BUSINESS PLAN

CEN/TC 104
CONCRETE AND RELATED PRODUCTS

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Today, concrete is one of the mostly used material in the building industry which is applied to almost all kinds of buildings and civil engineering works. Due to a permanent technical development and its great flexibility of mechanical and physical properties it is applied for structural and non-structural purpose from simple housing to sophisticated long span bridge systems. Thus, the production of fresh and hardened concrete as well as the production of its constituent materials covers an important proportion of the entire market in the construction field.

Although the production of concrete and the erection of concrete structures is a rather experienced technique with long-term tradition in various countries, a permanent development with respect to concrete technology, advanced production methods and the use of modern and refined constituent materials is taking place.

This development concerns not only the improvement of concrete performance and quality under economical aspects, but it is increasingly influenced by environmental demands required by the society.

1.2 Quantitative Indicators of the Business Environment

Data about production and production quantities of concrete and related products are not available.

Information might be taken from the web-sites of the relevant European industrial associations as listed in chapter 3.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

<u>Improvement of concrete properties on quality</u>

Beside an even quality and performance of concrete and concrete structures and the better assessment of these issues by the customer, standardization in the field of concrete technology leads to an improvement of concrete structures by increasing the characteristics and the durability of fresh and hardened concrete.

Economical aspects

Standardization in the scope of CEN/TC 104 leads to a en economical use of concrete constituents by provisions for the concrete composition which yield the required results. Furthermore, statistical approaches for quality supervisions and assessment lead to the decrease
of testing expenses.

Beside this, the free availability and tradability of constituents on the European market on the basis of harmonized provisions decreases costs by increasing the competition of producers.

Political aspects

Although the product concrete is not yet a product which is – in view of the Commission – regarded as to be harmonized under a mandate, most of the constituent materials of concrete are covered by the mandate M128. In so far, a great deal of the activities in CEN/TC 104 and its committees provide product specification to support the aim of the Construction Products Directive 89/106/EEC. This again relates finally to economical and market aspects in accordance with the remarks above.

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

All CEN members are on the mailing list of CEN/TC 104. From these about 70 % are actively involved in the technical work of CEN/TC 104 and its committees.

Furthermore, CEN/TC 104 keeps bilateral contacts with the following CEN/TCs:

CEN/TC 51 "Cement"
CEN/TC 154 "Aggregates"
CEN/TC 229 "Prefabricated concrete products"
CEN/TC 250/SC 2 "Eurocode 2: Design of concrete structures"
CEN/TC 298 "Pigments and extenders"

as well as with ISO/TC 71 "Concrete, reinforced concrete and pre-stressed concrete"

Besides, the following European industrial associations are observing members of CEN/TC 104:

BIBM	Bureau International du Béton Manufacturé
CEMBUREAU	Association Européenne du Ciment
ECOBA	European Coal Combustion Products Association
EFCA	European Federation of Concrete Admixtures
EFNARC	European Federation of National Associations of Specialist Constructors and Material Suppliers to the Construction Industry
ERMCO	European Ready-mixed concrete Organization
EUROSLAG	European Association of metallurgical slag producers and processors
FIB	Fédération Internationale du Béton

FIEC	Fédération Internationale Européenne de la Construction
RILEM	Int. Union of Testing and Research Laboratories for Materials and Structures

Group of Notified Bodies

With respect to the nature and the number of the participating bodies, committees and associations listed above, it can be stated that there is a great interest by involved parties and
stakeholders in the work of CEN/TC 104, and a sufficient balance of interests as well as a wellfounded technical input is ensured.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

The objective of CEN/TC 104 is to develop European Standards in the field of concrete technology as well as in the field of execution of concrete structures.

When CEN/TC 104 started its work in 1978 the working program consisted of only one work item, the drafting of a European Standard for provisions for the specification, production and conformity of concrete. This work was performed none Working Group under the guidance of the TC. When at the end of the eighties due to the discussion in connection with the internal market and the CPD it was realized that an operable concrete standard needs a package of additional standards for constituent materials the working program of CEN/TC 104 was extended to further items.

These items in particular concern product standards and related test standards for

- constituent materials
- strengthening and repair materials and systems for concrete structures
- execution of concrete structures
- special procedures of concreting (e. g. sprayed concrete).

The standardization of CEN/TC 104 included about 95 work items in the past, of which about 80 % have been brought to an end and published as European Standards.

In the beginning of the new century the aspect of the Essential Requirement (ER 3) and the CPD "Health, hygiene and environment" became a factor of importance, so that future activities will increasingly concern this issue.

A further task for future activities will be the periodical revision of already existing standards under the scope of CEN/TC 104, as well as the consideration of new and advanced developments in concrete technology.

4.2 Identified strategies to achieve the CEN/TCs defined objectives.

The work items were grouped to product families which are covered by different Working Groups established under the responsibility of the TC. In cases where these product families required an extended number of standards with respect to different products members of the family or with respect to large numbers of test standards, the Working Groups were upgraded to Subcommittees to accelerate the decisions for the adoption of the working

program and the adoption of papers for further actions in the CEN voting process. Essential for the work in CEN/TC 104 with its extended working program on different product families was the involvement of the relevant industry by its European Associations, federations and the liaison to other CEN/TCs which are dealing with constituents which are out of the scope of CEN/TC 104 (see also item 3).

4.3 Environmental aspects

CEN/TC 104 deals with a series of concrete constituents which are recycled products (e. g. mixing water, aggregate) or by-products from other industries (e. g. fly ash). The use of these products covers environmental aspects with respect to saving of raw materials and as well as minimizing the need of waste deposits.

Furthermore, CEN/TC 104 is involved in actions performed in the scope of the mandate M 136 "Products in contact with drinking water" and M 366 "Development of horizontal standardized assessment method for harmonized approaches related to dangerous substances under the CPD" to provide technical specifications for the support of these two mandates of the Commission.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

Concrete technology has as tradition in most of the European countries of more than hundred years under different economical, legal, technical and geographical conditions. Furthermore, concrete as a product, composed of several constituents with properties, which often depend on local or regional sources requires very detailed and often flexible systems of technical specifications and measurements in composition, production and control procedures to meet the required performance for each application.

This led to a well-balanced system of national technical rules in the field of concrete technology in the different European countries, which are mostly given in prescriptive provisions.

Theses aspects and the lack of performance-orientated requirements and test methods in the field of concrete technology often require difficult and long-term negotiations in the relevant groups of CEN/TC 104 to find an agreement between the interests and opinions of the different member countries and to establish a new harmonized system of standards, which will be accepted by all members involved.

As, however, a big portion of the initial working programme has been carried out, this program is likely to be completed in the expected time.

In any case, the progress of work is strongly influenced by effective financing of the TC and its subgroups, as well as by the participation of experienced experts, which for future activities is to be guaranteed by the interested parties.