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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

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FINAL REPORT

Transfer of Technology in Footwear Manufacture and Quality Control

(according to clause 2.09 f/g of contract 93/173)

BALLY MANAGEMENT LTD.

SYNOPSIS

This report has been written in accordance with the UNIDO project US/HUN/92/195 and is based on clause 2.09 f/g of contract 93/173.

The objectives of this project were,

- to assist the Hungarian footwear industry in becoming more competitive on the local and selected export markets
- to assist the Hungarian footwear industry in achieving a quality standard required for the export market

This report serves, to inform the parties involved about details of the below listed activities:

Project objectives including:

- Comments on the project objectives and Bally's obligations

Project alterations including:

- Causes and explanations for project alterations

Implementation phase I including:

- Comments on the appraisal mission in Hungary and reasons for the selection of the pilot factories
- Comments on the evaluation and obligation of BIMEO
- Comments on the evaluation of the selected pilot factories

Implementation phase II including:

- Material selection & testing
- Style selection and technical preparation
- Study tours
- introduction of styles & follow-ups
- work-shops
- Seminar
- Assessment of quality control in Hungarian factories

The knowledge gathered during the evaluation of BIMEO and the pilot factory gave sign that the Hungarian shoe industry has been troubled with enormous problems.

The availability of financial means was considerably low, so that the participating companies were struggling hard to cope with the requirements brought forward through this project. This situation is even more frightening when looking at the relatively high inflation rate and the exaggerated interest rates for bank loans. Due to these circumstances one of the pilot factories announced its bankruptcy at a very early stage in the course of the project.

In addition to the above mentioned problems it has been evident that due to the dependency on the Russian market the development of high quality upper and lining material has been neglected. As a consequence the leather used for producing the prototypes did not in the least meet the quality expectations set at the beginning of this project.

Maintaining shoe technical up-to-date knowledge has consequently also lost importance. This fact is definitely down to the rather inefficient vocational training. Bally is however of the opinion that a well planned additional project in this sector would contribute a great deal to get the Hungarian shoe industry back on track.

Despite the rather difficult circumstances which Bally realised during this project, considerable progress was achieved in several fields of shoe production:

- there is significant improvement in product development apparent
- the shoe technical understanding is raising
- well functioning quality securing measures have been established
- marketing and planning is now paid more attention to

The Hungarian shoe manufacturers should take advantage of its, from the logistics point of view, better location than its direct competitors like India, Pakistan, China. Delivering well selected export markets with good quality products "just in time" will help to take the Hungarian shoe industry back to the point where it used to be some decades ago.

To achieve this goal, the Hungarian shoe producers have to make an effort to keep on developing a marketing concept which considers customer demands of the markets targeted. Simultaneously, the production overheads must be reduced by evaluating the efficiency on the shop floor and in the administrative sector.

TABLE OF CONTENTS

3.2.2 Style selection

3.2.3 Technical preparation/Flow-charts

3.2.4 Bally's Technical Manuals

3.2.5 Study Tour I/II

3.2.6 Introduction of styles

3.2.7 Follow-up missions

3.3 Output 3

3.3.1 Study Tour III

3.3.2 Study Tour IV

3.3.3 Study Tour V

3.3.4 Work Shops

3.3.5 Seminar

3.4 Output 4

3.4.1 Transfer of know-how for third party certification and accreditation

3.4.2 BIMEO staff at Bally's

3.5 Output 5

3.5.1 Introduction of a quality management system

3.5.2 Assessment of quality control in Hungarian shoe factories

4. PROJECT RESULTS AND REMAINING MAJOR PROBLEMS

5. CONCLUSION

6. ANNEXES

1. PROJECT OBJECTIVES

1.1 General remarks

The Hungarian footwear industry built up a fairly good reputation in all of Europe during the 1930's as a supplier of high-quality sewn shoes (Goodyear welted) marketed under the "Budapest style" brand. The semi-mechanised manufacturing units were nationalised in 1949.
The factories were centralised, merged and decentralised several times between 1963 and 1989, according to the political or economic objectives of the central planned economy. The plants were developed into large-scale enterprises using completely mechanised - sometimes very advanced - technology. Some of the co-operatives only catered for the local demand, but the majority of them achieved very high standards in mechanisation and reached the size of small and medium state-owned factories.

The total output of the Hungarian footwear industry grew to 46 million pairs of leather shoes in 1989; the share of the co-operatives was 35 per cent. The main market for both state-owned and co-operative sectors was the former Soviet Union: Exports reached 17 million pairs/year, whereas the supply to West Europe and North America was about 6 million pairs/year.

The political changes beginning in 1988, had a substantial impact on the entire Hungarian economy. Manufacturing industries, developed mainly to cater for the Comecon market, experienced a very painful time, loosing their customers virtually within one year. Due to the simplicity of products and large orders, these capacities could not be transferred into high quality manufactures. The problem was complicated by the full liberalisation of foreign trade which resulted in importing inexpensive, poor quality footwear for the local market whilst, at the same time, income and consequently the buying power of the local population decreased dramatically. The re-orientation of manufacturing capacities towards the extreme European market was further handicapped by high inflation and interest rates on the Hungarian money market. The result was that the total output of the Hungarian footwear manufacturing industry dropped to 16 million pairs in 1992.

1.2 Project target

The project aimed to improve the competitiveness of Hungarian footwear manufacturers by introducing shoe products of high quality and upgrading a range of production, quality control and marketing skills of selected shoe factories. It also included the BIMEO Trading and Research Institute, the only institution in Hungary providing quality testing and control services to the leather, shoe and component industry. The project aim was to strengthen BIMEO's quality testing and control capabilities.

The project document describes the immediate objectives as follows:

- To assist the Hungarian footwear industry in becoming more competitive on the local and selected export markets by introducing high quality shoe products and an appropriate quality management system adopted by those supplying a reputable brand identity.

- To assist the Hungarian footwear and related industry sub-sector in achieving quality standards required for reliable and stable export to industrialised countries by upgrading the local quality testing laboratory BIMEO.

1.3 Donor country

The Swiss Government agreed to finance the project. The total costs amount to US$ 998'920 including 13% UNIDO support costs.

Throughout the period of execution, the Federal Office for External Economic Affairs in Bern took a keen interest in the activities and the progress of the project. The Bally team also received excellent support from the Swiss Embassy in Hungary.

1.4 Obligation of Bally

Bally Management Ltd. was selected by UNIDO as major sub-contractor. Bally has already successfully carried out two similar projects (Egypt).

The obligation of Bally as a subcontractor is stated in the Terms of Reference (Annex 1). The responsibility includes the following major activities:

- Selection of local materials and components and testing those items for their technical and fashion suitability.
- In-depth evaluation of technical capabilities of machinery and equipment in the shoe industry.
- Style selection at Bally's and manufacturing of prototypes in Hungarian materials.
- Training of staff and labour.
- Transfer of know-how and implementation of appropriate technology in the selected factories.
- Introduction of an efficient quality and process control system.
- Evaluation of the facilities at BIMEO institute and assessment of the reliability of its material testing. Transfer of know-how and recommendation for obtaining third party certification.

Next to the participation in the project BIMEO acted as direct partner of Bally experts and assisted them during the various factory visits, the workshops and the seminar as well as for translation. The major obligation of BIMEO was to participate in the implementation of know-how and technology by Bally experts in the selected Hungarian shoe factories and collect that know-how in order to make it available to companies not directly involved as pilot factories.

2. PROJECT ALTERATIONS

As already stated in the Project Document the Hungarian shoe industry was facing serious economical problems. During the appraisal mission and the evaluation of the selected companies, the mission teams received the information that a great number of enterprises were confronted with financial bottle necks and lack of liquidity. A team of the "Finance Commission" of the Swiss Government paying a visit to Hungary came to the same conclusion. Taking this fact into consideration, Bally was facing the risk that one or more of the selected factories could drop out during the implementation phase.

The companies initially assisted were ALBA, Székesfehérvár, BER-FER, Rakamaz and Record, Szeged. Due to the above mentioned reasons Bally was willing to include more companies directly in the project and distribute the input of know-how on a large basis. Bally made the following propositions which received UNIDO's approval:

November 1993	include ROBERT, Szombathely as additional pilot factory.
December 1993	PANNONIA, Nagykanizsa, SALGO, Salgotarjan, TURUL, Gyomaendröd and SOFTY, Budapest, to be visited by Bally experts.

These measures proved correct as one pilot factory went into bankruptcy and another one renounced of further collaboration.

In addition, Bally experts visited the Secondary School for Shoes and Leather in Budapest.

3. EVALUATION

PHASE I

3.1 Output 1

A report on the assessment of the capabilities of Hungarian shoe manufacturing plants, identification of (three) counterpart companies capable of producing high quality footwear, inputs required for receiving new technology and definition of recipients' commitments.

3.1.1 General remarks

The appraisal mission for the selection of the three pilot factories saw the Bally project team leader the first time being confronted with the actual situation of the Hungarian shoe industry. The visit took place from April 26 to May 5, 1993. The major problems of the local footwear manufacturing industry could be summarised as follows:

- The footwear production fell from 30,3 million pairs in 1989 by over 50% (1993).

- In the same period the import of shoes showed an increase of approx. 230%.

- The market of the countries of the former Soviet Union absorbing 40% of the production and other COMECON countries as well as the domestic market collapsed.

- The domestic market preferred low prices. On the one hand one has not realised the importance of quality, on the other hand there was not sufficient buying power for good products with added value.

- Most of the shoe factories were battling hard with financial problems. They had limited working capital and therefore could not finance the production. At the same time suppliers insisted on cash payment whilst many customers did not pay their dues.

- ...k credits were very limited with interest rates up to ...%.

- There was a pronounced lack of up-to-date marketing know-how, including marketing strategy, product creativity and range building techniques.

- The Hungarian shoe industry had lost its brand reputation.

- Domestic leather processing was small and very limited in good quality.

- Generally, the quality standard of the final product did not meet the requirements of West European demands.

- In spite of a solid shoe technical basis shoes were not manufactured economically.

- The productivity in production and administration was very low with a performance of 50 to 70% of the Bally achievements.

As a consequence of the current situation Bally was particularly dealing with these weak points during the entire project. Apart from technology Bally paid special attention to:

- marketing, including product development
- training of staff and operators, from technical know-how to supervision and modern managing metnods
- improving the quality consciousness
- time study, value analyses and working methods in order to increase efficiency

Due to intelligible reasons Bally could not directly solve the financial problems through the project. However, during all the activities - the visits to the various companies, the workshops and the visits to Bally - Bally was always referring to cost saving possibilities, value analyses and improvement of efficiency.

3.1.2 Appraisal mission

The target of the first phase of the project was to assess local conditions and select companies for transferring the know-how. The following main criteria were defined for selecting Hungarian shoe manufacturing companies:

- the assisted plants were to be run by private (privatised) companies;
- the management of the plants were to be capable of absorbing and implementing the technical assistance;
- the recipient companies were to be technically and economically viable;
- the assisted companies were to be open to Hungarian shoe manufacturers and cooperate in disseminating the technical know-how received.

Beside the basic criteria, a few additional requirements have been set up by UNIDO and the HUNGARIAN MINISTRY OF INDUSTRY AND TRADE (HMIT):

- the recipient companies will be responsible for providing materials and other inputs required for implementing high quality footwear manufacturing technology.
- the plants should be well-equipped and have adequate technical infrastructure.
- companies which have already had long-term commercial or technical relations with foreign shoe manufacturers, or which are owned by (even if only partially), foreign enterprises should not be selected.
- companies operating in regions suffering from high unemployment (e.g. Szabolcs-Szatmar-Bereg) should be given priority.
- the local staff should be able to communicate in English and/or German.

Altogether seventeen applications were received. BIMEO, who was selected as the local counterpart, together with HMIT, made the pre-selection in accordance with the set criteria. As a result, twelve companies were proposed for inclusion into the assessment phase. During a discussion with UNIDO and Bally representatives, the list was reduced to 9 companies by eliminating those companies not yet fully privatised.

The evaluation of the factories was conducted by a team of four persons:

Dr. F. Schmél, UNIDO, Backstopping Officer
Dr. I. Deme, BIMEO
I. Szabó, BIMEO
P. Regli, BALLY

The evaluation took place from April 27 to May 4, 1993. The team visited the following companies:

RECORD	Szeged
MODINNO	Pécs
PANNÓNIA	Nagykanizsa
ROBERT	Szombathely
ALBA	Székesfehérfár
KEKES	Gyöngyös
BER-FER	Rakamaz
ZSIGMOND	Tato
MOLTÁN	Budapest

After the visit to these nine shoe factories the evaluation team discussed in detail the strengths and weaknesses of the industry and each individual company. Based on the above mentioned criteria and an additional checklist established by Bally, the team selected the following three companies as pilot factories for PHASE II.

ALBA, BER-FER, RECORD

and in case of unforeseen complications ROBERT and PANNONIA as alternative companies.

With this selection the main shoe segments of men's, ladies' and casual could be balanced. Each company was located in a different geographic region of Hungary. The management of the companies was fully aware of the contribution to be provided for the implementation of the project. They declared their willingness to receive visitors from other Hungarian shoe factories and agreed to actively participate in disseminating the know-how received from Bally and other sources.

For details we refer to the following two reports:

1. Report on the Assessment and selection of Manufacturing Units, 14 June 1993 by Dr. Ferenc Schmél, UNIDO Backstopping Officer

2. Report on the Appraisal Mission of the Hungarian Footwear Industry, May 1993 by P. Regli, Bally Management Ltd.

List of characteristics of the visited shoe factories see Annex 2.

3.1.3 Evaluation of BIMEO Trading and Research Ltd., Budapest

BIMEO is the central quality control laboratory for the Hungarian leather and allied industries. It is a fully privatised company owned by Hungarian tanneries, leather product factories, local component and material suppliers, as well as by some of the employees.

BIMEO was selected by the Hungarian Ministry of Industry and Trade as the local counterpart with the responsibility of implementing the total quality control and management system. At the same time, BIMEO requested to cooperate with UNIDO staff and Bally experts in implementing the project.

BIMEO is accredited according to EN 45001 by the Hungarian Bureau of Standards but not yet to ISO 9000. The evaluation has shown the following results:

The evaluation took place in September 1993 and was carried out by two Bally experts, P. Regli, Project Team leader and D. Blair.

- The quality manual appeared to be comprehensive and was continually revised.

- Generally the test reports were similar to those issued by Bally Material Testing Laboratories.

- All necessary testing standards (e.g. Din,IUP) for general test procedures were available. The institute has closed contacts to other shoe research institutes like PFI in Germany and Satra in England.

- The equipment ranging from very old to very modern, was in acceptable condition and made the laboratory capable of carrying out a very wide range of tests. There was room for improvement in tidiness and cleanliness.

- For upper, lining and sole leather as well as for rubber, TR and PU the test method used by BIMEO were very similar to those applied at Bally's. There were certain differences in the test methods for threads, insoles and top pieces.

- BIMEO was also experiencing financial difficulties. The institute does not receive state support. The situation reflects the financial constrains of the entire shoe and leather sector, which had led to a reduced demand for many payable services.

Bally was assisting BIMEO on the following input:

- Handing over Bally's Technical Manual "Securing of Quality"

  - Part 1 Guide Book for Major Material Tests
  - Part 2 Test Instructions

These manuals give detailed information about test standards and their corresponding test requirements. These requirements reflect the high standard set for Bally products. The Bally Test Instruction Manual provides the testing laboratory with in-depth instructions on how to carry out a wide range of tests on footwear components. The two documents are based on over 60 years of experience in material testing at Bally's. They form the foundation for successful and reliable material testing:

- Information about Total Quality Management
- Advice in introduction and application of ISO 9000
- Training of BIMEO staff at Bally Laboratories in Switzerland
- Comparison of material tests from selected Hungarian leather and components (see point 3.3.1 Material testing)

BIMEO staff could also profit from the know-how transfer during the various visits of Bally experts to Hungarian shoe factories and the workshops.

3.1.4 Evaluation of pilot factories

Upon selection of three pilot factories Bally evaluated the respective companies, for the purpose of producing a solid base for forthcoming activities. Comprehensively judging the present situation, the evaluation team was to prepare the firms by providing vital information on:

- technology
- marketing
- material and components
- quality and quality control system
- training
- productivity
- machinery and equipment

in form of a list of prerequisites, essential for a successful continuation and completion of the project.

The evaluation, consisting of three Bally staff members, took place from November 15 to 26, 1993 showing following results:

- the financial liquidity is low
- the companies lack necessary knowledge in marketing
- the quality of materials and components is partially poor
- up-to-date knowledge is not available
- quality control systems are missing or insufficient
- the training systems are not effective
- the performance level is low
- due to intelligible reasons, a planning system is missing
- machinery and equipment are partly inappropriate and partly badly maintained

Bally utilised these information as guidelines for the preparation of pending missions and workshops in Hungary and Study Tours in Switzerland.

PHASE I

3.2 Output 2

Three Hungarian shoe manufacturing plants capable of producing footwear meeting the quality requirements of international markets having renewed product range, (re)trained managerial and marketing staff.

3.2.1 Material selection/testing & Comparison of test results and recommendations of materials to be purchased abroad

The main aim of the material selection was to determine the quality level of Hungarian materials and components, and to assess their suitability for high grade footwear. The use of locally made materials and components was a major point in the project.

A further aim was to compare the results obtained in the Bally Material Testing Laboratory with those obtained by BIMEO. This could enable an assessment of the quality requirement levels set by BIMEO.

The material selection took place during the "Evaluation-Phase of BIMEO Institute" and was carried out by P. Regli, Team leader and D. Blair, head of Material Testing Laboratories in September 1993.

Various materials were selected including upper and lining leathers, sole leather, insoles, heels, top pieces, rubber soles, synthetic soles, sewing threads, etc. The materials were selected directly from individual manufacturers and from three different shoe factories (ALBA / BER-FER / RECORD).

Important material was available, but at costs often too high for the Hungarian shoe manufacturers.

A direct comparison of all the test results from BIMEO and from the Bally Material Testing Laboratories could not be made, due to the differences in methods and equipment. It was, however, possible to make a direct comparison in the conclusions reached on the individual materials.

Comparing the test results, it was evident that there are often considerable differences in the Bally and BIMEO assessments. The Bally assessment was carried out using mainly the PFI requirements. For certain tests, Bally's own test requirements were applied. BIMEO used Hungarian specifications for its assessments.

The misinterpreted criteria for assessment has obviously led to differences in the judgement.

In particular, we noticed differences in the leather test results for:

- the Veslic test
- colour migration
- sweat resistance
- finish adhesion
- tensile strength
- water vapour number
- water soluble substances (sole leather).

With the bottom components there were differences in the:

- bending resistance of insoles and shanks
- abrasion resistance.

For further details please turn to the corresponding report.

With only a few exceptions, the Bally Material Test Results were more critical then those of BIMEO. As the aim of the project was to achieve an increase in the quality of the products from the Hungarian shoe industry, BIMEO had to examine and re-evaluate its test methods and requirements.

During the following training period of BIMEO staff at Bally's Test Laboratory, we dealt in detail with the test methods and placed particular emphasis on the evaluation of the materials after testing.

A. Braun, Managing Director of BIMEO, confirmed Bally's comments. Mr. Braun also mentioned that BIMEO was interested in some of the Bally test methods, and requested further information. This information has been supplied to him.

Conclusion

The physical and chemical test results for the upper and lining leather showed that there are some general problems with dyestuff and finishes. These problems could be overcome by the use of better chemicals.

Calf hides are available. However due to the price and the missing demand they are generally not used.
There were virtually no Hungarian goat or sheep hides available.
Suitable lining leathers for high grade shoes are available.

Based on the test results, Bally would like to point out that according to activity 1.2.6 of the project document, it was the responsibility of UNIDO to provide expert services in tanning and leather finishing.
Without those necessary improvements, the Hungarian shoe manufacturers will have to import upper leathers if high grade shoes are to be produced in the future.

Sole leather was not readily available because of lack of demand during the last decades. The sole leather from Simontornyia presented well, and, with a few minor improvements, should be suitable for use.

The other components were generally in order. The respective necessary improvements could be made fairly easily.

3.2.2 Style selection

The main objectives of this activity are:

- to develop a foundation for improving the product range in the pilot factories
- to produce prototypes, based on the selected styles, in Bally's factories made from Hungarian raw materials for determining the materials' suitability
- to show proper pattern construction and the correct application of technology on the shop floor
- to introduce the prototypes and transfer deeper technical know-how in Hungary

In this respect the pilot factories had the opportunity to select 6 styles and two lasts each from the Bally range. The selection took place in October (BER-FER, ALBA, RECORD) and in December (ROBERT) 1993, at Bally's in Switzerland.

The Hungarian companies were represented by:

Mr Imre Mészarovics	ALBA Co.
Mr Imre Beregnyei	BER-FER Ltd.
Mr Imre Farkas	RECORD Co.
Mrs Tóth Lászlóné	ROBERT Co.

The styles were to be selected in consideration of the abilities of their personnel and the availability of machines and equipment. Nevertheless, it was evident at an early stage that some styles were exceeding the companies' capabilities and leading to premature problems during the introduction of the styles in Hungary.

3.2.3 Technical preparation/Flow-charts

The technical preparation/Flow-charts includes the manufacture of prototypes and their respective technical specifications as well as comprehensive information about the technical preparation and prerequisites to be provided by the pilot factories for the introduction phase.

The prototypes were produced at Bally's using Hungarian materials, provided that it corresponded to a certain quality standard. Bally strictly followed the production process of its own, bearing in mind, however, technical restrictions noticed during the evaluation mission in the pilot factories e.g. simplified finishing methods etc..

The package of items each of the pilot factories received consisted of:

- 1 pair of shoes
- 1 upper partly finished demonstrating correct skiving and application of reinforcements
- 1 copy of patterns in standard size 4 1/2 (for ladies' shoes) and 7 1/2 (for men's shoes)
- 1 set of graded insoles patterns
- 1 set of components (insoles, soles, heels)
- 1 pair of each selected last (max. 2)
- 1 folder containing specifications such as sequence of operations, specifications for skiving and technical drawings.
- Time minutes of every operation according to Bally 100 % performance

3.2.4 Bally Technical Manuals

Bally's Technical Manuals provide detailed information about modern technology for the production of shoes. It was regarded as vital to have those Manuals available to every private shoe company in Hungary.

Bally sent the foilowing Technical Manuals to BIMEO for translation and distribution to the pilot factories:

- Leather sorting and Clicking Room techniques
- Closing Room techniques
- Men's Making Room techniques
- Ladies' Making Room techniques

- Quality Control
- Training program for the Closing Room

3.2.5 Study Tour I/II

The objectives of Study Tour I and Ii were on the one hand to make the technical staff acquainted with today's shoe technology in general, on the other hand to provide deeper technical knowledge in all the fields on the factory floor. Bally also aimed to familiarise the staff with the importance of quality control in the various departments. In addition, the Study Tour served to transfer in-depth knowledge in pattern making to those staff members of the companies already working in that field.

During the evaluation of the Hungarian factories in Hungary it was decided to divide Study Tour I and II into two groups. The decisive criteria were:

- to minimise possible interruption at the pilot factories
- to be able to render a more personal training to the individual person

The two training periods took place:

- Study Tour I: December 6 to December 10, 1993
- Study Tour II: January 24 to February 5, 1994.

The training was based on the Bally Technical Manuals and on the latest technology in shoe manufacturing. The training further included new production systems (modules, rinks), production planning (Just in Time, Quick Response), material testing at Bally's, quality control, management, maintenance concepts, etc.

During the training period the technicians had the opportunity to visit the Bally factories at Stabio (men's moccasin), Caslano (ladies' California and cemented), Aarau (ladies' cemented) and Altdorf (men's California) which produce shoe relevant to the selected styles and their existing production.

Particular attention was paid to shoe manufacturing in each department. All the significant points were thoroughly discussed and demonstrated on the spot.

During the two weeks' training course, the four pattern makers received an insight into the product development procedure at Bally's. Priority was set on practical pattern making.

The following subjects have been dealt with:

- last draft
- basic constructions of all ladies' and men's styles
- boots
- moccasin
- California
- sandals

Particular attention was paid to special construction, e.g. blocking, pattern springs, toe puff etc.
The possibilities of modern technology was shown during a visit to the CAD department. This visit was also utilised to attend foot fitting trials.

It was noticeable that the trainees have a good basic knowledge of the shoe technology. All participants were very attentive and eager to learn.

Most of them, however, failed to introduce in their factory what they learnt during their training in Switzerland. Basic and crucial points were neglected causing time consuming repetitions for the Bally experts during the introduction and the follow-ups.

Detailed training programmes can be seen in Annex 3.

3.2.6 Introduction of styles

This activity within the execution phase aims to implement the styles selected in Switzerland in the pilot factories in Hungary.

Further objectives were:

- introduction of correct technical processes
- upgrading the quality of the pilot factories' own products
- transfer of technical and organisational know how
- establishing a quality securing system

Introduction of new styles by Bally experts took place in two phases:

Phase 1: From January 10 - 18, 2 pairs of uppers of each style were manufactured in each factory

Phase 2: From February 7 - 18, the uppers were completed in the making room

The styles to be reproduced in Hungary were utilised, on the one hand to involve the entire staff team on the shop floor into the manufacturing process, on the other hand to check on the operatives' capabilities.
All the persons included into this process have received comprehensive explanations and demonstrations as well as exhaustive technical drawings.

Simultaneously, Bally experts examined surrounding factors associated with the manufacturing process, namely:

- material and components
- productivity/efficiency
- personnel situation (ration direct/indirect labour)
- availability of machinery & equipment
- maintenance
- management

It was apparent that all the companies visited by then shared identical problems. Those were, among others

- insolvency
- poor quality of materials and components
- low efficiency and productivity level compared to the number of employees

- inadequate machinery and equipment
- poor maintenance
- often incompetent and unconcerned management

Bally made an effort to involve the respective companies straight away into their major problems. Suggestions for improvements were discussed including all the measures to be taken to attain the goals.

Moreover, Bally wrote very detailed reports and tried to reflect the missions by repeating the most significant matters once again.

3.2.7 Follow-up missions

Follow-up mission aim to check on the maintenance of improvements and quality standard and on the successful implementation of recommendations given beforehand.

Additional objectives are the provision of supplementary support and advise on ensuring the consistency.

Bally experts carried out the following follow-ups:

June/August 1994:	Robert/Alba/Record/Ber-Fer
December 1994:	Ber-Fer
March 1995:	Robert
June 1995:	Pannonia/Turul
September:	Majsai/Softy

Taking the above mentioned points into consideration, these visits particularly aimed to prepare the factories for the forthcoming Shoe and Leather Fair in Budapest by establishing a range based on the products selected in Switzerland. They received thorough instructions in pattern making and the technical preparation for production.

Additionally, Bally experts analysed all the factories again paying special attention to:

- marketing
- production planning
- product development/tooling-up
- quality securing
- efficiency/productivity
- correct application of technology

Visible progress was recognisable since the first visit to the counterpart factories, specially as far as the execution of key operations is concerned.

However, the general problems of the Hungarian shoe production remained: the lack of financial means, which left the most significant problems unchanged. These were:

- deficient materials and components
- inappropriate machinery and equipment

It was disappointing to see that despite the effort made by Bally, be it the training in Switzerland or the very thorough technical support in Hungary, not more advantage was taken by the responsible persons. This fact was representative for the problems faced for almost the entire duration of the project.

3.3 Output 3

Up-to-date information and guidelines on producing high quality footwear meeting market requirements.

3.3.1 Study Tour III

It has been evident at the very beginning that marketing is the weak point in Hungary's shoe industry. This problem has been confirmed and emphasised by officials as well as shoe manufacturers.

The lack of up-to-date knowledge in marketing was mainly a result of the policy of Hungarian's former regime and therefore the strong dependency on the Russian market.

It was decided to give a group of Hungarian marketing specialists from the shoe trade the chance to attend a one week's training course at Bally's in Switzerland. It was Bally's aim to include, apart from marketing, as many administrative fields as possible into the programme.

The training was held from November 28 to December 2, 1994 and was attended by:

Farkas Imre	RECORD
Kosztolányi Dezsó	
Ráczné Olga	
Beregnyei Imre	BER-FER
Paszabi Ferenc	
Bartha Lászlóné	
Tilki Lászlóné	
Zoltán Boros	ROBERT
Tóth Lászlóné	
Katalin Kissné	
Elza Németh	
Antal Tóth	
Jánosné Bányóczki	ALBA
Rozália Baranyai	
Anikó Dénes	
Anna Kerek	

Bally established a thorough programme for this week (see Annex 4). The programme covered the following main subjects:

- Visit to the Bally testing laboratory
- Visit to the Bally leather store dealing with leather sorting

- Visit to Bally's men's/ladies' shoes factory in Schönenwerd
- Lecture on Bally's costing system
- Lecture on Bally's "After sales service" concept
- Visit to the training college of Swiss Shoe Federation
- Lecture on Bally's marketing concept
- Visit to Bally's Fashion Centre
- Introduction of Bally's CAD system
- Visit to Bally's Flagship store in Zurich
- Visit to the Bally shoe museum

Special attention was paid to the very comprehensive lecture on marketing chaired by Mr Peter Streit, Executive Vice President, and lectured by Mr Thomas Spiess, Head of Marketing Process Management.

This lecture consisted of the following key points:

- gathering marketing information

- establishing grid concept

- range building

- selling phase

- production planning

- purchasing

- product development

According to the interest shown and the feed-back received, Bally is of the opinion that the participants have gained a lot of useful knowledge during that week. Especially the lectures on costing and marketing appeared to have had a particular effect to some of the people who have pronounced their interest to reorganise the already existing system in their factories.

3.3.2 Study Tour IV

Agreeing on an additional visit of a Hungarian delegation to Switzerland, Bally provided the conditions to render supplementary services to a group of executives from the production and the Special Education School for Shoes, Leather and Fur in Budapest.

Participants

Kovács József	Secretary of the Hun. Nat. Com. for UNIDO (Ministry for Industry and Trade)
Hunya István	Private company owner (TURUL CIPÓ)
Szládovits László	President (Pannónia Shoe Coop.)
Dr Beke János	Prorector of the Technical College of Light Industry
Rajnai Katalin	Teacher of Leather Processing High School
Bahik Árpádné	Teacher of Leather Processing High School
Vlaj Márta	Teacher of Leather Processing High School
Vegrinyák József	Chief Engineer (LEBOK Shoe Producing and Trade Ltd.)

It was Bally's aim to deal with all the key subjects which are decisive in today's world of shoe manufacturing. Therefore, the very restricted training time of only four days has called for a rather tight time schedule.

Bally divided the training course into various fields:

- shoe technology/shoe production

  The participants of this training received thorough practical and theoretical information about modern shoe manufacturing from leather sorting to final inspection.

  Several Bally production plants were visited, such as:

  ° Men's shoe factory in Schönenwerd producing Bally's luxury shoes of Cemented and Goodyear construction

  ° Ladies' shoe factory in Schönenwerd producing Bally's high quality ladies' shoes of Cemented construction

  ° Men's shoe factory in Stabio producing Bally's prestigious Moccasin shoes

  ° Ladies' shoe factory in Caslano producing Bally's medium price products of Cemented and California construction.

  Bally made them familiar with the latest production systems such as Rink systems and modular manufacturing as it is applied in Bally's production plants.

  Particular attention was paid to types and advantages of machinery and equipment.

- product development

  The trainees had the opportunity to watch the development of patterns on the spot. They received comprehensive information about the possibilities and operation of Computer Aided Design (CAD) systems.

  Competent technicians involved them into the procedure from Design to the finished pattern.

- quality securing/material testing

  The Bally Engineering team organised a lecture about Quality securing. A member of Bally's Total Quality Management passed on mediated thorough knowledge about modern quality securing systems, their significance and importance in today's world of manufacturing and involved the participants into Bally's methods of quality control.

  The trainees paid a visit to Bally's Material Testing Laboratories which is the first officially accredited private Swiss testing laboratory.

  Mr David Blair, Head of Bally's Testing Laboratories, passed on in-depth information about:

  ° the basic material tests required in shoe manufacturing

  ° particular risk factors to watch

  ° the consumers' attitudes in terms of returns and complaints

- marketing/selling of shoes

  The group of trainees was involved into Bally's marketing concept by one of Bally's top marketing specialist. They learnt:

  ° how to define a product program
  ° how to established a collection
  ° the connection between marketing and product development
  ° how to successfully utilise modern communication systems
  ° how to display the products in the shop
  etc.

  Beside they had the chance to see one of Baily's best shops in Switzerland and to talk to shop personnel on the spot.

- training system

  The participants visited the facilities of the Training School of the Swiss Shoe Federation in Schönenwerd. They were fully involved into the training concept, the professions possible and the types of subjects and their extend.

  All trainees have received detailed subject tables of all the professions.

3.3.3 Study Tour V

In addition to the above mentioned study tours UNIDO and Bally agreed on supplementary visit of Majsai Cipöipari, Kiskunmajsai.

The group composing of 5 persons visited Bally from October 16 - 20, 1995. They received the same technical support as previous groups.

For details see point 3.3.2..

3.3.4 Work Shops

The purpose of the work shops was, to select subjects which are representative for the present problems in Hungarian shoe factories. The lectures were to transfer in-depth theoretical and practical information; they mostly contained details that could not be dealt with during the missions.

It was the aim of these work shops that as many shoe manufactures, technical schools and other institutions as possible connected with the shoe industry have the possibility to participate.

The topics of the lectures were chosen by BIMEO in consideration of the pilot companies' comments in this respect.

Bally prepared the following work shops:

December 15, 1995

Subject:	Finishing of shoes
Place:	Ber-Fer, Rakamaz
Chaired by:	P. Regli
Lectured by:	S. Ratheiser

March 9, 1995

Subjects:	Closing Technology & Quality Securing
Place:	Turul, Gyomaendröd
Chaired by:	P. Regli
Lectured by:	E. Gysin S. Nicklis

March 30, 1995

Subject:	How to deal with small orders & Training on the shop floor
Place:	Robert, Szombathely
Chaired by:	P. Regli
Lectured by:	S. Nicklis S. Ratheiser

BIMEO has translated the lectures into the Hungarian language. Everyone being interested has access to these translations. All the lectures were very well organised and mostly well attended. We would like to express our gratitude to all the parties involved into the organisation of the work shops.

For further information please refer to Interim-Report II.

3.3.5 Seminar

It was decided to arrange a Final Seminar in Budapest for the purpose of reviewing the past activities and the corresponding results, commenting on the most serious problems in the Hungarian shoe industry and giving recommendations for the future.
The owners of the pilot factories were invited of whom one of them stated the outcome and advantages gained from this project.

The Final Seminar took place on June 20, 1995.

To inform the public about the aim and results of the project, a press-conference was held prior to the Seminar in the presence of the Hungarian national television.

The official parties were represented by:

- Mr Károli Attila Soós, Under-Secretary of State
- Mr Claudio Caratsch, Ambassador of Switzerland in Hungary
- Mr Erwin Hofer, Counsellor of Swiss Embassy in Hungary
- Mr Tamás Karnitscher, President of Shoe and Leather Federation
- Mr Ferenc Schmél, UNIDO

Bally Management Ltd.

- Mr Peter Streit, Executive Vice-President, with the lecture "A three-dimensional Enterprise"
- Mr Paul Regli, Technical Director, with a project review
- Mr Siegfried Nicklis, Technical Expert
- Mr Sacha Ratheiser, Technical Expert

The Seminar was generally considered as successful. It also fully confirmed Bally's statements and comments given during the entire duration of the project.

3.4 *Output 4*

A well functioning quality control laboratory capable of carrying out duties related to third party certification

3.4.1 Transfer of know-how for third party certification and accreditation

One of the aims of this project was to find a partner being able to implement third party certifications in the Hungarian shoe industry.

Since BIMEO is an accredited testing laboratory according to EN 45001 by the Hungarian Bureau of Standards, it was decided to select this institute to achieve the set target.

The transfer of know-how was executed by the following means:

Evaluation of Bimeo Institute, Budapest

2 Bally experts visited Bimeo and examined the facility (equipment, staff) available at the laboratory and assessed the reliability of its testing methods.

Bally gave thorough recommendations on spot about necessary measures to be taken to achieve the capability of implementing third party certification.

Evaluation report & Bally Technical Manuals

A comprehensive report was prepared containing comments on

- the capability of staff
- quality of machinery and equipment
- testing methods
- Total Quality Management
- the introduction and application of ISO 9000

Bally's Technical Manuals - Securing of Quality were handed over.

Training of Bimeo staff at Bally Laboratories

Bally accepted 3 representative of Bimeo for a training course at Bally's for training according to international quality requirements.

The capability of Bimeo to render preparatory service to the shoe industry for the ISO 9000 certification rose. It was evident that Bimeo profited from the technical missions of Bally experts who provided ISO 9000-related advice to the participating companies. Consequently, Bimeo rendered additional ISO 9000 services to the assisted enterprises.

3.4.2 BIMEO staff at Bally's

As mentioned above, a vital part in achieving the capability of implementing third party certification in the Hungarian shoe industry contributed the training of Bimeo staff at Bally's Testing Laboratories in Switzerland.

Bimeo staff members visited Bally in April 1994.

The purpose of that visit was to make the trainees acquainted with the testing methods required according to international standards.

Bally involved the trainees into the most important physical and chemical testing methods necessary in today's shoe industry and all the associated points to watch.

Besides, the Bimeo representatives had the opportunity to visit the Bally production units in Aarau and Schönenwerd. They were confronted with the latest technology in the production of high quality shoes.

3.5 *Output 5*

Disseminated information of third party certification and principles of total quality control in the footwear industry

3.5.1 Introduction of a quality management system

The challenge faced by newly privatised firms of approaching the demanding Western market has been great, particularly with regard to the quality requirements and expectations by such markets.

Improving the product quality and simultaneously the quality of all the companies' procedures, such as marketing, product development, planning, communication, etc. was one of the main assignments of Bally to support the Hungarian shoe companies to be able to penetrate the markets targeted.

Bimeo was fully involved into Bally's activities in this respect, with the intention to have future audits executed by Bimeo on its own.

Despite the fact that, initially, all the companies have been far away from being capable of implementing internationally accepted standards, Bally - along with Bimeo - made an effort to consider ISO 9000-related requirements in their activities.

Bally's technical experts made clear, right from the beginning, that achieving the required quality standard is not a matter of additional and excessive examinations on the shop floor.

QUALITY CANNOT BE CONTROLLED;
QUALITY MUST BE PRODUCED

It has been apparent that to improve the product quality utmost attention has to be paid to

- the product development (pattern making, engineering)
- the quality of material and components
- the execution of operations
- the correct application of static examination on the shop floor

Taken the reports written after each visit one notices that Bally experts dealt with the above mentioned points in detail during every visit.

Besides, Bally tried to emphasise the importance of quality control by preparing a work-shop in Hungary and by including a lecture of one of Bally's Total Quality members during the Study Tours in Switzerland.

3.5.2 Assessment of quality control in Hungarian shoe factories

With regard to the above mentioned activities, following-up and assessing quality control in the factories visited by then played an important role during all the missions.

The lessons about quality control taught in Hungary and Switzerland were regularly repeated on spot and in the corresponding reports and revised if necessary.

Since static examination was absolutely neglected in all the production plants, Bally paid particular attention to the inspection stations in the departments.

The following inspection stations have been comprehensively explained and demonstrated:

- Leather sorting
- Clicking inspection
- Closing inspection
- Lasting inspection
- Final inspection
- Random inspection

All the companies Bally has visited to date have made considerable progress in the field of quality control. It has been evident that the quality consciousness has improved. It is one of the main reasons for the rising quality standard in the Hungarian shoe factories.

4. PROJECT RESULTS AND REMAINING MAJOR PROBLEMS

In spite of all the problems the Bally team was facing - problems which arose mainly from financial and economical reasons - we come to the conclusion that the implementation of the project has achieved satisfactory results and that the relevance of the project was confirmed.

The financial problems of two companies leading to bankruptcy of one, was definitely a setback. It could be overcome by involving more shoe companies directly in the project. Finally the Bally experts have analysed and assisted a total of eight shoe factories. Bankruptcy must be considered under the present situation and habits in Hungary. It is often used to take over a well functioning company at a favourable price in order to achieve higher profits afterwards. However the lessons learnt will be, that on possible further projects more attention must be paid to this subject during the evaluation phase, probably by including an economist or a finance specialist in the team.

We have achieved satisfactory to very good results in the assisted companies with significant improvements in product development, technical know-how and quality securing. We also paid special attention to planning, organisation, leading people, efficiency and cost management. The three workshops were helping to distribute this know-how to a wider circle of interested manufacturers. The BIMEO institute is definitely capable of securing the input of know-how with regard to quality and quality securing and to disseminate it to interested customers. We have certain doubts with regard to the shoe technical knowledge, as BIMEO has no staff member who is familiar with up-to-date shoe technology.

We also missed an engagement from the Hungarian Association of Leather and Shoe Industry who did not show any interest in the project.

At an early stage of the project, the Bally team leader had the chance to visit the Special Education School for Shoes, Leather and Furs in Budapest. The headmaster and his team showed a keen interest in the project. Bally therefore suggested that the school could participate in the visits to Bally Shoe Factories in Switzerland and also the workshops. A second visit to the school proved that the training in general subject was on a good standard.

On the other hand we found a tremendous lack of know-how and a rather low level on the vocational (shoe technical) side. This fact is very regrettable because it is part of the training of the young generation of today who should take over responsibility tomorrow. The problems are too complex so that an analysis within the project was not possible due to shortage of time and financial reasons. However an upgrading in these vocational schools would definitely bring advantages to the entire shoe industry through better educated employees. It can only be realised through a separate project - a project which would definitely find a good response and which would grow on fertile ground.

We are of the opinion that the Hungarian shoe industry can play an important part as supplier of upper and/or finished shoes to either shoe companies or retailers in the western part of Europe. Compared to low labour countries like Pakistan, India, Vietnam, China etc. Hungary has considerable advantages. Hungary is much closer to potential customers and therefore just-in-time manufacturing can be realised and is not only a catchword. Supervision of orders, technical input, training and quality control can much easier be realised and definitely cheaper than continuously sending technicians to the Far East. Transport time and costs are another important aspect a well as a proper working communication network. It is up to the Hungarian shoe manufacturers to make profit out of these facts. However they have to introduce the above mentioned criteria as their company policy or philosophy. Public relation actions are necessary; the best advertising however is to prove reliability.

5. CONCLUSION

Hungary belongs to those East European countries with positive prospects regarding economic trends Due to the fact that the Government consequently tries to fight against the high deficit of the national budget, and the negative performance balance, there will be a setback in the current year. The devaluation of the Forint by 9% in March 1995, should help to increase exports. Import duties have, in addition, been increased by 8%; a step which should help to reduce the balance of the current external trade deficit which jumped to over 4 billion US $. Further measures taken by the Government are a general reduction of expenses and in employment as well as cuts in salaries, in public sector, and in social contributions. A great number of Hungarians now have to double contributions. Devaluation of the Forint and a drastic increase in the cost of living, must be borne with shrinking salaries.

In view of these incisive measures by the Government, the purchasing power within the country will hardly increase in the near future, and therefore shoe consumption per capita will also stagnate. On the other hand, the reserves of hard currency are growing and business with foreign participation is steadily growing. Together with the above mentioned steps, the Hungarian Government has set a positive signal to foreign investors, who had become more and more sceptical.

Taking this tough economic situation into consideration it is obvious, that we cannot expect a boom in the Hungarian shoe industry in the near future. At present the local market is not growing and the cheap imports, as well as the products entering Hungary over the green border, can hardly be beaten from the price point of view.

Therefore the Hungarian shoe manufacturers have to put their feet down in new markets without neglecting the existing customers. The supposition is, specially for the West European and US market, that they realise the changes in the environment of the shoe trade, where finally the end user - the customer who buys the shoe - is dictating the market. The criteria for the manufacturers are:

- QUALITY
- FAST RESPONSE
- COST MANAGEMENT

From our point of view, job work, as many shoe manufacturers are now forced to do, is in medium to long term not interesting. The advantage is that no capital need for financing the production is required. An additional advantage is the transfer of technical know-how. On the other hand there is a hard pressure form the price point of view and profits are practically impossibie. Therefore, the management of the shoe factories should put all their efforts in finding a partnership or even a joint-venture with either western shoe manufacturers or retailers. Next to the three above mentioned criteria, reliability is of utmost importance.

BALLY MANAGEMENT LTD.
Engineering

Paul Regli	Siegfried Nicklis	Sacha Ratheiser
Tech. Director	Tech. Expert	Tech. Expert

Cc.: UNIDO, Vienna
BAWI, Berne
Swiss Embassy, Budapest
Bally Management Ltd. Schönenwerd

ANNEX 1

TERMS OF REFERENCE

US/HUN/92/195

10 August 1993

Terms of Reference

for the

subcontract

Transfer of Technology

in Footwear Manufacture and Quality Control

1. Background

The whole Hungarian economy is being restructured and the entire industry aims at joining to the system established within the EUROPEAN ECONOMIC COMMITTEE (EEC)[1]. The GOVERNMENT is making serious efforts towards privatizing former large-scale, state controlled companies. Foreign entrepreneurs are encouraged by legal guarantees, financial arrangements (e.g. provision of transferring profits made in Hungary into any hard currency through the local banking system, considerable results in achieving full convertibility of the local currency) and regional policies to purchase shares and/or complete plants and establish long-term cooperations in the industrial sector. All subsidies, the overwhelming majority of import barriers have been removed, the custom duties are being adjusted to those used in other European countries. The introduction of the free market economy has practically been completed in the leather and derived products industry sub-sector. The GOVERNMENT supports every activity aiming at establishment of European standards - especially those directed toward achieving higher quality of locally manufactured goods and joining cooperations with companies in the highly industrialized countries.

The Hungarian leather and leather products industry, particularly the footwear manufacturing sub-sector, is undergoing rapid structural changes. There were 64 state controlled shoe factories and cooperatives at the end of the 1980's, annually producing 45 million pairs of leather footwear, of which 17 million pairs were exported to other COMECON countries (13 million pairs to the former USSR). Hungarian industry supplied almost all the domestic trade (only 2 million pairs were imported annually) and provided employment for nearly 40,000 people. The industrial units are now being privatized and their number has grown to over 200. Due to the introduction of non-dictated trade in hard currency everywhere in East Europe, the heavy penetration of cheap imports from the Far East, and the financial problems with the former USSR States, total production has fallen below 20 million pairs/year. The local footwear manufacturing sector (without the support industry) provided job only for 24,700 employees in 1991 and the declining trend seems to prevail.

The most flexible medium-scale units are trying hard to establish cooperation with shoe suppliers in industrialized countries and they have managed to increase their export to the world market, but many of the existing factories face serious difficulties in supplying the highly competitive western markets.

The footwear manufacturing units in Hungary have adequate infrastructure, they are fairly well-equipped and have an experienced labour force. There are four tanneries, two large-scale shoe component (shoe lasts, plastic heels, units soles etc.) manufacturers, a footwear machinery company composing a fairly strong support industry. The sub-sector lacks **market intelligence** and needs substantial **quality improvement**. The *main problems* are the lack of market knowledge, product development skills and outdated production management systems. To gain an appreciable place on the World market one should have a well established **brand identity** and should provide reliable and timely supply in **consistent quality**. The most feasible way of

[1] In fact Hungary has become as an associated member of EEC and serious negotiations are going on with regards to transfer it to a full right membership until the end of the decade.

building up a reputation is to start cooperation with firms having a proven sales record of good quality footwear, possessing appropriate technology, marketing and product development knowledge, and capable of transferring their own quality management method. If these problems can be solved, the Hungarian leather products industry would be a more *feasible alternative* for advanced shoe suppliers in Europe to importing from the Far East (the closer location and existing manufacturing facilities offer lower production costs and faster response to market changes, which is of prime importance to fashion-oriented industries).

One of the preconditions to meet the requirement is a well-functioning institution providing quality control and technical development services to the local leather related trade. The footwear industry should introduce the necessary standards (including the introduction of ISO 9000 and its equivalent Euro Norms) and institutional background ensuring the implementation of **quality assurance and total quality control** systems. The testing laboratory (BIMEO)[2] of the former RESEARCH INSTITUTE OF THE LEATHER AND LEATHER PRODUCTS INDUSTRIES (BCK)[3] in Budapest has become an independent institute with limited but experienced staff, and a fairly wide range of up-to-date testing equipment. Its functions, its role in the trade and the working mechanism, however, need to be redefined in accordance with the new challenges. Both industry and management would like to establish functions similar to those practices followed by leading European institutes such as the SHOE AND ALLIED TRADE RESEARCH ASSOCIATION (SATRA) in the UK, PRÜF- UND FORSCHUNG INSTITUTE (PFI) in Germany and companies such as BALLY INTERNATIONAL in Switzerland.

2. Project objective

2.1. The main objective of the project is to assist the Hungarian footwear industry to become more competitive on the local and eventually on selected export markets by introducing *high quality shoe products* and an appropriate quality management system adopted by those supplying a reputable brand identity.

2.2. Assist the Hungarian footwear and related industry subsector in achieving quality standards required for reliable and stable export to industrialized countries, paying special attention to upgrading the local quality testing laboratory (BIMEO) to create suitable conditions for cooperation with advanced leather products suppliers in Europe.

3. Responsibilities of the Contractor

Given the aims, objectives, project outputs and activities as described in the *Project Document*, the Contractor will undertake to supply the necessary expertise and services to ensure the timely implementation of the project. The responsibilities of the Contractor include the following inputs:

3.1. Perform material selection and testing

Joint selection with local counterparts of best locally available materials from various Hungarian sources. The material selection includes: upper leather, lining and interlining, other reinforcement material, sole leather/unit soles, insole materials and other components, auxiliaries such as [illegible] trims, adhesives, finishing chemicals, etc.

[illegible]

[illegible]

- Test the materials at Contractor's laboratories for technical and fashion suitability.
- Prepare test reports based on the comparison with test results from the local laboratory.
- Suggest improvements.
- Define materials to be purchased abroad, recommend sources of supply

3.2. Perform an in-depth evaluation of technical capabilities of machinery and equipment for the selected production programme. Recommend additional equipment and attachments which may be needed.

3.3. Assist in style selection
Select eighteen basic styles (six men's, six ladies' and six comfort) in standard size (including shoe lasts) from the Contractor's production range.

3.4. Prepare and deliver prototypes in standard manufactured with the selected Hungarian and imported raw materials delivered by the local counterpart. The prototype should consist of: one complete upper, one set of components, one pair of completed shoes, one complete production specification and flow chart, one pair of lasts.

3.5 Prepare an interim report(s).

3.6 Present the prototypes and a product programme in the counterparts' factories.

3.7 Provide training of technical staff of the counterpart factory at the Contractor's factory as follows:

- three persons for style implementation	2 weeks
- three persons for the closing room	1 week
- three persons for the making room	1 week
- three persons for quality control	2 weeks

3.8 Implement production; start six selected prototypes at each counterpart's factory. A team of two specialists for a period of two working weeks each to assist in starting up production.

3.9 Introduce improved shoe finishing processes.

3.10 Introduce an efficient quality and process control system covering: material selection, material testing, inspection/check points, criteria for inspection, training of inspectors, smooth flow of information on quality, (total) quality management methodology.

3.11 Assist the local quality testing laboratory in introducing the third party certification system to be implemented in the Hungarian footwear industry:

- evaluate the facilities (equipment, staff) available at the laboratory, assess the reliability of testing,
- recommend an approach for obtaining third party certification and assessor's right (or acknowledgment) for the laboratory,
- accept laboratory representatives for (re)training according to the international quality requirements

3.12. Provide a final report with recommendations and presentation of the project's achievements to the selected Hungarian shoe factories in a five day seminar. The seminar will be organized and conducted by BIMI in close cooperation with the Contractor. Timing to be agreed with the counterparts and UNIDO. The UNIDO backstopping officer is expected to participate at project completion [illegible]

4. Field of expertise required

Shoe technologist - team leader (four months)
Well qualified footwear technologist with broad experience in transferring technology and starting up production abroad.

Shoe designer (two months)
Qualified designer/stylist/pattern engineer experienced in product range building, having profound knowledge in marketing and fashion trends.

Quality control expert (three months)
Quality testing expert with extensive experience in certifying materials, components and products for particular purposes, having profound knowledge in establishing quality assurance and/or total quality control systems.

Production control specialist (two months)
A qualified and experienced plant manager with knowledge of and experience in controlling (scheduling, monitoring and reporting) production for fashion markets.

Support staff - two months
Interpreters for translating documentation, specialists experienced in preparing quality control manuals, secretaries.

5. General time schedule

The final time schedule and a detailed work plan will be prepared as soon as the Contractor has been selected. The time schedule will be annexed to the contract and will form an integral part of the same. The following tentative time schedule, subject to modifications, is applicable *for the contract negotiations*:

5.1	Briefing of Contractor's team leader in Vienna	September 1993
5.2	Finalization of the work plan	September 1993
5.3	Testing materials and components available in Hungary	October 1993
5.4	Selection of styles to be transferred	November 1993
5.5	Preparation of production documentation on the selected styles	December 1993
5.6	Study tour of Hungarian specialists to the Contractor's plant	November 1993
5.7	Starting up production in the selected Hungarian factories	January 1993
5.8	Organization of a seminar for local manufacturers	April 1994 September 1994

Reports as follows:

- after test report of raw materials and components	October 1993
- upon completion of study tour	December 1993
- interim report	May 1994
- draft final report	October 1994
final report	November 1994

ANNEX 2

CHARACTERISTICS OF THE PILOT FACTORIES

Characteristics of the visited Hungarian shoe factories

	RECORD	MODINNO	PANNÓNIA	ROBERT	ALBA	KÉKES	BER-FER	ZSIGMOND	MOLTAN
Location	Szeged	Pécs	Nagykanizsa	Szombathely	Székes-fehérvár	Gyöngyös	Rakamaz	Tata	Budapest
Ownership	cooper.	private	cooper.	cooper.	cooper.	cooper.	private	private	private
Product	men's, youths	ladies, men's	men's, ladies	men's, ladies	ladies	children, skating	men's, ladies	ladies	ladies
New styles/seasons	100	25		75	100	20	30		20
Production (pairs/day)	500	200	1,000	400	1,000	400	500	300	600
Ex-factory price (HUF)	1,900 2,200	1,200 1,500	600 1,200	1,200 2,000	900 2,800	800 1,300	1,850	1,500 2,300	700 1,200
Markets	H,R	H,G,A	H,G	H,A	H	H,A,I	H, U	H	H,G
Direct labor	81	41	205	90	280	80	51	70	60
Staff	14	9	25	30	20	20	9	15	20
Material costs	60-70% of the ex-factory price								
Labour costs	10-15% of the ex-factory price								
Wholesale price	ex-factory price * 1.5								
Retail price	ex-factory price * 2.2								
Value added tax	25% (since 1989)								
Working days/week	5								
Working hours/day	8								
Social costs	54% on wages/salaries (paid by employers)								

Remarks: H - Hungary, R - Russia, G - Germany, A - Austria, I - Italy, U - Ukraine
Cooper. = owners are the employees, Private = owned by 1-3 entrepreneurs (normally they are top managers)

Annex to the Report of F. Schmid, UNIDO, 14 June 1995

ANNEX 3

TRAINING PROGRAMMES

VISIT OF A DELEGATION OF HUNGARIAN SHOE MANUFACTURERS

OCTOBER 11 TO OCTOBER 15, 1993

Participants

Mr. Imre Mészarovics
President ALBA Co.
Szekesfehérvar

Mr. Imre Beregnyei
Managing Director BER-FER LTD
Rakamaz

Mr. Imre Farkas
President RECORD Co.
Szeged

Mrs. Ellen Leither
Technologist RECORD Co.
Szeged

Interpreter

Mrs. Eva Murlasits
BIMEO LTD
Budapest

Accommodation

Hotel Storchen
CH-5012 Schönenwerd

Tel. 064 - 41 47 47
Fax 064 - 41 52 69

MONDAY, OCTOBER 11, 1993

arrival at Hotel Storchen in Schönenwerd by car
5 single rooms have been booked

12.00	Lunch at Hotel Storchen	P. Regli, E. Gysin
13.45	Visit to ladies' shoe factory in Aarau	E. Gysin
16.00	Aims of the project, project activities	P. Regli
19.00	Dinner Hotel Storchen	

TUESDAY, OCTOBER 12, 1993

08.00	After sale service	D. Blair, E. Gysin
09.00	Material Testing Laboratories	D. Blair
11.00	Leather treeing department	E. Gysin
12.00	Lunch Hotel Storchen	D. Blair
13.45	Visit to men's shoe factory in Schönenwerd	S. Nicklis
16.00	Visit CAD	O. Amann
19.00	Dinner	

WEDNESDAY, OCTOBER 13, 1993

	Group	Mrs. Eva Murlasits	
06.30	Departure by car to the Canton Tessin		
	- visit to ladies' shoe factory in Caslano	Material Testing Laboratories	D. Blair
	- visit to men's shoe factory in Stabio	Lunch	D. Blair
		Material Testing Laboratories	D. Blair
	Dinner en route	Dinner	D. Blair

THURSDAY, OCTOBER 14, 1993

	Group		Mrs. Eva Murlasits	
08.00	Style selection	S. Fischlin Director Trade Markets	Material Testing Laboratories	D. Blair
		E. Gysin		
11.00	Presentation of marketing concept	S. Fischlin		
12.00	Lunch	S. Fischlin, P. Regli		
13.45	Training methods	E. Gysin	Material Testing Laboratories	D. Blair
16.00	Planning	B. Graf		
19.00	Dinner	Engineering Team		

FRIDAY, OCTOBER 15, 1993

09 00	Visit to the Bally Shoe Museum	Mrs. T. Regli
11 00	Final discussion	Engineering Team
12 00	Lunch	P. Regli
	departure	

September 30, 1993

BALLY INTERNATIONAL LTD
ENGINEERING

P. Regli
Director Engineering

Copies to UNIDO Vienna, Dr. F. Schmel
BIMEO, Budapest
participants
S Fischlin, TM
D Blair, MP
E Gysin QM
S Nicklis, TQM-E
S Ratheiser, TQM-E
O Amann, TM-LIC
H Triebold, PR

VISIT OF THE FIRST GROUP OF STAFF MEMBERS OF HUNGARIAN SHOE MANUFACTURERS

DECEMBER 6 TO DECEMBER 10, 1993

Participants:	RECORD	BER-FER	ROBERT
	- Farkas Imre President - Kosztolányi Dezsö Clicking, Closing - Ráczné Derkács Olga Making	- Beregnyei Imre jun. Marketing - Paszabi Ferenc Quality control - Bartha Lászlóné Closing, Making - Tilki Lászlóné Closing	- Tóth Lászlóné Techn. Leiterin
Interpreters:	- Leichter Ellen	- Mihályi György	
Accommodation:	GASTHOF ZUM SCHÜTZEN Schachenallee 5000 Aarau Tel. 064 / 22 28 53 (23 01 24) Fax. 064 / 22 00 53		

MONDAY, DECEMBER 6, 1993

	Arrival at Gasthof Zum Schützen in Aarau by car. Rooms have been booked.	
12.00	Lunch	S. Ratheiser
13.30	Welcome to Bally	P. Regli
14.00	Visit to Bally treeing department Visit to Men's shoe factory in Schönenwerd	E. Gysin/S. Ratheiser
19.00	Dinner	E. Gysin

TUESDAY, DECEMBER 7, 1993

08.00	Training according to detailed program		Engineering Team
	Schonenwerd	Aarau	
	BER-FER RECORD	ROBERT	
12.00	Lunch		
13.30	Training according to detailed program		Engineering Team
	Schonenwerd	Aarau	
	BER-FER RECORD	ROBERT	
19.00	Dinner		Engineering Team

WEDNESDAY, DECEMBER 8, 1993

08.00	Training according to detailed program		Engineering Team
	Schonenwerd	Aarau	
	BER-FER RECORD	ROBERT	
12.00	Lunch		
13.30	Training according to detailed program		Engineering Team
	Schonenwerd	Aarau	
	BER-FER RECORD	ROBERT	
19.00	Dinner		

THURSDAY, DECEMBER 9, 1993

06.30	Departure to Stabio Visit of Men's Moccasin factory	P. Regli/S. Nicklis/E. Gysin
	Dinner en route	

FRIDAY, DECEMBER 10, 1993

08.00	Introduction of flow charts Quality Control Training methods Maintenance	Engineering Team
12.00	Lunch	
13.30	Open program	
15.30	Final discussion	P. Regli
	Departure to Hungary	

December 2, 1993

BALLY INTERNATIONAL LTD
ENGINEERING

Copies to: UNIDO Vienna, Dr. F. Schmel
Training participants
Engineering Team

P. Regli
Director Engineering

DETAILED TRAINING PROGRAM
CLICKING-/CLOSING ROOM

DECEMBER 7/8, 1993

Participants:

Mr Farkas Imre, President RECORD
(only December 8)

Mr Beregnyei Imre jun., BER-FER
(only December 7)

Mrs Bartha Lászlóné, BER-FER
(only December 7)

Mrs Tóth Lászlóné, ROBERT
(only December 7)

Mrs Tilki Lászlóné, BER-FER

Mr Kosztolányi Dezsó, RECORD

Mr Paszabi Ferenc, BER-FER
(only December 8)

CENTRAL POINTS OF THE TRAINING:

Leather sorting:

* Colour classification method
* Methods of area measurement
* Knowledge of materials
* Criteria of leather sorting

Clicking Room:

* Organisation and sequence of operation of a cutting department
* Basic knowledge of leather cutting
  - cutting direction
  - cutting in pairs
  - exploitation of materials
* Blocking
* Splitting
* Match marking in pairs
* Handling of machines and tools

Closing Room:

* General orientation
* Acquaintance with lay-out
* Marking
* Backing (ironing)
* Skiving
* Folding
* Stitching
  - use of needles and threads
  - closed seams
  - ornamental seams
  - functional seams
  - special stitching machines and guides
* Rubbing and taping
* Application of interlining
* Application of tapes

Quality Control:

* Leather sorting
  - delivery control

* Clicking Room
  - fundamental rules of inspection
  - methods of inspection
  - damaged or faulty upper pieces

* Closing Room
  - fundamental rules of inspection
  - method of inspection
  - rectification of faulty uppers

* Roving Inspection
  - points to watch when doing random checks
  - roving inspection prior to stitching-in the lining

DETAILED TRAINING PROGRAM
MAKING ROOM

DECEMBER 7/8, 1993

Participants: Mr Farkas Imre, President RECORD
(only December 7)

Mr Beregnyei Imre jun., BER-FER
(only December 8)

Mrs Bartha Lászlóné, BER-FER
(only December 8)

Mrs Tóth Lászlóné, ROBERT
(only December 8)

Mr Ráczné Derkács Olga, RECORD

Mr Paszabi Ferenc, BER-FER
(only December 7)

CENTRAL POINTS OF THE TRAINING:

Making Room:

* Organisation and sequence of operation in the Making Room

* Preparation for lasting
  - material stores (lasts, soles, insoles, uppers etc.)
  - humidification of uppers

* Assembling operation
  - attaching insoles
  - backpart moulding
  - pressing toe puffs

* Lasting operations
  - upper attaching
  - lasting
  - tech. instructions at heat setting

* Bottoming operation
  - conditions for a correct sole bond
  - roughing lasting allowance
  - cementing uppers and soles
  - sole pressing
  - heel attaching

* Finishing operation
  - ironing and hot-air blowing
  - repairing
  - finishing methods
  - finishing techniques

Quality Control:

* Lasting inspection
  - fundamental rules of inspection
  - using back height table
  - rectification of lasted shoes

* Final inspection
  - fundamental rules of final inspection
  - compiling data on rejects

* Roving inspection
  - duties of the roving inspector
  - checking machine setting

VISIT OF THE SECOND GROUP OF STAFF MEMBERS OF HUNGARIAN SHOE MANUFACTURERS

JANUARY 24 TO FEBRUARY 05, 1994

	RECORD	BER-FER	ROBERT	ALBA
Participants:	- Farkas Imre President (Modelleur)	- Gyula Tóth Modelleur	- Katalin Kissné Horváth Modelleur - Elza Németh Näherei - Antal Tóth Bodenmontage - Zoltán Boros Vorsitzender (Qualität)	- Jánosné Bányóczki Modelleur/Techn. Director - Rozália Baranyai Leitung Techn. Abteilung - Anikó Dénes Bodenmontage - Anna Kerek Näherei
Interpreters:	- Leichter Ellen		- Ibolya Horváth	- Hedvig Takácsné Fürst
Accommodation:	Hotel STORCHEN 5012 Schönenwerd Tel. 064 / 41 47 47 Fax. 064 / 41 52 69			

MONDAY, JANUARY 24, 1994

	Arrival at Hotel Storchen in Schoeneweerd by car Rooms have been booked	
12.00	Lunch	
13.30	Welcome to Bally	P. Regli
14.00	Training according to detailed program	O. Amann
19.00	Dinner	

TUESDAY, JANUARY 25 TO FRIDAY, JANUARY 28 1994

08 00	Training according to detailed program	O. Amann
12 00	Lunch	
13 30	Training according to detailed program	O. Amann
19 00	Dinner	

MONDAY, JANUARY 31, 1994

	Arrival of second group at Hotel Storchen in Schöneneverd by car Rooms have been booked.	
12.00	Lunch	
13.30	Welcome to Bally	P. Regli
14.00	Visit to ladies' shoes factory in Aarau Visit to Bally leather sorting department	Engineering Team E. Gysin
19.00	Dinner	

TUESDAY, FEBRUARY 1 AND THURSDAY, FEBRUARY 3, 1994

08.00	Training according to detailed program	Engineering Team H. Steiner
12.00	Lunch	
13.30	Training according to detailed program	Engineering Team H. Steiner
19.00	Dinner	

WEDNESDAY, FEBRUARY 2, 1994

08.00	Departure to Caslano Bally ladies' shoes factory (California)	Engineering Team
12.00	Lunch	Engineering Team
19.00	Dinner en route	

FRIDAY, FEBRUARY 4, 1994

08.00	Introduction of flow charts	Engineering Team
	Final discussion	P. Regli

December 17, 1993

BALLY INTERNATIONAL LTD
ENGINEERING

Copies to UNIDO Vienna, Dr. F. Schmel
Training participants
Engineering Team

S. Ratheiser

DETAILED TRAINING PROGRAM
CLICKING-/CLOSING ROOM

JANUARY 31 TO FEBRUARY 5, 1994

Participants: Mrs Elza Németh
ROBERT

Mrs Kerek Anna
ALBA

Mrs Baranyai Rozália
ALBA
(January 31 to February 2)

Mr Zoltán Boros
ROBERT
(February 2 to February 5)

Mrs Jánosné Bányóczki
ALBA
(January 31 to February 2)

CENTRAL POINTS OF THE TRAINING:

Leather sorting:

* Colour classification method
* Methods of area measurement
* Knowledge of materials
* Criteria of leather sorting

Clicking Room:

* Organisation and sequence of operation of a cutting department
* Basic knowledge of leather cutting
  - cutting direction
  - cutting in pairs
  - exploitation of materials
* Blocking
* Splitting
* Match marking in pairs
* Handling of machines and tools

Closing Room:

* General orientation
* Acquaintance with lay-out
* Marking
* Backing (ironing)
* Skiving
* Folding
* Stitching
  - use of needles and threads
  - closed seams
  - ornamental seams
  - functional seams
  - special stitching machines and guides
* Rubbing and taping
* Application of interlining
* Application of tapes

Quality Control:

* Leather sorting
  - delivery control

* Clicking Room
  - fundamental rules of inspection
  - methods of inspection
  - damaged or faulty upper pieces

* Closing Room
  - fundamental rules of inspection
  - method of inspection
  - rectification of faulty uppers

* Roving Inspection
  - points to watch when doing random checks
  - roving inspection prior to stitching-in the lining

DETAILED TRAINING PROGRAM
MAKING ROOM

JANUARY 31 TO FEBRUARY 5, 1994

Participants: Mrs Antal Tóth
ROBERT

Mrs Dénes Aniko
ALBA

Mrs Baranyai Rozália
ALBA
(February 2 to February 5)

Mr Zoltan Boros
ROBERT
(January 31 to February 2)

Mrs Jánosné Bányóczki
ALBA
(February 3/4)

CENTRAL POINTS OF THE TRAINING:

Making Room:

* Organisation and sequence of operation in the Making Room

* Preparation for lasting
  - material stores (lasts, soles, insoles, uppers etc.)
  - humidification of uppers

* Assembling operation
  - attaching insoles
  - backpart moulding
  - pressing toe puffs

* Lasting operations
  - upper attaching
  - lasting
  - tech. instructions at heat setting

* Bottoming operation
  - conditions for a correct sole bond
  - roughing lasting allowance
  - cementing uppers and soles
  - sole pressing
  - heel attaching

* Finishing operation
  - ironing and hot-air blowing
  - repairing
  - finishing methods
  - finishing techniques

Quality Control:

* Lasting inspection
  - fundamental rules of inspection
  - using back height table
  - rectification of lasted shoes

* Final inspection
  - fundamental rules of final inspection
  - compiling data on rejects

* Roving inspection
  - duties of the roving inspector
  - checking machine setting

DETAILED TRAINING PROGRAM
PATTERN DEPARTEMENT

JANUARY 24 TO FEBRUARY 5, 1994

Participants:

Mr Farkas Imre
RECORD

Mr Gyula Tóth
BER-FER

Mrs Katalin Kissné Horváth
ROBERT

Mrs Jánosné Bányóczki
ALBA
(only week 1)

CENTRAL POINTS OF THE TRAINING

Last copy

Standard size

Designs

Pattern cutting by hand for the following style constructions:

* Court
* Open toe, open back
* Oxford
* Loafer
* Derby
* Sandal
* Bootee
* Boot
* Moccasin

Grading

Counter construction

Blocking and cutting room

Lasting and fitting trails

Placing fitting on last

Factors influencing the fitting

Back curve

Counter lining

Sole

Sole constructions

Grading of soles

Distribution of heels

VISIT OF A DELEGATION OF HUNGARIAN EXPERTS TO BALLY SWITZERLAND FROM NOVEMBER 28 TO DECEMBER 2, 1994

ARRIVAL: Monday, November 28, 1994 (morning)
by car

DEPARTURE: Friday, December 2, 1994 (after lunch)

ACCOMMODATION: Hotel Storchen
CH-5012 Schönenwerd

Tel. (064) 41 47 47
Fax. (064) 41 52 69

WORKING PLACE: BALLY INTERNATIONAL LTD.
CH-5012 Schönenwerd/Switzerland

ENGINEERING:

Tel. (064)	40 11 22	
	40 24 84	Secretary
	40 26 00	P. Regli
	40 23 66	S. Nicklis/S. Ratheiser
Fax: (064)	40 20 81	

PARTICIPANTS:

Márta Farkas	Professor	Technical University For Light Industries
Imre Beregnyei	Director	BER-FER Kft., Rakamaz
László Gut	Desing	BER-FER Kft., Rakamaz
Zoltan Marocsan	Interpreter	
Miklós Szanyi	Director	MODINNO Kft., Pécs
Imre Molnar	Director	MOLTAN, Budapest
László Szládovits	President	PANNONIA, Nagykanizsa
Amer Karnel	Director	TURUL, Gyornaendröd
Szilvia Sajtos	Technician	SALGÓ, Salgótarjan
Zoltan Szilágyi	Engineer	Bimeo Testing & Research Institute Budapest

Schönenwerd, November 15 1994

P. R i

BALLY INTERNATIONAL LTD./ENGINEERING (UNIDO-BAWI-PROJECT)

VISIT OF A DELEGATION FROM HUNGARY

	Monday 28.11.94	Tuesday 29.11.94	Wednesday 30.11.94	Thursday 1.12.94	Friday 2.12.94
8		Costing			
9	Arrival by car Accommodation: Hotel Storchen 5012 Schönenwerd		Marketing Bally Fashion Centre	Visit to Zürich Bally Shoe Shops	Shoe Factory
10					
11		After sale service			Final discussion
12	Lunch	Lunch	Lunch	Lunch	Lunch
13	Material Testing	Visit to training col- lage of Swiss Shoe Federation			Departure by car
14			Marketing		
15	Leather sorting	Bally Shoe Museum			
16	Shoe Factory Men's and Ladies		CAD		

09.11.94 P. Regli

VISIT OF A HUNGARIAN DELEGATION

TO BALLY SWITZERLAND

FROM MAY 1 TO MAY 5, 1995

ARRIVAL: Monday, May 1, 1995 by car

DEPARTURE: Friday, May 6, 1995

ACCOMMODATION: Hotel Storchen
CH-5012 Schönenwerd

Tel. (064) 41 47 47
Fax. (064) 41 52 69

WORKING PLACE: BALLY INTERNATIONAL LTD.
CH-5012 Schönenwerd/Switzerland

ENGINEERING:

Tel. (064)	40 11 22	
	40 24 84	Secretary
	40 26 00	P. Regli
	40 23 66	S. Nicklis/S. Ratheiser
Fax: (064)	40 20 81	

PARTICIPANTS:

Kovács József	Secretary of the Hun. Nat. Com. for UNIDO (Ministry for industry and Trade)
Hunya István	Privat company owner (TURUL CIPÓ)
Szládovits László	President (Pannónia Shoe Coop.)
Dr Beke János	Prorector of the Technical Collage of Light Industry
Rajnai Katalin	Teacher of Leather Processing High School
Bahik Árpádné	Teacher of Leather Processing High School
Vlaj Márta	Teacher of Leather Processing High School
Vegrinyák József	Chief Engineer (LEBOK Shoe Producing and Trade Ltd.)
Schmél Katalin	Interpreter

Schönenwerd, April 20 1995

BALLY MANAGEMENT LTD./ENGINEERING (UNIDO-BAWI-PROJECT)

VISIT OF A HUNGARIAN DELEGATION

	Monday 1.5.95	Tuesday 2.5.95	Wednesday 3.5.95	Thursday 4.5.95	Friday 5.5.95	Saturday 6.5.95
07.00						Departure by car
08.00			Visit to Bally's Shoe factories in Stabio and Caslano E. Gysin S. Ratheiser		Visit to training college G. Hoppe S. Ratheiser	
09.00		Welcome to Bally information about the training procedure P.R.		Visit to Bally's shoe museum T. Regli	LAB S. Fischlin S. Ratheiser	
10.00		Leather sorting dept. S. Ratheiser				
11.00		Material testing D. Blair S. Ratheiser		Visit to Bally's men's and ladies' shoes factory in Schonenwerd S. Ratheiser	Quality Securing U. Hersperger S. Ratheiser	
12.00 - 13.30		Lunch	Lunch en route	Lunch	Lunch	
13.30						
14.00		Visit to Bally's mens' and ladies' shoes factory in Schönenwerd S. Ratheiser	Continuation of the journey E. Gysin S. Ratheiser	Visit to Bally Shoe Shop in Berne E. Gysin S. Ratheiser	Theoretical training on request E. Gysin S. Ratheiser	
15.00						
16.00	Arrival at Hotel Storchen Schonenwerd	CAD				
17.00						

ANNEX 4

REVIEW ON THE SERVICES RENDERED BY BALLY

REVIEW ON THE SERVICES RENDERED BY BALLY

Within the scope of this project Bally rendered a number of services. Below a rough overview is given:

• Total men/days of Bally experts in Hungary:	363
• Visits of Hungarian delegates to Bally's in Switzerland:	9
Number of delegates:	58
• Work shops carried out in Hungary:	3
number of subjects:	5
• Seminar	1
• Number of reports	11
• Technical manuals handed over	6

The project plan is shown on the next pages.

TRANSFER OF TECHNOLOGY IN

FOOTWEAR MANUFACTURE AND QUALITY CONTROL

PROJECT PLAN

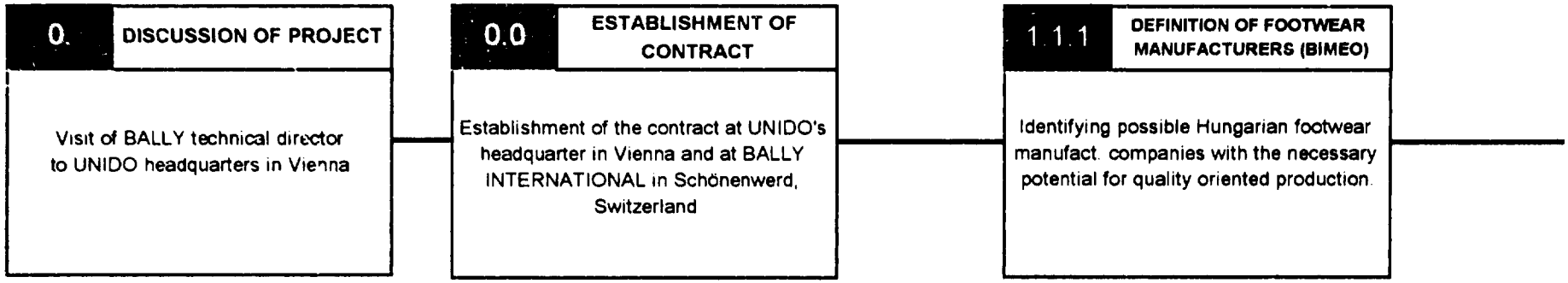
(EXCLUDING PROJECT ALTERATIONS)

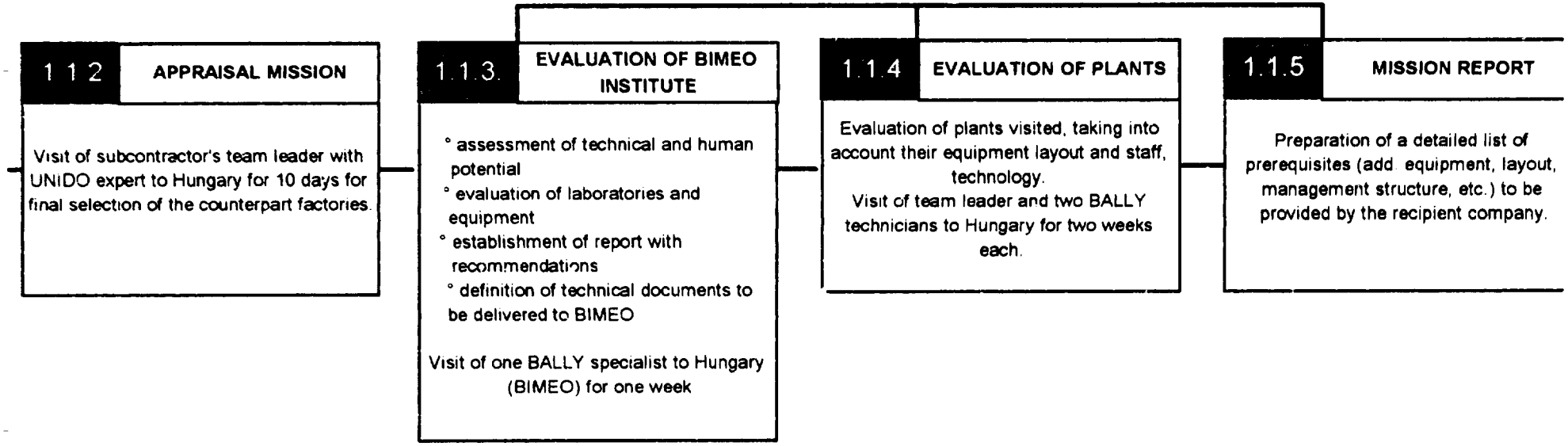
Schönenwerd, September 1993

BALLY INTERNATIONAL LTD.

1.1 OUTPUT I

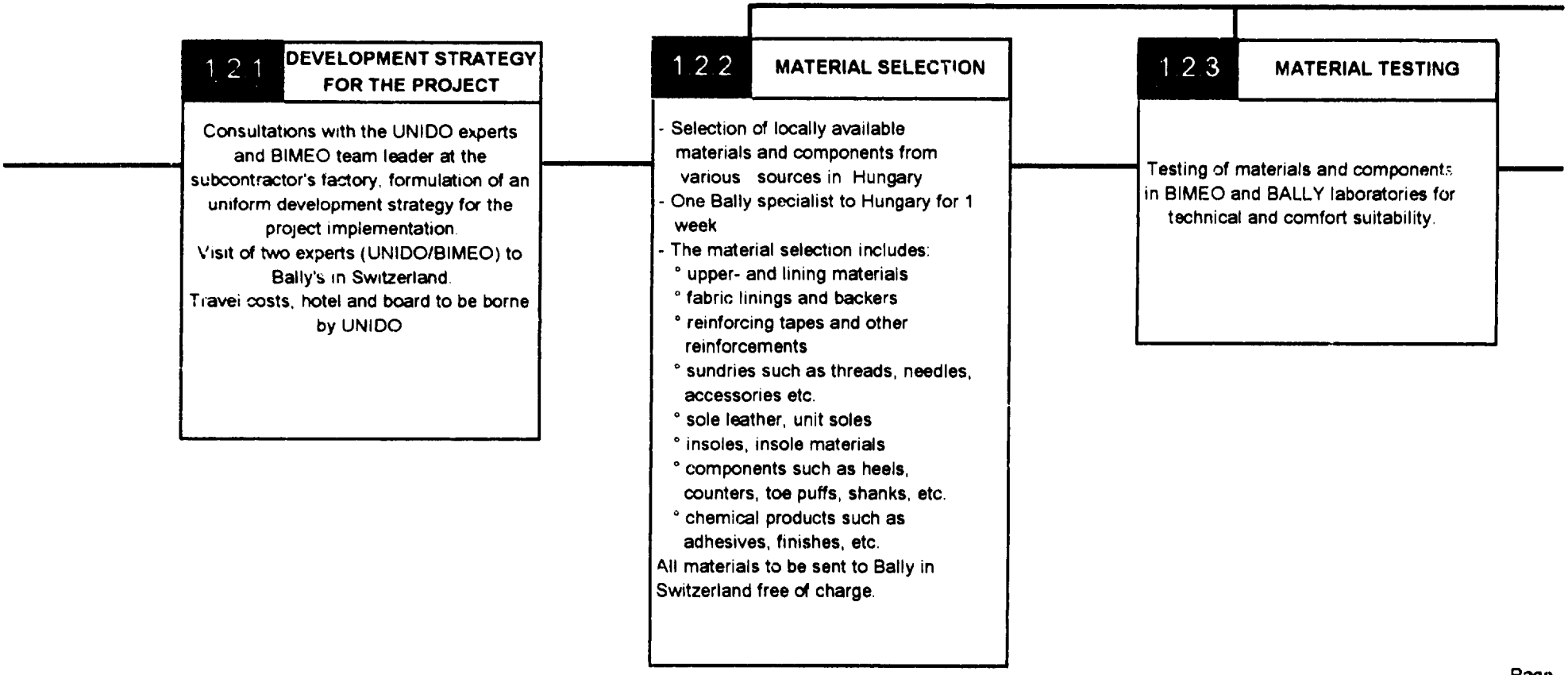
Establishment of a report on the assessment of the capabilities of Hungarian shoe manufact. plants. Identification of three counterpart companies.




1.1.2
APPRAISAL MISSION
Visit of subcontractor's team leader with UNIDO expert to Hungary for 10 days for final selection of the counterpart factories.
1.1.3.
EVALUATION OF BIMEO INSTITUTE
° assessment of technical and human potential
° evaluation of laboratories and equipment
° establishment of report with recommendations
° definition of technical documents to be delivered to BIMEO
Visit of one BALLY specialist to Hungary (BIMEO) for one week
1.1.4
EVALUATION OF PLANTS
Evaluation of plants visited, taking into account their equipment layout and staff, technology.
Visit of team leader and two BALLY technicians to Hungary for two weeks each.
1.1.5
MISSION REPORT
Preparation of a detailed list of prerequisites (add. equipment, layout, management structure, etc.) to be provided by the recipient company.

1.2 OUTPUT 2

Three (3) Hungarian shoe manufactg plants which are capable of producing footwear suitable for upgrading and achieving international standards in quality and delivery



ON REQUEST

1.2.4 EVALUATION OF TEST RESULTS	1.2.5 MATERIAL TO BE PURCHASED ABROAD	1.2.6 EXPERT SERVICE FOR TANNERS &	1.2.7 LEATHER UNIT SOLE PREMANUFACTURING
Comparison and evaluation of material test results between BIMEO and BALLY Establishment of a Material Test Report - results of material testing - suggestions or recommendations	Specification of materials and components to be purchased abroad. Presentation of test results to counterparts and to BIMEO. One BALLY specialist to Hungary for one week.	Provide expert service (basically) in tanning and/or leather finishing to selected Hungarian material and component manufacturers to achieve the desired quality and consistency of their supply.	Assisting in upgrading the leather unit sole manufacturing technology. One visit of one Bally expert to Hungary for two weeks

1.2.8 STYLE SELECTION

Selection of suitable styles at Bally shoe factories in Switzerland together with one marketing expert from each of the three factories

- selection of max. 6 styles and up to two lasts for ladies', men's and comfort shoes. Total 18 styles and max. 6 lasts.

Travel costs, hotel and board to be borne by counterparts

1.2.9 PREPARATION FOR PROD. TOOLING-UP

Manufacturing of 18 prototypes and 18 flow-charts of selected styles in raw materials delivered by the Hungarian counterparts.

Each flow-chart consists of:
- 1/2 pr. of shoes
- 1/2 pr. of upper, partly finished
- copy of patterns in stand. size
- 1 set of graded insole patterns
- 1 set of components
- 1 pr of each selected last in standard size
- 1 documentation with production specifications such as:
  - ° sequence of operations
  - ° time minutes
  - ° techn. drawings and specifications

1.2.10 STUDY TOUR BY SELEC. PLANT SUPERVIS.

Visit of techn. staff of the three counterpart factories to BALLY in Switzerland.
- 3 pers. for style implementation 2 weeks
- 3 pers. for the closing room 1 week
- 3 pers. for the making room 1 week
- 3 pers. for quality control 2 weeks

Period of visits according to mutual agreement. Visitors should understand English or German or be accompanied by a translator.
Air travel costs, hotel accom., board and translation services to be borne by Hungarian counterparts. Travel in Switzerland to and from Bally factories are borne by Bally.

1.2.1.1 INTRODUCTION OF NEW PRODUCTS

Three visits of two Bally experts to Hungary Each visit to one of the counterparts factories for a period of two weeks
Total 12 men/weeks

- Implementation of techn process, upgrading of quality, transfer of know-how, quality securing
- Establishment of Interim Report 1 for each factory

1.2.12 FOLLOW-UP MISSION

First FOLLOW-UP
One visit of two BALLY experts to Hungary for a period of three weeks each
(visit of each of the three factories for one week)
- Visit of team leader to Hungary for two weeks:
  - ° check-up improvements achieved since start of prod.
  - ° discussion of Interim Report 1 implementation shoe technology
  - ° upgrading of quality
  - ° staff training
  - ° establishment of Interim Report 2 for each factory.

- Second FOLLOW-UP
One visit of two BALLY experts to Hungary for a period of 3 weeks each (visit of each of the 3 factories for one week).
- Visit of team leader to Hungary for two weeks:
  - ° check-up improvements achieved since start of produc.
  - ° discussion of Interim Report 1
  - ° implementation shoe technology
  - ° upgrading of quality
  - ° staff training
  - ° establishment of Interim Report 3 for each factory

1.3 OUTPUT 3

Up-to-date information and guidelines on production of high quality footwear, meeting market requirements.

ON REQUEST

1.2.13 SELECTION FOR FELLOWSHIP TRAINING

Selection of middle management staff of counterparts factories for fellowship training:

- 3 pattern engineers
- 3 marketing specialists
- 3 plant managers

1.2.14 FELLOWSHIP TRAINING (UNIDO)

Fellowship training (approx. 2 months) in reputed institutions in industrialised countries.

1.3.1 VISIT TO BALLY IN SWITZERLAND

Study tour of six technical and marketing managers:
fellowship training:

- Preparation for a questionnaire by Bally
- Preparation of detail programmes

Air travel cost, hotel accom. and board to be borne by counterparts. Travel within Switzerland to and from Bally factories to be borne by Bally.

1.3.2	ONE-DAY WORK SHOP
	Organisation of one-day workshops on assistance provided and results achieved in each recipient plant. Work shops jointly organised by Bally, BIMEO and counterparts and carried out during the implementation and follow-up phase. The costs of the work shops are borne by UNIDO

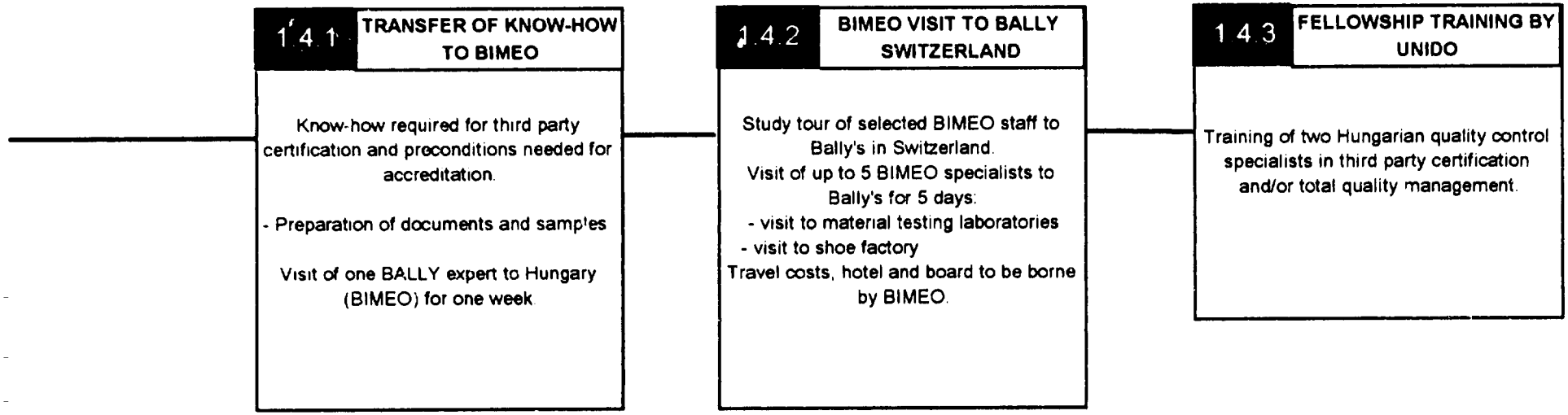
1.3.3	ORGANISATION OF A SEMINAR
	Seminar on range building, marketing and production management, information on project results achieved in selected shoe and component factories. Team of four Bally experts to Hungary for seven days. Seminar jointly organised by BIMEO and BALLY. Costs for the seminar to be borne by UNIDO.

1.3.4	SPECIAL DOCUMENTATION
	Distribution by BIMEO of technical information in the form of special documentation for the interested Hungarian shoe manufacturers.

1.4 OUTPUT 4

A well functioning quality control laboratory capable of carrying out duties related to third party certification

ON REQUEST



1.5 OUTPUT 5

Disseminated information of third party certification and principles of total quality control in the footwear industry.

1.4.4 BIMEO INTRODUCTION TO INTERN. INSTITUTIONS

Introduction of BIMEO to bodies and institutions such as SATRA and PFI, dealing with third party certification in industrialised countries during one of the international shoe fairs.

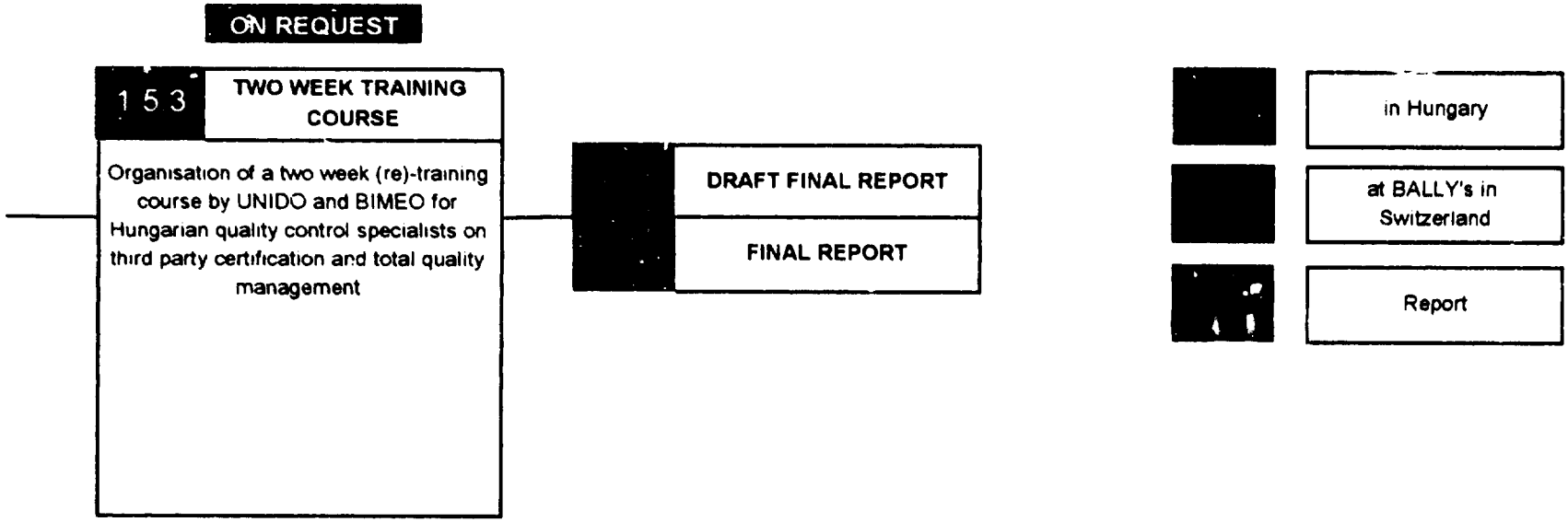
1.5.1 QUALITY MANAGEMENT SYSTEM

Introduction of an up-to-date quality management system in selected shoe factories.
- establishment of quality management system
- preparation of documents
- implementation of quality management system in three selected factories.

Three visits of two Bally experts to Hungary. Each visit to one of the counterparts factories for a period of one week. Total 6 men/weeks.

1.5.2 ASSESSMENT OF QUALITY CONTROL

Assessment of quality control management practice in some Hungarian shoe factories not assisted through this project.


ON REQUEST
153
TWO WEEK TRAINING COURSE
Organisation of a two week (re)-training course by UNIDO and BIMEO for Hungarian quality control specialists on third party certification and total quality management
DRAFT FINAL REPORT
FINAL REPORT
in Hungary
at BALLY's in Switzerland
Report