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### **BUSINESS PLAN**

# CEN/TC 217 – SURFACES FOR SPORTS AREAS EXECUTIVE SUMMARY

## Scope of CEN/TC 217

Standardization in the field of surfaces for indoor and outdoor sports areas with a special regard to: safety and performance requirements, test methods and environmental aspects.

#### **Business environment**

A range of sporting activities is played in the member countries of CEN. Many of these sports are organized into competitions between teams composed of one or more individuals. The sports are played according to rules which are normally under the control of national or international governing bodies.

The requirements of an athlete or sportswoman/man are defined by the biomechanics of the sport. Such biomechanical considerations transcend nationality, since they relate to the interaction between the human body and the surface upon which the sport is being played. In order to ensure that individuals are able to participate in sporting activities, it becomes necessary to characterize and lay down requirements for the sports surface; hence the need for the standardisation of sports surfaces.

#### **Benefits**

Many products that are sold across Europe today are obliged to meet the requirements of individual member countries' standards. This can lead to a multiplicity of products having essentially the same end-use but which must fulfil the varying requirements from state-to-state across Europe. Clearly, cost savings are implied if manufacturers only have to meet one pan- European set of requirements.

It is also of relevance that institutions offering certification of compliance services to the standards within the market are subjected to competition within Europe.

It is expected that European Standards will lead to increased safety in use for all players and an improvement in performance of individuals at the highest sporting level as a consequence of training on facilities of assuredly high quality.

Moreover, the CEN/TC 217 will also focus its work on environment and toxicology issues to take into account the environmental considerations meeting sustainable development aspects.

#### **Priorities**

- Environmental items: The aim of specific standards on sport surfaces is to reproduce the reality of the use and ageing of synthetic surfaces and components. All synthetic surfaces must be taken into consideration to analyse effect on air and water. Several items need to be controlled or studied.
- Existing standards: A series of test methods has been standardized to determine properties of sports surfaces, of a variety of constructions, which are important to the performance of the surface and to the protection of those performing on the surface.

Then, after having made great progress in developing test methods, CEN/TC 217 has moved into developing specifications for the commonly used surfaces.

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Henceforth, one part of the TC priorities are to update the existing sports surfaces standards to include new technologies and to take into consideration the debate and progress from the last WG's meetings.

New standards must be developped to ensure the quality for end users. .

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#### 1 BUSINESS ENVIRONMENT OF THE CEN/TC 217

#### 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:

Across Europe, there exists a variety of national standards for sports surfaces. These have been based on differing philosophies, but principally fall into what may loosely be termed 'performance standards' and 'construction standards' (or a combination of elements from both). From the outset, CEN/TC 217 has intended to produce safety in use and performance-based standards for sports surfaces.

From the perspective of the user, the performance of the surface and the safety in use is paramount. Furthermore, this approach does not preclude any particular construction capable of fulfilling the necessary performance requirements.

The national standards produced within Europe have had a major influence on the development of standards for sports surfaces throughout the world. Many countries recognize individual European countries' standards rather than, for example, American standards. Furthermore, many 'international' standards for sports surfaces have drawn heavily on expertise that exists within Europe, as well as on existing national standards in CEN member countries. The work of CEN/TC 217 will therefore have a major influence on the future development of standards throughout the world and it is therefore predictable that many countries outside of the immediate influence of CEN will adopt CEN/TC 217's standards.

As the market fragments into smaller operating companies, the need to protect the purchaser and end-user becomes more necessary. The need for attestation at an affordable price is paramount to protect the interests of all clients, whether it is the owner or the user of the facility. For the single market to flourish, the competing companies must all compete on a 'level playing field' to ensure fairness in the market.

Before the European standards were published, a manufacturer exporting to a number of different countries would need to obtain a different type approval for each type of sports surfaces in each country. It is very costly for a company to adapted and modified its products for each countries and the cost of separate testing in each country is also significant.

European standards removing technical barriers to trade allow consumers to realize the benefits of economies of scale and competition. Indeed consolidation of the industry across European standards is already underway thanks to the harmonized test methods.

However, there are currently a large amount of manufacturers in Europe. There is thought to be great potential for increased cross-border trade in Europe, given the close geographical proximity of the countries and their cultural similarities.

Furthermore, sports surfaces industry is made up of different type of stakeholders who are concerned by the standardization: manufacturers, installers, local authorities, research departments, laboratories, sports federations (governing bodies) departments and users. All of them pay attention to safety aspects, environment aspects, and the healthy of their business.

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#### 1.2 Quantitative Indicators of the Business Environment

Through two examples, the following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN /TC 217.

The industry of sports surfaces is composed by different type of surfaces: indoor surfaces such as wooden floor, PVC floor and rubber floor; and outdoor surfaces such as synthetic turf for football, hockey, rugby, synthetic athletic tracks, natural turf, and unbound or bound mineral surfaces, etc.

#### - Artificial turfs:

According to the European Synthetic Turf Organisation (ESTO), which represents 90 per cent of the industry in Europe, announced today that its members had hit an important target as the annual installation rate passed 25 million square meters (2,500 hectares, or over 6,000 acres).

From small and specialized beginnings in the 1970s the European synthetic turf industry has grown into a business worth €1 billion annually, and employing 10,000 people. There are now 300 million square meters – 30,000 hectares or 74,000 acres – of synthetic turf in Europe.

In many European countries, over 200 synthetic turf pitches, large size, are constructed.

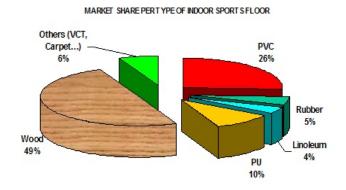
In recent years synthetic turf has been specified increasingly in urban landscaping applications and at airports. But its main use is in sports and leisure facilities: in Europe there are now more than 15,000 synthetic turf football pitches, over 1,000 hockey fields, 200 rugby pitches and 5,000 synthetic tennis courts.

Water conservation is an important factor in southern Europe: in Spain, for example, there are 2,000 synthetic turf soccer pitches, while France and Italy have 1,500 each.

Further north some of the benefits are different – avoiding waterlogging and mud. For example, there are 2,500 synthetic turf soccer pitches in Germany, 1,700 in the Netherlands, and 600 in the UK.

#### - Indoor surfaces:

The entire indoor sports surfaces trade represents 23,03 Million of m2 in Europe. The market is shared in different type of surfaces as presented below:



#### Legend

PU: polyuréthane

PVC: vinyle

VCT: vinyle flagstone

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**Conclusion:** The market of sport surfaces is growing and needs High Quality standards.

In addition, CEN standards are a reference for many non European countries and bring European technology overseas.

#### 2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 217

Since the publication of the standards on sports surfaces, some technical headways emerged, their use allowed to gain experiences on methodologies and test protocols (even to detect certain number of problem) which requires the revision of these standards.

The whole standardization work will be performed with a view to increase the quality of sports surfaces and the safety of all the European users.

Furthermore, revised European standard would produce a significant cost saving to the product manufacturers and consequentially their clients. Currently there exist throughout Europe many national standards. To operate in Europe requires a company not only to meet the standards of each individual country he wishes to participate in but also may require fine tuning of products to the extent that several versions of the same product may be needed to meet the requirements of all the countries. It is obviously time consuming costly and a clear obstacle to innovation.

By drafting documents recognized and applicable in all CEN members' countries, giving advice to manufacturers, importers and distributors, the standardization work will minimize the different interpretations in case of market surveillance by the public authorities and create a fair competition environment among worldwide manufacturers who operate on the European market including the EEA countries.

As mentioned above the harmonisation of existing national standards has been achieved within CEN TC 217. This has been one of the major contributions of this committee not only to Europe but in many ways Europe leads the world on standardisation of sports surfaces and as such the benefit Europe will obtain will have a global impact. European sports surfaces standardization is recognized all over the world due to the work realized for several years based on an important research. For proof, European sports surfaces standards are applied not only in European countries.

The Sports Surfacing Industry is a part of the Construction Industry as a whole and as such any standard that affects the construction industry may have an influence on the sports surfacing industry. Similarly any part of the construction industry that touches upon the sports surfacing industry may be affected by this standardisation work. Liaison with other committees has been established particularly but not exclusively those concerning resilient floor coverings, asphalt, concrete and aggregates.

Moreover by his involvement on toxicological and public health aspects, the TC 217 wishes that sports surfaces industry will take better account of the environmental issues in their activities.

#### **3 PARTICIPATION IN THE CEN/TC 217**

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 217, please contact the national standards organization in your country.

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# 4 OBJECTIVES OF THE CEN/TC 217 AND STRATEGIES FOR THEIR ACHIEVEMENT

### 4.1 Defined objectives of the CEN/TC 217

The primary objective of CEN/TC 217 has been to establish European standards for sports surfaces to allow the free movement of goods and services across the European Community and EFTA countries. The second aim of the CEN/TC 217 is to be attentive of the impact of sports surfaces industries on the environment.

The step-wise approach which has been adopted to achieve this aim is as follows:

- To publish the revised version of EN 14 904:2006
- To revise three existing European to meet market needs in particular further to the emergence of new technologies, standards specifications must be modified and certain number of imprecision must be corrected to clarify standards and allow a use for all stakeholders (EN 14877, EN 15330-1 and -2)
- To create specification for the CEN/TS leaching test for artificial turf focusing on health and safety issues for the benefit of consumers, users and the whole environment thanks to the setting of minimum technical safety requirements;
- To produce new standards for artificial turfs : infill material and shock pad : Test methods standards and specification standards
- To carry out periodical reviews of the standards, taking into consideration practical experience as a result of their implementation.

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

A shared need for European standards to underpin the relevancy of sports surfaces standards, in order to help all stockholders to use standards not only in Europe but all over the world as well.

The CEN/TC 217 will focus on the revision of three essential requirement's standards (mention below) which cover all the synthetic sports surfaces. These works will be carried out in working group:

- WG 2 "Surfaces of sports halls": EN 14904
- WG 6 "Synthetic surfaces" : EN 14877 and EN 15330-1

The CEN/TC 217 will also develop new standards on environment and toxicology issues to take into account the environmental considerations meeting sustainable development aspects. A new working group, WG 10 "Environmental aspects of sports surfaces", is set up according to the needs of this new item.

To improve existing standards on test methods and to help the other working group to speed up the revision of the standards mention below, a working group 11 is also set up.

#### 4.3 Environmental aspects

CEN/TC 217 will consider environmental aspects during the revision of each standard and will include environmental provisions if needed.

The specific working group (WG 10) will create new standards about environmental purposes: action on air and water, action on the players.

The scope must include all synthetic sport surfaces: complete systems and raw materials.

The priority is to deal with artificial turf because European countries are waiting for such standards for the protection of users and nature. The main items are:

- detection of heavy metals in the lixiviates,
- volatile organic compounds,

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Then the work must continue with others synthetic surfaces like tracks and tennis courts.

# 5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 217 WORK PROGRAMME

The following factors might influence the proper execution of the work program.

#### **Positive impact**

- The capitalized experience of manufacturers with sports surfaces areas;
- The long-established tradition of use of sports surfaces by thousand of consumers/users;
- The experience acquired on the implementation of existing European standards about sports surfaces.
- Positive impact in non-European countries.

### **Negative impact**

 The publication of national standards of which the application cannot be harmonized with European regulation and standardization;

<sup>—</sup> skin contact...