



BUSINESS PLAN

CEN/TC 164 WATER SUPPLY

EXECUTIVE SUMMARY

Business Environment

- Nearly almost 100% of the 450 M European people are supplied with drinking water (DW)
- Europe represents approximately 38,8 % of the world market; the top world-leading private DW operators are European companies;
- This technical committee is involved in a broad range of subjects, dealing with all the drinking water supply chain, from systems to accessories, including chemical products for treatment of water intended for human consumption and for swimming pools, and addressing both public installations and inside building equipments.
- The range of European water industries concerned by the TC is very wide: equipments & products manufacturers, service providers, contractors, engineering & consulting companies, laboratories, building & plumbing firms. Both public and private sectors are involved.
- The consumers and national, regional and local governments are directly interested, and actively committed in.
- The business is driven by 2 major EU directives (water framework (2000/60/EC) , DW (98/83/EC) and construction products regulation (305/2011)), the issue of materials in contact with DW being dealt with under the "New approach".
- For these products, the European Commission regulators have decided to elaborate and implement a CE mark, which will favour the internal market, and which needs inputs from CEN for harmonised standards and the test methods standards.
- REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) regulation entered into force on 1 June 2007. It replaces more than 40 European directives and regulations. It is for manufacturers, importers and downstream users of produce, market, import and use of substances not likely to be harmful to human health and the environment. Most of chemicals subject to standards must apply since December 2010.
- CLP regulation (classification, labelling and packaging of substances and mixtures) (No 1272/2008) also applies to chemicals used for treatment of water intended for human consumption and for swimming pools.
- Parties involved:
 - public authorities,
 - manufacturers of products for water supply applications,
 - operators,
 - test laboratories,
 - planning and construction companies.
 - chemical producers or suppliers

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Benefits

- To enhance and make more reliable the quality of DW throughout EU, "from source to tap", meeting the expectation of EU society for more food and health safety;
- To allow public and private DW service providers to comply with the regulations with affordable price;
- To increase the security of local services of general economic interest, for the benefit of all activities of the society;
- To facilitate the development of a European manufacturing industry for the products concerned, alleviating the costs of access to the market,
- To allow public and private service providers to optimize DW assets management and funding.

Since 1990, 230 European standards were adopted and 12 draft European standards are still under preparation.

Priorities

The priorities are :

- to develop European product standards to meet the requirements of Directive 98/83/EEC (DWD) and of Regulation 305/2011 (CPR)
- to develop standardised methods for testing materials in contact with drinking water;
- to prepare standards giving specifications for installations inside and outside buildings conveying water for human consumption
- to draft chemical products standards in the objective of the protection of users.

CEN/TC 164 is also very committed in the development of a mandate on fitness for contact with drinking water. Following the withdrawal of the mandate M/136, CEN/TC 164 is trying to work with the European Commission to draft a relevant mandate. The main priority is to have an applicable mandate.

1 BUSINESS ENVIRONMENT OF THE CEN/TC 164

The following technical, institutional, societal and international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC 164, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards.

1.1 Description of the Business Environment

High quality, safe and sufficient drinking water is essential for our daily life, for drinking and food preparation. We also use it for many other purposes, such as washing, cleaning, hygiene or watering our plants.

The European Union has a history of over 30 years of drinking water policy. This policy ensures that water intended for human consumption can be consumed safely on a life-long basis, and this represents a high level of health protection. The main pillars of the policy are to:

- Ensure that drinking water quality is controlled through standards based on the latest scientific evidence;
- Secure an efficient and effective monitoring, assessment and enforcement of drinking water quality;
- Provide the consumers with adequate, timely and appropriately information;
- Contribute to the broader EU water and health policy;

Consequently, the field dealt with by CEN/TC 164 "Water Supply" concerns safety, health and environment.

These issues have an important implication on the work of the Committee.

The Drinking Water Directive (hereinafter referred to as "DWD") is a cornerstone of EU water legislation. Its objective is to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

The materials used to construct supply systems, the chemical products used to treat water, and all products in contact with drinking water (such as tapware, hoses...) shall not change the water quality to meet DWD requirements

Each country has its own national acceptance criteria to allow materials to be in contact with drinking water.

As the market is European and not an addition of national markets, the European Commission has decided to harmonise the determination methods of essential characteristics which manufacturer needs to declare when a construction product in contact with drinking water is placed on the market.. The first attempt failed. The EC is trying since the end of 2016 to draft new mandates, on materials in contact with drinking water, in the frame of the CPR. Three drafts have been issued on metals, organics and cementitious materials based on construction products.

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The test method standards written by CEN/TC 164 will be referred to in the mandates. With the implementation of the European mandates, all countries will have to use the common European test methods. As there are currently drafted, the mandates are under the CPR so to affix the CE marking, a manufacturer must first do the declaration of performance (DoP) when he declares the product's essential characteristics. Declaration shall be based on test procedures and assessment and verification of constancy of performance (AVCP) procedures given in the harmonised product standard. CEN/TC 164 and other TCs will have to write the harmonised standards bases of this CE marking.

1.2 Quantitative Indicators of the Business Environment (Source: World Health Organization)

The commitments of Rio +20 concerning water are: access to safe drinking water; protection of water resources, water quality and aquatic ecosystems; integrated water resources management (IWRM); water resources assessment; and water and sustainable urban Development.

Concerning the access to safe drinking water, the global target for drinking water was met in 2010. But in 2015, 663 million people still lack improved water sources.

The global target for sanitation has been missed by almost 700 million people. In 2015, 2.4 billion people still lack improved sanitation facilities.

(1) Global water supply and sanitation coverage in the world , 2015

| | Urban | Rural | Total |
|---------------------|-------|-------|-------|
| Water supply | 96% | 84% | 91% |
| Improved Sanitation | 82% | 51% | 68% |

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 164

- The first benefit is that European standards allow to maintain a high level of quality for the drinking water supplied and for the relevant services and products. They will contribute to guarantee that the systems, the construction products, the equipments and the chemical products placed on the European market meet a high level of performance and efficiency, are safe for use by customers and are friendly for the environment.
- The second benefit is that European standards are expected to remove technical barriers to trade and open markets throughout Europe. European standards prepared by a CEN technical committee replace national standards on the same subject, in all countries member of CEN. Since the beginning of CEN/TC 164 work, 230 European standards have been published and about 12 are still being developed.
- The third and very important benefit of CEN/TC 164 is to prepare harmonised standards which support the compliance with the European Directives or Regulations described above (DWD and CPR), and will help the Member States regulators to implement the CE marking for construction products in contact with drinking water.

- CEN/TC 164 provides the interested manufacturers, drinking water service providers and consumers with a well-known platform for dialogue, allowing them to draft standards consistent with their mutual interests.

3 PARTICIPATION IN THE CEN/TC 164

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance between all interested parties. Participation of recognized European or international organizations as observers is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

Due to the structure of CEN/TC 164, participants in plenary meetings include :

- about 3 delegates representing each of the national standardization bodies,
- the convenor and/or secretary of each working groups,
- representatives of the liaison partners (such as TCs preparing product standards intended to be use for water supply),
- and observers from European or international associations (such as EUREAU, AQUA, EWTA, AQUAEUROPA, WQA...).

4 OBJECTIVES OF THE CEN/TC 164 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 164

The objectives of CEN/TC 164 are the preparation of :

- 1) basic standards for terminology, design, tests and marking of water production or supply;
- 2) chemical products standards to be in line with DWD, CLP and Reach.
- 3) standards for fitness for use in contact with DW: test methods which, for most of them, will be the basis of the future CE marking described above.
- 4) product standards to harmonise the practices in Europe and which are used by manufacturers and customers on the European market ;
- 5) harmonised product standards giving presumption of conformity with the essential requirements of the CPR;
- 6) standards on crisis and risk management

4.2 Identified strategies to achieve the CEN/TC 164's defined objectives

To reach its objectives, CEN/TC 164 has created several working groups (WG) to deal with specific items :

- | | |
|------|---|
| WG 1 | "External systems and components" |
| WG 2 | "Internal systems and components " |
| WG 3 | "Effects of materials in contact with drinking water" |
| WG 5 | "Concrete pipes" |

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| WG 8 | "Sanitary tapware" |
| WG 9 | "Drinking water treatment" |
| WG 10 | "Hot water and cold storage with dwellings" |
| WG 12 | "Flexible hoses assemblies" |
| WG 13 | "Water conditioning equipment inside buildings" |
| WG 14 | "Valves and fitting for buildings and devices to prevent pollution" |
| WG 15 | "Security of drinking water supply" |
| JWG1 | "Structural design of buried pipes" (with CEN/TC165) |

WG 1 and 2 write basic standards : terminology, design, calculation methods, installation, operation and maintenance.

WG 5, 8, 10, 12, 13, 14 deal with product standards.

WG 3 deals with test methods for assessing the effects of materials in contact with drinking water, these test methods will be used to test future CE marked products (but the limit values will be fixed by the regulators)

WG 9 deals with chemical products used in the treatment of drinking water, including products for swimming pools.

WG 15 deals with security of water supply. This group was created after a demand of the DG Home to write standards on the protection of the fields.

JWG1 is a joint working group between CEN/TC 165 and CEN/TC 164 . This group is administratively managed by CEN/TC 165

The priorities of CEN/TC 164 have been :

- first to develop voluntary standards CEN/TC 164;
- secondly to develop product standards to meet the requirements of Directive 93/38/EEC (DWD)
- nowadays to develop tests methods and product standards to meet the requirements of Regulation 305/2011 (CPR) and Directive 98/83/EEC (DWD).

When available, national standards have been used as a basis to European Standards.

CEN/TC 164 has several liaisons :

- with CEN committees to co-ordinate the development of standards and to be kept informed of the work made by other committees :
 - CEN/TC 57 "Central heating boilers"
 - CEN/TC 69 "Industrial valves"
 - CEN/TC 133 "Copper and copper alloys"
 - CEN/TC 155 "Plastics piping systems and ducting systems"
 - CEN/TC 165 "wastewater engineering"
 - CEN/TC 197 "Pumps"
 - CEN/TC 218 " Rubber and plastic hoses and hose assemblies"

- CEN/TC 203 " Cast iron pipes, fittings and their joints "
- CEN/TC 402 "Domestic Pools and Spas"
- CEN/TC 426 "Project Committee - Domestic appliances used for water treatment not connected to water supply"

- with an international committee, to be kept informed of the work made by this committee:
 - ISO/TC 224 " Water services "
- with other organisations which are interested by CEN/TC 164 work and have an official liaison statut (AQUA Europa, AQUA, ECOS, EHI, ESA, EuSalt, EWTA, EuLA, MASM, CEIR (taps and valves))

4.3 Environmental aspects

The aims of CEN/TC 164 are to promote the environmental approach in a B-to-B context and to comply with legislation

Experts in working groups, and especially in WG 8 have in mind that the methodology to implement the European ecolabel is the same for ecodesign. Definition of criteria for the European ecolabel on taps and showerhead are in progress. Once it is done, it works for both green label and ecodesign. The goal is not only to reduce energy consumption but also to reduce environmental impacts.

Then, with that in mind, experts are aware of the importance of environmental issues in product standards and each time a new work item is registered this issue is raised.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 164 WORK PROGRAMME

The philosophy of the mandates, drafted by the European Commission for materials in contact with Drinking Water, to write standards which will be the basis of the new CE marking is different from the one of other mandates as it mixes technical performances under the CPR and water quality requirements under DWD.

The requirement "fitness for contact with drinking water" is not simple to fulfilled. Although the draft mandates cover materials, the CE marking will apply to products and the link between the two is not yet defined.

These new approaches are very confusing to CEN/TC 164 experts who have to comply with this Directive and to devote time and energy to answer the requirements of the European Commission.

Following the proposal of the European Commission of three draft mandates on materials, CEN/TC 164 experts have expressed comments. The experts don't believe a European mandate can be applicable as long as there is no European Regulation about fitness for contact with drinking water such as positive lists. The main concern is to have a deceptive CE marking mixing construction products performance with fitness for contact with drinking water performance.

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The Drinking Water Directive is currently under revision. In the standardisation work, CEN/TC 164 needs to consider both the requirements of the DWD and the CPR which both deals with European regulation. The objective of CEN/TC 164 is to have a common legal European framework for products and materials in contact with drinking water that would minimise cost, time and effort for testing and certification.

The impact of these mandates on the work programme of CEN/TC 164 is difficult to assess. CEN/TC 164 will need a clear guidance and an open dialogue with the Commission. Positive lists for materials/substances would be efficient in this context.”

The adoption of Directive (98/83/EEC) at the end of 1998 leads to the modification of a large number of projects and published standards regarding the chemical products for water treatment. The implementation of the REACH Regulation on the registration, evaluation and authorization of chemicals had a significant impact on the WG9 "Chemicals for water treatment." Indeed, a review of all its standards is conducted in the medium term to be consistent with the European regulation.

Lastly, CEN/TC 164 had also to cope with the decreasing availability of experts. This may hinder the progress of standards developed by CEN/TC 164. CEN/TC 164 experts are trying to put more dynamism in its work, looking for new items to work on. A special effort will also be devoted to communication of our work and of our deliverables to try to attract new expertise.