tunisian students will be placed in U.S. universities at both the graduate and undergraduate levels, a manpower planning system in the fields of science and technology appropriate to Tunisia's needs will be developed and put into operation, procedures for expeditious preparation of student academic dossiers for placement in the United States will be advised and staff will be trained in placement procedures, and selected Tunisian higher institutions of technical training (as mutually agreed by the Grantee and A.I.D.) will be assisted in enhancing their curriculum and teaching methodologies through short-term consultants and in one or two institutions through the presence of visiting U.S. professors.

The project will be implemented through the Office of International Cooperation (DCI) of the Ministry of Higher Education and Scientific Research (MHESR). This office will cooperate closely with the Directorate of Higher Education, the Directorate of Scientific and Technical Research, and the Office of the Special Assistant to the Minister for Curriculum Reform (all of MHESR), the newly created Academic Affairs Office of MHESR in Washington, D.C., the Manpower Planning Office of the Ministry of Plan and Finance (MPF), and appropriate offices within the Ministry of National Economy and other Ministries as required. The role of these ministries will focus primarily on inputs to manpower planning in technology fields and on some placement of students.

Technical assistance will be provided to the Grantee through a host-country contract with a qualified U.S. university, firm, organization or consortium of such organizations and one additional A.I.D. personal services contract. The former will provide both long-term and short-term assistance in Tunisia and in the United States, while the latter will assist the Tunisian Student Placement Service in Tunis with the processing of student dossiers for placement in the United States.

C. Project Components

This project will address the creating and reinforcing of long-term links between the United States and Tunisia for technology transfer by assisting the Grantee to establish a workable system for determining technically trained manpower needs and obtaining access to the U.S. technological community. This system will include methods for projecting manpower requirements in technical skills, placement of Tunisian students in U.S. universities and enhancement of the curriculum of Tunisian technical institutions.

The project will consist of the following components:

1) Manpower Planning

Currently Grantee manpower planning is carried out on a large scale by the Directorate of Manpower Planning of the Ministry of Plan and Finance (MPF). The sources of data for the work of the Directorate are the other line ministries, primarily through their statistical and planning units. For the Ministry of Higher Education and Scientific Research (MHESR), the institutional link with the Ministry of Plan and Finance (MPF) is the Office of Planning, Statistics and Data Processing. A major responsibility of this office is to determine demand by academic field for higher education. The determinations are based on manpower requests from each ministry and also serve as the starting point for planning for faculty and facilities required to meet the demand for training.

This component of the project will assist the MHESR and MPF to develop and put into operation a manpower planning system that is commensurate with the Grantee's needs in the fields of science and technology. Early in project implementation a manpower planning task force made up of representatives from the MHESR, the MPF, the Ministry of National Economy and ad hoc members from other relevant ministries, and the long-term resident advisor will be created and will direct technical manpower planning in higher education for the MHESR. Its initial task will be to identify short-term technical assistance needs to strengthen the MHESR manpower planning capability in science and technology and to examine the feasibility of adapting the MPF manpower planning model to the forecasting requirements of the MHESR, thereby establishing a planning system capable of working with supply and demand projections in all technical fields.

The scheduling and monitoring of the short-term consultants in manpower planning will be the responsibility of the resident advisor and his principal counterpart, the Director of International Cooperation (DCI) of the MHESR. However, the task force will be the principal beneficiary of the short-term manpower planning assistance provided by this project and will be the channel through which the consultants will provide assistance to obtain data from other ministries involved with technical manpower, as either suppliers or end-users.

2) Student Placement

At the request of the Government of Tunisia, the MIESR is embarking on a program to send a large number of Tunisian undergraduate and graduate students to the United States for academic training in technical fields. Approximately 220 students will be placed in the United States for academic year 1981-82, before A.I.D. assistance begins. The Grantee proposes to then place an average of 260 students per year during each of the three years of the project. Prior to departure they will receive English language training at the English Language Center recently established at Sousse, or in other facilities or through secondary school curriculum modification which the Grantee may arrange in the future.

A.I.D. financing of this component is limited to technical assistance to the Grantee in placement of students for academic degrees in engineering and associated fields. A short-term (six-months) advisor in Tunis will work with and train the staff of the MIESR in the design of a system to place Tunisians in U.S. technical institutions and in the preparation of student academic dossiers necessary to make application to U.S. institutions. This advisor will arrive by January 1982 to begin preparation of dossiers for enrollement of participants in the fall of the same year. His principal counterpart will be the Chief of the new Service for Student Placement in the United States, who will be responsible for the preparation of documentation for U.S. placement of Tunisian students. This service is being created separately from other services within the DCI which handle foreign placement of students because of the size of the new program, substantially larger and much more complex than the previous experience of the DCI in student placement abroad. In addition, the MIESR is in the process of creating a Tunisian Academic Affairs Office in Washington, D.C. to service the participants of this project and to develop institutional contacts and exchanges. This office will be staffed by a Tunisian director and a deputy director qualified in student placement, administration and counselling and familiar with Tunisian technical schools. A.I.D. financing will provide for a long-term consultant in Washington to assist this office to develop a comprehensive placement, counseling and student orientation program. This activity will begin in the spring of 1982 and continue until near the end of the U.S. financing of the project in December 1984.

The Grantee will be solely responsible for the costs, including tuition and maintenance allowances, of the academic training of its students. The Grantee will also pay all of the international transportation of the participants, including an annual return trip to Tunisia in order to maintain family contacts and ease the burden of studying abroad and to secure the highest possible rate of return of students to Tunisia after studies are completed.

3) Strengthening Tunisian Scientific and Technological Academic Institutions

The function of this component is to strengthen the institutional capacity of Tunisia's advanced technological training institutions through the integration of U.S. technical curricula and teaching methods in undergraduate and graduate programs of selected technical institutions, as mutually agreed by the Grantee and A.I.D. Such development will take place at three different levels. First, it will assist at the national level through the provision of technical assistance to the Directorate of Higher Education of MHER to address questions such as degree equivalency and institutional growth patterns.

Second, at the institutional level, it will provide six senior-level visiting U.S. engineering professors for nine months each. This will expose Tunisian faculty to U.S. curricula and pedagogical methods at one or two engineering schools and will foster long-term institutional and professional contacts.

Third, at the classroom level, it will provide in-service training of Tunisian counterparts on a one-to-one basis by the visiting professors. Each professor will be assigned one or more counterpart faculty members who will work with him during his stay and who will be expected to take over the courses and research programs established by him after his departure. This component will also introduce new course content, teaching strategies and teaching materials through inputs of short-term consultants. The first group of visiting professors will arrive in the fall of 1982 and another group will arrive in the fall of 1983. Each group will stay for one academic year.

A final feature of this component deals with the limited access of Tunisian officials in higher education to U.S. technology and the U.S. higher education system. A.I.D. will finance the cost of course materials and travel within the United States for up to 12 short-term study tours by Grantee administrators or senior professors associated with advanced training in engineering and related fields. These trips will enable the Tunisian scientific and technological leadership to develop an understanding of how best to transfer U.S. technology to their institutions and to initiate what is intended to be lasting personal and institutional relationships with U.S. professionals and institutions. The timing and program of each study tour, as well as the selection of participants will be done by the Grantee's project manager in consultation with the long-term resident advisor.

D. PROJECT IMPLEMENTATION

1) Project Committee

Because the activities of this project involve more than one ministry, and in the case of the MHESR multiple offices within a single ministry, a committee will be established to guide the effort. The committee will be chaired by the Director of International Cooperation (DCI) of MHESR and will include the Director of Higher Education, the Director of Scientific and Technical Research, the Special Assistant to the Minister for Curriculum Development and Reform, the Chief of the Service for Student placement in the United States (all of MHESR), and representatives from the Ministries of Plan and Finance (MPF) and National Economy (MNE). It will meet periodically and its particular role will be to provide overall policy guidance and to assure coordination among key project component such as the placement of U.S. resident faculty members, recruitment and predeparture preparation of participants, utilization of short-term technical assistance and the functioning of the manpower planning task force. The chief of party (COP) of the technical assistance team will act as a technical advisor to the committee and will coordinate the technical assistance provided by this effort for the life of the project.

2) Manpower Planning Task Force

A second body that will be established and which will have a role in the project will be the Manpower Planning Task Force. This task force will be the meeting ground for the producers and end-users of technically trained manpower. Among its members will be the A.I.D. funded contractor's COP, the Director of Higher Education of MHESR, the head of the statistical and planning unit of the same office, a member of the manpower planning unit within the MPF, a representative of the Ministry of National Economy and ad hoc representatives of other ministries as required.

This task force will determine the appropriate mix of consultant expertise to be provided by the project to a) develop the MHESR manpower planning capability in science and technology and b) adapt the World Bank manpower-planning model used by the MPF to be compatible with current MHESR procedures. In the long term it is expected that this task force will become a permanent body gradually expanding its sphere of activity until it provides guidance on technical manpower planning for all sectors of the Tunisian economy.

3) Project Coordinator

The project will be administratively located in the MIESR. The Tunisian project coordinator will be the Director of DCI of MIESR, who within the organizational structure of the MIESR reports directly to the Minister. While it is not anticipated that he will be involved with the details of the project on a daily basis, he will chair the project committee, sign project vouchers, and resolve issues as they may arise among the heads of the technical offices involved with project implementation.

For discrete project activities the project coordinator will designate operational responsibility to the heads of various organizations within the MIESR. For example, the Directorate of Higher Education of MIESR will be the office involved with the placement of visiting professors in Tunisian technical institutions, the selection and assignment of short-term technical experts, and the handling of degree equivalency issues. The determination of the numbers of students who are to be sent for training in the United States, their fields of study and the process for selection of candidates for placement, and general curriculum development and planning for institutional growth is the responsibility of the Cabinet of the Minister of MIESR. Moreover, the project coordinator will be the principle representative of MIESR in dealing with the MIF in manpower planning efforts.

On questions related to curriculum development the COP will work with the Special Assistant to the Minister of Higher Education for Curriculum Reform. This office has a staff function, as opposed to the line function of the Directorate of Higher Education, and is responsible for developing the theoretical background of curriculum reform which the Directorate of Higher Education will in turn implement.

4) Service for Student Placement in the United States

Preparation of academic dossiers for students prior to their departure will be the responsibility of the newly created service for Student Placement in the United States. This service will be located in the DCI of MIESR. It will be staffed by a Chief of Service, a professional assistant with expertise in student dossier preparation and a secretary, and the service will report directly to the project coordinator, the Director of DCI of MIESR. This service will be parallel to but outside of other student placement units supervised by the Deputy Director of DCI which are also involved with the placement of students in universities overseas. The rationale for creating a separate service with a unique reporting arrangement is a result of the large volume of students that will be processed and the complex placement information required by U.S. universities. Moreover, it attests to the importance placed on this effort by the Grantee. The chief of this unit will be the counterpart for the medium-term, six month, student placement advisor to be located in Tunis.

5) Academic Affairs Office

An Academic Affairs Office will be established in Washington, D.C. and will work directly with the Student Placement Service in Tunis. It will be directly responsible for fostering long-term educational exchanges with U.S. universities, and in that sense will have a much broader mandate than student placement. However, one of its major responsibilities will be to provide for the orientation and placement of up to 1000 students to be sent to the United States during the life of the project. It will be staffed by a Director and a Deputy Director who are both senior level professionals knowledgeable of the Tunisian technical higher education system. It is expected that the Director will concentrate on establishing long-term contacts with U.S. universities while the Deputy Director focuses on matters of student placement and orientation. This Office is responsible to the Minister but on practical matters affecting student placement it will report directly to the project coordinator, the Director of DCI of MHESR. It will have its own operating budget, including funds for office space, a secretary, travel and communications. U.S. financing will support the provision of a long-term (30 month) technician to assist this Office to implement workable orientation and placement procedures.

E. PROJECT INPUTS

The total cost of this project is estimated at U.S. \$24,718,000 of this total U.S. \$1,450,000 will be funded by AID with the balance (equivalent to US \$23,268,000) contributed by the GOT. AID financed inputs include technical assistance and training. The Grantee will provide Tunisian staff and office space, both in Tunisia and in the U.S., facilities for in-country language training, international travel for Tunisian students, all tuition and maintenance fees for Tunisian students, logistical support, international travel for Tunisian administration and faculty members visiting the United States, and partial salaries and international travel for visiting U.S. faculty members.

1) AID Inputs

a) Technical Assistance

A major portion of the A.I.D. inputs to this project will be the financing of a host-country contract for technical assistance with a U.S. university, firm, organization or consortium of such organizations. This assistance will include two advisors in Tunis. The first, the chief of party, will have as a counterpart the Tunisian project manager, the DCI of MHESR, and will work closely also with the Director of Higher Education, MHESR and the Special Assistant for Curriculum Development and Reform of MHESR. He will coordinate implementation of the key elements of the project, including refinement of manpower planning methodology, assessment of the needs of the six engineering faculty curricula, recruitment of U.S. visiting professors, and placement and supervision of project financed short-term consultants. He will serve through the life of the project and will have a background in engineering with relevant experience in teaching and university administration.

The short-term advisor in Tunis will be a student placement specialist. In order to place him in Tunis in time to assist with placement for the fall of 1982 he will be hired under a direct AID contract. He will serve for six months and will train the staff of DCI, MHESR in establishing a student academic dossier transfer system in cooperation with the Tunisian Academic Affairs Office in Washington, D.C. Another part of the host country contract will be 33 person months of short-term technical assistance. These consultants, under the guidance of the chief of party, will provide expertise on curriculum reform, teaching methodology, manpower planning and other technical and administrative matters as determined to be useful.

AID resources will be used to complement the salaries paid by the Grantee to six visiting U.S. professors. The Grantee will pay the equivalent of \$ 20,000 of the salary of each professor. U.S. funds of up to \$27,500 per professor will be added to the Grantee's contribution to insure recruitment of the most capable individuals possible.

Also financed under the host-country contract will be the services of one foreign student specialist for 30 months who will be stationed in Washington, D.C. in the Tunisian Academic Affairs Office. This specialist will provide assistance to the office in organizing and operating a

large-scale placement and follow-up system in support of Tunisian students.

b) Training

A.I.D funding for training will total U.S. \$65,000. This component will consist of up to twelve short-term study tours for Tunisian higher education administrators and academics. The purpose of the tours will be to provide key Tunisian officials with exposure to contemporary technology training methods in the U.S. and the opportunity to establish long-term personal and institutional ties with the U.S. technology and higher education communities.

c) Other

A.I.D financing of not more than \$ 50,000 will be used to pay the application fees for the first group (Fall of 1982) of Tunisian students to be placed in U.S. universities. This will be a one time expenditure. After the first year this cost will be borne by the Tunisian Government.

2) Government of Tunisia Inputs

The Grantee will contribute approximately 94 percent total dollar value of this project. The Grantee will pay the recurring costs of the Student Placement Service within DCI, MHESR, the start up and recurrent costs of the English Language Training Center at Sousse, and the recurrent costs of the Academic Affairs Office in Washington, D.C. The English Language Training Center, the Service for Student Placement in the United States and (in terms of their major task) the Academic Affairs Office in Washington have been created at the initiative of the Grantee specifically in order to support the larger program of an increased flow of Tunisian technical students to the United States.

The Grantee will provide total academic and personal financial support, including one yearly round trip ticket, for Tunisian students sent to the U.S. The Grantee will furnish complete administrative and logistical support for the long-term advisor and for the six months student placement specialist in the Office of the DCI, MHESR and will provide administrative support for the long-term advisor to the Academic Affairs Office in Washington. Finally, the Grantee will pay for international travel,

shipment of personal effects and partial salary for six visiting U.S. professors and will provide administrative support at their host Tunisian engineering institutions and administrative assistance in rapidly establishing themselves and their households in Tunisia in order that they may make the most effective academic contribution as rapidly as possible.

F. PROJECT BUDGET

1. AID Expenditures

The total AID contribution is US \$1,450,000, estimated to be allocated approximately as follows:

	(U.S. Dollars)
<u>Chief of Party/Faculty and Curriculum Development Adviser: 30 months, Tunis</u>	250,000
<u>Short-term Consultants:</u>	
Faculty and Curriculum Development (23 person-months)	273,000
Manpower Planning (10 person-months)	<u>120,000</u>
	393,000
<u>Salaries for U.S. Faculty (16 @ 27,500)</u>	165,000
<u>Support Services:</u>	
Faculty and Consultant Recruitment	60,000
Logistics for 12 Tunisian Faculty Tours in United States	<u>65,000</u>
	125,000
<u>Placement Services:</u>	
Placement Adviser to GOT/Tunis (6 months)	35,000
Placement Adviser to GOT/Washington, D.C. (30 months)	95,000
Travel and Communications (US)	30,000
Direct Placement Costs (US)	50,000
Student Orientation Seminars (US)	<u>45,000</u>
	255,000
<u>Project Evaluation</u>	<u>20,000</u>
	Subtotal
	1,208,000
Contingency and Inflation (20%)	<u>242,000</u>
	TOTAL
	\$ 1,450,000

2. Government of Tunisia Expenditures

The total Grantee contribution is estimated to be TD 11,634,000, to be allocated as follows:

Academic Training:

(Tuition, room, board, expenses, travel at TD 6000/student/year)

Enter fall 81 - 220 students
fall 82 - 50 students (minimum)
fall 83 - 50 students (minimum)
fall 84 - 50 students (minimum)

Total Entry - 370 students (minimum)

Average 4 academic years per student X 370 students =
1480 student years at TD 6000/yr

(Tunisian Dinars)

8,880,000

Academic Affairs Office in Washington, D.C.
(January 1982 - December 1984)

Salaries	175,000
Office and Overhead	105,000
Travel and Communication	<u>35,000</u>

315,000

Salaries

Management, 36 mo.	28,000
Chief, Student Placement Service 36 mo.	18,000
Staff, Student Placement Service 36 mo.	14,400
Secretary, Student Placement Service 36 mo.	10,800
Institutional Counterpart to U.S. Technicians, 21 mo.	11,500
Statistical and Planning Unit Chief, 36 mo.	18,000
Staff, 36 mo.	14,400
Secretary, 36 mo.	<u>10,800</u>

126,700

Logistical Support

Communications	1,300
Reproduction	2,000
Translation Services	5,000
Local Transportation and Per Diem	5,000
International Travel and Per Diem	15,000
Conference Facilities	<u>20,000</u>

48,300

<u>English Language Training at the Sousse Center</u>		(Tunisian Dinars)
Salaries of Teachers	24,000	
Scholarships	25,000	
Housing and Food	45,000	
Management Salaries	10,000	
Materials and Equipment	100,000	
Contingencies	<u>42,000</u>	250,000
 <u>U.S. Professors in Tunisia</u>		
Salaries, 6 years at 10,000	60,000	
International travel, 6 at 2,500	<u>15,000</u>	75,000
 Subtotal		
		9,695,000
 Inflation and Contingency at 20%		
		<u>1,939,000</u>
 Total		
		TD 11,634,000
 at TD 1.00 = US\$2.00, the COT contribution =		
		US\$23,268,000
 Project Total		
		<u><u>US\$24,718,000</u></u>

C. PROJECT EVALUATION

Two evaluations are scheduled for the project, one in June 1983 near the mid-point of the project, and another at the end of the project in December 1984. Both evaluations will be undertaken collaboratively by representatives designated by the GOT and A.I.D. and by the chief of party of the A.I.D. funded contract. A.I.D. costs for project evaluation are funded within the project.

The evaluation will take place concurrently with project implementation and there will be no delay or stop in on-going project activities.

1) Evaluation Timing

The first evaluation will take place in June 1983 at a time when the project will have been active through one complete academic year. This will allow the evaluators to assess the function and effectiveness of the student placement and orientation system and the visiting professor program. Interviews should be held with Tunisian students returned for the summer and with both U.S. and Tunisian faculty members who have been involved in the program.

The Manpower Planning Task Force will have been established for nine months and short-term technical assistance to the task force will have been initiated at least three months before the evaluation. The role and capability of the task force should therefore be clear by the time of the evaluation.

Technical assistance in curriculum development for the technical institutions will have been in progress for over a year, and it should be possible to see some impact in the curricula proposed for the Fall of 1983.

All policy issues within the project, such as the process for degree equivalency advance evaluation and the role of the Manpower Planning Task Force, should be clearly defined by the time of the mid-project evaluation. The evaluation should recommend any mid-project corrections to be implemented during the balance of the project.

The final project evaluation is scheduled for December 1984 and will focus on the effectiveness of methods and procedures used during the project to augment Tunisian technical training capacity and to improve manpower planning capability. It will make recommendations for future actions to be taken by the GOT.

2) Evaluation Criteria

The success of the project will be judged along two major dimensions.

a) The efficiency of the project will be seen in whether or not contributions have been made on schedule, technicians have arrived when needed, prescribed roles have been carried out, administrative units, committees and task forces have been established and staffed, resources have been properly managed, U.S. professors have been placed, students have been enrolled and a number of other actions described by the project have been carried out as projected. The evaluation criterion to be applied here focuses on whether or not obligations have been met and prescribed actions have been carried out in a timely manner.

b) The effectiveness of the project is measured along a very different dimension. Here one must look at issues such as the degree to which U.S. faculty members have been integrated into Tunisian faculties and properly utilized, the effectiveness of the Manpower Planning Task Force and its acceptance by MHESR and other involved ministries, the impact of academic technical assistance on curricula and pedagogical methods, and the degree to which any such impacts appear to affect institutional operation and the quality of technical education. The criterion applied here is the impact of the various project elements and the apparent desirability of such impacts. The evaluation should not hesitate to recommend termination of an ineffectual project element, and should make constructive recommendations for new or altered actions, either for the remainder of this project or to be carried out in the future by the GOT.

ANNEX 2

PROJECT GRANT STANDARD

PROVISIONS ANNEX

Definitions: As used in this Annex, the "Agreement" refers to the Project Grant Agreement to which this Annex is attached and of which this Annex forms a part. Terms used in this Annex have the same meaning or reference as in the Agreement.

Article A: Project Implementation Letters

To assist Grantee in the implementation of the Project, A.I.D., from time to time, will issue Project Implementation Letters that will furnish additional information about matters stated in this Agreement. The parties may also use jointly agreed-upon Project Implementation Letters to confirm and record their mutual understanding on aspects of the implementation of this Agreement. Project Implementation Letters will not be used to amend the text of the Agreement, but can be used to record revisions or exceptions which are permitted by the Agreement, including the revision of elements of the amplified description of the Project in Annex 1.

Article B: General Covenants

SECTION B.1. Consultation. The Parties will cooperate to assure that the purpose of this Agreement will be accomplished. To this end, the Parties at the request of either, will exchange views on the progress of the Project, the performance of obligations under this Agreement, the performance of any consultants, contractors or suppliers engaged on the Project, and other matters relating to the Project.

SECTION B.2. Execution of Project. The Grantee will:

(a) carry out the Project or cause it to be carried out with due diligence and efficiency, in conformity with sound technical, financial, and management practices, and in conformity with those documents, plans, specifications, contracts, schedules or other arrangements, and with any modifications therein, approved by A.I.D. pursuant to this Agreement; and

(b) provide qualified and experienced management for, and train such staff as may be appropriate for the maintenance and operation of the Project, and, as applicable for continuing activities, cause the Project to be operated and maintained in such manner as to assure the continuing and successful achievement of the purposes of the Project.

SECTION B.3. Utilization of Goods and Services.

(a) Any resources financed under the Grant will, unless otherwise agreed in writing by A.I.D., be devoted to the Project until the completion of the Project, and thereafter will be used so as to further the objectives sought in carrying out the Project.

(b) Goods or services financed under the Grant, except as A.I.D. may otherwise agree in writing, will not be used to promote or assist a foreign aid project or activity associated with or financed by a country not included in Code 935 of the A.I.D. Geographic Code Book as in effect at the time of such use.

SECTION B.4. Taxation.

(a) This Agreement and the Grant will be free from any taxation or fees imposed under laws in effect in the territory of the Grantee.

(b) To the extent that (1) any contractor, including any consulting firm, any personnel of such contractor financed under the Grant, and any property or transaction relating to such contracts and (2) any commodity procurement transaction financed under the Grant, are not exempt from identifiable taxes, tariffs, duties or other levies imposed under laws in effect in the territory of the Grantee, the Grantee will, as and to the extent provided in and pursuant to Project Implementation Letters, pay or reimburse the same with funds other than those provided under the Grant.

SECTION B.5. Reports, Records, Inspections, Audit.

The Grantee will:

(a) furnish A.I.D. such information and reports relating to the Project and to this Agreement as A.I.D. may reasonably request;

(b) maintain or cause to be maintained, in accordance with generally accepted accounting principles and practices consistently applied, books and records relating to the Project and to this Agreement, adequate to show, without limitation, the receipt and use of goods and services acquired under the Grant. Such books and records will be audited regularly, in accordance with generally accepted auditing standards, and maintained for three years after the date of last disbursement by A.I.D.; such books and records will also be adequate to show the nature and extent of solicitations of prospective suppliers of goods and services acquired, the basis of award of contracts and orders, and the overall progress of the Project toward completion;

(c) afford authorized representatives of a Party the opportunity at all reasonable times to inspect the Project, the utilization of goods and services financed by such Party, and books, records and other documents relating to the Project and the Grant.

SECTION B.6. Completeness of Information.

The Grantee confirms:

(a) that the facts and circumstances of which it has informed A.I.D., or caused A.I.D. to be informed, in the course of reaching agreement with A.I.D. on the Grant, are accurate and complete, and include all facts and circumstances that might materially affect the Project and the discharge of responsibilities under this Agreement;

(b) that it will inform A.I.D. in timely fashion of any subsequent facts and circumstances that might materially affect, or that it is reasonable to believe might so affect, the Project or the discharge of responsibilities under this Agreement.

SECTION B.7. Other Payments. Grantee affirms that no payments have been or will be received by any official of the Grantee in connection with the procurement of goods or services financed under the Grant, except fees, taxes, or similar payments legally established in the country of the Grantee.

SECTION B.8. Information and Marking. The Grantee will give appropriate publicity to the Grant and the Project as a program to which the United States has contributed, identify the Project site, and mark goods financed by A.I.D., as described in Project Implementation Letters.

Article C: Procurement Provisions

SECTION C.1. Special Rules.

(a) The source and origin of ocean and air shipping will be deemed to be the ocean vessel's or aircraft's country of registry at the time of shipment.

(b) Premiums for marine insurance placed in the territory of the Grantee will be deemed an eligible Foreign Exchange Cost, if otherwise eligible under Section C.7 (a).

(c) Any motor vehicles financed under the Grant will be of United States manufacture, except as A.I.D. may otherwise agree in writing.

(d) Transportation by air, financed under the Grant, of property or persons (and their personal effects) will be on carriers holding United States certification, to the extent service by such carriers is available. Details on this requirement will be described in a Project Implementation Letter.

SECTION C.2. Eligibility Date. No goods or services may be financed under the Grant which are procured pursuant to orders or contracts finally placed or entered into prior to the date of this Agreement, except as the Parties may otherwise agree in writing.

SECTION C.3. Plans, Specifications, and Contracts. In order for there to be mutual agreement on the following matters, and except as the Parties may otherwise agree in writing:

(a) The Grantee will furnish to A.I.D. upon preparation,

(1) any plans, specifications, procurement or construction schedules, contracts, or other documentation relating to goods or services to be financed under the Grant, including documentation relating to the pre-qualification and selection of contractors and to the solicitation of bids and proposals. Material modifications in such documentation will likewise be furnished A.I.D. on preparation;

(2) such documentation will also be furnished to A.I.D., upon preparation, relating to any goods or services which, though not financed under the Grant, are deemed by A.I.D. to be of major importance to the Project. Aspects of the Project involving matters under this subsection (a) (2) will be identified in Project Implementation Letters;

(b) Documents related to the prequalification of contractors, and to the solicitation of bids or proposals for goods and services financed under the Grant will be approved by A.I.D. in writing prior to their issuance, and their terms will include United States standards and measurements;

(c) Contracts and contractors financed under the Grant for engineering and other professional services, for construction services, and for such other services, equipment or materials as may be specified in Project Implementation Letters, will be approved by A.I.D. in writing prior to execution of the contract. Material modifications in such contracts will also be approved in writing by A.I.D. prior to execution; and

(d) Consulting firms used by the Grantee for the Project but not financed under the Grant, the scope of their services and such of their personnel assigned to the Project as A.I.D. may specify, and construction contractors used by the Grantee for the Project but not financed under the Grant, shall be acceptable to A.I.D.

SECTION C.4. Reasonable Price. No more than reasonable prices will be paid for any goods or services financed, in whole or in part, under the Grant. Such items will be procured on a fair and, to the maximum extent practicable, on a competitive basis.

SECTION C.5. Notification to Potential Suppliers. To permit all United States firms to have the opportunity to participate in furnishing goods and services to be financed under the Grant, the Grantee will furnish A.I.D. such information with regard thereto, and at such times, as A.I.D. may request in Project Implementation Letters.

SECTION C.6. Shipping.

(a) Goods which are to be transported to the territory of the Grantee may not be financed under the Grant if transported either: (1) on an ocean vessel or aircraft under the flag of a country which is not included in A.I.D. Geographic Code 935 as in effect at the time of shipment, or (2) on an ocean vessel which A.I.D., by written notice to the Grantee has designated as ineligible; or (3) under an ocean or air charter which has not received prior A.I.D. approval.

(b) Costs of ocean or air transportation (of goods or persons) and related delivery services may not be financed under the Grant, if such goods or persons are carried: (1) on an ocean vessel under the flag of a country not, at the time of shipment, identified under the paragraph of the Agreement entitled "Procurement Source: Foreign Exchange Costs," without prior written A.I.D. approval; or (2) on an ocean vessel which A.I.D., by written notice to the Grantee, has designated as ineligible; or (3) under an ocean vessel or air charter which has not received prior A.I.D. approval.

(c) Unless A.I.D. determines that privately-owned United States-flag commercial ocean vessels are not available at fair and reasonable rates for such vessels, (1) at least fifty percent (50%) of the gross tonnage of all goods (computed separately for dry bulk carriers, dry cargo liners and tankers) financed by A.I.D. which may be transported on ocean vessels will be transported on privately-owned United States-flag commercial vessels, and (2) at least fifty percent (50%) of the gross freight revenue generated by all shipments financed by A.I.D. and transported to the territory of the Grantee on dry cargo liners shall be paid to or for the benefit of privately-owned United States-flag commercial vessels. Compliance with the requirements of (1) and (2) of this subsection must be achieved with respect to both any cargo transported from U.S. ports and any cargo transported from non-U.S. ports, computed separately.

SECTION C.7. Insurance.

(a) Marine insurance on goods financed by A.I.D. which are to be transported to the territory of the Grantee may be financed as a Foreign Exchange Cost under this Agreement provided (1) such insurance is placed at the lowest available competitive rate, and (2) claims thereunder are payable in the currency in which such goods were financed or in any freely convertible currency. If the Grantee (or government of Grantee), by statute, decree, rule, regulation, or practice discriminates with respect to A.I.D.-financed procurement against any marine insurance company authorized to do business in any State of the United States, then all goods shipped to the territory of the Grantee financed by A.I.D. hereunder will be insured against marine risks and such insurance will be placed in the United States with a company or companies authorized to do a marine insurance business in a State of the United States.

(b) Except as A.I.D. may otherwise agree in writing, the Grantee will insure, or cause to be insured, goods financed under the Grant imported for the Project against risks incident to their transit to the point of their use in the Project; such insurance will be issued on terms and conditions

consistent with sound commercial practice and will insure the full value of the goods. Any indemnification received by the Grantee under such insurance will be used to replace or repair any material damage or any loss of the goods insured or will be used to reimburse the Grantee for the replacement or repair of such goods. Any such replacements will be of source and origin of countries listed in A.I.D. Geographic Code 935 as in effect at the time of replacement, and, except as the Parties may agree in writing, will be otherwise subject to the provisions of the Agreement.

SECTION C.8. U.S. Government-Owned Excess Property.

The Grantee agrees that wherever practicable United States Government-owned excess personal property, in lieu of new items financed under the Grant may be used to finance the costs of obtaining such property for the Project.

Article D: Termination ; Remedies.

SECTION D.1. Termination. Either Party may terminate this Agreement by giving the other Party 30 days written notice. Termination of this Agreement will terminate any obligations of the Parties to provide financial or other resources to the Project pursuant to this Agreement, except for payments which they are committed to make pursuant to non-cancellable commitments entered into with third parties prior to the termination of this Agreement. In addition, upon such termination A.I.D. may, at A.I.D.'s expense, direct that title to goods financed under the Grant be transferred to A.I.D. if the goods are from a source outside Grantee's country, are in a deliverable state and have not been offloaded in ports of entry of Grantee's country.

SECTION D.2. Refunds.

(a) In the case of any disbursement which is not supported by valid documentation in accordance with this Agreement, or which is not made or used in accordance with this Agreement, or which was for goods or services not used in accordance with this Agreement, A.I.D., notwithstanding the availability or exercise of any other remedies under this Agreement, may require the Grantee to refund the amount of such disbursement in U.S. dollars to A.I.D. within sixty days after receipt of a request therefor.

(b) If the failure of Grantee to comply with any of its obligations under this Agreement has the result that goods or services financed under the Grant are not used effectively in accordance with this Agreement, A.I.D. may require the Grantee to refund all or any part of the amount of the disbursements under this Agreement for such goods or services in U.S. dollars to A.I.D. within sixty days after receipt of a request therefor.

(c) The right under subsection (a) or (b) to require a refund of a disbursement will continue, notwithstanding any other provision of this Agreement, for three years from the date of the last disbursement under this Agreement.

(d) (1) Any refund under subsection (a) or (b), or (2) any refund to A.I.D. from a contractor, supplier, bank or other third party with respect to goods or services financed under the Grant, which refund relates to an unreasonable price for or erroneous invoicing of goods or services, or to goods that did not conform to specifications, or to services that were inadequate, will (A) be made available first for the cost of goods and services required for the Project, to the extent justified, and (B) the remainder, if any, will be applied to reduce the amount of the Grant.

(e) Any interest or other earnings on Grant funds disbursed by A.I.D. to the Grantee under this Agreement prior to the authorized use of such funds for the Project will be returned to A.I.D. in U.S. Dollars by the Grantee.

SECTION D.3. Nonwaiver of Remedies. No delay in exercising any right or remedy accruing to a Party in connection with its financing under this Agreement will be construed as a waiver of such right or remedy.

SECTION D.4. Assignment. The grantee agrees, upon request, to execute an assignment to A.I.D. of any cause of action which may accrue to the Grantee in connection with or arising out of the contractual performance or breach of performance by a party to a direct U.S. Dollar contract with A.I.D. financed in whole or in part out of funds granted by A.I.D. under this Agreement.