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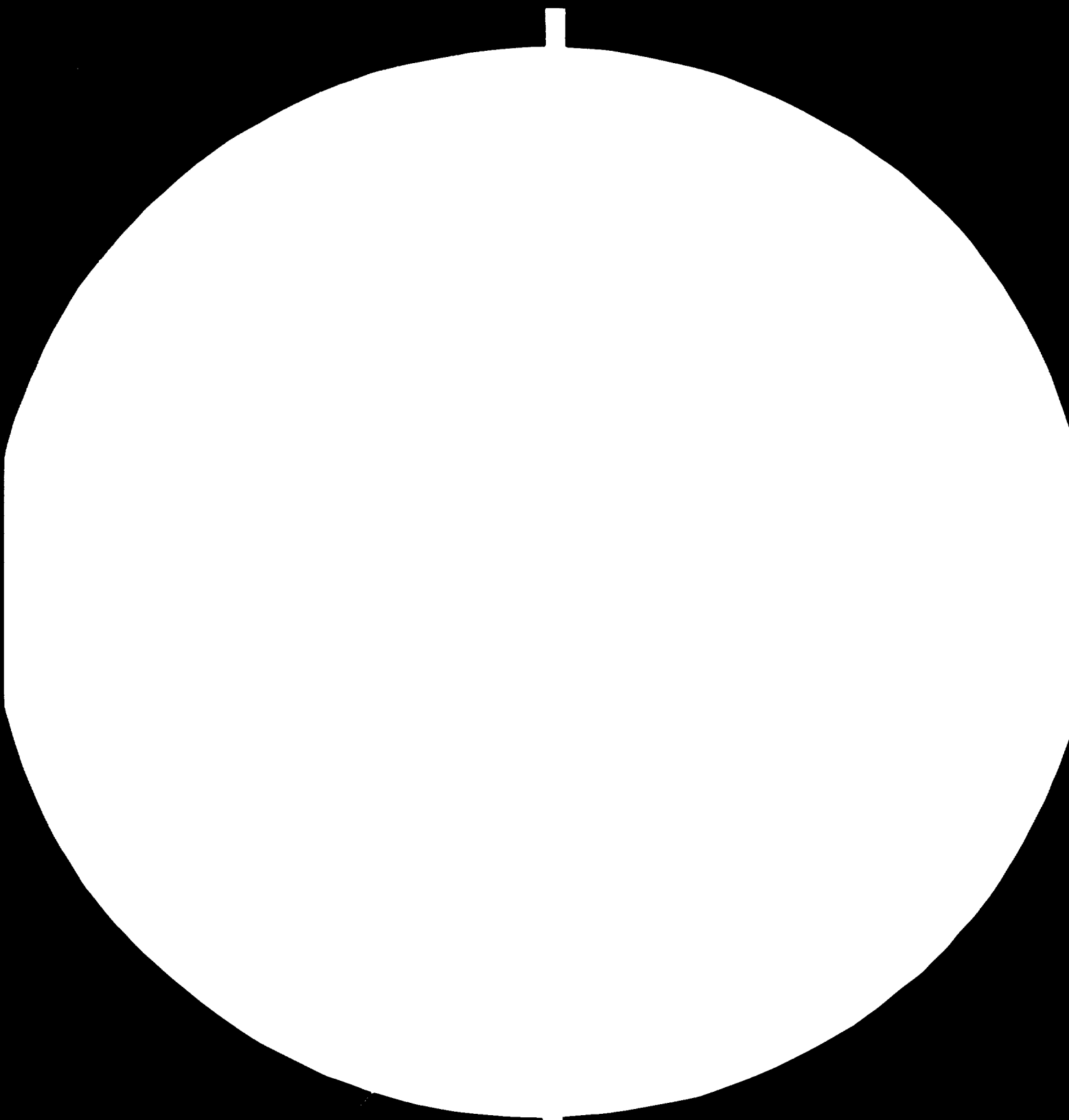
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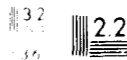
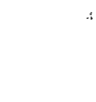
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(United Nations Development Programme)

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## 1. INTRODUCTION

This final draft - envisaged by the Contract - aims at describing the present situation, the actions undertaken, the results obtained as well as the initiatives that are foreseen in the future. The final aim of the report is to verify whether the action undertaken at the present time satisfies the objectives envisaged and what may yet be done to optimize the results and future perspectives.

## 2. DESCRIPTION OF THE PRESENT SITUATION

Following an examination of the Statute as well as of the organization chart envisaged for the ECP (Escola Central

do Petroleo), it is possible to check the state of the present situation.

## 2.1 ECP's Statute

- It dates back to November 1979 but came into force in March 1980; this date corresponds, however, to the beginning of the teaching activities in the ECP.
- It envisages the creation of planning and decision-making departments, as well as consulting and executive departments.

### 2.1.1 Departments for Planning and Decision-making

These departments are:

- General Management
- Management Council

It should be underlined that while the General Management of the ECP has been regularly in service since the beginning of the activities, the Management Council on the other hand, is still to be implemented and consequently is not in service.

### 2.1.2 Consulting Departments

Four consulting departments are envisaged, namely :

- Normal disciplinary council
- Educational disciplinary council
- Educational council
- Council for the planning of the teaching activities

The Educational Council is the only one to have been implemented to date (the Technical Assistance has stressed the importance of overcoming this problem as soon as possible, in addition to reducing the periodicity of the meetings. These are, at present, being held on a monthly basis but due to local conditions, it is not possible to maintain such a continuity).

### 2.1.3 Executive Departments

These departments are :

- Administration and finance
- Educational Department.

These are both in service but some of the functions are still to be filled by regularly appointed Heads of Department. A series of considerations may be made on this point which shall however be closely examined further along.

## 2.2. ECP's permanent staff

As indicated in the ECP's Statute, the Training Centre's permanent staff totals 129 employees, precisely :

A) Management personnel	7
B) Teaching personnel	15
C) Administrative personnel	21
D) Personnel for General Services	77
E) Technical personnel	9
	<hr/>
	129

A series of considerations may be made on this point but we shall focus our attention on two aspects since they are of fundamental importance at this stage.

The first consideration is based on the fact that the ECP envisaged a maximum simultaneous presence of 240 trainees since the ratio staff/trainees is 1/2 : this seems excessive. A possible increase of the number of trainees can be envisaged, thus overcoming relative problems without changing the structures already foreseen.

The second consideration concerns the type of organization chart envisaged and more precisely some internal discrepancies with respect to forecasts.

(There is, for example, a teaching and an administrative department with 15 and 21 employees respectively, while no Head of Department is envisaged for the General Services in which 77 employees are foreseen; moreover, there is a discrepancy between the teaching personnel and the personnel assigned to the administrative department).

However, the negotiations to improve these aspects of the statute are already in course and a solution to the existing problems can be envisaged.

### 3. ACTIVITIES

The various activities developed and carried out in the Centre will, for simplicity sake, be divided into "skill areas" and will be dealt with separately.

#### 3.1 Activities of the teaching department

These are the most important activities and well justify the creation of the ECP. This Department is run by a Head who attended a 7 month course in Italy. Said Head is in charge of the following activities :

- Teaching courses
- Activities related to the teaching department
- Angolan Ministries
- Italian teaching assistants



- Library
- Use of audiovisual aids
- Production activities in the laboratory
- Selection of trainees.

### 3.1.1 Training Courses

Four out of six courses are being held at present, precisely :

- Course for Production Operators (15 trainees)
- Course for Electrical Operators (15 trainees)
- Course for External Operators (15 trainees)
- Course for Laboratory Operators (11 trainees)

for a total of 52 trainees.

The courses are being carried out in a satisfactory manner and the results are exceeding all expectations.

The course for the Production Operators, which was the first to start, tackled the last three subjects envisaged in the programme (theory and management of plants regarding processing of crude oil, plants for the stocking and processing of crude oil, auxiliary plants); the trainees will therefore soon leave the ECP to complete their practical training on the plant and enter the industrial world.

The other two courses envisaged in the programme (refining technicians, toolmakers) started in the first week of October.

We have accepted these variations in the programme of activities, requested by the Angolan Party, since their motivations seemed quite valid.

These reasons are principally associated with the need to consolidate the structures of the ECP : in fact, five months after the activities started, 4 courses out of 6 are being held. This may, however, enable participants from other areas of the country to participate in the courses (this implies a vaster selection and consequently, more complicated planning of activities).

### 3.1.2 Teaching Secretariat

This Department operates jointly with the Administrative Secretariat since the various Heads of Department have not yet been appointed as envisaged in the Organization Chart.

The Teaching Secretariat has prepared a card-index for the trainees and one for the instructors, has started to systematically gather the most important data, as well as the results of the courses.

Procedures are being prepared which aim at implementing the assistance and coordination of the teaching activities on the plants

and establishing contacts with mass-media in order to promote the recruitment of candidates for future courses on a national scale.

### 3.1.3 Angolan Instructors

Only six out of the 7 Angolan Instructors who attended the course in Italy, are still working. They are carrying-out their work in a conscientious manner and have obtained good results. The only problem lies in the fact that they will not be able to cope with all the future activities of the ECP since certain initiatives have been taken in view of future needs of the ECP. The attention of the "quadros" of the Petroleum Department has been focused on this aspect of the problem. The following positions are therefore to be covered :

- 1 extracting technician in the petroleum industry (production department);
- 1 instructor for the study of scientific matters (physics, chemistry, mechanical technology, etc.).

The recruitment of these technicians is immediate in order to back up the activities of the instructors already appointed. (Said technicians shall however first attend a teaching methodology course at ECP).

Moreover, the 6 Technicians who were sent to Algeria for training, by the "quadros" department, have returned; they will be trained in order to assist the actual instructors and will be available for the Training Centre's activities.

However, it should be underlined that the recruitment of the future instructors for successive courses will be the object of a separate and thorough study. The Technical Assistance insisted and still insists that selection and recruitment operations begin immediately so that the trainees may be sent abroad to attend the training courses, as was the case for the 1st group of trainees. This is necessary since the skills involved are different from those previously applied (e.g. mechanical maintenance, rotating machines maintenance, overhaul and maintenance of motor vehicles, metallic carpentry and welding, industrial safety and fire prevention).

As a conclusion to this brief account, we would like to emphasize the excellent relationship existing between the Angolan instructors and the Italian assistants who, therefore, carry out their work in a spirit of mutual collaboration.

#### 3.1.4 Italian Assistants

The Italian Assistants in ECP, at present consist in a Management and Instructors' Group.

The first group includes the following personnel :

ZANELLOTTI Giuseppe	- Team Leader
MOSCATO Claudio	- Assistant to the Team Leader
ERMOSINI Carlo	- Maintenance Organization expert
SALETTI Roberto	- Electrical Maintenance expert

The second group includes at present the following personnel :

CASTELLANA Elio	- Assistant in refining for external operators
CORRAINI Giulio	- Assistant to the course for production operators
CERABINO Mario	- Assistant to the Lab. operators
LUNARDI Luigi	- Assistant to the course for electricians
MARRAFFA Carlo	- Logistic activities

Mr. Renato LESMO, the assistant who carried out a specific part of the Course for Production Operators, has returned to Italy as well as Mr. Gabriel INGO. The latter is substituted by Mr Mario CARABINO who will complete the course

for Laboratory Operators.

As already mentioned in the second report, Mr Carlo MARAFFA, specialized in the reproduction of the teaching software, has been assigned to the Printing Centre; he will start to produce this material and at the same time, he will supervise the training of 2 Angolan technicians who will carry on this activity in the future.

### 3.1.5 Library

The position of librarian is still to be filled but the library has almost all the teaching software and material provided by Comerint (except for the guides for the practical exercises in the laboratory which have already been dispatched from Italy).

In addition, 1300 volumes out of the 2500 provided by UNIDO have arrived and a new arrival is foreseen before the end of September.

The Library is run by the Assistant of the Team Leader who carries out this duty with the collaboration of the Angolan trainees. The ECP Organization Chart however envisages the recruitment of one librarian (male or female); this is not possible at present since various duties envisaged by this position go beyond simple control operations, for example, research and

documentation of bibliography.

### 3.1.6 Audiovisual aids

We have been using the material provided by UNIDO for more than one month. These teaching aids which are a back-up to the courses, are very useful and both instructors and trainees show an enormous interest in it.

### 3.1.7 Production of software

It is too early to envisage this activity but it should be underlined that, as the courses proceed, all the texts are being examined, corrected and completed by the instructors; the material will thus be available in the final version for reproduction.

The work of revision does not aim at producing a new software, which requires well consolidated structures and experience over a rather long period of time, but rather at providing sets of revised text-books with a view to achieve a modular use of this material, for future activities of the ECP.

### 3.1.8 On-the-plant training

The main companies operating in the Petroleum Industry in Angola have recently visited the ECP. The Representatives of CABINDA GULF, TEXACO, SONANGOL, PETRANGOL, MOBIL had the opportunity of visiting the ECP and appreciated the activities as a whole, the organization of the Centre as well as the development programmes.

Moreover, this visit gave us the opportunity to directly check, with the qualified Representatives of the Angolan Petroleum Industry, the validity of the choices operated as regards organization and to establish the first direct contacts so as to organize the training of the ECP trainees on various plants.

These initiatives will be followed by a series of visits of the Angolan and Italian teaching personnel on the plants, in order to optimize the programming of the training activities directly on site; this type of training should satisfy the specific needs of the Angolan Industry in the best possible way.

As far as the Italian Technical Assistance is concerned, a general training on-the-plant programme has been drawn up specifying the following aspects :



### 3.1.9 Laboratories

The three ECP laboratories (instrumentation, electrical and chemical laboratories) were left practically unused during the first term of activity but they are now in function, especially the electrical laboratory (electrical measurements and low-voltage installations) and the chemical laboratories which are attended daily by the trainees who show a great interest in the practical exercises.

Three Angolan instructors particularly involved in this training (i.e. one coordinator for each of the following courses : toolmaking, electricity and laborator, operators respectively) have been entrusted with the responsibility of the laboratories; they jointly carry out their work with the Italian assistants concerned.

### 3.1.10 Selection of trainees

The selection of candidates for the courses to be held create enormous difficulties in Angola due to transport, communication, logistic and safety problems.

To date, selection has been promoted by repeatedly publishing on newspapers, announcing via radio and concentrating selection in Luanda or the ECP.

As we have already mentioned in point 3.1.1, for the last two courses on the programme, the selection will be carried out in other parts of the country as well, so as to have a more complete and better distributed presence of the trainees per area.

### 3.2 Activities of the Administrative Department

The situation in this department is characterized by a series of critical aspects due to :

- the lack of a head of department;
- the lack of qualified personnel in a position to carry out specific duties;
- the excessive turn-over of the personnel registered to date.

The Technical Assistance has repeatedly drawn the attention of the Heads of Department on these drawbacks; the results moreover shall be less rapid since foreign Technical Assistance in this field is more difficult.

The two following aspects have been examined separately :

- the activities of the administrative secretariat
- personnel management.

### 3.2.1 Administrative Secretariat

This service operates at present with 3 fixed members of staff, two are typists of a low-medium level. In the absence of the Head of Department, the Office is run by the ECP General Management in collaboration with the Head of the Teaching Department.

This type of situation which is due to lack of personnel, makes it difficult to satisfy the need for simplicity and subdivision of duties.

Some of the members of the Secretariat who were among the first to be trained have left said Secretariat and have been substituted by other personnel with a lower qualification.

### 3.2.2 Personnel Management

This service is momentarily without a Head of Department since he recently left the ECP and the situation, as a whole, is quite different from the initial expectations.

The ECP's General Management is directly in charge of this service and attempts made to provide it with structures, procedures and regulations have failed to date.

In fact, the situation to be coped with at present, can be summarized in the following manner:

- numerous important functions are still to be assigned; it is only by adopting more organic and functional recruitment methods that these results may be reached;
- the selection and trial periods for the recruitments will have to be the object of a more severe analysis;
- there is an inflation of the less qualified positions and consequently of the ECP's structures;
- the personnel turn-over is too high and the methods to check it should be the object of a study;
- all measures of a disciplinary nature concerning either the trainees or the teaching personnel will be discussed by the normal disciplinary council as well as by the pedagogical disciplinary council.

### 3.3 Activities of the General Services

Notwithstanding the fact that the activities related to this service are quite numerous and an important manpower force is envisaged, the EDP Statute gives it far less importance than given to the Teaching and Administrative Department.

In the organization chart submitted by the Technical Assistance to the General Services, all three departments are given the same importance; therefore, a decision should be taken.

The new organization chart envisages a Head for this Department which will be subdivided into 3 sections (Maintenance, Purchasing and Management of the Warehouses, Logistics), each subordinated to a Head.

The present situation as well as the perspectives of these 3 sections are hereafter described.

### 3.3.1 Maintenance Area

This area envisages all the principal maintenance activities, such as :

- Mechanics
- Electricity
- Pipe-fitting
- Motor-car fleet
- Buildings
- Gardens

foreseen in the ECP; these are at present being more or less completely organized by two Italian assistants, since the Head of this department has not yet been recruited.

#### 3.3.1.1 Mechanical assistance

No problem worth mentioning has arisen till now; this service is however run by Italian personnel who are training two persons.

#### 3.3.1.2 Electrical maintenance

The ordinary maintenance has been entrusted to two members of local staff assisted by Italian personnel, since their level of qualification is rather low.

However, the maintenance of the transformer has been entrusted to the Italian personnel, since it has not been possible to recruit a person locally with sufficient technical knowledge.

#### 3.3.1.3 Hydraulic maintenance

It mainly concerns the maintenance of the ECP aqueduct and the service is being run by the Technical Assistance. This service does not have a Head of Department; two local members of staff are now employed in the electrical maintenance department and they are being trained to carry out some specific maintenance interventions such as :

operations at the pumping station, cleaning of filters at the station for water-treatment .

As a conclusion, we can say that the situation will greatly improve once the Angolan part will have carried out the electrical connexions (as per Contract).

#### 3.3.1.4 Overhauling

The work is proceeding very well in this department, but the spare parts are a great problem since it is practically impossible to find them on the Angolan market. The stock of the spare parts has been more or less completely reintegrated and other orders have been forwarded; the department can therefore be run in an independent manner.

#### 3.3.1.5 Maintenance of the buildings

No maintenance has been necessary to date. We may add that during the 2nd phase of the ECP, assemblers as well as qualified Italian personnel will be available; the latter will deal with training of local staff.

### 3.3.1.6 Upkeep of the gardens

Three members of the staff do the gardening in "green areas" and near-by transit areas.

### 3.3.2 Purchasing Department

Two suppliers work in this department and are in charge of the food products, consumable goods, spare parts. One of the two is in charge of the management of the warehouse (there is no warehouseman at present since the goods stored have a low handling rate).

It should be stressed once more that the supply of food products is still critical; great difficulties have been overcome in order to cope with this problem.

The supply of fuels still represents a great problem but the situation will improve once the erection of the deposit is completed.

### 3.3.3 Logistic Department

This department deals with the activities related to :

- the kitchen and the mess-room
- the dormitories, laundry and ironing-room
- the office dealing with travel and transport of personnel
- the agricultural section.



This department is giving quite good results and the local personnel has reached quite a good level of ability (especially as regards the kitchen, mess-room, laundry and ironing room).

The superintendence service in the ECP is satisfactorily run by DDP militaries but the position of night superintendent for the night service, especially in the dormitories, is still to be assigned; we know, however, that the management has taken all the necessary steps to fill this key position, since it is of fundamental importance in the life of the ECP.

The travel office for the trainees to and from Luanda is run by the Quadros Department for the Ministry of Petroleum while the transport service is directly run by the ECP (the latter is giving quite good results even if the drivers that can be relied upon have neither much experience nor great ability).

Clearing and preparation of the grounds for agricultural use near the ECP has started (for a vegetable garden as well as breeding of chicken and pigs).

#### 4. CONCLUSION

Having to draw conclusions for this period of assistance of the UNIDO/PNUD Technicians and of the work done in the ECP, we can mention the following :

- 4.1 It is obvious that the ECP could not have started to carry out their activities at the beginning of March if the UNIDO/PNUD had not guaranteed the presence of the Management Group (4 members of staff) from the beginning of January.
- 4.2 Thanks to the instructors sent on site and notwithstanding the fact that some of them had to be substituted due to health or family reasons, the 4 courses can now be carried out according to expectations, especially as regards the didactic part.
- 4.3 Other problems which are less easy to solve regard the management, administration, general services departments; these are due to :
  - 4.3.1 Lack of personnel with the necessary qualifications to carry out the various tasks (moreover, their level of qualification is often lower than the level on which the training should be based).
  - 4.3.2 Difficulty to form a mentality where order and organization are the prevailing rules (may be too much of a European concept).  
It is obvious that either the Angolan or Italian Part will have to show more adaptability which naturally requires more time and patience.

4.4 We must admit that, as a whole, an excellent spirit of collaboration has prevailed all through this period and the assistance provided by the Ministry of Petroleum - in particular by the Head of the Co-operation Department - was beyond all expectations as regards the helpfulness, advices and devotion that they showed us.

It is obvious that the ECP still needs to be assisted for a while to be able to cope with the new courses which are about to start and to set up the new and more complex services that the training centre will be equipped with.

4.5 Finally, we would like to stress the fact that our negotiations with the Heads of UNIDO/PNUD in Luanda have been characterized by a spirit of comprehension, patience and friendly collaboration.



