BUSINESS PLAN

CEN/TC 334
IRRIGATION TECHNIQUES

EXECUTIVE SUMMARY

Business Environment

• Europe has a very significant position in the international irrigation market and it's one of the world's leading source of irrigation technologies and one of the majors producers of irrigation equipment.

• The major product groups used worldwide are:

- The sprinkler irrigation technique, that allows to free oneself from topography limitations to convey and apply water by using permanent/portable pipes and sprinkler emitters, or irrigation moving machines, or piping featuring a gun or a series of sprinkler heads.

- Low volume irrigation technique (localised irrigation), that allows to achieve individual water application to each plant.

- Accessories and fittings.

- Remote monitoring and control for irrigation systems.

• The main parties involved are:

- Manufacturers;
- Importers/distributors;
- Suppliers;
- Public authorities;
- Research and testing laboratories
- Quality control organizations;
- Farmers associations;
- Technical consultant.

Benefits

- Since 1998, 18 standards were published.
- The need to increase the technical quality of irrigation systems.
- The need to use limited water resources efficiently and to increase agricultural production.

Priorities

- To finish the current work programme in order to offer to manufacturers a standard for each one of the most important machines;
- To develop standards based on new technologies applied to irrigation systems.

1 BUSINESS ENVIRONMENT OF THE CEN/TC 334

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:

Political factors
Taking into account that between 60 and 70 percent of the world's freshwater is used for agricultural, modern irrigation technology is critical for conservation of agricultural water and expansion of agricultural production.

Homogenization of the language in the communication of the political officials for a better comprehension and an efficient action of the Europeans.

Economical factors
The cost of technical barriers to trade is high for companies today and any standard adopted at European level is likely to have worldwide impact, given the weight of the European economy in the world.

Rationalization of the performances for an involvement in the international processes for recognition of technologies.

Social factors
- Protection of user and manufacturers interests.
- Defence of the safety conditions.
- Employment of people in farming, parks and garden sectors.

Technical factors
To ensure progress in research and development of new products or technologies, due to irrigation equipment is changing fast, especially because of the introduction of electronic and information processing systems

Legal factors
Recommendation, which is becoming more widespread in Europe, for the irrigators of the need of metering irrigation water.

Standardization work is used as a legal cover for the conditions of application of the insurance system.

International trade and standardization aspects
Main of standards adopted at European level is likely to have worldwide impact and EN standards will be used as basis for international exchange.

A close co-operation with ISO/TC 23/SC 18 ‘ Irrigation equipment and systems’ already exist and this good co-ordination of works (by means of joint meetings, ISO observers in CEN/TC and WG meetings, transfer or drafts to ISO via Vienna Agreements), allows to avoid overlapping.

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:

No quantitative indicators are provided.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 334

- The first benefit of European standardization within CEN/TC 334 is to allow irrigation technique manufacturers, users, and laboratories to meet in a well-known structure, wording standards together.

- The second benefit is that European standards are expected to remove technical barriers to trade and open markets throughout Europe. European standards drafted by a CEN technical committee replace national standards on the same subject in Europe. Since the beginning of CEN/TC 334 work, 18 European Standards have been published and 8 are still being developed. Moreover some of these standards were developed in common between CEN/TC 334 and ISO/TC 23/SC 18 committees.

- The third benefit is that European standards maintain a high level of quality

3 PARTICIPATION IN THE CEN/TC 334

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.

4 OBJECTIVES OF THE CEN/TC 334 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 334

Standardization and quality assurance of irrigation systems are essential factors for efficiency and durability.

Modern irrigated agriculture use them as operational means to adapt to increased competition for water and to meet the growing food requirement of the global population.

The objectives of CEN/TC 334 are to make standards guiding irrigation system selection, design, installation and operation. These standards have to take into account the need to improve uniformity of water distribution (due to limited water resources) and also to consider the good quality of installations and equipment, and appropriate technical knowledge as important factors.

Irrigation equipment should be an efficient tool for sustainable development and to allow rationalization of the training modules for the users of the equipment.

4.2 Identified strategies to achieve the CEN/TC 334 defined objectives

In the beginning, the works were conducted within CEN/TC 144/SC 1 'Irrigation techniques' (created in 1991) which was transformed into a CEN/TC 334 'Irrigation techniques' (by CEN/BT at the end of 1998) due to the fact of the number of drafts under elaboration, the development of voluntary standards required by industry and not related to EC Machinery Directive, the different technologies and industries.

Since 1995, ISO/CEN decided to convene a joint group to co-ordinate their work programmes to endure that there were no duplications and that the work undertaken in each body was of maximum benefit to the other. Most of the ISO work concerns product standards covering a range of irrigation system components and parts, or standards on test methods. At the European level, the work is aimed more specifically towards systems found in Europe, with emphasis on system specifications, sizing methods, technical characteristics and formatting of user information (see the following work programme). As a result 2 standards on traveller irrigation machines and centre pivot and moving lateral irrigation machines were parallel approved according to the Vienna agreement. ISO observers participated in CEN/TC and WG work on Solid set sprinkler systems, Automatic turf irrigation systems, localized irrigation, Accessories and fittings, remote monitoring and control for irrigation systems.

The work programme has been set up by step taking into account the work priority and the availability of the European experts. Today 9 Working Groups have been set up to deal with 10 draft standards.

Liasons with the other CEN technical committees (CEN/TC 69/WG 7 'Valves for water supply', CEN/TC 144 'Tractors and machinery for agriculture and forestry', CEN/TC 155 'Plastic piping systems and ducting systems') or other organisations (ISO/TC 23/SC 18 'Irrigation and drainage equipment and systems'), European Irrigation Association (EIA) have been established.

4.3 Environmental aspects

As every product and every test method has an impact on the environment during all stages of its life-cycle, there is a need to reduce any potential adverse impact by taking into account environmental issues in standards. It is therefore necessary to understand how the product interacts with the environment during its life-cycle, including emissions to air, discharges to water and soil.

CEN/TC 334 should take into consideration:

The precautionary principle and environmental and human health protection and safety aspects whenever a new standard is drafted or an existing product standard is revised or intended to be revised. Furthermore, at any stage in the standard development process, experts are encouraged to include environmental issues in their comments.

The use of Good Laboratory Practice (GLP) and EN ISO/IEC 17025 will prevent pollution when drafting analytical test methods.

Standards should include processes, practices, techniques, materials and products to avoid, to reduce or at least to control the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impact.

For example, hazardous, toxic or otherwise harmful substances and materials prescribed in standards should be substituted by other less harmful substances and materials whenever possible and feasible.

When developing standards, the precautionary principle will be taken into account by focusing on options and solutions minimizing environmental risks.

The integration of environmental aspects into product development can also be considered by reusing, recycling and recovering materials at end-of-life.

CEN/TC 334 should develop robust and properly validated standards, while recognising the limitations of existing scientific capacity and knowledge to identify potential impacts. In order to take account of the diversity of products and their specific environmental impacts, as well as the need for relevant environmental knowledge, CEN/TC 334 should try to make every reasonable effort to invite environmental experts to participate in the work.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 334 WORK PROGRAMME

Need for encouraging and developing information on the European drafts or standards, so as to ensure a more thorough appropriation by the different partners and a more active participation of certain countries.

- **Contribution of experts**: Since the experts work in standardization on a voluntary level, the contribution from experts (e.g. from industry) is not always made available as expected.

- **Balance of the working groups:** It is recognised that not all the working groups have a perfect balance, e.g. manufacturers, users, and national safety bodies. New participants are welcomed.

For work items under the Vienna agreement:

- **Other factors**: There are other factors beyond direct control of the CEN/TC 344 or its working groups e.g. the turn around time for parallel processing in CEN and ISO can have an important impact on the progress. One of the measures to reduce this impact is a close cooperation between CEN/TC 344 and ISO/TC 23/SC18.