

TECHNICAL SPECIFICATIONS
TE/ETH/08/008 - 15002746
*“Technical Assistance Project for the Up-Grading
of the Ethiopian Leather and Leather Products Industry”*

ERP SYSTEM FOR AN ETHIOPIAN FOOTWEAR INDUSTRY
REQUIREMENTS FOR AN ERP SYSTEM SOFTWARE AND IMPLEMENTATION SERVICES

I. GENERAL BACKGROUND INFORMATION AND AIM OF THE PROJECT

The main objectives of the project are the up-grading of the technical and managerial capabilities of all the actors of the Ethiopian leather sector in order to create favourable conditions for increasing the country's exports as well as FDIs in the local leather and leather products industry (LLPI). The main component of the project refers to the technical assistance to the tanning sector and to the Ethiopian footwear and other leather products industry. In order to increase FDIs in this sub-sector, foreign potential investors will be invited to visit local companies and identify areas which require improvement in view of possible joint ventures. Within this sub-sector, special attention will be also provided to the development of the formal and informal micro and small scale enterprises. This intervention will be aimed, on one hand at contrasting cheap foreign productions dominating the local market, and on the other, at boosting export performance by improving the productive capacity. Furthermore, assistance will be provided to the Ministry of Trade and Industry (MoTI) for the setting up of the new Textile and Leather Industry Development Centre (TLIDC), responsible for the elaboration of sectoral policies and overall development strategies.

II. THE SCOPE OF THE SUPPLY

The analysis of managerial needs of the footwear companies has highlighted the inadequacy of the actual information system to support operations and decision making. This situation also results in depressing business performances with negative impact on profit and sales. In order to tackle this problem a possible solution has been envisaged in a software application able to manage the business processes from a common DATABASE and to automate many activities related to the management of the supply chain like customer order management, production planning, material requirement planning, material management.

A fully integrated Enterprise Resources Planning (ERP) system software, especially developed for the footwear industry, has been considered as an appropriate solution to the above mentioned problem and its implementation in an Ethiopian footwear company should constitute a pilot experience to be extended, possibly with the contributions of other donors, to other companies of the leather and leather product industry.

The selected Ethiopian Footwear Company for the first installation is *Anbessa Shoe Factory* of Addis Ababa (Ethiopia). This company operates as an autonomous public enterprise. Its production capacity is of about 3000 pairs a day, based on two plants with a good level of mechanization (at least for the main plant). The total number of employees of Anbessa is 782 and typical products are gent's shoes and moccasin ladies shoes. The information technology experience of Anbessa is basically restricted to office automation applications and no common and integrated database is available. Anbessa has 13 up-to-date PCs (potentially usable as clients of an ERP system).

III. TECHNICAL REQUIREMENTS

As per Annex 1

IV. QUOTATION

The vendor must quote:

- 1) The price for the basic offer clearly stating what has been included and what has not been included with reference to the above requirements. A list of deliverables must also be attached. The price should be intended as “all inclusive”. No additional tax or duties must be charged to UNIDO
- 2) the price for any additional software module or package not included in the basic offer
- 3) the price for any additional recommended hardware not included in the basic offer
- 4) the price for any additional user (the basic offer should already include 7 users)
- 5) The daily rate for assistance, training, installation and customization in Addis Ababa excluding travel cost and allowances.
- 6) Annual fee for maintenance and upgrading starting from the second year (the first year must be already covered by the basic offer)

V. VENDOR REFERENCES

A list of **footwear companies** currently using the proposed ERP must be attached specifying for each company:

- Name
- Main products and /or brands
- Contact Name and Title
- Address and e-mail
- Phone number

UNIDO reserves the right to contact any of the references.

VI. DELIVERY

The complete ERP system (including hardware) must be delivered to ANBESSA Shoe Factory within one month after the placement of the order. The ERP software including the DBMS should be pre-installed into the server.

At least two weeks before delivery, support must be given to start the conversion of Anbessa files.

Annex 1

Technical Specifications

The supply of the ERP system should comply with the following requirements:

The hardware offered in the basic offer must include:

- 1 PC Server: HD 500 GB, RAM 4GB, 2CPU Quad Core – OS WINDOW
- 1 Fast laser printer
- 4 Bar code readers
- Wireless LAN connection devices

The Software offered should include the following:

The vendor proposal can be split in a **basic offer** and an offer for **optional modules** and components. The basic offer must include:

- ERP System specification and performance
- Specific features for footwear companies
- Software supplied
- Hardware supplied
- Installation and user manuals
- One year of on line assistance, maintenance and upgrading
- Number of users : 7, supported concurrently

On site assistance for installation, training, customization, and implementation up to *go live* have not to be included in the basic offer. The vendor must propose a daily rate for sending to Addis Ababa a skilled engineer able to perform the above on-site activities if requested.

The software of the basic offer should encompass most of the following **modules and functions**:

- 1) Product design and configuration including product drawings and pictures management
- 2) Item coding management (for material, components, and product)
- 3) Integration with CAD CAM systems for leather cutting and costing
- 4) Bill of material management
- 5) Colour & size management
- 6) Routings management and capacity management
- 7) Product costing
- 8) Boxes and carton management
- 9) Warehouse management including SKU & Location management

- 10) Inventory management (including ABC analysis and re-order level reporting)
- 11) Material and product identification handling based on a bar code system
- 12) Sales planning
- 13) Sales management
- 14) Customer order management and order progress status
- 15) Operational marketing management (including sales expenses, sales royalties & commissions)
- 16) Master production scheduling
- 17) Capacity availability and utilization management
- 18) Material requirement planning
- 19) Suppliers management
- 20) Purchase order management
- 21) Suppliers delivery management
- 22) Quality control for acceptance of supplies
- 23) Manufacturing process quality control and rejects management
- 24) Suppliers' invoices management
- 25) Material requisition management
- 26) Missing material management
- 27) Production order management (JOB Order scheduling)
- 28) Production capacity and resources management including bottleneck identification and management
- 29) Work in progress tracking and shop floor control & reporting
- 30) Production scheduling and control (might partially be included in 27)
- 31) Production equipment management (dice, lasts, moulds)
- 32) Production machinery maintenance management
- 33) Shipping management (including the production of the relevant documentation and labeling)
- 34) Invoicing
- 35) Budgeting, cost accounting and reporting
- 36) Financial accounting (including general ledger and chart of accounts)
- 37) Human resources management (basic data, skills, training, payroll, time keeping, performance management...)
- 38) WEB based E-commerce
- 39) On-line customer order tracking and tracing

Optional Modules:

- 40) Retail network management**
 - 41) Performances and cost monitoring dashboard**
 - 42) CAD CAM system for drawing and cutting**
 - 43) WEB based CRM module**
- The language of software and manuals must be English**

For each of the above modules and functions the vendor proposal must specify:

- a.1) whether it is fully performed and included in the basic offer or**
- a.2) it is partially performed (see subsequent point b) and included in the basic offer or**
- a.3) it is not included in the basic offer but could be available for an additional price as an option**
- b) How the function is performed (transactions, input /output, charts and reports, use of bar code system - when applicable-, main windows, ...)**

The following examples would be appreciated:

- 1) Examples of the management of a customer order from production planning to delivery, including material requirement planning, procurement, production scheduling and shipment**
- 2) Example of warehouse and inventory management**
- 3) Example of sales planning, master production schedule, product costing, bill of material inquiries and reports**
- 4) Examples of the installation and user manuals**

Client PCs are already available.

The technical requirements for the RPF for an ERP for Anbessa Shoe Factory as well as the Framework of the main topics to be considered are included in the Scheme in the following page.

