BUSINESS PLAN
CEN/TC 92
WATER METERS

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:

Drinking water is a scarce resource on our planet. It has an important role to play in the development of any human, animal or vegetable life, and in the evolution of our societies. Water metering and subsequent billing is one of the subjects, which makes the public aware of the problem of the ever-increasing water prices. Installation, maintenance and water treatment costs, mean great differences in the prices of metered water. These differences exist in different countries of the European Community as well as between as individual countries.

Water metering concerns following major sectors in the economy:
- "industrial and commercial"
- "agricultural"
- "residential"

Those directly interested in this sectors are the manufacturers, suppliers, authorities and testing laboratories. Users, on the other hand, are less represented.

For suppliers, standardisation is a tool that answers the user’s requirements with precise definitions in accordance with logical and scientific approaches. For the authorities, it assures that water (object of commercial transactions) is accurately measured and for laboratories it verifies that water meters conform to the relevant requirements.

The main objects of standardisation are:
- the abolition of technical obstacles and contradictory standards
- the improvement of the quality and compatibility of the products

The context of water metering is changing due to deregulation throughout Europe linked to the Measuring Instruments Directive - MID 2004/22/EC. Standardisation in the field of water meters is also under way in the International organization for standardization ISO and in the International Organisation of Legal Metrology (OIML). OIML R-4 P series is being revised to allow for hot water meters and to be in line with the requirements of the MID.
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

1.2.1 Executive summary

Water use is expected to decrease markedly in most of Europe; however, many Mediterranean river basins will continue to face water stress. Total water abstraction in Europe is expected to decrease by more than 10% by 2030. The sectoral profile of water use in most of Europe is changing: the manufacturing sector and households are replacing the electricity sector as the main abstractors. In southern Europe, irrigation continues to dominate (more than 40% of the total), and expanding irrigated areas and likely climate changes are expected to increase vulnerability to droughts and other extreme climatic events.

The recent enlargement of the EU continues to provide both environmental opportunities and threats. EU legislation has in many cases led to stronger environmental legislation in the 10 new Member States (New-10). At the same time, improved economic prospects and the associated higher levels of individual consumption are likely to increase the pressure on the environment. In contrast to the overall European trends, the use of water by households and mineral fertilisers in agriculture are expected to increase substantially in the New-10 (by more than 70% and 35% respectively, although these remain lower than in the EU-15 in absolute terms). Also, resource productivity in the New-10 is expected to remain relatively low (currently about four times lower than in the EU-15), providing ample opportunities for implementing cost-effective mechanisms or 'leapfrogging' towards the use of newer, more resource-efficient technologies.

The current shift to more integrated approaches towards environmental policies provides further opportunities to improve the future state of Europe's environment. For many environmental problems, past and current legislation has often successfully addressed the 'big polluters', but new concerns are likely to arise from individual consumption and diffuse sources of pollution. A shift in the nature of environmental pressures is expected: from production towards consumption, and from large point sources to more fragmented and diffuse sources (including households, agriculture and transport infrastructure). Successful responses may require policymakers to give more consideration to the common drivers and sectoral developments (for example in transport and agriculture) behind many environmental pressures in Europe, and to address these in a coherent manner.

The structure of the water sector varies throughout Europe – in terms of price, subsidies, cost/price relationship, etc. In most of the European countries, the resource water is under public ownership. The future tendency in the water management points into direction of greater involvement of private operators in the management. The debate is on future water management strategies within the European countries, it is not solely focused on private sector involvement. Other issues are resources, water quality, water charges, water services, legislation and competition.

Changed approach – new requirements

The shift of water and waste water management, operation and investment from public service to business creates new requirements for regulation, especially economic regulation. Increasingly, this new approach, and its associated regulatory frameworks, are seen as important tools – along with scientific and technological advances – for progress towards sustainability.
1.2.2 Sectoral water use in Europe

Future total abstractions in EU15 are predicted to show only very small increases because of: stable population growth, industrial decline, improved water use technologies, greater water re-use (industry) and stabilisation of agricultural water use (especially irrigation). Infrastructural (or supply-side) responses to water stress (more reservoirs, more wells, water transfers etc) are now being critically assessed against demand-side responses such as water conservation, water saving, water reuse, leakage reduction. The importance of economic principles and pricing of water (full cost recovery) is now an important consideration in the development of water policy.

1.2.3 Sectoral water use in Europe

With regard to the evolution of water management strategies, the analysis of the country reports reveals future trends towards changes in water sector operation with increasing private involvement or more concentration. One of the reasons for this trend is financial concerns. In some European countries water is highly subsidised and the charges do not cover the cost. As the new EU framework directive requires a full cost recovery, charges may increase in the future. There already had been a corresponding tendency for price increase during the last five years.
1.2.4 European outlook

Total water abstraction in Europe is expected to decrease by more than 10 % between 2000 and 2030 with pronounced decreases in western Europe. Climate change is expected to reduce water availability and increase irrigation withdrawals in Mediterranean river basins. Under mid-range assumptions on temperature and precipitation changes, water availability is expected to decline in southern and south-eastern Europe (by 10 % or more in some river basins by 2030). The sectoral profile of water abstraction is expected to change: withdrawals for the electricity sector are projected to decrease dramatically over the next 30 years as a result of continuing substitution of once-through cooling by less water-intensive cooling tower systems. Water use in the manufacturing sector is likely to continue to grow. In eastern Europe, water use in the domestic sector may grow significantly. Agriculture is expected to remain the largest water user in the Mediterranean countries, with more irrigation and warmer and drier growing seasons resulting from climate change.

References / Further reading:

- European Environment Agency / Inland Waters / Topic report No 2/1999

- European environment outlook / EEA Report No 4/2005

- Sustainable use of Europe’s water / Environmental assessment series No 7

- aqualibrium – Organisation of the water market
  [http://www.oieau.fr/aqualibrium/Aqualibrium_17.pdf](http://www.oieau.fr/aqualibrium/Aqualibrium_17.pdf)
2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

The complete work programme of CEN/TC 92 will support the Measuring Instruments Directive - MID 2004/22/EC and the product standards will be harmonised, thereby meeting the essential requirements specified in the MID. Any measures, such as the use of good quality standards, which facilitate free trade across borders is therefore to be welcomed by all parties concerned.

- Confidence of the parties involved in respect of quality and metrological performance.
- With the availability of harmonised Standards there will be a reduction of cost related to conformity evaluation and assessment for the manufacturers.
- A real impact on reducing costs for users within the European countries are consistently applied standards.

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 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.

Representatives of the following 11 CEN member countries regularly participate in the meetings of CEN/TC 92 (38% of the totally 29 CEN member countries are represented):

- Austria
- Belgium
- Denmark
- France
- Germany
- Italy
- Netherlands
- Portugal
- Spain
- Switzerland
- UK

There is currently one CEN/TC 92 Working Group: WG 2 – General requirements

CEN/TC 92 liaises with other international bodies to ensure its standards take due account of related work elsewhere: OIML/TC 8/SC 5; EUREAU; ISO/TC 30/SC 5 and TC 30/SC 7.
4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

In 2005 the TC has published three European Standards for water meters concerning aspects of General Requirements, Installation and Conditions of Use and Test Methods and Equipment (EN 14154 Part 1-3). These standards will be harmonised with the Measuring Instruments Directive - MID 2004/22/EC with a target date of 2007.

The main theme is to prepare functional standards relative to water meters. The technical committee (currently CEN/TC 92/WG 2) redefined its scope to permit the use of all kind of meters, irrespective of technologies (not only ‘tests methods and equipment for cold potable meters’). It also anticipates the standardization complementary to the Measuring Instrument Directive (MID).

The aim of the standard is to define common rules for all meters submitted to metrological verification in the European Union.

The standard deals with meters to measure volume flow of cold potable and warm sanitary water enclosed in full conduits. This is irrespective of technologies applied (not only traditional mechanical meters). This standard will be completed, if necessary by special standards for dedicated meter technologies.

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

Standards are a very important requirement to underpin the declared performance of products and to ensure a consistency of testing and acceptability. This is enhanced by the use of third party certification.

The combined approach of product innovation underpinned by up-to-date standards assists Europe to continue to be recognised as a major player in the design, production and supply of water meters.

CEN/TC 92 and its working groups will continue to work using electronic circulation of documents and by holding technical meetings. Meetings are conducted in English with translation confined to a minimum and all committee papers are circulated in English only, which ensures maximum progress with savings in cost and time. Normally CEN/TC 92 holds one plenary meeting per year in conjunction with the related ISO meeting (working groups meeting depending the program).

CEN/TC 92 will discuss the possibilities to strengthen the liaison with ISO and OIML to promote the harmonisation of standards in the field of water meters.

Contact will be sought to the secretariat of ISO/TC 30/SC 7 to explore possible amalgamation of EN 14154 series with ISO 4064 series, giving way to abroad (global) use of combined EN-ISO standards and keep the possibility to harmonise with EC directives as indicated under chapter 1.1.

The imminence of the Measuring Instrument Directive and of the revision of International Recommendation (OIML) gives prominence to the interests of the standardisation beyond the European countries.

4.3 Environmental Aspects

Water meters are a tool to address environmental aspects in general. As water meters do provide quantitative data they serve directly to the evaluation of water stress of the environment of a region. In clause 1.2.1 the societal and environmental significance of water meters are outlined.
As water meters are generally of low volume or (in case of high volume, low in number of pieces) and their time of use is usually a decade or more, the environmental impact of water meters is seen to be minor by TC 92. Materials used are plastics and metal alloys which can be easily separated for recycling.

With the mandate M/441 CEN/TC 92 future work items will directly be affected. The scope of this mandate directly addresses environmental aspects.

However by future revisions of the standards CEN/TC 92 will use CEN Guide 4 as a mean to systematically analyze the standards clause by clause considering environmental aspects.

The ongoing project of CEN/TC 92 are under the Vienna Agreement and under ISO lead thus on the active work items CEN/TC 92 can not directly change the program of work.

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

Until now no affecting factors occurred or have been indicated.

The complete work programme of the TC is in support of the MID, requiring the launch of a draft of annexes ZA to the existing EN 14154 Part 1-3 in autumn 2006. For the proposal of closer cooperation with ISO and OIML the next meetings will decide the direction.