UNITED NATIONS DEVELOPMENT PROGRAMME Project of the Government of Libyan Arab Jamahiriya **Project Document**

Project number: LIB/99/003/A/01/13

Project title: Support and Development of Specialized

Schools and Technical Education

Project short title: Development of Specialized

Schools

Estimated start date: 01/10/1999 Estimated end date: 30/9/2002

Management arrangement: UN Agency Execution Designated institution: Secretariat of Education and

Vocational Training

United Nations implementing Agency: UNESCO

Project Site: Tripoli

Beneficiary countries: Libyan Arab Jamahiriya

Classification information

ACC sector and sub-sector: Human resource development/Secondary schooling

DCAS sector and sub-sector: Human resource

development/Secondary schooling

Government Sector and Sub-sector: Education

Primary areas of focus/sub-focus: Other UNDP

Development Priorities

Secondary areas of focus/sub-focus:

Primary type of intervention: Capacity-building.

Secondary type of intervention: Technology adaptation.

Primary target beneficiaries: Government

organization

Secondary target beneficiaries: Population at large

Summary of DIVDP and cost sharing i	nputs
[as per attached budget]	
HAIDD	

TRAC (1&2) 0 TRAC (3) Ω

STS 0 Other 0

Cost-sharing:

Government \$9,090,000 Financial institution Third party

TOTAL \$9,090,000

Administrative and Operational Services.

SOF (03) (10%) \$ 909,000 SOF (07) \$ Others (cost-sharing)

TOTAL \$9,999,000

Government inputs: (local currency)

(in kind) (in cash)

LPAC approved date: 05/08/1999

BPAC approved date: N/A

Programme officer: Amal El-Moghrabi

Brief description: This project supports a national long-term plan for the development of specialized secondary schools and technical education in general. It will: 1) Support curriculum review for specialized secondary schools and preparation of textbooks; 2) Develop Informatics education curriculum for and provide equipment for selected 40 specialized schools; 3) Prepare curriculum for technical teacher training assist in setting up specialized departments; 4) Develop informatics education in the Intermediate vocational centres and provide equipment for 30 centres; 5) Develop curriculum for existing and new disciplines in technical and vocational education; 6) introduce informatics education in 44 Pilot basic education schools.

ON behalf of:

Government

Executing ager

Date

Name/Title

Ma'toug Mohammad Ma'toug ecretary of Education

Resident Repre

UNDP

United Nations Official exchange rate per US Dollar is Libyan Dinar 0.473

A. Context

1. The development problem being addressed

Libya is a large country with abundant resources and a small population of nearly 4.4 million with a very high growth rate. Since 1969, top priority has been given to human resource development through the provision of free education at all levels. Almost full enrolment in basic education (grades 1-9) for the age group (6-15) has been achieved, with 1,153,385 enrolled in 1998/99. At the secondary level, enrolment reached 245 290 students in nearly 1000 schools, about 80% of the relevant age group. In higher education, nearly 35.4% of the age group were enrolled in the 14 universities and 58 higher technical institutes. At present,, the total number of students enrolled in all levels of education is 1.8 million which is 40.3% of the population. Female participation in education, especially at the basic and secondary levels is almost 50% of the total.

The 'New Educational Structure' adopted in Libya since 1982 placed great emphasis on the development of vocational education through vocational training centres as well as vocationalizing general secondary education. The 'Specialized Secondary Schools', first introduced in 1984, aimed at contributing further towards the country's employment needs more directly and swiftly. However, the new schools faced various constraints and difficulties that re uired urgent attention. Following a review of the new system in the early 1990s, the new schools were re-launched in 1996 with six types of specialized schools: basic sciences, engineering sciences, life sciences, social sciences, economic sciences and arts and information, offering a total of 17 specializations. They are intended to gradually replace all general secondary schools but no time-scale has been decided yet. In 1998/99, there were 241 specialized schools with 32 063 students. In 1999/2000, the Secretariat of Education plans to open another 193 specialized schools. Nevertheless, serious constraints need urgent attention especially with regards to curriculum development, technical teacher training, textbooks and training facilities.

This project stems from the new priorities of the Secretariat of Education and the need to address the main problems facing specialized secondary education in particular, and technical and vocational education in general. The Secretariat of Education refuested UNDP and UNESCO to re-formulate and unify the five projects (LIB/97/009-013) signed in 1997 that were concerned with the 'Introduction of computer education', 'The enhancement of English Language teaching', 'Textbook production', and the 'Introduction of educational technology'. Due to various difficulties and changes, the implementation of the five projects were delayed and some of the activities envisaged in them were undertaken by the education authorities. The new project takes into account the present priorities of educational development as well as some of the relevant activities of the previous projects. Special emphasis is placed on the upgrading of educational content through curriculum development for secondary and technical education, the training of technical teachers, the introduction of modern educational and information technology and the introduction of computer education in basic education.

2. Previous experiences and lessons

The concept of vocationalizing secondary education in Libya is a radical and pioneering reform in the Arab countries. Diversifying secondary education in order to provide an easier transition to labour market and/or higher education is most appropriate at this stage in the development of the education system. The dual objectives of the new schools re uire a delicate balance in the design of the curriculum. As yet, there is little experience in the country in the field of curriculum development and technical teacher training for this type of education. However, there are abundant and varied experiences in this regard in several European, South American, Asian and African countries, such as comprehensive schools and polytechnic schools, that can be of benefit to Libyan educators and planners.

An important element in the curriculum of the new schools is the introduction of informatics in the four-year duration of study. The use of computers is seen by the Secretariat of Education to be an important tool that can be gradually used in the delivery of the rest of the curriculum (where appropriate), and in school administration. It is also recognized that educational technology approach should be adopted as soon as possible. The combination of informatics teaching and educational technology is expected to have an effect on the whole school system and to introduce changes in content and pedagogy. Experiences from other counties in curriculum development and teacher training in informatics for various levels and disciplines as well as the use of educational technology will enhance the work of the limited available ualified staff in Libya.

3. The development objectives

The Libyan Arab Jamahiriyia has given a high priority to human resource development in general and to education in particular. A high percentage of the public budget is allocated to education. The development of human resources is seen as a prere uisite for sustainable national development and a diversification of its economy through the availability of skilled manpower. The main area of priority identified in UNESCO Reports: TSS-1 Educational Advisory Mission to Libya (7-21 May 1994), Specialized and Vocational Secondary Education (10-22 December 1998), is the ualitative improvement of secondary and technical education. The findings of these reports gave special priority to curriculum development, training of technical teachers for specialized secondary schools, development of informatics education for secondary and vocational education and the introduction of computer education in basic education.

The development of updated curriculum for the specialized secondary school and the training of competent technical teachers will have important conse uences on the uality of education and the achievement of the set objectives of the new system. Based on the new curriculum, measures can then be taken to prepare the textbooks and teaching materials, provide the necessary facilities and train the teaching staff. At the same time, the introduction of educational technology and information technology as important tools

in education will enhance the uality of education and enable the students to handle modern technology in the 21st century. To start with, selected specialized secondary schools, intermediate and vocational centres throughout Libya will be provided with IT laboratories and facilities. They will be 'models' for further provisions by the Secretariat of Education to other schools in the future.

4. Project Strategy

The National Centre for the Planning of Education and Training of the Secretariat of Education in Tripoli is the central authority responsible for the preparation and development of curriculum and textbooks for the basic and secondary education in Libya. Working through the NCPET, as the national executing institution, and in close cooperation with central and local education authorities, schools and higher institutes, the project will aim to provide support in curriculum development, technical teacher training, informatics education, preparation of textbooks and introduction of informatics in basic education.

As a first step, the curriculum for the specialized secondary schools in engineering sciences, life sciences and basic sciences will be reviewed with the participation of national and eleven international consultants culminating in a 'curriculum workshop' to be held in Tripoli. Following its adoption, the revised curriculum will be the basis for the preparation of textbooks and other teaching materials for the various disciplines. The project will assist in the provision of e uipment, software packages and reference books to enhance NCPET capability of producing better uality and camera ready textbooks.

The revised curriculum will also be the basis for the preparation for technical teacher training for the specialized schools. The disciplines that are most critical and considered first priority are in engineering sciences (mechanical, electrical and electronics, building and construction and natural resources) and in life sciences (health sciences). A team of eight international consultants will assist in the preparation of the appropriate curriculum for these disciplines and advise on the needs for e uipment and teaching and technical staff. They will also assist in identifying the most cost effective and appropriate locations for the proposed specialized technical teacher training departments to be established in three or four of the Higher Teacher Training Institutes or other related institutes selected from various regions. Once a decision is taken on the findings of the first team of consultants, other consultants will be recruited at various times during the project duration to assist in the setting up of the new departments, training of staff, procurement of e uipment and evaluation and assessment.

The introduction of educational technology and development of informatics education in the specialized schools will begin in the first year with the recruitment of four international consultants. They are to help revise and update the curriculum and prepare the specifications and e uipment lists for modern computer (networked) laboratories for 40 specialized schools selected on the basis of a minimum of one school in each of the 26 administrative region in Libya. The informatics teachers from these

schools will be trained first locally in an intensive course for one month in cooperation with the Higher Institutes for Computer Technology in Tripoli and Benghazi. Training abroad for the 40 teachers (in two groups) for two months will follow. Further assistance and training will be provided to the teachers during the project period to enable them to make their schools as truly 'model' schools.

In the second year similar efforts will be directed towards upgrading the teaching of informatics in the Intermediate Vocational Centre. Four international consultants will also be recruited to assist in the revision of the curriculum and advise on the euipment re uirements. Thirty IVCs will be selected on similar basis as before, i.e. at least one from each administrative region in Libya, to be provided with modern (networked) computer laboratories. The teachers of informatics from the 30 IVCs will be trained in the same way as those from the specialized schools, for one month locally and two months abroad. The selected IVCs will also serve as models to be replicated by the Secretariat of Education in the other 300 centres. The pilot schools and IVCs must play a role of helping in spreading out of expertise to their neighbouring schools when it is decided that they are ready to do so and when there is a commitment to supply those schools with the necessary facilities from the Secretariat funds.

Another objective of the project is the introduction of informatics education in basic education in an experimental basis. International consultants will be recruited to assist in the preparation of curriculum appropriate to the age group and level of study. They will also advise on e uipment re uirement for introduction to basic information technology. A total of 44 experimental or 'Pilot' schools will be selected, at least one from each of the 26 administrative regions of Libya. Local training in intensive courses and workshops will be arranged for the teachers from the selected schools, and continuing assistance and supervision will be arranged through the higher institutes or neighbouring 'pilot' specialised schools or IVCs.

5. Beneficiaries

The target beneficiaries of the project are, in the first instance, all the students in the specialized secondary education system who will receive an upgraded and refined curriculum more relevant to their future employment and/or education. The number of students in specialized secondary education was over 32000 in 1998/99 out of a total of 245000. By the time all general secondary schools are replaced by the new schools, as planned, the total number of students who will ultimately benefit from the improved pedagogical content will be all Libyan students going through the educational system regardless of gender.

The students will also benefit from the improvement in the uality of the textbooks and other teaching materials. By the end of the third year, the National Centre for Planning of Education and Training will have a substantially increased capability for

textbook and teaching aids preparation and production, using appropriate methodology and technology.

The upgrading and revision of the curriculum in informatics for the specialized schools and IVCs will benefit all students in those institutions. In addition, the provision of modern computer laboratories and the training of informatics teachers in the 40 specialized schools and 30 IVCs throughout Libya will have direct impact on the uality of teaching and training. Training of 70 informatics teachers locally and abroad will enhance their competence and ability to pass that competence to students in their schools. Over 15000 students on average will directly benefit each year from the new facilities and trained teachers. Employers will also benefit from school leavers having information technology skills. The trained informatics teachers will also act as resource persons in their schools and centres to promote the educational technology approach in the teaching of all other subjects. Educational technology e uipment will also be provided by the project to the selected schools and centres.

The experimental introduction of informatics in basic education will be an important first step in the future outlook of education for the coming century. The use of information technology is gaining rapidly in Libya, and all students in basic education will benefit greatly from the inclusion of informatics in their curriculum.

6. Regulatory framework

The project will support the efforts to vocationalize secondary schools and develop informatics education and training across secondary and basic education. Within the Secretariat of Education, curriculum development is the sole responsibility of NCPET. The envisaged activities of the project that involves the specialized schools, intermediate vocational centres, basic education schools and higher institutes would re uire the active cooperation of various department within the Secretariat of Education. The departments most concerned are the Directorate of Intermediate Secondary Education, the Directorate of Higher Institutes, the Directorate of Basic Education and all local education authorities in the 26 administrative regions in the Jamahiriya.

7. National resources

The Secretariat of Education is totally committed to the vocationalizing of secondary education and the improvement of the uality of education through curriculum development, teacher training and the extensive use of educational and information technology. It has accepted the main findings of UNESCO missions of 1994 and 1998 and recognizes that its investment, outside the funds directly related to the project, is in training, courseware, hardware and technical assistance in order to fulfil the goals of the project.

National counterpart consultants are expected to work closely with international consultants especially in curriculum development, teacher training and informatics. The

project will draw on the human resources, educators and teachers, available at the National Centre for Planning of Education and Training as well as those in the targeted schools, intermediate vocational centres and higher institutes. There is a wealth of potentially capable individuals available in the country that can be recruited at the appropriate time to assist in the various activities of the project.

B. Strategy for Use of UNDP Resources

This project aims at the enhancement of the national capacity for sustainable human resource development that falls well within the UNDP mandate. Through training of personnel and technical assistance, UNDP/UNESCO intervention will contribute to capacity building in the education sector in order to promote uality and competence. The activities of the project will enhance existing or initiate new educational practices that are sustainable within the Libyan educational system. At the end of the project period, the outcomes will become integral parts of the normal work of the Secretariat of Education with a wealth of added expertise and capacity for future development and improvement.

The need for UNDP/UNESCO support for the current efforts to vocationalize secondary education as well as other aspects of uality enhancement measures were clearly identified in the above mentioned two UNESCO Reports of 1994 and 1998. The Secretariat of Education accepted the main recommendation and sought UNDP help in three main areas, recruitment of international consultants, training of teachers and educators and procurement of educational e uipment.

UNDP will be re uired to keep a close eye on the budget and implementation of the project, especially with regard to the imports of e uipment for educational purposes. The Secretariat of Education has re uested help from UNDP and UNESCO (as the executing agency) in the running of the project to provide access to the wide international expertise and resources that can be utilized to achieve the set goals. The local UNDP offices, working very closely with the staff of the Secretariat of Education, will be able to provide valuable support for the project activities and maintain effective monitoring of progress at each stage of implementation.

C. Immediate Objectives, Outputs, Indicators and Activities

1. Objective 1:

Set-up Project Management Unit at the National Centre for Planning of Education and Training.

1.1 Output I:

Appoint Project Manager, Administrative Assistant and Secretary.

Activities

1.1.1 Advertising for and appointing a Project Manager. This will be done by UNDP and UNESCO in consultation with the National Project Coordinator and the Secretariat of Education 9SEE Annex V: Job Descriptions).

1.1.2 Advertising for and appointing an experienced Administrative Assistant and Secretary (see Job Descriptions, Annex V). This will be done by UNDP, UNESCO, National Project Coordinator and PM in consultation with the Secretariat of Education.

1.2 Output 2:

To prepare and e uip the Project Unit site. The site will be provided by the Secretariat of Education-National Centre for Planning of Education and Training, and will be e uipped to the standard agreed, including e uipment ordered in this project.

Activities

1.2.1 The designated site is refurbished and made secure.

1.2.2 Furniture and e uipment are ordered and delivered, including transport, computers, photocopying, communication, etc.

1.2.3 Set up administrative procedures for the smooth operation and management of the project in consultation with UNESCO, UNDP and the Secretariat of Education.

1.2 <u>Output 3:</u>

To up-date the experience of the appointed PM.

Activities

1.3.1 The PM go on a two-week study tour to UNESCO for briefing and visit centres concerned with curriculum development, informatics and technical teacher training.

1.3.2 UNESCO appoints short-term consultant (for one month) to assist in the initial

activities of the project and plan the first year activities in detail.

1.3.3 The consultant should make further visits at regular intervals (every nine-twelve month) to give assistance in the planning and implementation of various activities for the duration of the project.

2. Objective 2

Curriculum development for specialized secondary schools and other vocational and technical education institutions

2.1 Output1:

Revised and refined curricula for basic sciences, engineering sciences and life sciences,

Activities

- 2.1.1 Translate proposed curricula and syllabi into English in preparation for review by international consultants.
- 2.1.2 Identify and recruit international consultants in the field of vocationalized secondary education.
- 2.1.3 Send proposed curricula to international consultants for first review.
- 2.1.4 Send experts comments to national curriculum technical committees.
- 2.1.5 Coordinate preparation of Curriculum Workshop to be held in Tripoli for three weeks.
- 2.1.6 Curriculum Workshop is held for in-depth review of the curriculum of the three types of schools and attended by international and national experts.

Prepare final version of the curricula ready for adoption by SoE.

2.2 Output 2:

Technical assistance for the preparation of textbook manuscript and other teaching materials.

Activities

- 2.2.1 Procure a selection of references, textbooks and teaching materials from international sources appropriate for vocationalized secondary education.
- 2.2.2 Procure computer hardware and software, photocopying machines and other e uipment for the preparation of the pre-print textbooks manuscripts and teaching materials.
- 2.2.3 Procure teaching aids, software packages and other materials for the enhancement of the production of teaching materials.

2.3 <u>Output 3:</u>

Enhancement of curriculum development activities at NCPET.

Activities

- 2.3.1 Training abroad of senior staff of the curriculum division of NCEPT in the development and evaluation of curriculum for technical and vocational education.
- 2.3.2 Organize training of selected staff in the field of educational planning such as IIEP Paris.
- 2.3.3 Assist in the development and application of Evaluation and Management Information System EMIS, and train the NCPET staff in study tours abroad.
- 2.3.4 Assist NCPET in the local training of textbook authors and other senior educators involved in the preparation and development of curriculum for various technical and vocational specializations.

3. Objective 3:

Development of information technology education in specialized schools

3.1 Output 1:

Revision and upgrading of informatics curriculum to suit various disciplines

Activities

- 3.1.1 Recruit international consultants for short assignments
- 3.1.2 Revise and evaluate teaching of computer education.
- 3.1.3 Link revised curriculum to local needs and market.
- 3.1.4 Select centres of excellence in Tripoli, Benghazi, Sirte and Sebha to serve as focal points for training activities.

3.2 Output 2:

Installation of model computer laboratories in selected (40) specialized secondary schools throughout Libya.

Activities

- 3.2.1 Prepare detailed e uipment lists and specifications including 19 workstations networked with a server.
- 3.2.2 Procure e uipment.
- 3.2.3 Installation, testing and operation of laboratories.
- 3.2.4 Train personnel on operation in cooperation with local experts from Higher Institute for Computer Technology in Tripoli, Benghazi or others.

3.3 Output 3:

Training of IT teachers on new curriculum

Activities

- 3.3.1 Organize workshops in various regions to familiarize teachers with new curriculum.
- 3.3.2 Organize local training courses for teachers from the 30 selected schools in cooperation with HICT, Tripoli and Benghazi.
- 3.3.3 Organize training abroad in study tours or appropriate courses for the teachers from the 40 schools.
- 3.3.4 Evaluate and review the achievement in the implementation of the curriculum and carry out further improvements and adjustments.
- 3.3.5 Assist in helping other schools in the use of the new curriculum.

Updated and revised curriculum for informatics in the intermediate vocational centres

Activities

- 5.1.1 Recruit international consultants in teaching of informatics for short assignments
- 5.1.2 Revise and evaluate teaching of informatics in IVCs.
- 5.1.3 Develop appropriate curricula to meet the needs of various disciplines.
- 5.1.4 Develop effective training programmes in specialized departments in the Polytechnics for computer operators.

5.2 Output 2:

The provision of model computer laboratories in selected (30) IVCs

Activities

- 5.2.1 Prepare detailed e uipment lists and specifications for model laboratories, including 19 workstations networked with a server.
- 5.2.2 Arrange the procurement of e uipment and software.
- 5.2.3 Installation, testing and operation of laboratories.
- 5.2.4 Train personnel on operation in cooperation with local experts from Higher Institute for Computer Technology in Tripoli, Benghazi or others.

5.3 Output 3:

Preparation of appropriate teaching and training materials and software

Activities:

- 5.3.1 Recruit international and national experts in informatics.
- 5.3.2 Prepare teaching and training materials for the various disciplines.
- 5.3.3 Prepare or adapt software for training purposes in the various specialisations.
- 5.3.4 Test the use of the new materials in selected centres.
- 5.3.5 Refine the teaching materials into 'teaching packages' for distribution to all IVCs.

5.4 Output 4:

Training of IT teachers on new curriculum

Activities

- 5.4.1 Organize workshops to familiarize teachers with new curriculum.
- 5.4.2 Organize local training courses for teachers from the selected IVCs in cooperation with HICT, Tripoli and Benghazi.
- 5.4.3 Organize training abroad in study tours or appropriate courses for the teachers from the IVCs.

Activities

- 7.1.1 Recruit international consultants to help develop curriculum.
- 7.1.2 Develop appropriate curriculum for targeted levels and age groups.
- 7.1.3 Assist in the preparation of teaching materials and teaching aids.
- 7.1.4 Prepare lists of e uipment, textbooks and software necessary for the effective implementation of the curriculum.

7.2 Output 2:

The provision of basic e uipment for computer laboratories in selected (44) 'Pilot' schools.

Activities

- 7.2.1 Prepare detailed e uipment lists and specifications for computers for the 44 Pilot schools.
- 7.2.2 Arrange the procurement of e uipment and software.
- 7.2.3 Installation, testing and operation of e uipment.
- 7.2.4 Train personnel on operation in cooperation with local experts from Higher Institute for Computer Technology in Tripoli, Benghazi or others.

7.3 Output 3:

Training of teachers on informatics curriculum.

Activities

- 7.3.1 Organize workshops to familiarize teachers with new curriculum.
- 7.3.2 Organize local training courses for teachers from the selected Basic Education schools in cooperation with HICT, Tripoli, Benghazi or others.
- 7.3.3 Evaluate and review the achievement in the implementation of the curriculum and carry out further improvements and adjustments.
- 7.3.4 Assist other schools in the use of the new curriculum.

8. Indicators to monitor progress

Table 1 shows a summary of the indicators for monitoring progress towards producing the outputs listed above.

D. Inputs

Government inputs

Premises

- Offices for the Project Unit: at or near the main building of the National Centre for Planning of Education and Training.
- Offices for the staff of the Unit and visiting consultants and in-service training, meeting room, storeroom.
- Furniture (desks, etc.), air-conditioning.
- Car parking space.
- Telephones and fax with ISDN connections, Internet link.
- Repair, maintenance and operational costs for building and furniture.

Personnel

- 2 support staff (orderly/ tea boy).
- 3 Drivers
- Additional secretarial assistance as and when needed.

Training

- Transportation, accommodation and allowances for all trainees (informatics teachers, trainers, etc.) to and from districts and within districts.

Financial contribution

- Recurrent cost of Project Unit.
- Salary of support staff.
- Cost of installation and wiring for the informatics laboratories.

UNDP inputs

Project Personnel

- Project Manager to act as the chief executive officer and the link with UNESCO, UNDP and the Secretariat of Education and coordinate all the project activities (see Job descriptions, Annex V). He should be on site as soon as possible after the project document has been signed in order to commence the setting-up of the Project Unit, the installation of e uipment, and the planning for implementation of activities, (total 36 man-month)
- Administrative Assistant with good English and computer skills, (36 man-month)
- Secretary with good English and computer skills, (36 man-month)

Consultants

- Eleven short-term consultants (including Team Leader) for curriculum review for the specialized secondary schools (total 19 man-month).
- Eight short-term consultants (including Team Leader) for the preparation of technical teacher training curriculum, (total 28 man-month)

- Four informatics education consultants for the specialized schools, (total 16 manmonth).
- Eight informatics consultants (unidentified) for the specialized schools (total 16 manmonth).
- Four informatics education consultants for the intermediate vocational centres, (total 16 man-month).
- Ten informatics consultants (unidentified) for IVCs (total 20 man-month).
- A planning consultant for short-term assignments, (total 4 man-month)
- Two evaluation consultants for short-term assignments, (total 1 man-month)
- Sixteen unidentified consultants for short-term assignments, (total 20 man-month).

Sub-contracts

- Two main sub-contracts for local training in cooperation with local institutions.

Training

- Study tours for National Project Coordinator, and Project Manager.
- Local group training for informatics teachers in specialized secondary schools in cooperation with the Higher Institute for Computer Technology, Tripoli and Benghazi.
- Group training abroad for two month for informatics teachers from specialized school.
- Local group training for informatics teachers in Intermediate Vocational Centres in cooperation with the Higher Institute for Computer Technology, Tripoli and Benghazi.
- Group training abroad for two month for Informatics teachers from intermediate vocational centres.
- Study tours for teachers and educators involved in technical teacher training.
- Study tours for senior educators involved in curriculum development and the production of teaching materials and textbooks.
- Fellowships for informatics, curriculum development, technical teacher training, educational planning and educational management information systems, (total 72 man-month)

Equipment

Detailed e uipment lists and specifications will be prepared by the international consultants and UNESCO for each part of the activities of the project. The e uipment lists shown in Annex IV are only indicative and as a general guide.

The 40 selected specialized schools will be typically provided with microcomputers and e uipped with one server and 19 workstation networks as shown in Table IV-1. The same arrangements will be made for the 30 intermediate vocational centres. For the 44 basic education schools, a number of microcomputers with multimedia facility will be

provided in accordance with the curriculum that will be prepared and the available resources. Educational technology e uipment will also be provided to the specialized schools and IVCs. Table IV-2 is a typical e uipment list for educational technology.

The Project Unit will be provided with basic office e uipment, microcomputers and educational technology e uipment for training purposes (Table IV-3). In addition, four vehicles will be provided for the transportation of personnel and consultants in their work throughout Libya.

E uipment lists and specifications for other e uipment, such as those for the preparation of textbooks and teaching materials, will be prepared as soon as possible by the Project Unit with the assistance of the international consultants.

E. Risks and Prior Obligations

The project is dependent on the provision of suitable premises for the project unit and the continued enthusiastic support of the Secretariat of Education. Any delay in the selection and appointment of the Project Manager must be avoided if the project is to be implemented as planned. The project team, PM and consultants must be given access and parameters within which they can operate, e.g. in the selected schools and centres.

It is also assumed that there will be ade uate ualified informatics teachers, with university degrees in computer science, on the staff of the specialized schools and intermediate vocational centres to be trained for the selected schools and centres.

Some of the risks may be related to;

- The problem of maintenance and the need for discipline in the use of computers, peripherals and audio-visual aids cannot be over-stressed. Maintenance and good practice would make the necessity for repairs less fre uent.
- Unless a supply of spare parts is ensured, the computers and other e uipment supplied to the schools through the project will not be able to function for long.
- There is a danger of computer viruses infecting the systems unless a strict discipline in maintained.
- The selected schools and IVCs must prepare the sites for the informatics laboratories in good time to facilitate installation. The sites must have the necessary power supply distribution, air-conditioning, dust-proofing and furnishing.

F. Management

The management of the project will relay mostly on national ualified personnel. A Project Manager who will be based in Tripoli, within or near the premises of the National

Centre for Planning of Education and Training will carry out the planning and execution of the project activities. He will be working under the direct supervision of the General Director of NCPET who will be the National Project Coordinator. All activities concerned with curriculum development and planning will be channeled though the Centre. The NCPET is also in an ideal position to coordinate other activities relating to all specialized schools, intermediate vocational centres, higher institutes and basic education schools.

The Project Unit will have, in addition to the PM, a core team of personnel consisting of an administrative assistant, secretary, drivers and other assistants. It will be able to call on extra help from NCPET at times of increased activity.

The Project Manager, in consultation with the National Project Coordi, will prepare the work plans. It is envisaged that a UNESCO consultant for planning will assist the PM at the start of project implementation and pay regular visits to the project for the same purpose in the following years. A steering Committee should be set-up to assist the Unit in the implementation of the work plans.

UNESCO as the executing agency will have the main task of managing the various activities outside Libya that are concerned with recruitment of consultants, training, procurement of euipment, monitoring and coordination. UNDP will also have an important role in the coordination and monitoring of the project.

G. Monitoring and Evaluation

The project will be subject to tripartite annual review (Government, UNDP and UNESCO). The review team, meeting in UNDP Tripoli, each time will have reports from:

- The Project Manager (the Project Performance Evaluation Report PPER)
- An independent international evaluator who will have spent a week with the project shortly before the review meeting.

The last of these reviews will consider the Project Terminal Report. This will be prepared in draft sufficiently in advance to allow for review and technical clearance by UNESCO, the executing agency, at least four months prior to the terminal tripartite review.

It is suggested that the project be visited by the evaluator 12 months after it has officially finished to review (and report back to UNESCO) on evidence of its continued influence (post-summative assessment).

H. Legal Contexts

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of the Libyan Arab Jamahiriya and the United Nations Development Programme, signed by the parties in 1976.

The country's implementing agency shall, for the purpose of the Basic Standard Agreement, refer to the Government co-operating agency described in that agreement.

The following types of revisions may be made to this project document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the project document have no objections to the proposed changes:

- (i) Revisions in, or addition to, any of the annexes of the project document.
- (ii) Revisions which do not involve significant change in the immediate objectives, outputs or activities of a project, but are causes by re-arrangement of inputs already agreed to or by cost increases due to inflation; and
- (iii) Mandatory annual revisions that reshape the delivery of agreed projects inputs, or reflects increased expert or other costs due to inflation, or take into account agency expenditure flexibility.

<u>I. Work Plan</u>

Annex 1 gives the main milestone dates for the project and Table 1 shows a tentative work plan for the first twelve months. The Project Manager in consultation with the National Project Coordinator prepares the detailed work plan for all the objectives, outputs and activities.

J. Budgets

The following budget sheets are attached:

- Project Budget covering UNDP/Government Contribution
- Project Budget and Payment Schedule

ANNEXES

June 2002

Annex I	<u>Work Plan</u>

Appoint Project Manager as early as possible October 1999 Appoint Administrative Assistant and Secretary Project Unit site prepared PM briefing at UNESCO and meeting with consultants. Curriculum Workshop held in Tripoli for three weeks Steering Committee formed November 1999 Specialized schools' curriculum finalized Preparation for curriculum team for technical teacher training December 1999 Activity with selected 30 specialized schools commence Meetings with informatics teachers from selected schools Development of curriculum for informatics in specialized schools January 2000 Team for technical teacher training assemble in Tripoli Planning of local training course for Informatics teachers February 2000 Planning of local training course in educational technology Procurement of euipment for informatics & educational March 2000 technology Planning of group-training abroad in informatics & educational April 2000 Local training course for informatics teachers Local training for informatics teachers in educational technology May 2000 Group training abroad (informatics & educational technology) June 2000 Preparation of First Year report July 2000 Delivery & installation of e uipment in schools. August 2000 Visit of external Evaluator, Tripartite Review. October 2000 Second Tripartite Review. October 2001

Preparation of Terminal Report

October 2002

Project closes

Final Tripartite Review

October 2003

Post Summative Evaluation

Annex II Schedule of project reviews, reporting and evaluation

Tripartite reviews will take place 12, 24 and 36 months after the beginning of the implementation of the project. A project report will be put before each review by the PM and an independent evaluator who will visit the project for a week before each review (see Section G above). The last (36 month) Tripartite review will receive draft "Project Terminal Report" at least 4 months before the review.

It is suggested that senior staff and the steering committee have meetings at regular intervals to review together the project's progress and fine tune strategies adopted.

Annex III Training Programmes

The Project has many training programmes.

(1) For the Project Manager

A study tour for two weeks, first for briefing at UNESCO Head uarters and then to educational institutions, looking at:

- Strategies used for the support of change
- Educational Technology and Informatics Centres
- Training courses (pre-service and in-service)
- Books, software and course materials.
- Assessment practice.
- Classroom practice.

(2) For informatics teachers of specialized schools and intermediate vocational centres

After selection of the targeted 'model' schools, the 40 informatics teachers will receive intensive courses, both locally and abroad. The courses will cover many aspects of information technology, educational technology and instructional design, leaving them confident users of computers and other learning and teaching aids in their subject speciality and e uipped to some extent to help other teachers to change their practice. They will act as special school computer and educational technology advisors and help their colleagues who are new to computer use as well as teaching their colleagues their speciality, informatics.

The courses will be planned in UNESCO, Paris and Tripoli, in detail by the PM, and 2 or 3 international training consultants. Some of the following are likely to be included in the syllabus:

- Introducing teachers to information technology.
- Preparing teachers for pedagogical use of computers.
- Learning how to organize group-work with only a few computers or limited resources.
- Training in lesson design. They will have to write lesson materials, analyze the learning tasks and prepare good examples for using the computer and other resources in their curriculum subjects. This will involve becoming ac uainted with what software and other resources are available and appropriate.

The courses will aim to put all content into a classroom-related context but, in the early stages, their will have to be lessons in basic "housekeeping" of using a computer and other e uipment. Inevitably some materials and software will re uire knowledge of some English

They will probably be expected to undertake a project, using computers with any appropriate resources available and an educational technology approach.

Training will continue, formally from time to time, throughout the Project duration to ensure that by the end of the project, Libya will have an effective in-service training/curriculum design personnel.

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Table IV-3: E uipment for Project Unit.

· · · · · ·	Description	No.
1	Vehicles	4
2	Computer, Pentium II with modem, CD-ROM, etc.	3
3	Laser Printer	2
4	Fax/telephone	1
5	Scanner	3
6	Punches (sets)	l
7	Screens	1
8	Data show	2
9	Laminating e uipment	1
10	Guillotine	1
11	Non-expendable graphics e uipment- various	1
12	Air-conditioning	1
13	Books and curriculum materials for Library	1
14	Curriculum software collection	1

Annex V Job descriptions

(a)

Post title:

Project Manager

Duration:

36 months

Date Re uired:

October 1999

Duty station: Tripoli

Duties:

- 1. To liaise and coordinate with the Secretariat of Education all aspects of the project.
- 2. To be overall responsible for the project management and delivery of the inputs for the various activities of the project.
- 3. He is responsible for the educational drive and direction of the project, for solving problems of content and methodology and keeping everyone informed (including UNESCO, UNDP and the Secretariat.
- 4. To be responsible for the scheduling and carrying out of formative and summative evaluation for all aspects of the project, including the collection of baseline data as re uired.
- 5. To be responsible for all courses and relations between trainer/trainee and evaluation.
- 6. He must ensure a close liaison with the curriculum development department of NCPET, curriculum technical committees, all the chosen specialized secondary

schools and IVCs throughout Libya, the chosen Higher Institutes, for Teacher Training, Specialized Technical and Computer Technology.

Attributes

- Experience of working in difficult situations;
- Ability to find creative solutions to situations which arise;
- Good people and management skills;
- Good planning abilities;
- Thorough knowledge of the government and the Libyan education service.

Experience:

- At least 15 years relevant professional experience;
- Practical experience of operating in a secondary school context;
- Wide experience in giving and arranging training, and designing training courses and syllabi;
- A sound background in administration and education;
- Experience of project management and managing people;
- Experience in computing, curriculum design and material development in an education technology/computer context is an advantage;
- Competence in the field of technical teacher training.

Qualifications: University doctorate level, or MA, in computer science, educational technology, engineering or other related fields but with sound experience in curriculum development.

Languages: Arabic: Mother tongue, Very good knowledge of English.

(b)

Post title: Administrative Assistant

Duration: 36 months

Date re uired: October 1999

Duty station: Tripoli

Responsible to: Project Manager

Duties: Appointed by a committee that includes representatives from the Secretariat of Education, UNDP, UNESCO and the Project Manager. He/she works under the supervision of the PM and provide support in all administrative, organizational and technical activities in the project. This includes all accounting, supervision of support staff. He/she will carryout such other duties and assignments as the PM might reasonably assign to him/her from time to time.

Qualifications: Graduate (BA) and/or recognized ualification in management or accounting with proven successful and wide experience in project management

and new technologies. He/he must have at least 15 years experience with good computer skills (especially word-processing).

Languages: Mother tongue: Arabic; very good knowledge of English.

(c)

Post title: Secretary
Duration: 36 months

Date re uired: October 1999

Duty station: Tripoli

Responsible to: Project Manager

Duties: Appointed by a Committee that includes representatives from Secretariat of Education, UNDP, UNESCO and the Project Manager. He/she works under the supervision of the PM and in collaboration with the Administrative Project staff. He/she is responsible for providing secretarial support to the Project Unit, PM and visiting consultants.

Qualifications: Recognized unlification in office management with proven and wide experience in secretarial work and new technologies. He/he must have at least 10 years experience as a secretary with good computer skills (especially word-processing).

Languages: Mother tongue: Arabic; very good knowledge of English.

Annex VI Terms of Reference for Consultants

VI.1 Curriculum Review for specialized secondary schools

VI.1.1 Terms of Reference for International Consultants

- 1. Review the proposed curricula (Arabic/English) in his field of specialization for the engineering sciences, life sciences, or basic sciences and submit an initial report on their content and suitability to the level of study in comparison with similar standards in other countries. The comments should be completed within 2 weeks and sent to UNESCO and SoE.
- 2. Attend the workshop to be held in Tripoli for 3 weeks to carry out in-depth review of the curriculum in his field of expertise with Libyan experts. At the end of workshop, the detailed curriculum including content distribution per week for the theoretical and

- 6. Prepare a programme for the training for the teaching staff for the new departments.
- 7. Assignment duration for the international consultants is for two months, including report writing.

VI.2.2 Terms of Reference for UNESCO Coordinator (Team Leader)

- 1. Participate in the recruitment of suitable consultants for the various disciplines.
- 2. Act as a consultant in his own field of specialization or competence as given above.
- 3. Co-ordinate the work of the team of international consultants in Tripoli with national counterparts to ensure the smooth and fruitful conclusion of the consultants' mission.
- 4. Submit a final report to UNESCO/ SoE on the findings, recommendations and suggestions of the team.
- 6. The Team leader should be assigned and commence work one month before the rest of the team. His assignment is for the duration of the project activities outlined in Section C: Objective 4, outputs 1-3 (expected to be for 4 months).

VI.3 Terms of Reference for planning consultant

- 1. Assist the Project Manager in the preparation of the first detailed work plan, including all the activities, at the start of the project.
- 2. Make regular visits, for one month every calendar year, to assist in the development and refinement of the annual work plans for the later stages of the project.
- 3. Help in the regular evaluation of the progress made in the implementation of the project.
- 4. Assist in the preparation for budget revisions to meet the changing situation in implementation.

VI.4 Terms of Reference for informatics consultant for the specialized schools

- 1. Review informatics curriculum for the specialized secondary schools (in engineering sciences, life sciences, and basic sciences), and suggest changes for updating and upgrading.
- 2. Prepare detailed e uipment lists for networked computer laboratories with 19 workstations, software and educational technology e uipment with full specifications.
- 3. Visit the 40 selected specialized schools and assess suitability for installing the new computer laboratories (such as availability of space and ualified teachers).
- 4. Prepare for the one-month local training course for informatics teachers from the selected schools in cooperation with the Higher Institutes for Computer Technology in Tripoli and Benghazi.
- 5. Participate in workshops to familiarize the teachers with the new curriculum.

- 6. Assist in the supervision of the installation, operation of the new laboratories, and onsite training of teachers.
- 7. Prepare outline for the two-month training course for informatics teachers abroad.

VI.5 Terms of Reference for informatics consultant for the intermediate vocational centres

- 1. Review informatics curriculum for the IVCs and suggest changes for updating and upgrading to meet the needs of the various specializations.
- 2. Prepare detailed e uipment lists for networked computer laboratories with 18 workstations, software and educational technology e uipment with full specifications.
- 3. Visit the 30 IVCs and assess suitability for installing the new computer laboratories (such as availability of space and ualified teachers).
- 4. Prepare for the one-month local training course for informatics teachers from the selected centres in cooperation with the Higher Institutes for Computer Technology in Tripoli and Benghazi.
- 5. Participate in workshops to familiarise the teachers with the new curriculum.
- 6. Assist in the supervision of the installation, operation of the new laboratories, and on-site training of teachers.
- 7. Prepare outline for the two-month training course for informatics teachers' abroad.



United Nations Development Programme

C/S Schedule of Payments

Project

Main Source of Funds AOS Source of Funds Executing Agency Budget Currency LIB/99/003//

DEVELOPMENT OF SPECIALIZED SCHOOLS UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)

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UNESCO - United Nations Educational, Scientific & Cultural Org.

USD

Subline Donor	Year	Date	Scheduled Amount	Budgeted Amount	Balance
101.01 LIB				;	
	1999				
		10/07/1999	970,200.00		
		01/11/1999	1,276,000.00		
			2,246,200.00	2,246,200.00	0.00
	2000	•			
		01/01/2000	3,261,500.00		
			3,261,500.00	3,261,500.00	0.00
	2001				·
		01/01/2001	3,278,000.00		
			3,278,000.00	3,278,000.00	0.00
	2002				
		01/01/2002	1,213,300.00		
			1,213,300.00	1,213,300.00	0.00
		Grand Total	9,999,000.00	9,999,000.00	0.00

Table 1: Objectives, outputs and monitoring indicators Project Document Number: LIB/99/003 Revision: A

Objecti	Objectives and outputs	sindi	Monitoring indicators for objectives and outputs	jectives and outputs		
Code		Description	Year 1	Year 2	Year 3 Year 4	4 1
101	01 02	Management Support Set-up Project Unit Equipment supplied	Unit staff appointed Equipment	Effective Unit	Effective Unit Equipment	Effective Unit
T02	01 02 03	Curriculum Dev.for Spec.Schools Review & update curricula Tech.Assist.Prepartion of textbooks Support curriculum dept.	Finalised Procure equipment	Completed Procure equip. Training	Completed Procure equip. Training	Completed Procure equipment Training
103	01 02 03	Informatics education in Spec.Sch. Revise curriculum Computer labs for 40 spec.sch. Train IT teachers	Recruit consultants	Curriculum Procurement Training	Completed Completed Training	Completed Completed Completed
T04	01 02 03	Tech. Teacher Training Prepare curricula for eng. & life sc. Select locations of new departs. Support for new departs.	Recruit consultants	Curriculum Locations Equipment	Completed Completed Training	Completed Completed Training
T05	01 02 03	Informatics education for IVCs Revise curriculum Computer labs for 30 IVCs Train IT teachers		Recruit consult.	Curriculum Equipment Training	Completed Completed Training
T06	01	Develop curricula for new diciplines Review for existing disciplines Develop. For new disciplines		Review curr. New Curricul.	Review curt. New curricul	Review curr. New curriculum
T07	01 02 03	Informatics for basic education Prepare curriculum Procure equipment for 44 sch. Training of teachers		Curriculum	Completed Equipment Training	Completed Completed Training

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	0/60		XXXX	XXX	⋩
	00/80		XXXX	XXXX	XXXX
Revision: A	00//00		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXX
Revisi	00/90	:	XXXXX	XXXXX	XXXXXX
	02/00		XXXXX	XXXXX X	XX XXXXX
000	04/00		XXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Project Document Number: LIB/99/000	03/00		XXXXX	XXX	XXXX XXXX
umber:	02/00		XXXXX	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ment N	01/00		XXXXX	XXXXX	XXXX
et Docu	12/99		XXXXXXXX	. XXXX	
hs Projec	11/99		XXXX		
2 months	10/99	×××	cs XXXX lines	2	
Table 2: Tentative Work Plan for the first 1	Objective Output Activities and Management Action	Set-up Project Managt. Unit Appoint PM Appoint Admin.Assist.\$y& Sec. Up-date PM & beiefing	Curriculum Dev.for Spec.Schools Review & update curricula Tech.Assist.Prepartion of textbooks XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Informatics education in Spec.Sch. Revise curriculum Computer labs for 40 spec.sch. Train IT teachers	Tech. Teacher Training Prepare curricula for eng. & life sc. Select locations of new departs. Support for new departs.
2.2: Tei	tive Out	01 02 03	01 02 03	01 03 03	01 02 03
Table	Objec	101	T02	Т03	T04

United Nations Development Programme LIB/99/003 - SUPPORT A DEVELOPMENT OF SPECIALIZED SCHOOLS AND TEAH CALEDUCATION

Budget "A"

Page

Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)
Executing Agency: UNESCO - United Nations Educational, Scientific & Cultural Org.

SBLN Description	Implementing Agency	6	Total	1999	2000	2001	2002
010.99		Net Amount					
. 011.01 Curriculum consultant (1)	UNESCO	Net Amount	15,000	15,000:	=		· · · · · ·
		% AOS	•	10.00	10.00	10,00	10.00
		AOS	1,500	1,500			
		Total	16,500	16,500			
011.02 Curriculum consultant (2)	UNESCO	Net Amount	15,000	15,000			
		W/W	1.50	1.50			
		% AOS		10.00	10.00	10.00	10.00
		AOS	1,500	1,500			
		· Total	16,500	16,500		•	
011.03 Curriculum consulant (3)	UNESCO	Net Amount	15,000	15,000			
		WIM	1.50	1.50	٠		
		% AOS		10,00	10,00	10.00	10.003
		AOS	1,500	1,500			
		Total	16,500;	16,500			
:011.04 Curriculum Consultant (4)	UNESCO	Net Amount	15,000	15,000;	• • •		
		W/M	1.50	1.50			
		% AOS		10.00	10.00	10.00	10.00
		AOS	1,500	1,500			
		Total	16,500	16,500			
-011.05 Curriculum Consultant (5)	UNESCO	Net Amount	15,000	15,000			
		M/M	1.50	1.50			
		% AOS	•••	10.00	10.00	10.00	10.00!
		AOS	1,500	1,500			
		Total	16,500	16,500.	-		
011.06 Curriculum Consultant (6)	UNESCO	Net Amount	15,000;	15,000	• • • •		
		W/W	1,50	1.50			
		% AOS		10.00	10.00	10.00	10.00
		AOS	1,500	1,500			
		Total	16,500	16,500			
. 011 07 Curriculum Consultant (7)	UNESCO	Net Amount	15,000	15,000			
		WIM	1.50	1.50.			
		% AOS		10.00	10.00	10.00	10,00:
		AOS	1,500	1,500			
		Total	16,500	16,500			
011.08 Curriculum Consultant (B)	UNESCO	Net Amount	15,000	15,000			

Juited Nations Development Programme LIB/99/003 - SUPPORT AN. JEVELOPMENT OF SPECIALIZED SCHOOLS AND TECHN 1L EDUCATION

Budget "A"

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Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1,1 & 1.1.2/Line 1.2)

Executing Agency: UNESCO - United Nations Educational, Scientific & Cultural Org.

SBLN Description	Agency	Agency	Total	1999	2000	2001	2002	
011.16 Tech. Teacher Trg Consultant (4)	UNESCO	Net Amount	30, 000;		30,000			
		WIM	3.00		3.00	-		
		% AOS		10,00	10.00	10.00	10.00:	
		AOS	3,000		3,000			
		Total	33,000	-	33,000			
011.17 Tech Teaher Trg Consultant (5)	UNESCO	Net Amount	30,000		30,000			
		W/W	3.00		3.00			
		% AOS		10.00	10.00	10,00	10.00	
		AOS	3,000		3,000			
		Total	33,000		33,000			
011 18 Tech Teacher Trg Consultant (6)	UNESCO	. Net Amount	30,000		30,000			-
		WW	3.00		3.00			
		% AOS		10.00	10.00	10.00	10.00	
		AOS	3,000		3,000			
		Total	33,000		33,000			
011.19 Tech Teacher Trg Consultant (7)	UNESCO	Net Amount	30, 000		30,000			
		W/W	3.00		3.00			
		% AOS		10.00	10.00	10.00	10.00	
		AOS	3,000		3,000			
		Total	33,000		33,000			
011 20 Tech. Teacher Trg Consultant (8)	UNESCO	Net Amount	30,000		30,000			
		W/W	3.00		3.00			
		% AOS		10.00	10.00	10.00	10.00	
		AOS	3,000		3,000		-	
		Total	33,000		33,000			•
011.21 Tech. Teacher Trg Con.(Team Leader)	UNESCO	Net Amount	48,000		48,000.			-
		WW	4.00		4.00			
		% AOS		10.00	10.00	10.00	10.00.	
		AOS	4,800		4,800		•	
		Total	52,800		52,800			
011.22 Tech Teacher Trg Cons	UNESCO	Net Amount	120,000			60,000	60,000	
		WW	8.00			4.00	4.00	
		% AOS		10.00	10.00	10.00	10.00	
		AOS	12,000			6,000	.000′9	
		Total	132,000		•	66,000	.000 '99	
011.23 IT Consultants (Spec.schools)	UNESCO	Net Amount	25,000	25,000.				
		M/M	2.00	2.00				
		% AOS		10,00	10.00	10,00	10.00	
		AOS	2,500	2,500				

-United Nations Development Programme LIB/99/003 · SUPPORT AR JEVELOPMENT OF SPECIALIZED SCHOOLS AND TECH⁽¹⁾ AL EDUCATION

Budget "A"

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Page

Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)
Executing Agency: UNESCO - United Nations Educational, Scientific & Cultural Org.

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SBLN Description	Implementing Agency	5:	Total	1999	2000	2001	2002	
011.23 IT Consultants (Spec schools)	UNESCO	Total	27,500	27,500				
011 24 IT Consultant (Spec Schools)	UNESCO	Net Amount	25,000	25,000				
		W/W	2.00	2,00.				
		% AOS		10.00	10.00	10.00	10,00	
		AOS	2,500	2,500		••	· -	
		Total	27,500	27,500	٠			
011,25 IT Consultants (Spec.Schools)	UNESCO	Net Amount	25,000	25,000				
		W//M	2.00	2,00.				
		% AOS		10.00	10.00	10.00	10.00	
		AOS	2,500	2,500				
		Total	27,500	27,500			-	
011.26 IT Consultant (spec schools)	UNESCO	Net Amount	25,000	25,000				
		W/W	2.00	2.00	•			
		% AOS		10.00	10.00	10.00	10.00	
		AOS	2,500	2,500				
		Total	27,500	27,500	•			
011.27 IT Consultant (Spec.schools)	UNESCO	Net Amount	220,000		100,000	60,000	60,000	
		M/M	16.00	-	8 00	4.00	4.00	
		% AOS		10,00	10,00	10.00	10.00	
		AOS	22,000		10,000	6,000	6,000	
		Total	242,000		110,000	66,000	66,000	
·011.28 IT Cons.(IVCs)	UNESCO	Net Amount	260,000		100,000	100,000	60,000	
		W/M	20.00		8.00	8.00	4.00	-
		% AOS	-	10.00	10.00	10.00	10.00	
		AOS	26,000	1	10,000	10,000	6, 000:	
		Total	286,000		110,000	110,000	66,000	
011.29 Evaluation Tech Teacher Tg Cons	UNESCO	Net Amount	15,000				15,000	
		WIM	1.00				1.00	
		% AOS		10.00	10.00	10.00	10.00	
		AOS	1,500				1,500i	
		Total	16,500:				16,500	
011.30 Evaluation if Consultant	UNESCO	Net Amount	15,000				15,000	
		N/M	1.00		••		1.00	
		% AOS		10.00	10,00	10.00	10.00.	
		AOS	1,500				1,500	
		Total	16,500				16,500	
011.31 Planning Consultant	UNESCO	Net Amount	60,000	15,000	15,000	15,000	15,000;	
		W/W	4.00	1.00	1.00	1.00	1.00	
		% AOS		10.00	10.00	10.00	10.00	

LIB/99/003 - SUPPORT AN: DEVELOPMENT OF SPECIALIZED SCHOOLS AND TECH! AL EDUCATION Inited Nations Development Programme

Budget "A"

Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)

UNESCO - United Nations Educational, Scientific & Cultural Org. Executing Agency:



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LIB/99/003 - SUPPORT AN JEVELOPMENT OF SPECIALIZED SCHOOLS AND TECH. AL EDUCATION United Nations Development Programme

Budget "A"

Page

Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)

UNESCO - United Nations Educational, Scientific & Cultural Org. Executing Agency:

SBLN Description	Implementing Agency	_Ф	Totaì	1999	2000	2001	2002	
011.23 IT Consultants (Spec schools)	INFSCO	Total	27 500	000				
		90	000112	000				
011.24 IT Consultant (Spec Schools)	UNESCO	Net Amount	25,000	25,000				
		W/M	2.00	2.00.			-	
		% AOS		10.00	10.00	10.00	10.001	
		AOS	2,500	2,500.			 !	
		Total	27,500	27,500				
011.25 IT Consultants (Spec.Schoots)	UNESCO	Net Amount	25,000	25,000			-	
		WW	2,00	2.00.				
		. % AOS		10.00	10,00	10.00	10.00	
		AOS	2,500.	2,500			•	
		Total	27,500	27,500			-	-
011 26 IT Consultant (spec schools)	UNESCO	Net Amount	25,000	25,000				-
		M/M	2.00.	2.00				
		% AOS		10.00	10.00	10,00	10.00	
		AOS	2,500	2,500				
		Total	27,500	27,500				
011.27 IT Consultant (Spec.schoots)	UNESCO	Net Amount	220,000		100,000	60,000	60,000	
		· W/M	16.00		8,00	4 .00:	4.00	
		% AOS		10,00	10.00	10.00	10.00	
		AOS	22,000		10,000	6,000;	6,000;	
		Total	242,000		110,000	(99,000)	66,000	
011.28 IT Cons.(4VCs)	UNESCO	Net Amount	260,000		100,000	100,000	60,000	
		WW	20.00		8.00	8.00	4.00	
		% AOS		10.00:	10.00	10.00	10.00	
		AOS	26,000		10,000	10,000	6,000	
		Total	286,000		110,000	110,000	000,99	
1011.29 Evaluation Tech. Teacher Tg Cons	UNESCO	Net Amount	15,000				15,000	
		M/M	1.00				1.00	
		% AOS		10.00	10.00	10.00	10.00	
		AOS	1,500				1,500	
		Total	16,500				16,500	
011 30 Evaluation IT Consultant	UNESCO	Net Amount	15,000				15,000	
		W/M	1.00,				1.00	
		% AOS		10.00	10,00	10.00	10.00	
		AOS	1,500				1,500	-
		Total	16,500				16,500	
011 31 Planning Consultant	UNESCO	Net Amount	60,000	15,000.	15,000	15,000	15,000	
		W/M	4.00	1.00	1.00	1.00	1.00	
		% AOS		10.00.	10.00	10.00	10.00	···•

LIB/99/003 - SUPPORT A LU DEVELOPMENT OF SPECIALIZED SCHOOLS AND TECH CALEDUCATION United Nations Development Programme

Budget "A"

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Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2)
Executing Agency: UNESCO - United Nations Educational, Scientific & Cultural Org.

	00	.00	.00	4.00.	00	.00	100	001	00	00	000		.000	9.00	.00	1,350	350	:000'6	00.6	10.00;	900	9,900;	:00:	18.00	2,250	750	000	10.00	1,000	1000	000	000
2002	1,500	16,500	50,000	4.	10.00	5,000	55,000	305,000	21.00	30,500	335,500		13,500	6	10.00		14,850	6,6	9	10,	0,	6,6	22,500	8		24,750	10,000		1,(11,000	10,000	1,000
2001	1,500	16,500	75,000	6.00	10.00	7,500	82,500	340,000	25.00	34,000	374,000	•	18,000	12.00	10.00	1,800	19,800	12,000	12.00	10.00	1,200	13,200	30,000	24.00	3,000	33,000	10,000	10.00	1,000	11,000	10,000	1,000
2000	1,500	16,500	100,000	8.00	10.00	10,000	110,000	633,000	55.00	63,300	696, 300	٠	18,000	12.00	10.00	1,800	19,800	12,000	12.00	10.00	1,200	13,200	30,000	24.00	3,000	33,000	10,000	10.00	1,000	11,000	10,000	1.000
1999	1,500	16,500	25,000	2.00	10,00	2,500	27,500	326,000	30,00	32,600.	358,600	-	4,500	3.00,	10.00	450:	4,950	3,000	3.00	10.00	300	3,300	7,500	.00.9	750	8,250	10,000	10.00	1,000	11,000	10,000	1.000
Total	6,000	66,000	250,000	20.00		25,000	275,000	1,604,000	131.00	160,400	1,764,400		54,000	36.00		5,400	59,400	36, 000	36.00		3,600.	39, 600	90,000	72.00	9,000	99,000	40,000		4,000	44,000	40,000	4,000
Đ.	AOS	Total	Net Amount	W/M	% AOS	AOS	Total	Net Amount	M/M	AOS	Total	-	Net Amount	W/W	% AOS	AOS	Total	Net Amount	W/W	% AOS	AOS	Total	Net Amount	W/W	AOS	Total	Net Amount	% AOS	AOS	Total	Net Amount	AOS
Implementing Agency	UNESCO		UNESCO										UNESCO					UNESCO									UNESCO					
Description	011.31 Planning Consultant	•	011 97 Short-term Consultants					011.99 Line Total					013.01 Admin Assistant					013 02 Secretary					013.99 Line Total				016.01 Mission Costs				016.99 Line Total	

IB/99/003 - SUPPORT ANL^{2/}EVELOPMENT OF SPECIALIZED SCHOOLS AND TECHN LEDUCATION

Budget "A"

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Main Source of Funds: 01 - UNDP-IPF / TRAC - (Trac 1.1.1 & 1.1.2/Line 1.2) Executing Agency:

UNESCO - United Nations Educational, Scientific & Cultural Org.

017.01 Sr. National consultant (NPC) WifM % AOS Total 017.02 National Consultant (PM) WifM WifM % AOS Total 017.97 Unidentified National consultants UNESCO Net Amount WifM AOS Total Net Amount WifM AOS Total	mount	18,00	5,000				
2 National Consultant (PM) 7 Unidentified National consultants 99 Line Total	S wount	18.00.		20,000	000.00	15,000	
2 National Consultant (PM) 2 Unidentified National consultants 39 Line Total	S wount	9	1.50	6.00	6.00	4.50	
2 National Consultant (PM) 7 Unidentified National consultants 99 Line Total	mount	- :000 y	10.00	10.00	10.00	10.00	
2 National Consultant (PM) 7 Unidentified National consultants 99 Line Total	mount .	0000	500	2,000	2,000	1,500	
2 National Consultant (PM) 7 Unidentified National consultants 99 Line Total	mount .	(900)	5,500	22,000	22,000	16,500	
7 Unidentified National consultants UNESCO 99 Line Total	<u>ν</u>	54,000	4,500	18,000	18,000	13,500.	
7 Unidentified National consultants UNESCO 99 Line Total	Ω	18.00	1.50	6.00	6.00	4.50	
7 Unidentified National consultants UNESCO 99 Line Total			10.00	10.00	10.00	10.00	
7 Unidentified National consultants 99 Line Total		5,400	450	1,800	1,800	1,350	
7 Unidentified National consultants UNESCO 99 Line Total		59,400	4,950	19,800	19,800	14,850	
99 Line Total	mount	100,000	40,000	20,000	20,000	20,000	
99 Line Total	 S		10.00	10.00	10.00	10.00	
99 Line Total		10,000	4,000:	2,000	2,000	2,000	
99 Line Total		110,000	44,000.	22,000	22,000	22,000	
	mount :	214,000.	49,500	58,000	58,000	48,500	
		36.00	3,00.	12.00	12.00	9.00	
		21,400	4,950	5,800	5,800	4,850	
		235,400	54,450	63,800	63,800	53, 350	
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W/M:	mount	1,948,000	393,000	731,000	438,000	38.6, 000:	
\(\frac{1}{4}\)		239,00	39.00	91.00	61.00	48.00	
AOS		194,800;	39,300	73,100	43,800	38, 600:	
Total	•	2,142,800	432,300	804,100	481,800	424,600	-
	-						-
021.01 Subcontract A UNESCO Net Amount	mount	24,000		10,000	10,000	4,000	
% AOS	SC		10.00	10.00	10.00	10.00	
AOS		2,400		1,000	1,000	400	
Total		26,400		11,000	11,000	4,400	
021.99 Line Total Net Amount	mount	24,000		10,000	10,000	4,000	-
AOS		2,400		1,000	1,000	400.	
Total		26,400	٠	11,000	11,000	4,400	
	-			==			
022.01 Sub-contract B UNESCO Net Amount	mount	30,000	-	10,000	10,000	10,000	
% AOS	S		10.00	10.00	10,00	10.00	
AOS		3,000		1,000	1,000	1,000	
	-	33,000;		11,000	11,000	11,000	
022.99 Line Total Net Amount	mount	30,000		10,000	10,000	10,000	
AOS		3,000		1,000	1,000	1,000	