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Technical report: suggestions for medium-term development of MEBLO\*

Prepared for the International Centre for Public  
Enterprises in Developing Countries (ICPE)  
by the United Nations Industrial Development Organization,  
acting as executing agency for the United Nations Development Programme

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\* This document has not been edited.

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TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	1
2. Present Situation in General	2
2.1 Wooden Furniture	3
2.2 Particle Board	5
2.3 Textile Products	6
2.4 Metal and Plastic Products	6
2.5 Machiner and Electronics	7
2.6 Engineering	7
2.7 Retail Shops	8
2.8 Export	9
2.9 Contract Furnishing Service	9
3. Recommendations for immediate Actions	10
3.1 Design Changes	10
3.2 Expansion of Export of Furniture	14
3.3 Furniture Components as New Export Product	16
4. Outlook	17
4.1 Engineering Services	17
4.2 Knowhow Transfer	18
4.3 Export and Import of Furniture Components	19
4.4 Joint Ventures in Far East and other Parts of the World	19
5. Conclusion	20

## 1. Introduction

As part of its technical assistance project to the International Centre for Public Enterprises (ICPE), UNIDO assigned Gotthard P. Heilborn, a consultant from Rosenheim, FRG, to undertake a one week mission from 09. - 15.06.88 to provide ad hoc assistance to ICPE's consultancy services to MEBLO, Nova Gorica, Yugoslavia as per Job Description SI/INT/88/601/11-53/J-12209 (Annex 1).

His Terms of Reference were to compile informations on the past and current works, to review the current level of technological development, and to recommend possible ways for improvements and expansion, and for marketing MEBLO's know howby means of consultancy and engineering services.

He hereby wishes to thank his counterpart, Mr. Victor Arh of MEBLO and all his colleagues, who have provided him with so many informations. He also wishes to thank Dr. Edo Pirkmajer, the Team Leader of the ICPE project for the guidance throughout, and for the summarising discussions at the end of the mission.

## 2. Present Situation in General

First of all it has to be clearly stated that MEBLO at this stage is no longer to be considered as a furniture factory but it rather is a combine in which the production and marketing of furniture still represents a major component for the revenue but where other industrial and commercial branches are, and will have to be, increasingly looked into, favoured and expanded.

At present the following branches of the combine provide their share to the revenue:

- 24.0 % from Wooden Furniture
- 23.5 % from Particle Board
- 30.9 % from Textile Products
- 11.2 % from Metal and Plastic Products
- 10.4 % from Machinery and Electronics.

The present situation was observed in details as follows:

## 2.1. Wooden Furniture

This part of the complex itself consists of several units located in Nova Gorica and other formerly independent factories located in Branik, Cepovan and Trnovo which have meanwhile joined into the MEBLO combinate but which have not been visited in the course of this mission.

In Nova Gorica MEBLO operates

- a sawmill adequate for its own consumption
- production lines for solid timber furniture
- production lines for panel furniture
- a production line for furniture from bended laminates.

As mentioned already in the reports of Mr. Bassili, Mr. Auboeck and Mr. Pavlin the machinery is modern and up-to-date and the staff seems well trained. Thus in this field changes seem to be of not a great actuality and importancy.

But it was observed that

- the company seems to be halfway from seller's to buyer's market with all related consequences, and
- the management has obviously not taken the necessary consequences mainly with regard to the furniture design.

While over most of the 40 years of the existence of the company the only objective was to produce the masses of furniture as per the plan and for the never ending demand of the buyers with the main problem of the delivery time - the situation has meanwhile changed into the opposite.

Suddenly this situation had changed and today and for the first time since the company was established the products are not automatically sent to the waiting customer but have to be marketed.

And as already mentioned in other reports also suddenly the company should realise that only such products can successfully be marketed which are not only sought by the customers because of

- Its beauty of the design which follows the latest fashion trends,
- Its careful selection of the materials,
- its undisputable quality of the workmanship
- its reasonable prices

but which must also be manufactured under conditions where such prices can be achieved with a comfortable profit margin.

And in this respect it was observed that design seems to be still considered as a matter of 'art' only rather than as a combination of 'art' with the necessity of a 'most economical and most rationalised production'.

Thus the present situation shows products which are produced on most modern machine and production lines but under design conditions wasting all the efforts because only the 'art' component has been fulfilled but the production costs are too high and cannot provide the required profit margin.

This seems to be the most important change to be made as soon as possible. And this refers as well to the solid timber furniture as to the panel and laminated furniture.

## 2.2. Particle Board

The existing particle board factory is still to be considered as modern and also size-wise adequate under economical views. The quality of the products is good. But due to its 'economical' size of the output only a fraction is consumed by the own furniture factory while a great percentage has to be sold to the market.

But Mr. Bassili has very rightly already observed and stated in his report that whenever and wherever 'raw' particle board has to be marketed the profit margin must be very small if at all existing.



### 2.3. Textile Products

This department is very typical for the development of MERLO from a furniture factory into a combine of its today's diversification.

While originally a department for upholstery furniture was added to complete the range of furniture being offered to the customers this department has meanwhile expanded and developed into an quite independent factory in which the production of upholstery furniture represents only about 30 % of the total revenue of the department.

### 2.4. Metal and Plastic Products

This department seems to be on the same path of development as the textile products lines. Originally created to complete the range of products for the furniture buying customer now lamps, bathroom accessoires and a range of metal and plastic based furniture are now manufactured.

And most of the products are now being sold independently from any direct sales of furniture.

## 2.5. Machinery and Electronics

While other departments of MEBLO are still mainly concentrated on supporting the main product line - furniture - this department is fully on its way to diversification.

Originally likely a maintenance department it has accepted the challenge to design and manufacture special machines on demand of the furniture manufacturing. Those machines have later been sold and offered to outsiders. And by today the department is offering a range of 10 different machines for specialised purposes as a rather independent business line of MEBLO.

Much further development was achieved by the former electric maintenance section which by today has gone into manufacturing or better into assembly of computer and CIM equipment.

Both sections of the Machinery and Electronics department provide a 10.4 % margin of the revenue to the company by today with all prospects of further growth and development.

## 2.6. Engineering

In the same way as the other (formerly solely service oriented) departments have developed into real diversification also the engineering department is planning to become independent.

This intention is however, just started and in the very initial stage. But it provides a good field for future developments mainly in exports and has to be looked into it carefully.

## 2.7. Retail Shops

It is the business policy of MEBLO to market its products mainly through own retail shops. This is valid for Yugoslavia and the Middle East at the moment but plans are in the pipeline to open such retail shops also in Austria and Italy in the near future, and in the Far East in the foreseeable future, too.

The way those retail shops are decorated and designed has been mentioned in the report of Mr. Bassili already and definitely needs to be improved on the way from seller's market (keep customers patiently waiting until delivery is ready) to Buyer's market (demonstrate buyers and sell them the idea how nice and comfortable living in such furniture could be).

Since the local market in Yugoslavia is declining anyway it will be necessary for the management of MEBLO to decide whether such a re-decorating of the retail shops would achieve a higher or at least not declining market share or whether other measures such as modification of the design, creation of a 'youth line' as suggested by Mr. Bassili etc could provide for more success.

## 2.8 Export

This is one of the main sectors in MEBLO where expansion will provide for economic success. Today's export is handled through MEBLO ITALIANA and directed mainly to the Middle East.

MEBLO is proud to have showrooms (retail shops) now in Abu Dhabi, Dubai and Kuwait while another one in Doha is to be opened soon. Those showrooms are operated together with local businessmen and could be considered as another way of sales through agents. This kind of sales may have to be looked into.

Preconditions for export are actually very good already because the ever depreciating Dinar allows attractive prices to overseas buyers - also easily balancing the freight and other handling costs.

Export is furthermore most important because it provides MEBLO with the most needed foreign exchange.

## 2.9 Contract Furnishing Service

This department seems to be also one with a real future because the possibility to use so many of its own products provides the engineers with an excellent basis for such a 'turnkey' contract furnishing service.

Due to the declining value of the Yugoslav Dinar this department will increasingly be attractive to overseas investors looking for the interior decoration of hotels, congress centres, stadia and so many other public or private enterprises with the need of a uniform, high quality interior decoration.

### 3. Recommendations for immediate Actions

In the following sections of this report it was tried not to repeat such recommendations which have been brought forward by Mr. Bassili and the other experts already. All of those are fully supported without modifications or alterations except for the one referring to the furniture design where changes have been recommended in a very general way and where here in this report details shall be suggested.

#### 3.1. Design Changes

As mentioned earlier all experts have found that the present way of using the design as basis for the manufacturing and selling of the furniture needs improvement without going into many details.

During the relatively short time available for finding of facts in Nova Gorica it was observed that design was once only used for

a modular furniture line while all other furniture models are designed under the criteria of 'modern look' neglecting the need of the most economic manufacturing parameters.

At this stage it should be explained what is meant with 'most economical manufacturing' and 'modular system'.

The furniture industry in the Federal Republic of Germany is accepted as being most developed. To understand the reasons why this has been possible it is necessary to also understand the two main columns on which such developments have been built.

The first column was at all times up to now the availability of cheap raw materials of an extremely high quality through the early development and use of particle board for the panel furniture production.

But almost simultaneously the second column was developed in Germany which was the manufacturing under the modular system.

This kind of manufacturing means in details a design which studies average human body sizes for the people in the area of the market, and finds the smallest multiplyable measure (size) to provide the design for a permanent multiplication of this measure (size) when 'modules' are designed and created.

The reason for doing so is the knowledge that machines working at a high velocity and precision are existing and are providing for a

high output, but that this output is strongly influenced by the times required for changing those machines from one model size to the next one.

Therefore, and with the help of the 'modules', a system had been found where all components of a furniture line are designed with a multiplication of the basic measure keeping the number of components as small as ever possible.

And with the help of the modular components it was then possible to split the manufacturing process into two main sections

- the machine rooms where - independently of the incoming order - large quantities of various components all with the same width e.g. were passed through highly automatically operated machine lines ending up in a fairly large intermediate storage for the components
- the assembly rooms where - based on the incoming orders only - the components were taken out of the intermediate storage to be assembled as demanded by the particular order.

This system has helped the German furniture industry over many years to be leading in the world because, in connection with the cheap raw material (particle board prices have practically not increased during the past 30 years in Germany), it was possible to expand the local German market continuously and increasingly to open export markets.

This system has also changed the consumers' habits in Germany from the grounds up. While over generations furniture were not only bought once in a life time but inherited by the next generations now suddenly parents realised that their children did no longer want to use their furniture but were keen to get new and modern ones - and even to obtain the latest fashionable ones after much less than a generation to improve their home.

All this was only possible through the 'modular design' system which allowed furniture makers a very economical manufacturing on their machines with a minimum demand for machine changes while different surface treatments and designs provided for the range of alternatives sought by the customers.

Only lately this system was completely modified in the FRG. CNC operated machines made it possible to reduce the times needed for the change of a machine setting to almost zero and consequently to accept variations in sizes for very small series also.

For MERLO a decision has to be made whether

- a great investment could be afforded for bringing in CNC operated machines or for modifying existing machines for CNC operation to be then in a position to compete against the Central European and German furniture industry with lower production costs but higher freight costs, or whether

- with a smallest investment an outside, likely German, designer



should be hired to either train or better even lead the MEBLO designers permanently in the art of 'industrial design' which provides adequately for modern, customer-requested look as well as for the conditions to produce the small number of components on the existing machines most economically on largest possible series - and thus much cheaper than today.

Such a decision could provide MEBLO immediately for a profit margin in the furniture production - or for a larger margin which would then allow the management to be much more flexible than the competition by offering the well-known high MEBLO quality in connection now with affordable price in Yugoslavia - and when competing in the world market for exports.

And since it was mentioned that large investments cannot be considered at the moment it must be recommended to chose the 'older' but more appropriate system for the time being. In any case this system would not only be connected with the smallest thinkable investment for an expatriate Industrial Designer but could also be realised almost immediately and without loss of time.

### 3.2. Expansion of Export of Furniture

While today the export of furniture is mainly handled through the showrooms and intended own retail shops in Austria and Italy the

export should be expanded through the establishment of sales agents in mainly overseas countries.

Furniture showrooms are today existing in almost every country in the world and those countries with foreign exchange are always keen to offer their clientele not only local products but also imported ones.

To implement such ways it would only be possible to find out the countries in the world which do not have any or strict foreign exchange regulations and to find furniture importers or dealers or even manufacturers in those countries and to offer them the range of furniture as it exists in MEBLO today.

Unfortunately the export department of MEBLO is presently not connected to the company's main computer and this investment should be considered immediately to allow the expansion of export activities which seem to be impossible without the help of computer manuals on every desk in the export department.

In countries of the Far East products are available which would be sought by MEBLO for import such as electric appliances and electronic components for the related departments which could be obtained on countertrade basis.

In this way the export market could be expanded immediately still leaving room for a much larger expansion after the modular product

system has been established and prices and models could be made more attractive.

### 3.3. Furniture Components as New Export Product

This matter was already recommended by Mr. Bassili in his report and shall be underlined here again as a real opportunity.

The fact that such furniture components would be exported to Italy and maybe Austria would improve the income of the particle board line substantially because prices paid for furniture components - being nothing else but particle board laminated and cut-to-size and bundled in transportable stacks on pallets - are much better than those achievable in the highly competitive market for raw particle board.

But a very interesting aspect was created during the mission's discussions. Yugoslavia is intending to establish a 'tax-free zone' in Nova Gorica right at the border to Italy.

MEBLO should by any means obtain an area in this zone and should then bring in the particle board from its Nova Gorica production and sliced fancy veneer and/or high quality laminating papers from abroad (such as Italy) and transfer the lamination and cutting-to-size operation into the tax-free zone.

#### 4. Outlook

While in the previous paragraphs immediate actions were proposed which can be implemented mostly without any or just with limited investments the following paragraphs shall consider improvements which would require more time for the implementation.

##### 4.1. Engineering Services

The already stated intention to offer engineering services to outside companies such as in the Third World could be expanded once the modular system is installed in the furniture production lines.

Very likely by that time CAD will be installed in the engineering department which would be a definite precondition for offering of such services.

Both - the modular production system of furniture as well as CAD for the engineering works - are today needed for such services not only in terms of precision and standardisation but mainly in terms of the time factor.

When offering such services it has to be accepted that as any customer buying anything, once having made the decision, he wants

the implementation as soon as possible. And here is the bottle neck to be mastered: Between the decision (contract) made and the beginning of the work is the discrepancy.

For the customer it is only the choice of a civil engineer, the contact with the company or authority to provide electricity and some other engineers as well as the purchase of the land which he mostly has acquired already, and he is then ready to go ahead.

But for the engineering company the bulk of the work has to be done in almost no time. The detailed planning in connection with so many influencing factors has to be chosen and implemented on drawings in connection with much design and coordinating works. And this today can simply no longer be done manually but through reproduction on machines i.e. CAD.

#### 4.2. Knowhow Transfer

In connection with the engineering services it will be possible to establish a knowhow transfer. This can be done in connection with simple co-operation agreements between overseas companies as in developing countries.

Such an agreement could secure an overseas company in getting permanently new designs while MEBLO could benefit from selling the design which is to be made for their own production anyhow

Such an agreement could also provide for training of foreigners in MERLO while MERLO at the same time would benefit from cheaper labour during the training time.

Finally such an agreement would establish a permanent contact to an overseas company with the possibility of exchanging experience and obtaining general informations on raw materials, market trends and many other aspects, too.

#### 4.3. Export and Import of Furniture Components

In the further development of such co-operation agreements even the exchange or supply of components could be considered being export for the one and import for the other company making use of cheaper or more efficient production possibilities.

#### 4.4. Joint Ventures in Far East and other Parts of the World

Following the previously sketched development programme the final goal will be Joint Ventures in overseas countries.

Such joint ventures will in addition to the exchange of design drawings, or training personnel, or furniture components then also provide for a participation in the management, in the company policy and strategy of an overseas company, and finally and hopefully also in the profit of such a company.

For going all the way from exports only towards co-operation, knowhow transfer, exchange of personnel and components, and finally into joint ventures it will certainly be necessary to have own offices in such areas or countries with all the benefits of a continuous presence.

#### 5. Conclusion

Based on the facts found during the short time of the mission it is stated that the company seems to be halfway between a factory producing for the high demand of the clientele under the main problem of continuous delivery time difficulties, and a combinat which has to concentrate on marketing of furniture as the main products while many other sectors are in a continuous expansion and diversification process taking over an increasingly greater share of the revenue.

On this way it is recommended to hire an expatriate industrial designer immediately and to transfer the production from the present manufacturing of furniture almost completely without the modular system into a process where only modular furniture components are being produced.

Not only the manufacturing will be easier and cheaper but also the amount of money being bound in the intermediate storage will be reduced through those measures.

In a parallel action to improve the efficiency of the company the export should be expanded as rapidly and as soon as possible by appointing agents and selling directly or indirectly through them and by giving the export department a better efficiency by having them connected to the company's main computer.

Also the establishment of a laminating and cutting-to-size line in the tax-free zone seems an immediate possible action unless it will take too long until this zone has been established. In this case the components should be produced meanwhile in the main factory but sales of furniture components to Italy and Austria should commence as soon as possible.

With those immediate actions taken the necessary increase of revenue can be achieved and this revenue can then be used to expand the company beyond the boundaries of Yugoslavia in the effort to secure further expansion despite the world competition.