

## **BUSINESS PLAN**

### **CEN/TC 296**

#### **EXECUTIVE SUMMARY**

##### **Scope**

Standardization of design, construction, inspection and testing of metallic tanks intended for the transport of dangerous goods of a capacity of more than 450 l. It shall cover tanks of road tankers, tanks of rail-tank-wagons and tanks intended for multimodal transport. "Tank" means the shell and all relevant equipments.

##### **Business Environment**

The tanks for the transport of dangerous goods are regulated by EU legislation and international regulation (RID/ADR). The 27 standards published by CEN/TC 296 since the start of work are used throughout the countries of the EU and also in Eastern Europe.

The parties involved are:

- manufacturers of tanks, manufacturers of equipments,
- users, petroleum, chemical and gas industry,
- public authorities, inspection bodies.

##### **Benefits**

CEN/TC 296 standards have been published and harmonized under the RID/ADR and TPED for construction requirements and test methods for tanks for the transport of dangerous goods within Europe. 12 of its standards are referenced in RID/ADR and their use is mandatory.

##### **Priorities**

CEN/TC 296 has essentially completed its original programme of work and is now engaged in updating and improving some of its standards to meet the specific requirements of the European legislation and the international regulation RID/ADR.

The relationship the standards have with the legislation covering these activities is important. Maintaining this relationship is a priority facing the TC presently.

## **1 BUSINESS ENVIRONMENT OF THE CEN/TC 296**

### **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 296, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

#### **1.1.1 Political factors**

There is a high European expectation to constantly improve:

- The protection of persons and property by increasing the safety factors. Public opinion is deeply affected by accidents involving the transport of dangerous goods and it may result in political responses at the level of each member state which are not always coherent at a European level;
- The protection of the environment against all pollution by dangerous substances.

#### **1.1.2 Legal factors**

The international transport of dangerous goods is regulated by international agreements which in the case of land transport are known by the abbreviations ADR (for road) and RID (for rail). These rules have been drawn up within the framework of international organisations.

At European Union level, in order to avoid duplication of the work already carried out by other international organisations, EU legislation has been drawn up on the basis of the following principles:

- Uniform application of the international regulations at national level, relying at technical level on European standardization;
- Adoption of measures at EU level, aimed at supplementing international regulations;
- Bringing down of the trade barriers created by non-harmonised national standards: the standardization work conducted within the framework of CEN/TC 296 must allow the bringing down of the trade barriers created by national standards.

These principles have been applied within EU legislation which is currently the following directive: *Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods.*

A further directive, *Directive 2010/35/EC of the European Parliament and of the Council of 16 June 2010 on transportable pressure equipment (TPED)*, has been implemented covering aspects related to the creation of a single system of approvals for gas tanks manufacturing and periodic inspection of these tanks and will allow free circulation and use for transportable equipment within EU.

#### **1.1.3 Mandate**

In 1995, the European Commission had given a mandate (M/086) to CEN for standardization in the field of the transport of dangerous goods that will contribute to the objectives to harmonize conditions under which the dangerous goods are transported within the territory of

the Union, to facilitate the free movement of goods and services, and to ensure a high level of safety.

For CEN/TC 296, the initial list of standards covered by this mandate was:

- prEN 13094: Tanks for the transport of dangerous goods - Non-pressure metallic tanks - Design and construction
- prEN 14025: Tanks for the transport of dangerous goods - Metallic pressure tanks - Design and construction
- prEN 12972: Tanks for the transport of dangerous goods - Testing, inspection and marking of metallic tanks.

#### **1.1.4 Interested parties in the standardization process**

The following parties have a key interest in the standardization process:

- Road tanker manufacturers : the European road tanker fleet counts approximately 60 000 units; new vehicles represent 5 000 units per year;
- Manufacturers of service equipment for tanks;
- Loaders : petroleum products and chemical/gas industry sector;
- Carriers : road, rail, inland waterways and maritime;
- Administrations (public authorities): Transport, Environment ministries...;
- Approved agencies, inspection bodies.

#### **1.1.5 Type and size of companies**

The structuring of the market is very diversified:

- Small and medium-sized enterprises (SMEs) for the manufacturers of tanks, of service equipments and of tank loading and unloading systems;
- Large industrial groups as far as loaders are concerned: petroleum and chemical/gas industry;
- Small and medium-sized transport companies (sometimes forming part of regrouped companies of a larger scale)

## **1.2 Quantitative Indicators of the Business Environment**

The transport of dangerous goods represents, in European traffic, all products and all modes of transport combined, around 15 % of the total transport of goods.

It mainly involves:

- The petroleum products sector: a vast, competitive, technically and professionally structured market; this market is essentially oriented towards to domestic market. Petroleum products represent 75 % of the tonnage of transported dangerous goods;
- The chemical sector: often concentrated in high industrial density regions; it offers a market which opens up to extensively to the outside ; it represents 20 % of the transport of dangerous goods;
- Liquefied gases representing 5 % of the transported dangerous goods.

The transport of dangerous goods is therefore a technically essential link of the production – distribution chain. It constitutes an essential activity on which a large number of industrial and economic sectors depend.

The breakdown of the dangerous goods modes of transport is as follows:

- Road: 71 %
- Rail: 15 %
- Inland waterways: 8 %
- Pipelines: 6 %

## **2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 296**

The first benefit of European standardization within CEN/TC 296 is to allow tank and equipment manufacturers, inspections bodies, regulatory bodies and users to meet in a well-known structure, to write together standards which are used by all.

These standards are the essential complement to the introduction of EU legislation and the standards drawn up within the working groups WG 2, WG 3 and WG 5 constitute the technical codes of the Directive, in particular concerning the design, the materials, the inspection...

The second benefit is that EN standards remove the technical barriers to trade, decrease the cost of designing, manufacturing and testing the tanks and their equipment.

## **3 PARTICIPATION IN THE CEN/TC 296**

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.

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

### **4.1 Defined objectives of the CEN/TC**

#### **4.1.1 CEN/TC 296 will develop standards on:**

- terminology;
- design and construction of metallic tanks (non-pressure and pressure tanks);
- service equipment for the transport of petroleum products;
- service equipment for the transport of liquid chemicals;
- electronic equipment and systems;
- guideline for loading, transporting and unloading of dangerous liquid goods;
- testing, inspection and marking;

to contribute to the aim of the EU legislation to establish a uniform set of rules for the safe transport of dangerous goods, to facilitate the free movement and to ensure a high level of safety for transport operations.

**4.1.2** It will produce standards that are suitable for adoption into the RID/ADR. Where technical requirements are considered to justify modifications to RID/ADR these will be clearly identified.

**4.1.3** It will ensure that standards are delivered in line with agreed target dates and consistent with the optimum use of resources.

#### **4.2 Identified strategies to achieve the CEN/TC.s defined objectives.**

**4.2.1** Presently, CEN/TC 296 has a collection of 27 published standards and 5 active projects in its programme of work.

#### **4.2.2 Structure of the TC**

CEN/TC 296 is currently organized in seven working groups:

- WG 1: Terminology and knowledge representation
- WG 2: Low pressure metallic tanks – Design and construction
- WG 3: Design and construction of pressure tanks (Pressure > 0,5 Bar)
- WG 5: Testing, inspection and marking
- WG 6: Tank equipment for the transport of liquid chemicals (Dormant)
- WG 7: Service equipment
- WG 8: Electronic equipment and products
- WG 9: Guideline for loading, transporting and unloading of dangerous liquid goods.

#### **4.2.3 Liaisons**

The following liaisons currently exist at the TC level:

CEN:

- CEN/TC 286 “Liquefied petroleum gas equipment and accessories”

External:

- European Aluminium Association (EAA)
- European Industrial Gases Association (EIGA)
- European LPG Association (AEGPL).

**4.2.4** TC Plenary meetings take place at approximately twelve-month intervals, with the working groups meeting at intervals appropriate to the relevant work item target dates..

#### **4.3 Environmental aspects**

Tanks for the transport of dangerous goods are made for repeated use and have a life of more than 20 years. The traditional construction from steel and aluminium alloy means that recycling at the end of life is easily arranged. Therefore, environmental issues have not been uppermost in the minds of the experts from the industry whose main incentive has been to establish a single European market. The TC is thus somewhat late in addressing environmental factors.

Instead of starting the revision of existing standards to add environmental considerations, the TC considers to develop a Technical Specification covering its environmental aspects that could be included in the normative references of the relevant standards.

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

Much of the detailed drafting is carried out by a small number of individual experts. Progress is therefore dependant on the limited time available to these experts, and the necessary demands of their employers.

Periodic (biennial) changes to the regulation on the transport of dangerous goods may require additional work to reflect the changed requirements.