



## **BUSINESS PLAN**

### **ISO/TC 115 Pumps**

#### **EXECUTIVE SUMMARY**

Pumps are widely used in industry and facilities applications at a worldwide level.

ISO/TC 115 is responsible for the standardization on general process pumps mainly and handles a portfolio of 19 International Standards and 1 technical report dealing with safety, testing, performance features among others.

Currently development efforts dwell on energy management and methodology to conduct technical energy audits on pumping system.

## 1 INTRODUCTION

### 1.1 ISO technical committees and business planning

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work programme with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

### 1.2 International standardization and the role of ISO

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 140 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

## 2 BUSINESS ENVIRONMENT OF THE ISO/TC

### 2.1 Description of the Business Environment

*The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:*

The ISOTC115 “pumps” , founded in 1964, is responsible for the standardization of liquid pumps (e.g rotodynamic and positive displacement) used in facilities within liquids production or transportation processes as well as, when relevant, pump-like machines (e.g. rotodynamic mixers for waste water) or accessories dedicated to pump application (e.g sealing cartridges). The following application are excluded from the scope : concrete pumps (see ISO/TC 195/SC 1), cavity pumps for petrol application (see ISO/TC 67/SC 4), pumps used in hydraulic fluid power (see ISO/TC 131), fuel injection pumps (ISO/TC 22), pumps intended for household and similar purposes (see IEC/TC 61), pumps for agricultural application (see ISO/TC 23), pumps for aerospace application (see ISO/TC 20/SC 10), bilge pumps for small crafts (see ISO/TC 188), pumps for cryogenic service (ISO/TC 220).

The development of most of the standards is actually entrusted to subcommittees (see 7.1), fully responsible for their development program. ISOTC115 supervises the activities of these subcommittees according ISO rules. These subcommittees are:

ISO/TC 115/SC 01 "Dimensions and technical specifications of pumps"  
 ISO/TC 115/SC 02 "Methods of measurement and testing"  
 ISO/TC 115/SC 03 "Installation and special application"

Over the 48 years since its foundation, the TC, through its subcommittees, has established a collection of 19 International standards and 1 technical report. These publications address all the various features commonly standardized on products, such as design, testing and performance, safety and installation recommendations. Over the last 5 years, most of the development efforts focused on the revision of key standards (ISO 9906 on acceptance tests, ISO 17769 on vocabulary) and the development of cobranded standards API-ISO in the field of petrol and gas applications. Currently development efforts dwell on energy management and methodology to conduct technical energy audits on pumping system.

## **2.2 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 ISO/TC:*

The economic value of the standards drafted in ISO/TC 115 is considerable but as a rule cannot be expressed directly as a quantity.

Nearly all industrial sectors are using pumps: water treatment facilities, oil & gas industries, power generation, HVAC, chemistry, agrofood...

Pumps size and range are wide and can be off-the-shelf or completely tailored products.. The production of the addressed pumps can be split according to regions as following: USA 33%, Europe 24% Japan 17% and others 26%. Major markets for pumps are: Americas 20%, Europe 28%, Middle East 9%, Asia 33%, Others 10% (Source EIF forecast 2012).

## **3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC 115**

ISO/TC 115 is expected to:

1. Offer an up-to-date portfolio of standards on pumps and theirs accessories bringing solutions required by the market preventing barriers to trade throughout the world.
2. Harmonize worldwide approach of all the subjects related to pumps and pumping systems ( safety, denomination and specifications, testing, energy management, application)

## 4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC

### 4.1 [Countries/ISO members bodies that are P and O members of the ISO committee](#)

#### 4.2 **Analysis of the participation**

Main countries representing 80% of the market are present as P-member in the ISOTC115 instance and its subcommittees (SC1, SC2 or SC3). To participate to the projects, the members of ISO/TC 115 have to be members of sub committees in charge of the projects.

| Country                      | body                                    | ISO/TC 115<br>"Pumps" | ISO/TC<br>115/SC 01<br>"Dimensions<br>and technical<br>specifications<br>of pumps" | ISO/TC<br>115/SC 02<br>"Methods of<br>measurement<br>and testing" | ISO/TC<br>115/SC 03<br>"Installation<br>and special<br>application" |
|------------------------------|---|-----------------------|--|---|---|
| Belgium                      | NBN<br>(Belgium)                        | 1                     | 1  | 1   |   |
| Brazil                       | ABNT<br>(Brazil)                        | 1                     | 1  | 1   | 1   |
| China                        | SAC (China)                             | 1                     | 1  | 1   |   |
| Czech Republic               | UNMZ<br>(Czech<br>Republic)             | 1                     | 1  | 1   | 1   |
| Denmark                      | DS<br>(Denmark)                         | 1                     | 1  | 1   | 1   |
| Finland                      | SFS<br>(Finland)                        | 1                     | 1  | 1   |   |
| France                       | AFNOR<br>(France)                       | 1                     | 1  | 1   | 1   |
| Germany                      | DIN<br>(Germany)                        | 1                     | 1  | 1   | 1   |
| India                        | BIS (India)                             | 1                     | 1  |   |   |
| Iran, Islamic<br>Republic of | ISIRI (Iran,<br>Islamic<br>Republic of) | 1                     |  |   |   |
| Italy                        | UNI (Italy)                             | 1                     | 1  | 1   | 1   |
| Japan                        | JISC (Japan)                            | 1                     | 1  | 1   | 1   |
| Korea, Republic<br>of        | KATS<br>(Korea,<br>Republic of)         | 1                     | 1  | 1   | 1   |
| Netherlands                  | NEN<br>(Netherlands<br>)                | 1                     |  |   | 1   |
| Poland                       | PKN<br>(Poland)                         | 1                     | 1  | 1   |   |
| Russian<br>Federation        | GOST R<br>(Russian<br>Federation)       | 1                     | 1  | 1   | 1   |
| Spain                        | AENOR<br>(Spain)                        | 1                     | 1  | 1   | 1   |
| Sweden                       | SIS<br>(Sweden)                         | 1                     |  | 1   | 1   |
| Ukraine                      | DSSU                                    | 1                     |  |   |   |

| Country                              | body                 | ISO/TC 115<br>"Pumps" | ISO/TC<br>115/SC 01<br>"Dimensions<br>and technical<br>specifications<br>of pumps" | ISO/TC<br>115/SC 02<br>"Methods of<br>measurement<br>and testing" | ISO/TC<br>115/SC 03<br>"Installation<br>and special<br>application" |
|--------------------------------------|----------------------|-----------------------|--|---|---|
|                                      | (Ukraine)            |                       |  |   |   |
| United Kingdom                       | BSI (United Kingdom) | 1                     | 1  | 1   | 1   |
| USA                                  | ANSI (USA)           | 1                     | 1  | 1   | 1   |
| <b>Total participating countries</b> |                      | <b>21</b>             | <b>17</b>  | <b>17</b>   | <b>14</b>   |

## 5 OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

### 5.1 *Defined objectives of the ISO/TC*

Current objectives are to:

1. Develop new standards in connection with current challenges, among others: energy management and technical energy audits on pumping systems.
2. Maintain the current portfolio of standards and revise it if necessary

### 5.2 *Identified strategies to achieve the ISO/TC's defined objectives*

For any new project of standardization led by ISO/TC 115, the strategy is to create a dedicated working group headed by a secretary and a project leader within the relevant subcommittee, which shall conduct the development of the project. The working groups are disbanded as soon as the project is over, due to publication or work abandon.

Besides, Liaisons with committees from ISO or other standardization organization which deal with characteristics affecting pumps or pumps application not covered by ISO/TC 115 scope are surveyed to identify any changes which could affect ISO/TC 115 portfolio of standards:

- ISO/TC 030 "Measurement of fluid flow in closed conduits"
- ISO/TC 067 "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries"
- ISO/TC 067/SC 06 "Processing equipment and systems"
- ISO/TC 108 "Mechanical vibration, shock and condition monitoring"
- ISO/TC 108/SC 02 "Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures"
- ISO/TC 131 "Fluid power systems"
- ISO/TC 131/SC 02 "Pumps, motors and integral transmissions"
- ISO/TC 156 "Corrosion of metals and alloys"
- ISO/TC 188 "Small craft"

## 6 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME

Availabilities of experts, efficiency of working group to produce projects according to ISO drafting rules and sophisticated development tracks are factors affecting completion and implementation of the TC work program.

## **7 STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC**

This section gives an overview of the ISO/TC's structure, scopes of the ISO/TCs and any existing subcommittees and information on existing and planned standardization projects, publication of the ISO/TC and its subcommittees.

### **7.1 [Structure of the ISO committee](#)**

### **7.2 [Current projects of the ISO technical committee and its subcommittees](#)**

### **7.3 [Publications of the ISO technical committee and its subcommittees](#)**

#### **Reference information**

**[Glossary of terms and abbreviations used in ISO/TC Business Plans](#)**

**[General information on the principles of ISO's technical work](#)**