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:

Scope of CEN/TC 249

Standardization of terminology, test methods and specifications in the field of plastics and plastic-based materials, semi-finished products and products (thermoplastics, thermosets, cellular plastics, degradable plastics, bio-based polymers, thermoplastics elastomers, composites and reinforcement products for plastics) as well as plastics recycling. Rubber is excluded. Specific end-product related items are also excluded if they are covered by the scope of an existing product TC.

State of the art and market environment

Plastics are a 21st century material powering the improvement of human welfare and innovative developments to meet the challenges of society. They offer a panel of economical solutions to a wide variety of situations. In particular, plastics facilitate resource efficiency and climate protection. The plastics industry is a major contributor in the context of green economy and the efficient and sustainable use of material resources.

Both general purpose and specialty polymers are subject to continuous improvement, e.g. better intrinsic properties achieved by the production of new technologies, better mechanical or environmental performances by plastic-based composites, lower carbon footprint thanks to recycling, extended shelf-life. Up to date, quick, adequate and economical test methods are necessary to assess relevant properties in relation to the target applications.

Last but not least, new trends and innovations in plastics industry may need to be addressed by new standards; this is for example the case when using nano materials in plastics. Nano-particles provide plastics with special characteristics and may require the development of specific test methods for characterization, measure of dispersion, etc.

Regulatory environment

Several sectors are subject to regulatory compliance such as construction, packaging, food contact materials, electrotechnical devices, waste management. Considering the scope of this technical committee as well as other ones, CEN/TC 249 is principally concerned with the so-called "Construction products regulation" (Regulation (EU) N°305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC).

There is no particular regulatory requirement as far as the technical standards related to test methods are concerned.
As standards under the scope of CEN/TC 249 do not deal with the chemical composition of plastics, REACH is only considered as guidelines in a responsible approach and sustainability of materials and products covered by the TC. Harmonised standards in the context of the CPR will need to address the release of dangerous substances, according to testing procedures set up by CEN/TC 351.

Stakeholders

CEN/TC 249 develops its own documents (EN, CEN/TS and CEN/TR) and equally adopts standards developed by ISO/TC 61 (Plastics), thanks to an intensive usage of the Vienna Agreement where an added value for Europe has been identified.

The two umbrella Europeanwide plastics associations, PlasticsEurope (Association of Plastics Manufacturers) and EuPC (European Plastics Converters), are members in liaison.

Experts in the various working groups come from the plastics industry (producers, converters, recyclers), laboratories, certification bodies, SME and NGO entities and authorities, depending on which WG is concerned.

1.2 Quantitative Indicators of the Business Environment

All figures relate to the year 2011.

The total plastics production in Europe reached 58 millions tonnes.

The demand from European converters increased to 47 millions tonnes with the following segmentation by resin types and mean markets:

![Graph of resin types and mean markets](image)

* EU27+N. CH incl. Other Plastics (~5.7 Mio t)
Source: PlasticsEurope Market Research Group (PEMRG)

Note: “others” means consumer and household appliances, furniture, agriculture, sport, health and safety.

The collected post-consumer waste reached 25.1 million tonnes, from which 14,9 tonnes have been recovered (recycling and energy recovering).
2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

The Plastics Industry and all other interested parties will benefit from the standards, technical specifications and technical reports, as appropriate, helping in technical exchanges, trade, competitiveness, communication and better quality. A large spectrum of matters is covered:

- Terminology, vocabulary, abbreviated terms, definitions
- Designation of materials
- Characteristics and properties of materials
- Classes of performance of products and semi-finished products
- Specifications for products
- Up to date methods of testing
- Recommended practices, including e.g. welding
- Templates for declaration and communication

Plastics and plastic-based materials, semi-finished products and products apply, as well as plastic reinforcement products, plastics degradability and recycling. More recently, bio-based plastics have also been considered.

A number of harmonised standards will allow the CE marking of products under the CPR, resulting in access to the market.

In general, the most competitive or economical solution is an identified benefit. However, it cannot be achieved in every case, for technical reasons.

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 an observer from recognised European or international organisations is also possible, under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country. A balanced representation is preferred.

The collaboration between ISO and CEN should also be emphasised. Many experts are active in ISO/TC 61 and act as informal liaison agents in areas of common interest, also outside the Vienna Agreement framework.

We have to note that the work done in CEN/TC 249 (technical expertise) and its financing are supported by individual enterprises or countries. This can explain a moderate to severe lack of active experts in certain cases. We expect a gradually stronger involvement of the plastics sector, notably by representatives of SMEs, thanks to the recently issued regulation on European standardisation (Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation).
4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

The objectives of the CEN/TC are directly related to the requirements of the European plastics sector. They are proposed, discussed and decided upon by the concerned stakeholders before any amendment of the work programme and the possible creation of a working group.

Requirements may be for instance:
- Description of new test methods taking into consideration the recent development of more accurate and sensible techniques;
- Update of existing test methods when such techniques are still in usage;
- Characterisation of materials and declaration of properties to better suit the needs of the value chain and its final users, increasing product confidence and reliability;
- Setting up requirements to select the best materials or products for the purpose and elimination of those not totally under control;
- Drafting common templates for communication to avoid any misinterpretation of data.

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

The main axes of the TC strategy are:
- Business plan endorsed by PlasticsEurope and EuPC before submission to CEN/BT;
- Be open to start any discussion about new areas for standardisation in the field of plastics;
- Adapt the TC structure (i.e. working groups) in accordance to the work programme requirements and to the available resources in terms of expertise, finance and professional support;
- Transpose ISO standards under the Vienna Agreement as much as possible when the ISO documents are fully suitable for the European market. The European status of these standards should be beneficial to the industry, compared to the status of the equivalent ISO document (e.g.: harmonisation, compulsory, rationalisation);
- Work in parallel with ISO under the Vienna Agreement for new standards if possible (if suited to European requirements);
- When working with ISO, the lead should be decided item by item;
- Develop new CEN standards for specific European requirements. Existing documents should be taken as starting drafts, whenever possible (modified ISO, national standards, guides, technical documents);
- Outside the terms of the already mentioned Vienna Agreement, liaisons with other European bodies (within CEN or not) are encouraged, if a positive input is expected;
- Invite experts on an ad hoc basis when very accurate knowledge is necessary;
- Liaise as often as necessary with the CEN consultant and the EC services to guarantee standards in line with the mandates;
- Try in all cases to reach consensus and in case of lack of approximation of views, restructure the problematic standard(s) to offer a solution to the opponents;
- Decide on the most appropriate deliverable, depending on the situation; that may include e.g. non consolidated knowledge, development of technologies;
- Delete any draft from the work programme and disband the responsible working group, if a lack of support and interest is clearly identified;

- In contrast, encourage any innovative subject if it can be of general interest to the European plastics industry and if a balanced panel of experts is committed to working together.

4.3 Environmental aspects

Guidelines on environmental aspects, as can be found in BOSS, will have to be observed. Considering an environmental checklist (see Guide 4) as such, or as a tool for helping drafting appropriate clauses, is recommended.

A significant part of the work programme addresses items having a direct link with the environment, in terms of waste management and saving of resources: characterisation of degradability, in particular biodegradability, recycling of plastics, bio-based polymers, composite materials. It is also considered that a well-defined fitness for a particular purpose has an indirect and real positive environmental impact.

In case of EN ISO standards, developed under the Vienna Agreement, the expertise of ISO/TC 61 in relation to environmental aspects and provisions in standards is appreciated (see e.g. implementation of the ISO 17422 recommendations).

In other cases, the WGs are encouraged to take into account all environmental aspects relevant to their materials or products.

When available and possible, the implementation of the recommendations and rules set up by CEN/TC 350 will be effective, as appropriate.

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

The risk analysis shows that the factors negatively affecting the work of CEN/TC 249 are not specific to the plastics sector and CEN/TC 249:

- Lack of active experts who are ready to spend time on a common interest mission;
- Hesitation of (potential) stakeholders (e.g. manufacturers, converters, laboratories, academics) to invest resources in standardisation when their direct benefit is not adequately identified, in particular due to the recent crisis of which the consequences have not yet been resorbed;
- Situation in ISO/TC 61, because a major part of the work programme is based on the Vienna Agreement;
- Decreasing knowledge of the basics of standardisation processes;
- Language (e.g. accuracy of terms, clear understanding of exchanges, translation of drafts for enquiries);
- Efficiency of CEN (and ISO) central secretariat as well as EC services in procedure steps where the TC has no power;
- It takes too long before the positive impact of the Regulation on European standardisation is experienced