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Contents **FINAL REPORT**
ETROPAL EAD, Etropole -
Audit and Analysis
[6 pages and 3 supplements]

Project symbols **DG/BUL/93/002 Assistance to the Transition to Market**
Economy

UNIDO Contract: **No. 94/074P Assistance to the Transition to Market**
Economy, Purchase Order No. 15-4-1074P

National Contractor: **BULGARIAN INDUSTRIAL ASSOCIATION (BIA)**
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Date: September 15, 1994

ABSTRACT

The present report bears upon the implementation of the requirements at Stage Two of Contract No. 94/074P, and contains the results of the study and a survey of the company ETROPAL EAD, together with proposals for technical assistance.

The aims of the report are:

- to identify the main problems relating to the company's activities and to formulate priorities as a function of the company's short-term development objectives under the new market conditions;
- to identify the areas for technical assistance, in accordance with the market conditions;
- to link the points of "interaction" between the company needs and the possibilities of UNIDO under Project DG/BUL/93/002, Annex B, for the purpose of providing technical assistance.

The object of the report is the company ETROPAL EAD (Etropole).

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Object of activities: Production of different medical disposable consumable items (Haemodialysers, Infusion systems, Syringes, Intra-arterial and intravenous infusion systems, Hollow-fibre dialyser etc.); endoprosthesis; instruments.

Ownership: State-owned enterprise (SOE).

The SOE is supervised by: The Ministry of Industry. It is managed as a one-man limited liability company by the manager, in compliance with the provisions of the legislation in force in the country.

Privatization: Procedure has been opened for privatization through the Privatization Agency. As potential buyers have been identified the companies:

- Fresenius AG - Germany
- Idemsa - Spain
- Global Medical - UK.

To meet these objectives the team carried out the following tasks:

- additional information was gathered, and the state of affairs was verified "in the field" by means of interviews;
- problem areas (weaknesses) and advantages (strengths) of the company were identified;
- "the matrix approach" was applied in determining priorities with a view to finding solutions to existing problems;
- the areas of extending technical assistance were identified.



1. Personnel: Total number of employees: 198 (74 women and 124 men).

Women per men ratio: 1 : 1.7.

Administrative personnel: 15 people.

Workers, including maintenance: 167 people.

Administration/workers' ratio: 1:11.

Distribution by education:

higher - 9; secondary - 150; primary - 39.

The personnel is highly qualified. The staff have been trained in Germany to operate some technological lines.

2. Organizational Structure: The existing structure dates of 1992 (See Supplement No.2). The company was established in 1976, first as a unit with the Medical Academy, and later as an independent company. In 1993 it was extended following the construction of a haemodialysis unit. The present structure is the result of reorganization at the Ministry of Industry.

3. Infrastructure: The company is located on two sites. The principal part is well designed, and has good road connections. The "Syringes Workshop" is situated on the so-called "old site", which will be moved to a new building on the main site.

The cost of fixed assets are 41.5 million Leva according to an evaluation made in 1992; land is not included in the evaluation. The structural distribution of the fixed assets is: buildings - 30%; machines and facilities - 63%; transport vehicles - 3%; others - 4%.

The buildings are new and are well maintained. Their physical depreciation is 10%, that of the transport vehicles - 50%.

The moral depreciation of the buildings is 20%, the transport vehicles - 90%.

4. Products:

4.1. List of Products: ETROPAL EAD has specialized in the narrow sector of medical disposable consumable items and medical instruments.

The disposable items are: haemodialysers, infusion systems, disposable syringes, catheters, blood transfusion lines, urinating bags, etc.

The instruments comprise: general instruments, endoprostheses, and osteosynthetic items.

4.2. Capacity: The production capacity is different for the different products, and depends on the technological facilities and equipment.

4.3. Quality Standards: The so-called GMP requirements (purity class) are not complied with, for two reasons. On the one hand, The required sanitary and hygienic standards of the working environment regarding this type of production, like e.g. air-conditioning, are not observed (there is dust loading, pollution, etc.) in spite of the well-kept order and cleanliness in the premises. On the other hand, to achieve the proper conditions for observing the above-mentioned standards the company will need a "complete" technological production cycle.

Haemodialysers are the only items that correspond to the GMP requirements due to the fact that they are produced at a fully equipped technological line that was bought from the



FRESENIUS AG company (Germany). The achievement of these standards also depends on the raw materials and on packings. The company products are made in accordance with the Bulgarian State Standards (BDS). Haemodialysers correspond to DIN standards.

4.4. Sales: Work is done according to preliminary contracts. The company participates in a tender, together with western producer companies, which is launched by the Ministry of Health. Contracts are negotiated following the results of the tender.

4.5. Trade Mark and Packings: The company has its own trade mark. A specific requirement of this type of products applies to packings that should correspond to special requirements - hygiene, sterility, materials, etc.

4.6. Acceptability in the Market: The products are well received on the domestic market. The company's only competitor is the MOMINA KREPOST company (Veliko Tarnovo) regarding the disposable syringes. The products are well received in the markets of the ex-socialist countries. There is a demand in such items in Russia and Ukraine but no adequate market studies have been made regarding exports to these countries.

4.7. Adaptability of the Products: The company products are well adapted to the requirements of the domestic market.

4.8. Flexibility of the Products Towards the Market Needs: The price of haemodialysers is higher in comparison with that of the competitors for technological reasons. The price of disposable syringes is lower as compared to that of world producers. No possibilities exist for cutting prices further down, the pricing depends on imported materials that are very costly.

4.9. Automation of the Processes: The production is largely automated.

4.10. Production List Availability: No big possibilities exist for improvement of the production list with the existing technological facilities due to the fact that it has a very narrow specialization.

5. Production:

5.1. Production Technological Chart: The production of ETROPAL is carried out in the following specialized differentiated workshops, by types of products:

- "Haemodialysers and Infusion Systems" workshop;
- "Disposable Syringes" workshop;
- "Orthopedic Prostheses and Instruments" workshop;
- "Instruments & Repairs" workshop;
- "Technical Service" workshop.

The "Haemodialysers and Infusion Systems" workshop is equipped with a complete technological line of the German FRESENIUS AG, which is in a very good condition. Work efficient about 60% to 70% of its total capacity

The technological charts vary in the individual production units, depending on the specificity of the products.



The plastic parts for all the production items are manufactured in a special unit that is equipped with multifunctional machinery for the processing of plastics. The unavailability of a pre-processing machine for the sorting of the palettes worsens the quality of the plastic items.

5.2. Machinery and Facilities: The company has the following machinery and facilities:

- universal production machines for the processing of plastics; they have a high capacity, are well services, and their work load is approximately 60%;
- universal metal processing machines - in a good condition, with a work efficiency of approximately 70%;
- packing machines, with a work efficiency of approximately 80%;
- inscribing machines, with a work efficiency of approximately 80%;
- gas sterilizing equipment of the ODELGA type, with a work efficiency of approximately 70%.

The physical depreciation of the machinery and facilities is about 20%; the moral depreciation is about 60%.

5.3. Flexibility of the Production: The universal machines are multifunctional. The technological lines are completed, leaving no room for "empty" or "narrow spots".

5.4. Working Places: They are permanent and are distributed by technological operations / lines / machines. Labour is highly qualified.

5.5. Equipment Maintenance: The equipment is well maintained.

5.6. Quality Control (QC): Quality control is carried out by the specialized national authority.

5.7. Environmental Protection: The company has not been fined (or received penalties) for harmful impact on the environment

6. Procurement:

6.1. Raw Materials: Most of the raw materials are imported. These are: cuprophane, PVC, polycarbonate, polyethylene sling, syringe paper, polypropylene, and others. The company works with permanent suppliers, mainly from Germany, Japan and Italy.

6.2. Spare Parts Supply: Spare parts' distribution: 30% - own production; 65% - from other suppliers; and 5% - imported. Instruments supply: 60% - manufactured by the company; 40% - bought from other suppliers.

6.3. Packing Materials: Packings are made in Bulgaria: PVC foil 320, paper, and hard PVC foil. Quality level is not high from the point of view of the requirements of foreign markets

7. Sale:



7.1. Marketing: The company has a Sale Department with two employees. It has a comparatively good information about the price level of similar products on the international markets. Studies show that the company products are in demand in the markets in Russia, Ukraine and other eastern countries; however, no action has been taken with a view to realization.

7.2. Trade Channels: Direct sales to the medical establishments in the country. The production of haemodialysers depends directly on the number of out-patients. The company has unrealized products in stock.

7.3. Promotion of Products: The company has promotional folders in the English language. It participates in the Plovdiv Fair. Products promotion is very specific, and strongly depends on the operational, surgery and reanimation medical teams. Treating doctors act as "promotion agents" of some of the company products.

7.4. Realized Export: The company has realized the export of about 10% of the syringes in the first half of 1994. Products realization on the domestic market is as follows:

- syringes - approximately 13 million pieces;
- infusion systems - approximately 220 thousand pieces;
- haemodialysers - approximately 50 thousand pieces.

7.5. Contacts with Foreign Companies: Traditional contacts are maintained with the FRESINIUS AG from Germany that supplied the ETROPAL company with a technological line for dialysers. Contacts are also maintained with the firms IDEMSA (Spain) and GLOBAL MEDICAL (United Kingdom). These companies have shown interest as potential buyers following the company's privatization.

8. Financial Situation: The company was profit-bearing until 1991 including. The financial year 1992 was terminated with a minimal loss of 3 thousand BGL, which rises to 3,040 thousand BGL in 1993. Justification by factors: paid interest rate on short-term credits - 368 thousand BGL; direct production activities - 2,946 thousand BGL, plus a profit of 274 thousand BGL.

In 1994, a minimal profit of 420 thousand BGL is anticipated due to the fact that the received interest rates will exceed the paid ones by 199 thousand BGL. Improvements will be entirely born by the end-users. Cutting down prices can only be expected following technological improvements.

Supplement No. 2 shows the structure of expenses.

The company operates with a considerable working capital of its own. It also uses capital from pre-paid orders. It has sales receivables to the amount of approximately 13,800 thousand BGL, and payables of about 13,500 thousand BGL, 44% of which are to suppliers.



9. PROBLEMS AND CONSTRAINTS UNDER THE CHANGED ECONOMIC CONDITIONS

9.1. Relating to the Structure of Production

Strengths:

- the products have a permanent (unfailing) social importance;
- the products meet the needs of the medical establishments;
- the attainment of international standards is primarily a technological, and not a qualification issue;
- the products prices are lower than those of imported goods.

Weaknesses:

- GMP requirements for both the technologies and the products have not been reached;
- there is no availability of domestic raw materials which could increase the quality of the products;
- packings for the syringes do not correspond to international standards.

9.2. Relating to the Technological Level

Strengths:

- the company is very experienced and highly qualified;
- the buildings are in good status, and are well-maintained, possibilities exist for equipment with modern technological production lines;
- the machinery and facilities are in good physical status.

Weaknesses:

- the technologies are morally obsolete;
- the production capacities are not fully used.

9.3. Relating to the Financial Situation

Strengths:

- the fixed assets are owned by the company;
- the company has no bank investment credits;
- the company has an important amount of working capital.

Weaknesses:

- the company's working capital has an inferior returnability
- the company uses short-term credits with high interest rate

9.4. Relating to the Access to Domestic and Foreign Markets

Strengths:

- relatively strong positions on the domestic market;
- there is shortage of products of this type on the markets of Russia and Ukraine.



Weaknesses:

- insufficiently developed marketing structure and respective strategy;
- insufficient studies have been made of the foreign markets, especially in the eastern countries.

TERMINAL SECTION

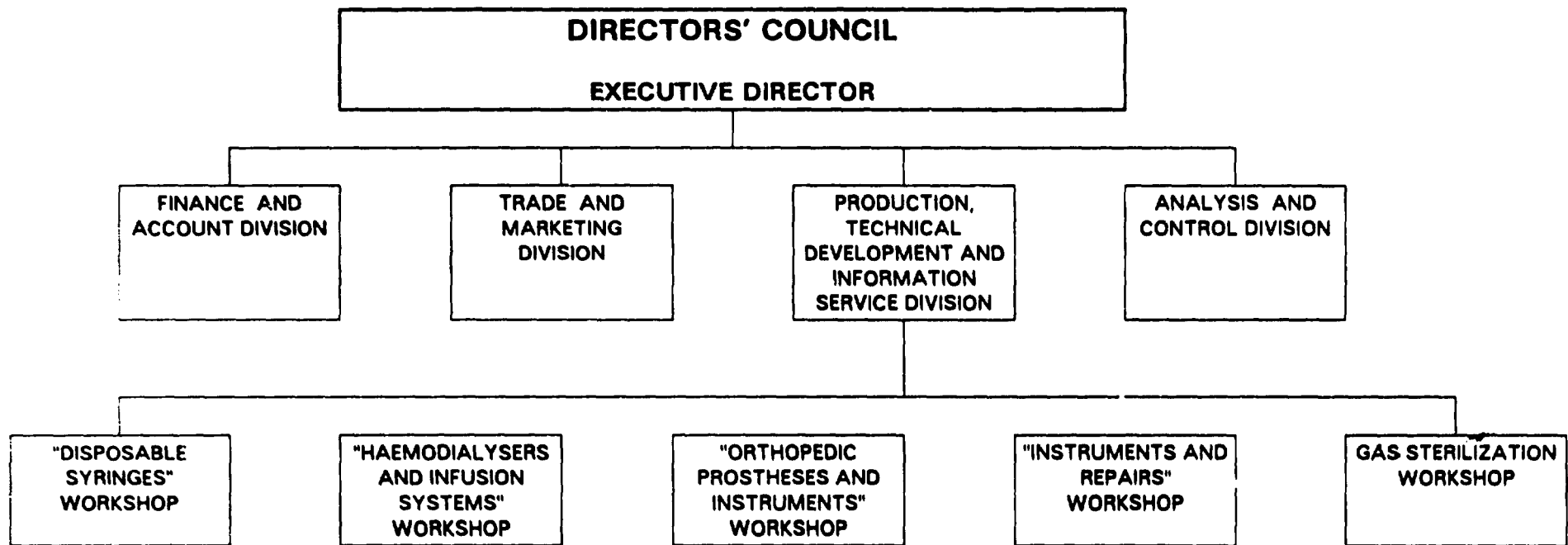
The analyses and study show that the company has a specific social orientating. The issues are very characteristic and are closely related with the production. Thus e.g., the moral depreciation of technologies and working parameters have a negative impact on the quality of products. The introduction of new products and new technologies will require a higher qualification level of the company staff.

There is one fact that is specific of ETROPAL, namely that conditions for privatization are present, and interested potential clients are available. The experts' team, jointly with the company management, took these factors into consideration, and proposes that UNIDO provide technical assistance in the following areas:

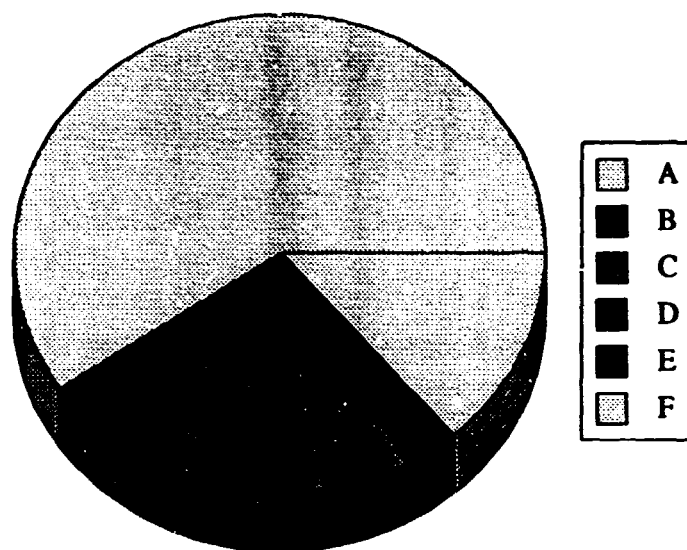
- *technical know-how and technologies;*
- *marketing and functions of the Sale Department;*
- *financial management.*



ORGANIZATIONAL STRUCTURE



PRODUCTION EXPENSES' STRUCTURE



	Types of the Expenses	tho.BGL	Parts of Expenses in percent
A	Raw materials	27,493	59.5
B	External Services	395	0.8
C	Salaries	7,788	16.8
D	Social Insurance	2,715	5.9
E	Depreciation of fixed assets	1,586	3.4
F	Other Expenses	6,264	13.6
	TOTAL	46,241	100

TOTAL EXPENSES' STRUCTURE

	Types of the Expenses	tho.BGL	Parts of Expenses in percent
A	Production Expenses	46,241	97.1
B	Credits' Interests	500	1.1
C	- for working capital	500	1.1
D	Other Expenses	875	1.8
E	Taxes	-	-
	TOTAL	47,616	100



ETROPAL EAD, (Etropole)

Job Description

TA: Foreign Investment and Technologies

1. Analysis of the existing equipment, technologies and working conditions according to GMP standards.

To be done by a team of specialists from the company under the supervision of the consultant through the following stages:

- appraisal of the "closed" production units which produce different products according to GMP standards;
- elaborating plans for introducing small changes and reconstruction of the production and technology organisation in order to meet the requirements of international standards.

2. Elaboration of production strategy.

To be carried out on the basis of the marketing studies' results. The main goal of the production strategy should be to cover in full the demand of medical consumables and other medical articles of great importance for Bulgarian markets.

The specific activities of the company, that must be outlined in the strategy are:

- to elaborate plans for creating and developing the production of highly efficient medical items of great demand;
- to establish contacts with companies dealing with technical equipment and technologies for such kind of enterprises as ETROPAL;
- to create opportunities for co-production.



ETROPAL EAD, (Etropole)

Job Description

TA: Marketing and the function of sales department

1. Organizational activities:

To create a specialized marketing unit. To be accomplished by the company director together with the consultant.

2. Theoretical activities:

A short presentation of the methods and approaches to be applied in practice in the marketing unit and for senior staff.
To be carried out at the same time as the practical assistance.

3. Practical activities:

a/ to elaborate a product-market strategy which should cover the following items:

- marketing of the eastern markets and creating a distribution network for them;
- diversification of the customers;
- establishing contacts with foreign companies, which are potential customers of the company's products.

b/_To create an Action plan for implementing the product-market strategy pointing out terms, responsible persons and expected results.



ETROPAL EAD, (Etropole)

Job Description

TA: Financial and accounting management issues

1. Theoretical activities:

A short presentation of the management of turn-over and cash-flows i.e. incomes and expenditures as well as own capital and debts and mainly the credits.

To be carried out simultaneously with the practical assistance relative to the same problems.

2. Practical activities:

To be carried out by specialists from the company under the instructions of the consultant. The following issues to be emphasized:

a/ Incomes and costs - total and of selected items:

- to plan the incomes and costs as well as to plan the financial resources;
- to organize and develop conditions of accounting;
- to do analysis of the costs of products with high percentage of imported materials in order to improve their competitiveness at the Bulgarian markets;

b/ Working capital:

- the management of the goods on stock;
- the management of uncompleted production;
- the management of short-term loans and own financial resources.

c/ To elaborate a financial strategy of ETROPAL for the near future.

d/ To provide software products for automated management of the financial activity.

