# CEPI Brief N° 1

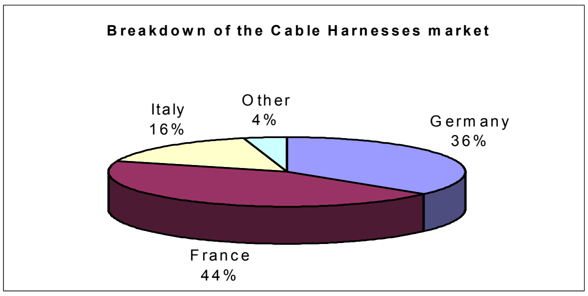
## *Strategic positioning study of the Cable Harnesses branch*

### FOREWORD

Automobiles have on average 2000 meters of cables. Cabling represents 6 % of the price of the vehicles. Vehicle constructors have out-sourced this activity to equipment manufacturers. In Tunisia, the vehicle cable harnesses branch is part of the automobile components sector.

### NATIONAL SITUATION

The automobile components sector is made up of 124 enterprises employing 16,000 persons. 33 enterprises are wholly exporting and employ over 11,000 persons.
There are 21 non-resident enterprises, of which 15 are entirely foreign owned.
The cable harnesses branch represents 63 % of employment and 73 % of total sector exports.
The branch in Tunisia over the past five years has flourished and expanded, with the entry into production of 11 enterprises generating over 7000 jobs.
Currently the branch counts some 18 enterprises and close to 10,000 employees. The enterprises are wholly exporting and 12 are non-resident. Branch production and exports have recorded annual average growth of 50% and value added of 30%.
The major equipment manufacturers are present in Tunisia; among which: are Delphi, Sylea, UTA, Léonische,…
Tunisia's principal markets are Germany, France




and Italy representing **96 %** of exports.
Average annual investment realized in the branch is 15 Million TND/year, while average productivity is 31,000 TND per employee.

### INTERNATIONAL SITUATION

The market is concentrated in the countries of the Triad : European Union, NAFTA and Japan.
The projections in Europe reveal that through 2004 growth of the branch will be favorable to Tunisia, due in part to the country's proximity to the market and its expertise in the domain.
Following is an estimation of the market for cable harnesses (consumption):

| *(Value in million TND)* | 1998 | 2004 |
|---|---|---|
| World market | 19 568 | 21 704 |
| « Consumption in Europe » | 7 240 | 7 928 |
| Tunisian production exported | 310 | 471 |
| Tunisian share of the market<br>▪ World<br>▪ European | <br>1.6 %<br>4.3 % | <br>2.2%<br>6% |

### INTERNATIONAL COMPARISON

A Benchmarking study realized on the branch relative to a reference group composed of Morocco, Poland, Portugal and France reveal that Tunisia has a number of competitive advantages, as well as a number of unfavorable factors.

**Factors Favorable to competitiveness include:**

- Low and stable real salaries;
- advantageous tax advantages and incentives accorded to off-shore units;
- availability of engineers assuring a good level of production supervision and TQM ;
- good level of availability of educated labor.

**Factors unfavorable to competitiveness include:**

- elevated transport costs relative to the competition;
- loss in productivity due to the reduced hours work schedules during Ramadan and summer.

**Strengths and weaknesses of the branch in Tunisia**

The major **strengths** are the following:

⇨**In general**

Quality Tunisian management and supervisory personnel with an entrepreneurial spirit and industrial organizational capacities. A number of enterprises have developed close relations with the major world leaders of the profession.

⇨ **Human Resources**

Personnel easily motivated, dynamic and reactive and receptive to the technical aspects of cabling. The personnel easily applies problem solving methods; which is part of Tunisian culture.

⇨ **Technology and production**

Numerous enterprises have constructor certification, with a conformity rate superior to 92%. Others are « Single Source », meaning unique suppliers for one or several references.

⇨**Within the Institutional framework**

It is noted that there is a regulatory and administrative environment that is favorable to investment and to the modernization of industry.

The principal **weaknesses** are the following.

⇨**In general**

- A strong dependence on order givers from the branch and a lack of visibility of the sector;
- No local independent support in R&D;
- lack of technical and industrial sub-contracting.

⇨**Human Resources**

It is noted that there is the need for training for management staff and that there are certain difficulties in keeping management staff employees over the long term.

⇨ **Technology and production**

The SMEs lack production organization methods and the methodology for total quality management. They lack the expertise and methods to follow productivity, modern industrial organizational structures and work flow logistics and independent work teams. Technical supervision is in need of upgrading in terms of knowledge in industrial management methods applied within the automobile sector.

⇨**Within the Institutional framework**

Regulations are not well adapted for sales by suppliers to « offshore » companies : when Tunisian enterprises sell to an off-shore enterprise, the sale is considered as exporting. The majority of these Tunisian enterprises are not familiar with this modality. The « offshore » company has the tendency to purchase its supplies from abroad, to the detriment of local industry.

## OBJECTIVES 2008

The sector in Tunisia has not yet reached maturity. Competitive conditions are still favorable for another 7 to 10 years. The following table shows the potential evolution in 2008 :

| Criteria | 1998 | 2008 |
|---|---|---|
| European groups in Tunisia | 5 | 8 |
| Share of the potential European market | 4.3 % | 7 % |
| Number of units in Tunisia | 18 | 25 |
| Direct employment | 10 000 | 15 000 |
| Enterprises certified ISO | 40 % | 80 % |
| Units with a conformity rate of >92 | 5 | 15 |
| Level of claims for 80% of units | >500 ppm | <80 ppm |
| Number of upstream (inputs) enterprises created | 4 | 20 |
| Corresponding employment | 350 | 2 500 |
| Creation of a technology pole | - | yes |

## LUCRATIVE NICHES AND MARKETS

- To consolidate the presence of cable harnesses manufacturing units in Tunisia;
- Facilitate the creation of a local sub-contracting industry ( other than wires) ;
- facilitate and encourage the creation of other labor industries in the electric and mechanical sectors;
- facilitate the access of Tunisian suppliers and services enterprises to the off-shore companies .

## ACTIONS TO UNDERTAKE

### Actions within the enterprises

- Training in production management;
- Initiate ISO certification, QS and « Supply Chain Management».

### Institutional Measures

- Amelioration of customs procedures to be compatible with 'just in time' management method;
- Creation of an inter-professional association for benchmarking;
- Creation of a technology pole for the automobile components and electrical branches; to which is linked and observatory for the evolution of automobile technologies;
- Simplify customs procedures and provide customs officials with EDI for 'just in time' clearance. Realize an audit of these procedures for the delivery for the two types of enterprises of the sector in order to develop ideas for improving the system;
- encourage Tunisian partnerships in the sector so as to avoid that the sector is 100% foreign;
- provide incentives for compensation favoring the creation of Joint Ventures with Tunisian partners.

### Promotional Actions

- Reinforce collective actions for the participation at professional fairs;
- Set up a group for the identification and prospecting of enterprises in Europe;
- Encourage partnerships and assure the development of the branch and the creation of upstream industries.

### Enterprise Creation and partnership

- Four industrial project files to promote;
- An exhaustive list of potential partners to contact