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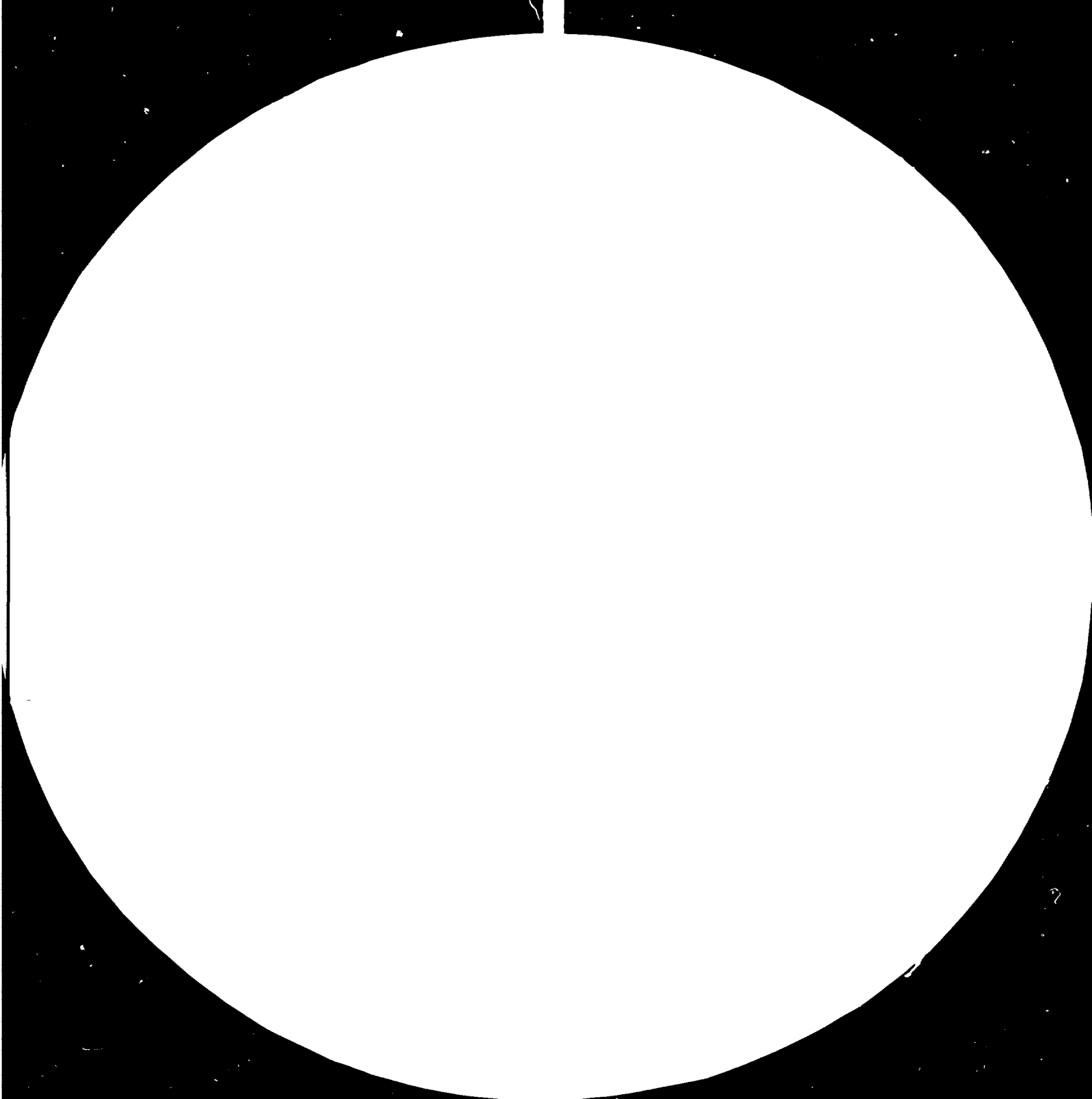
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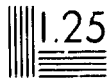
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FINAL REPORT OF THE
UNITED NATIONS DEVELOPMENT PROGRAMME

Angola, ESCOLA CENTRAL DE PETROLEOS N'GUNZA

Reference : Unido Contract N° 50/128
Project N° DP/ANG /79/009
Activity Code : 10-20-32-1

INTRODUCTION

This report summarizes the work carried out by Comerint's personnel involved in the Unido project concerning management of the ECP in N'Gunza during the period 1/5/80 to 30/6/81.

The services, envisaged to be of 75 months/man, were aimed at increasing the activities both of training and of general organization of the local staff in charge of managing the Centre.

The initial situation was the one given in the Final Report of September 1980, at the end of the 1st phase of assist-

ance to the ECP, and which can be summarized as follows:

- 4 courses started, out of the 6 estimated, from the beginning of the activities (3/3/80);
- an organizational structure, consisting of local personnel, still somewhat unsteady but already well delineated, in the teaching, administrative, and general services' sectors;
- an operative life which made it possible not to miss a single day of lessons, despite the objective difficulties concerning logistics, transport and food supply.

1. PROGRESS OF THE TEACHING PROGRAMMING IN THE PERIOD 1/0/80 TO 30/6/81

1.1 Courses finished before 31/12/80:

- Production operators (13 trainees)
- External refinery operators (12 trainees)
- Electricians (11 trainees)

1.2 New courses begun before 31/12/80:

- Instrumentation technicians (13 trainees)

1.3 Courses finished before 30/6/81:

- Chemistry laboratory operators (11 trainees)
(ended on 20/3/81)

1.4 New courses begun before 30/6/81:

- Production operators - 22/1/81 (16 trainees)
- External operators - 9/2/81 (15 trainees)
- Electricians - 13/4/81 (10 trainees)
- Texoco general theory course - 18/2/81 (16 trainees)

5 On-the-job training finished before 30/6/81:

- Production operators (13)
- External operators (12)

At the N'Ganza ECP on June 28th, the final diplomas were presented to the first 25 students who had finished the on-the-job training on the oil production and refining plants.

All these trainees were then employed by oil companies who gave them jobs suitable to the training they had received.

1.6 On-the-job training underway:

- Electricians (11)
- Chemistry laboratory operators (11)

2. OTHER TRAINING ACTIVITIES

- Activities with the monitors

1. A teaching and methodology course attended by the Angolan monitors began in March and is still being held.

The course, which consists of two weekly encounters of two hours, aims at providing greater details about the subjects dealt with in the course held in Italy and checking them in the light of a year of practical experience.

2. An introductory course to micro-computers attended by 5 Angolan monitors began in March and is still underway. It is held 4 hours a week.

The purpose of the course is to give initial training and information about informatics, on the uses of micro-computers in teaching and process controls.

- Activities with the ECP staff

The following staff are presently being trained:

- 3 electrical maintenance operators
- 3 civil works and hydraulics maintenance operators
- 3 mechanical maintenance operators

Training is by personal instruction and aims at providing the capability to repair failures and teaching the preventive maintenance procedures.

3. OTHER ACTIVITIES

- Periodic meetings with the Management, monitors, trainees.
Purpose: a periodic check of the progress of the teaching activities; to overcome the gap which still partially exists between the various components of the school community.
- Re-organization of the Administration, of the Library, of

the warehouse management.

- The international Regulation of the School (sent by Minpet) was revised.
- The statute of the School was revised.
- Within the context of making the School independent, direct contacts were made with the oil companies in order to:
 - check that the training given in the ECP corresponds to the needs of the companies
 - check future training requirements.
- Mr. Cambi is preparing a detailed work analysis of the Luanda refinery so as to prepare the specific teaching material.

4. PERSONNEL INVOLVED IN THE PROJECT FROM 1/9/80 TO 30/6/81

	1980 Sept.	1980 Oct.	1980 Nov.	1980 Dec.	1981 Jan.	1981 Feb.	1981 Mar.	1981 Apr.	1981 May	1981 June
<u>TEAM LEADER</u> ZANELLOTTI FOI										
<u>ASSISTANT</u> MOSCATO REZZONICO										
<u>MAINTENANCE COORDINAT.</u> ERMOSINI GUIDUCCI										
<u>PRINTING ROOM ASSIST.</u> MARRAFFA										
<u>ELECTRICAL MAINT.</u> SALETTI										
<u>INSTRUCTORS</u> CERABINO LUNARDI MIGGINO CORRAINI CASTELLANA SALSICCIA MUSSONE CAMBI D'AMBROSI										
TOTALS	9 m/m	8½ m/m	7¾ m/m	7 m/m	7 m/m	8¾ m/m	7¾ m/m	7¼ m/m	7 m/m	8¼ m/m

TOTAL m/m 76 + ¼

5. ANGOLAN PERSONNEL

5.1 The number of the Angolan monitors is the same as in the first phase, while 2 laboratory assistants and 2 basic science monitors are being trained by personal instruction.

5.2 The managerial back-up personnel in the logistic and administrative organization and the various services has increased from the approximately 50 units in the first phase to the present 117 units. This required a notable effort as regards finding personnel, anticipating training, and organizational incorporation.

5.3 The problems concerning "high level" operative figures - Head of the Administrative Sector; Head of the General Services Sector - are currently being defined.

The Administrative Sector has settled down noticeably now that the very high turn-over which characterized the first year of the school has been stopped. An organization course is being prepared which will contain training and procedural activities and will be held for all personnel in the sector.

The General Services Sector, reasonably settled at the intermediate and lower levels, still requires special attention as regards the choice and training of the top positions. This is harder to resolve,

especially because of the lack of qualified and experienced personnel on the internal market.

It has been decided to solve the problem by favouring the growth and continuing training of personnel in the School who show reasonably reliable development characteristics.

The time required will not, however, be short.

6. RELATIONS WITH THE OIL COMPANIES

This intervention area has widened notably and is a crucial point for justifying and developing the work performed in the School.

The connection between the training in N'Gunza and the requirements of the companies has caused a series of services, information, clarifications, analyses of employment situations, etc. to be moved to Luanda, where by now at least one of the project technicians and a corresponding member of the local staff are kept busy on a full-time basis.

The function of guidance, study of the work market, selection of the trainees, and programming the types of courses (in the School, on the job, short, re-current, seminars, etc.) are becoming a service sufficiently integrated to require its own personnel and its own structure, at the service of the School and closely connected to the operative companies.

Within this context, it is necessary to underline the essential role that the State Company.- Sonangol - is assum-

ing in deciding and controlling the activities and the flows of trainees and resources. It is obvious that the attribution and assumption of responsibility by Sonangol provides an objective guarantee concerning the quality of the work performed and the efficiency of the same with regard to the actual requirements.

7. INTRODUCTION INTO AN INDUSTRIAL CONTEXT

The School, both as an organism which produces functions and as a structure, represents an innovation for the environment surrounding it, characterized still by social, economic, and organizational conditions of life which are full of problems.

It is, therefore, natural that expectations arise and that, in any case, the type of activity performed finishes by emitting stimuli, requirements, problems of comparison, of use, of development. Correct answers need to be found to all of these elements in order to avoid, on one hand, disagreements or contrasts and, on the other, that the type of expectation is both in proportion to and compatible with what the institution can provide. The fact remains, however, that, in the conditions of an objective lack of structures and means, it is not possible to pursue a "happy island" model which is more or less unreachable by those not on it.

8. UNRESOLVED PROBLEMS

It needs to be emphasized how the organizational structure of the School has made and is making an uncommon effort to guarantee both ordinary operation (food supply, for example) and also a constant connection with outside operative bodies (Ministry, Sonangol, other oil companies).

- 8.1 One of the most serious problems still existing is, undoubtedly, the lack of vehicles and of spare parts for the ones there are. The conditions created by this lack often lead to grave, and sometimes dramatic, situations. Help in this field needs to be provided decisively.
- 8.2 Vehicles and a real possibility of external social contacts are also problems that condition the efficiency of the instructors and the local personnel. The situation in this sector could become very worrying if measures are not adopted that allow an outlet and the possibility of periodic breaks.
- 8.3 The possibility of maintaining the vehicles, equipment and structures in efficient conditions requires not only the training of maintenance personnel (currently underway) but also the possibility of quick access to the market of expendable materials and of

spare parts, etc. The present internal difficulty of guaranteeing this form of procurement makes it important to find an efficient solution to this strategic request.

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APPENDIX

The plan of the medium-term development programmes of the N'Gunza ECP are enclosed herewith.

PLAN FOR DEVELOPING THE ACTIVITIES
OF THE ECP IN N'GUNZA

1. Starting point: the existence of a series of operative companies, some with consolidated activity, some developing quickly, others being set up.

2. For each of these, in relationship to the problems of the work force employed or estimated, it is possible to predict different levels of requirements:
 - 2.1 The need to recruit workers and technicians
 - 2.1.1 to complete the personnel
 - 2.1.2 to replace expatriate personnel
 - 2.2 Programmes for re-adapting and/or re-cycling personnel already employed internally
 - 2.3 Precise training actions at recurring periods
 - 2.4 Up-dating and seminar activities
 - 2.5 Specializations for specific jobs with an average/high level content

3. The first move to meet the requirements (expressed and not) is to set up a system capable of continuously recording the needs, processing them, and then translating them into programmes.

4. Such an instrument, juridically expressed by the ECP structures with the power granted it as "direct interlocutor with the Companies" needs, in fact, to be more clearly defined as an "organized and specific Service" with the following characteristics:
 - continuity
 - specialization
 - reliability

5. The functions ascribable to the "Service" can be thus summarized:
 - 5.1 To act as observatory of the employment trend in the sector and, specifically, of the specialization and group development dynamics
 - 5.2 To work out the ratio with the sector technologies, their introduction and adaptation
 - 5.3 To provide a time estimate of the requirements, at the various levels, of the specializations and groups
 - 5.4 To plan the training actions
 - 5.5 To identify the resources and places intended for the activity.

6. The answers to the problems put forward in point 2 will also be divided into various levels

- 6.1 The requirements in point 2.1 are met by the ECP with its structure in N'Gunza
 - 6.2 For those in point 2.2, reference can again be made to the ECP as a structure (material and service), foreseeing, however, specialists from the Companies as monitors.
 - 6.3 The answer to point 2.3 is normally the structure itself of the plant (or company) in question, with programmes agreed with the teaching planning service of the ECP and held by internal and/or external experts.
 - 6.4 The inter-company nature of point 2.4 would make it normal to use the N'Gunza structure.
 - 6.5 Point 2.5 raises problems that obviously can only be assessed case by case, and will generally require actions to be carried out abroad.
-
7. If we break down the role, and the reciprocal functions, of the ECP to give a dimension to
 - 7.1 The activities
 - 7.2 The services
 - 7.3 The human resourcesin relation to the requirements, we find that:
 - 7.4 There is a "consolidated area" that guarantees the "basic training" which is already in expansion

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7.5 The "on-the-job training coordination" nucleus is being set up and will be in charge of the School/Company re-entry of trainees who have finished the basic course.

7.6 The preliminary liaison service between operative Company/Resources/Programmes/ECP does not exist.

7.7 The problem of programming the teachers is still unresolved, as is that of the relative sub-systems:

7.7.1 Recruitment

7.7.2 Training/trainers

7.7.3 Seconding technical personnel from the Companies

7.8 The programme for local preparation of the teaching material necessary must be set up.

8. While point 7.5 can be controlled by the ECP with its present structures and operative figures (Pedagogy Department), points 7.6, 7.7 and 7.8 require a redefinition of the structures and personnel.

The following is a chart of the ECP activities/Professional figures system.

ECP - CHART OF ACTIVITIES AND

N'GUNZA

A

NORMAL COURSE
ACTIVITY

INTERMITTENT AND
RE-ADAPTATION
TRAINING ACTIVITIES

UP-DATING
AND
SEMINARS

TEAM LEADER ASSIS-
TANT
LOCAL/FOREIGN
INSTRUCTORS

B

OBSERVATORY
GUIDANCE
PROGRAMMING

SELECTION
TRAINING
TRAINEE

DESIGN
PREPARATION OF TEACH-
ING MATERIAL

TEAM LEADER ASSIS-
TANT
PEDAGOGY DEPART-
MENT

2 EXPERTS
TEACHING
ENGINEERS

RELATIVE PROFESSIONAL FIGURES

LUANDA

ABROAD

C

TRAINING
ON THE JOB
C/O COMPANIES

TEAM LEADER/
ASS. - COORD.
TRAINING ON THE
JOB - ASSIST.
TRAINING ON THE
JOB -

G

MEDIUM/
HIGH
SPECIALIZA-
TIONS

D

TRAINING
ON THE JOB
ACTIONS

TEAM LEADER/
ASS. - COORD.
TRAINING ON THE
JOB - EXPERTS

E

COMPANY
CONTACTS

TEAM LEADER/
ASS.
COORD. TRAIN-
ING ON TH JOB

TEAM LEADER
ASSISTANT
PEDAGOGY
DEPARTMENT

MINISTRY
CONTACTS

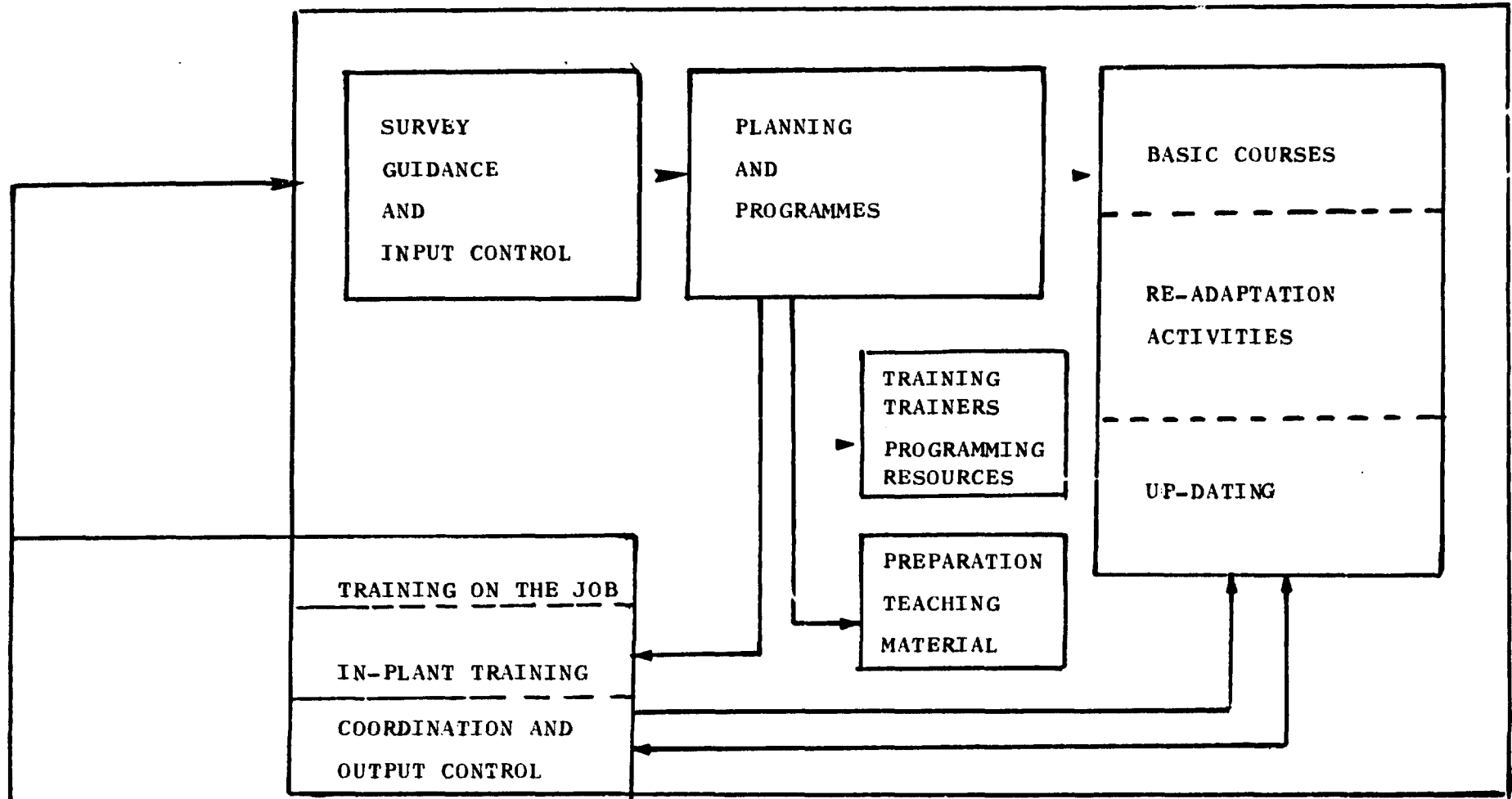
TEAM LEADER
ASSISTANT

F

LOGISTIC BASE
FOR THE
ESCOLA

HEAD OF BASE
SECRETARY

ESCOLA CENTRAL DE PETROLEOS



View of the interaction system between ECP and the companies

OPERATIVE COMPANIES

ECP - 1982

TRAINING ACTIVITIES

N'GUNZA

LUANDA

