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## **BUSINESS PLAN**

## CEN/TC 402 DOMESTIC POOLS AND SPAS

### **EXECUTIVE SUMMARY**

## **Business Environment**

CEN/TC 402 is in charge of standardization in the field of domestic swimming pools, spas and other types of pools and their related materials, equipment and accessories, used for domestic purposes (use of a pool / spa/ hot tub designated solely for the owner's/proprietor's/operator's family and guests including the use connected with renting dwellings for family use). The sector of domestic swimming pools is a young one constantly growing up over the last fifteen years and now estimated at about 4 millions privately owned swimming pools in Europe.

The stakeholders' mapping of CEN/TC 402 is the following:

- Constructors, installers and retailers;
- Manufacturers, importers, suppliers and distributors;
- Testing houses;
- Public authorities (including some Consumers Agencies);
- Consumers.

## Benefits expected (for all swimming pools and spas covered by this TC)

- Elaboration of a set of standards for the benefits of manufacturers and consumers:
- Increase the safety of all the European citizens, and especially that of children,
- Improve consumers' information and awareness, in particular in terms of swimming pool and spa installation and correct use,
- Support market surveillance activities carried out by the public authorities in checking the compliance to the GPSD and in minimizing interpretation differences,
- Harmonization and opening of markets throughout Europe by issuing deliverables, recognized and applicable in all CEN members' countries, providing advice to constructors, manufacturers, importers and distributors,
- Provide a support for industrial companies and for SMI and SME as a model for producing or building.

#### **Priorities**

- Confidence and safety of consumers,
- Provide a support to market surveillance authorities,
- Ensure that the standards are applied throughout Europe through similar sampling and testing.

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#### 1 BUSINESS ENVIRONMENT OF THE CEN/TC 402

## 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:

The sector of domestic swimming pools is a young one constantly growing up over the last fifteen years and now estimated at about 4 millions privately owned swimming pools in Europe. This growth followed the general trend of society in the frame of development of leisure and enabled domestic swimming pools to become more and more democratic through industrialized processes of production.

This growth may have been different from one European country to another, but the immediate environment of use of these domestic swimming pools is the same throughout Europe.

The domestic swimming pools, mainly divided into inground pools and aboveground pools, can be purchased through different distribution channels, including internet which leads to an uncertainty in the service to be provided by the sector's players.

Moreover, domestic swimming pools are complex products which require guidelines both related to the construction and the installation of the pools and all their related equipment and accessories.

#### Social and safety factors

These domestic swimming pools are used for domestic purposes, especially by children or mainly intended for the latter. The reduction of the risks (e.g. drowning, suction etc.) which can result from using domestic swimming pools is thus of particular importance. Indeed, children constitute a vulnerable group within society, requiring among other aspects, adequate information and a high level of protection identical in all CEN member countries.

Swimming pools are very useful in the prevention of drowning because it is the better water point to learn swimming: the water is clean, calm and sometimes at the good temperature.

#### Legal factors

The Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on General Product Safety (GPSD) regulates consumer product safety in a horizontal way at EU level.

Concerns have been expressed by various stakeholders (public authorities, consumers and manufacturers) regarding the safety of pool equipment used in domestic swimming pools which are put on the European market. Indeed, an increasing risk for consumers, involving possible low quality replicas of pool's equipment in terms of performance requirements and information to be supplied by manufacturers, was identified in the last years.

It is felt that European Standards dealing with such products will increase safety levels, enable manufacturers to comply easily with European legislation, facilitate the work of market surveillance authorities, as well as ensure fair competition in the European marketplace.

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# Industry initiatives and economical factors

Since few decades, the European industry players are involved in the production of domestic swimming pools and they have recently organized themselves within the European Union of Swimming pool and spa Associations (EUSA - www.eusaswim.eu) in order to discuss issues concerning the industry, draw up common technical documents for the sector and present economical and environmentally friendly energy technologies.

All major national trade federations operating in the European Union are member of EUSA, created in 2006, and represent most of the famous commercial brands distributed in Europe, even those originating from non-EU countries.

The development of the sector of domestic swimming pools is also characterized by strong and voluntary initiatives regarding innovation, such as:

- the use of various construction materials (e.g. wood, polyester shells, reused materials...);
- the development of new filtering media (e.g. crushed glasses, zeolites);
- the increase of the safety thanks to new products which are more resistant and efficient;
- the use of leds, heat pumps, solar heating, water recovery tank, dechloraminated products, in view of addressing environmental issues;
- the appearance of home automation: automatized and remote water treatments, "comfort" equipment (e.g. submarine music).

#### 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 the CEN /TC 402:

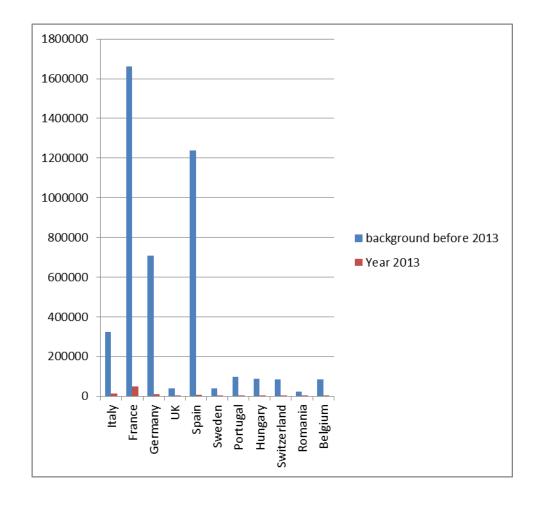
In spite of a lack of official statistics at EU level on domestic swimming pools, EUSA has estimated the overall volumes of the swimming pools manufactured by 12 of their members (see chart and table below). In 2013, this represented an annual market of 97 000 units sold.

These estimations do not cover swimming pool's equipment. Parts of them are imported, mainly from North America and Southeast Asia.

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Figures related to the situation of the European market



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	Italy	France	Germany	UK	Spain	Sweden	Portugal	Hungary	Switzerland	Greece	Romania	Belgium	TOTAL
Population	60760000	65700000	80620000	64100000	46500000	9200000	10460000	9 900 000	7860000	11000000	19500000	11000000	396600000
Private (Historical data)	200000	1270200	648000	20000	1112000	10000	75000	77 000	72000		21500	70000	3575700
Year 2007	21000	96000	12000	6000	38000	5000	5000	3 000	2000			3300	191300
Year 2008	24000	61000	8500	5000	35000	5000	5000	2 500	2000			2700	150700
Year 2009	22000	59000	12000	2500	15000	5000	4000	1 900	2000			2000	125400
Year 2010	20700	63000	9000	2500	16000	5000	4000	800	2000			2400	125400
Year 2011	19000	57000	10000	2300	14000	5000	3000	600	1900			2500	115300
Year 2012	17000	54180	10000	1800	8000	5000	2000	900	2000		700	2400	103980
Year 2013	14500	47870	9500	2200	8000	5000	2000	1 600	2000	1300	550	2200	96720
Total Private	338200	1708250	719000	42300	1246000	45000	100000	88 300	85900	75000	22750	87500	4484500
No. Inhabitants / Private Pool	180	38	112	1515	37	204	105	112	92	147	857	126	88
Public (Historical Data)*	14930	25630	7000	7100	16900	1970	4030	3 000	680	200	963	2000	82403
No. Inhabitants / Public Pool	4070	2563	11517	9028	2751	4670	2596	3 300	11559	55000	20249	5500	4813
Percentage Public / Private (%)	4,41	1,50	0,97	16,78	1,36	4,38	4,03	3,40	0,79	0,27	4,23	2,29	1,84

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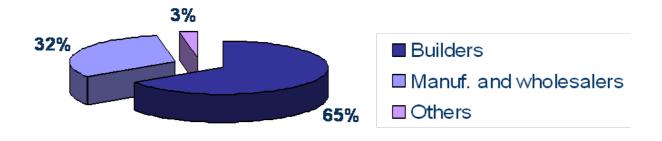
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#### Offer

The domestic swimming pool business in Europe employs more than 120 000 employees for the construction of swimming pools only (pools' equipment excluded) and might be considered as a support for economical activity of European countries.

This sector is mainly divided into companies that are:

- in a Business to consumers (B to C) relationship, such as constructors, installers, retailers...; they might be independent or part of networks, some of these networks being implemented worldwide,
- in a Business to business (B to B) relationship, such as manufacturers, suppliers, distributors...; most of these companies being involved on several products and markets,



Source: EUSA, Barcelona 2009

Furthermore, it is important to highlight that most of the industry players in this sector are small and medium sized companies or even, very small enterprises (handicraft). Nevertheless, some suppliers of pool equipment's manufacturers might also come from heavy industry (e.g. plastics).

The average of salaried person number is equal to 7 for a constructor/installer and 10 for a B to B.

#### **Demand**

The demand of domestic swimming pools is decreasing since 2008 and the market has been divided by 2.

The budget required begins with 10 000 euros and the average is 20 000 euros. For an aboveground swimming pool, the budget may be less than 1000 euros.

In 40 % of the cases, the owner will install the kit swimming pool with the assistance of a professional or on its own. For an aboveground swimming pool, the owner will install it on its own.

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#### 2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 402

In 1999, under the impulse of the Consumer Safety Commission (CSC), France started a standardization process on domestic swimming pools at national level with the aims to better define the products and provide the different categories of end users with the appropriate advice to use the product safely. This led public authorities and professionals to draft national standards in order to protect consumers' interests and upgrade professionalism.

Since 2006, in a parallel way, the European Union of Swimming pool and spa Associations (EUSA) developed some technical papers on water treatment, on heating and on construction of domestic swimming pools.

The CEN/TC 402 will gather these initiatives and experiences with the aim to develop the first set of European standards covering every related aspects which altogether constitute domestic swimming pools such as:

- Pools' structures (inground pools, aboveground pools, kit swimming pools...),
- Water circulation systems,
- Pools' liners and membranes,
- Heating equipment,
- etc.

The whole standardization work will be performed in a view of:

- increasing the safety of all the European citizens, and especially that of children, improving consumers' information and their awareness, in particular in terms of swimming pool installation and correct use, by setting the minimum safety and performance requirements of the products;
- providing advice and assistance to constructors, installers, retailers, manufacturers, importers, suppliers and distributors, by drafting deliverables recognized and applicable in all CEN members' countries; minimizing the different interpretations in case of market surveillance carried out by the public authorities;
- creating a fair competition environment among pool constructors and among pool equipment's manufacturers operating on the European market including the EEA's countries.

Furthermore, once published, the set of standards will provide common technical rules to the market of domestic swimming pools, and ensure end users that these products comply with safety essential requirements.

Professionals and consumers will also use these reference documents as a basis for solving possible technical issues (ex: acceptable tolerances in construction of a swimming pool).

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#### **3 PARTICIPATION IN THE CEN/TC 402**

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.

A complete list of such organizations in Europe can be found at:

http://standards.cen.eu/dyn/www/f?p=CENWEB:5

### 4 OBJECTIVES OF THE CEN/TC 402 AND STRATEGIES FOR THEIR ACHIEVEMENT

## 4.1 Defined objectives of the CEN/TC 402

The main objectives of CEN/TC 402 are the following:

- to reduce the risks which can result from using domestic swimming pools, thanks to the setting of minimum technical safety requirements; dealing with the product life cycle from design to installation and maintenance
- to specify the necessary information to be given to the users via standards of the specifications relating to the marking of the equipment, materials and accessories, to the purchase information and instructions for use;
- to set a fair competition environment among constructors and manufacturers who
  operate on the European market including the EEA countries, thanks to the
  harmonization of the technical requirements and information given to the
  consumers.

## 4.2 Identified strategies to achieve the CEN/TC 402.s defined objectives.

Initially, standardization activities could start immediately in the field of domestic swimming pools to deal with:

- safety requirements and test methods applicable to domestic swimming pools; this
  work being carried out in Working Group 1 « Pool structure design, product and
  installation »
- safety requirements and test methods applicable to swimming pools' equipment intended for water circulation, filtration and treatment; this work being carried out in Working Group 2 « Pool water circulation, filtration and treatment »
- safety requirements and test methods applicable to mini pools, this work being carried out in Working Group 3 "mini pool"
- safety requirements and test methods applicable to domestics spas and hot tubes, this work being carried out in Working Group 4 "domestics spas and hot tubes"

Both aspects would altogether provide a safe and proper swimming pool to the end user. This will thus require the development of consistent and converging parts of the standards through regular

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coordination activities/checks to be set up among WG 1, WG 2, WG 3 and WG 4 under the monitoring of the TC.

It is also assumed that the safe products (i. e. products with a high level of quality) are the basis of consumers' safety. Therefore, standardization work should take into account the following topics:

- product safety and performance requirements;
- safe construction and installation, and safe requirements for methods and treatment;
- safe use, which could include information and red flags for consumers (e.g. "Don't leave your child unattended in the pool").

In addition, further working groups could also be set up, as follows:

- Working Group 5 « Pools' liners and membranes », in order to ensure a proper waterproofing of the swimming pool,
- Working Group 6 « Heating equipment »,
- etc.

Taking into account the time constraints, the first prEN standards for domestic pools were approved in 2015 and water circulation equipment for domestic pools should be approved by the end of 2016."When available, national standards (and/or any relevant deliverables) will be used as a basis for the drafting of European Standards.

It will also be highly positive to promote a suitable cooperation with organizations and policy makers in the field of domestic swimming pools, both at national or European levels, establishing appropriate liaisons if need be.

In that perspective, it is suggested to set up such liaisons with the following Technical Committees:

- CEN/TC 52 "Safety of toys",
- CEN/TC 136 "Sports, playground and other recreational facilities and equipment",
- CEN/TC 164 "Water supply",
- CEN/TC 249 "Plastics".

ANEC (European Association for the coordination of consumer representation in standardization) in quality of CEN associated member, will also be involved in the activities of this CEN/TC.

#### 4.3 Environmental aspects

CEN/TC 402 intends to consider environmental issues when drafting product standards in support of sustainable international trade, by using CEN Guide 4 "Guide for addressing environmental issues in product standards".

Indeed, the need to reduce the potential impacts on the environment of a product that can occur during all stages of its life is recognized around the world, and the potential environmental impacts of products can be reduced by taking into account environmental issues in product standards.

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As far as domestic swimming pools are concerned, the following main issues have already been identified at different stages of their life cycle:

- Production and construction: materials used (e.g. REACH<sup>1</sup>, use of reused materials...), durability, carbon footprint...
- Use of the swimming pool: water and electrical consumption, emission of carbon dioxide (e.g. chemical products used, heating equipment...)
- Renewal: durability of the swimming pool (e.g. easy access to the equipment for repair and replacement)
- End-of-life: water reuse, swimming pool liner's recycling, means of filtration (e.g. sand) Furthermore, CEN/TC 402 will actively address compliance with any applicable national, European or international related regulation.

# 5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 402 WORK PROGRAMME

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

- the absence of scientific information or data regarding certain very specific points,
- in certain countries, the lack of statistical data on the sector of domestic swimming pools and/or on accidents and information on the circumstances under which these have happened,
- professionals to be involved in the standardization work are mainly within small and medium enterprises and have to be properly identified and invited to participate actively in order to ensure consensus, large acceptance and, once approved, implementation of the standards by the market,

<sup>&</sup>lt;sup>1</sup> REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)