# BUSINESS PLAN

**CEN/TC 270**
**Internal combustion engines**

## 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 CEN/TC 270, and may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

a) General description of the market

The Scope of CEN/TC 270 refers to the standardization of reciprocating and rotary displacement internal combustion engines.

Internal combustion engines (ICEs) provided power for industrial drives, rail traction and ship propulsion for more than 100 years. It proved that power produced by internal combustion engines was more versatile than power produced by steam engines.

Internal combustion engines are able to operate by burning a variety of liquid or gaseous fuels by spark ignition, compression ignition or a combination of both. The standards developed by CEN/TC 270 reflect the requirements of the international ICE market.

b) Size of the market

In 2011 the total turnover of ICEs produced worldwide was approximately €100 billion.

The range of applications using ICEs as high efficient, flexible and reliable power source is wide: Non-Road Mobile Machinery, Locomotives, Railcars, Ships as well as Stationary Power applications for e.g. combined heat and power (CHP) or emergency purposes.

Essential safety requirements for safeguard health as well as environmental topics as pollution by noise, vibration and exhaust emissions are significant parts of the work of CEN/TC 270 in order to fulfill market requirements. As the market continues to grow and expand into third world countries the demand for standardization will increase.

NOTE: For detailed market information on the various applications see also the information of the national, European and international industry associations.

### 1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of CEN /TC 270:

The following trends are expected to prevail which will influence the work of CEN/TC 270:

a) society will expect more respect and care for the environment. As the internal combustion engine (ICE) will be an integral part of our world also in future days, even stricter operation requirements will have to be fulfilled especially regarding efficiency and emissions (particulate and gaseous);

b) the main focus will still be placed on ICE safety;

c) legislation will impose greater restrictions on the use of fuels which will require strong efforts to improve the efficiency of power generation across Europe and the world;

d) there will be a growing co-operation between all countries in order to face and manage the upcoming challenges through active participation in standardization (on European and global level)

The future developments in international ICE standardization will concentrate on the harmonization of differing and diverse national requirements and legislations.

CEN/TC 270 is aware of this trend and will help to develop the required harmonization. A main focus is placed on the close co-operation with other Technical Committees (in all standardization organizations) to ensure active collaboration and participation in all relevant areas of the work programme.

CEN/TC 270 is aware of the relevance and urgency and is prepared to deal with stricter environmental and safety requirements for ICEs from the European Union and international legislations.

To prevent the implementation of double requirements CEN/TC 270 will prepare standards on a common basis with the international standardization committee ISO/TC 70.

## 2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

The main benefits that result from the work of CEN/TC 270 are as follows:

a) the elimination of trade barriers by ensuring that contradictions and/or repetitions are removed from International and European standards;

b) to promote even better safety requirements by an agreement on consensual rules and to minimize and, wherever possible, eliminate risks to persons and goods;

c) to protect the environment from unacceptable damage;

d) to harmonize test methods and quality criteria.

## 3 PARTICIPATION IN CEN/TC 270

All CEN national members are entitled to nominate delegates to CEN technical committees and experts to working groups, ensuring a balance of all interested parties. Recognized European or international organizations are also allowed to participate when certain conditions are met. To

participate in the work of CEN/TC 270 please contact the national standardization organization of your referring country.

3.1 At current state (06 December 2012) the following member bodies have confirmed their participation:

1. Austria (ASI)
2. Belgium (NBN)
3. Bosnia and Herzegovina (BAS)
4. Bulgaria (BDS)
5. Croatia (HZN)
6. Czech Republic (UNMZ)
7. Denmark (DS)
8. France (AFNOR)
9. Germany (DIN)
10. Italy (UNI)
11. Latvia (LVS)
12. Lithuania (LST)
13. Luxembourg (ILNAS)
14. Netherlands (NEN)
15. Norway (SN)
16. Poland (PKN)
17. Romania (ASRO)
18. Slovakia (SUTN)
19. Slovenia (SIST)
20. Spain (AENOR)
21. Switzerland (SNV)
22. Turkey (TSE)
23. United Kingdom

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

### 4.1 Defined objectives of the CEN/TC

The objectives of CEN/TC 270 are

a) to ensure that internal combustion engines (ICEs) are designed and used time efficient and cost effective in conformance with recognized environmental and safety standards;

b) to identify technical areas that require the development of international standards, through liaisons with other relevant technical committees (CEN and ISO);

c) to ensure by regular review that standards that are already published and in use are up-to-date and reflect the state of the art at the time of review;

d) to continue drafting work in CEN and ISO in accordance with the following guidelines and aims:

- ISO standards that are of interest to CEN (especially those that are safety and emission related) shall, wherever possible, be referenced in the relevant CEN standards under preparation as well as in those standards that have already been published;

- when it seems necessary to convert ISO standards into CEN standards this should be done by using either the CEN Primary Questionnaire (PQ), CEN Unique Acceptance Procedure (UAO) or the Vienna Agreement depending on the nature and status of the ISO draft.

e) through the adoption of ISO standards as EN standards, ISO standards may in fact become mandatory regulations for the engine trade in EC Countries and support European legislation, in particular New Approach Directives;

f) to develop EN standards as fast as possible and replace existing national standards, especially when they are related to safety standards

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

To be able to efficiently draft standards and answer requests CEN/TC 270 proposes the following structure:

WG 5: Internal Combustion engines – Safety Requirements for RIC Engines

- Revision of EN 1679-1:1998+A1:2011

CEN/TC 270 is currently in charge of five harmonized standards under the EU Directive 2006/42/EC and three harmonized standards under the EU Directive 94/9/EC. All standards have been cited in the Official Journal of the European Union.

Other standards of the work programme that are not part of the above mentioned working groups are ISO standards which are either subject to the parallel voting or another voting procedure that are in accordance with CEN and ISO guidelines, depending on the nature and status of the ISO Standard.

CEN/TC 270 proposed liaisons with

- ISO/TC 70 - Internal Combustion Engines
- EUROMOT - The European Association of Internal Combustion Engine Manufacturers
- CEN/TC305 – Potentially explosive atmospheres / IEC SC 31M

The agreed working language of CEN/TC270 will be English. Meetings, drafts and other documents will be held/published in English.

### 4.3 Environmental aspects

The environmental aspects of CEN/TC 270 are

a) to ensure that internal combustion engines (ICEs) are designed and used in conformance with recognized environmental standards concerning

- Exhaust emissions
- Sparing of resources
- Noise / Vibrations

b) to reflect market requirements through the adoption of environmental focused ISO standards as EN standards; ISO standards may in fact become mandatory regulations for engine trade in EC countries and support European legislation, in particular New Approach Directives.

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

The structure and working practices adopted by CEN/TC 270 allow to proceed with the drafting/review work as quickly as possible. Especially the use of the online database Livelink allows a lot of work to be done without the need for a face-to-face meeting.

However, the development of standards can be affected more or less by the following constraints which exist in the current economic environment:

a) drafters' priority conflicts between their daily work and standards development;

b) the costs of hosting and attending meetings at all levels.

CEN/TC 270 is in the position to cover its present work programme. The level of technical expertise is constantly kept under review to ensure that all relevant areas are covered. Nominations for delegates and experts are requested when specific areas of expertise or additional support are required. CEN/TC 270 uses its resources efficiently and effectively and, in conjunction with the support and guidance provided by the CEN Central Secretariat, this will help to ensure that all its objectives are achieved.