



**BUSINESS PLAN**  
**ISO/TC 224**  
**Service activities relating to drinking water supply systems and wastewater Systems -**  
**Quality criteria of the service and performance indicators**

## **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 prioritise among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development. Your role in the implementation of the Business Planning concept will contribute significantly to the overall effectiveness of international standardization.

We express our sincere appreciation and thanks for your time in reviewing this Business Plan.

### **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 130 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 Industry Technical Agreement (ITA) 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 ITA 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 224 (Source: World Health Organization)

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 ISO/TC 224, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

### 2.1 The Global Water Supply and Sanitation Assessment

The global percentage coverage for water supply and sanitation, has increased over the past ten years for all but urban water supply: about 816 million people have gained access to improved water supply and 747 million people have gained access to improved sanitation.

#### (1) Global water supply and sanitation coverage, 2000

	Urban	Rural	Total
Water supply	94%	71%	82%
Sanitation	86%	38%	60%

#### (2) Water supply and sanitation coverage by region, 2000

	Africa	Asia	LA&C	Oceania	Europe	N. America
Global water supply	62%	81%	85%	88%	96%	100%
Global sanitation	60%	48%	78%	93%	92%	100%
Urban water supply	85%	93%	93%	98%	100%	100%
Urban sanitation	84%	78%	87%	99%	99%	100%
Rural water supply	47%	75%	62%	63%	87%	100%
Rural sanitation	45%	31%	49%	81%	74%	100%

Table (2) shows that in every region, except Oceania and Northern America, total sanitation coverage is lower than total water supply coverage. The Table also shows that urban coverage is significantly higher than rural coverage.

Table (3) presents percentage coverage with household water supply and sewerage connections, as well as other types of access.

#### (3) Water supply and sanitation coverage by category of service, 2000

	Africa	Asia	LA&C	Oceania	Europe	N. America
<b>Water supply</b>						
Household connection	24%	49%	66%	-	{ 96 %	{ 100 %
Other access	38%	32%	19%	-		
No access	38%	19%	15%	-	4%	-
<b>Sanitation</b>						
Sewerage connection	13%	18%	49%	-	{ 92 %	{ 100%
Other access	47%	30%	29%	-		
No access	40%	52%	22%	-	8%	-



Table 4 shows the mean percentage of the population served by various types of water supply in the large cities of each region. As it shows, with the exception of Africa, the majority of the population has house connections or yard taps. But it is no coincidence that the regions with the most rapid growth in the largest cities also have highest proportion of the population without access to the services in those cities.

**(4) Water supply in the largest cities: mean percentage of the population with each type of service, by region**

	Africa	Asia	LA&C	Oceania	Europe	N. America
Household connection or yard tap	43%	77%	77%	73%	96%	100%
Public tap	21%	7%	3%	3%	1%	0%
Borehole or handpump	3%	4%	1%	0%	1%	0%
Others	2%	6%	4%	3%	0%	0%
Unserviced	31%	6%	15%	21%	2%	0%

The type of sanitation systems available, and the proportion of the population using each, are shown in Table (5). As in the case of house connections for water supply, regions where the populations of large cities are growing fastest are also those with the lowest coverage with conventional sewers. Africa and Oceania have the lowest coverage, while Latin America and the Caribbean and Asia lie between them and the industrialized regions of Europe and Northern America.

**(5) Sanitation in the largest cities: mean percentage with each type of facility, by region**

	Africa	Asia	LA&C	Oceania	Europe	N. America
Sewer	18%	45%	35%	15%	92%	96%
Small bore	4%	0%	2%	11%	1%	0%
Septic tank	12%	28%	25%	45%	7%	4%
Pour-flush	7%	18%	2%	10%	0%	0%
Ventilated Improved Pit latrine	10%	2%	2%	0%	0%	0%
Simple pit	29%	3%	12%	2%	0%	0%
Other	1%	0%	2%	0%	0%	0%
Unserviced	19%	4%	20%	17%	0%	0%

**2.2 Sector Performance**

The mean rates of unaccounted-for water are shown in Table (6), by region. The majority of unaccounted-for water is represented by physical losses from the distribution system. And in many cases, the unaccounted-for water indicator reflects the efficiency of the management of a water utility.

**(6) Mean unaccounted-for water in large cities, by region**

	Africa	Asia	LA&C	N. America	Europe *
%	39%	42%	42%	15%	18%

\* Our estimation.



It is estimated that over one-third of the urban water supplies in Africa, and in Latin America and the Caribbean, and more than half those in Asia, operate intermittently. Intermittent water supply is a significant constraint on the availability of water for hygiene and encourages the low-income urban population to turn to alternatives such as water vendors. When the systems function intermittently, contamination may also occur by intrusion of contaminated water into the pipelines through faulty joints, cracks, etc.

A substantial proportion of rural systems fail to function at any given time. Piped systems were considered to be "functioning" if they were operating above 50% of their design capacity on a daily basis.

**(7) Median percentage of rural water supplies which are functioning, 1990-2000**

	Africa	Asia	LA&C	Oceania	Europe	N. America
% functioning	70%	83%	96%	93%	100%	97%

Many rural supplies, while meeting the definition of "functioning", do not in fact provide a satisfactory service, because of deficiencies in water quality, unsuitable location or restrictions on their use.

The lack of treatment of wastewater is another health hazard. Table (8) shows the median percentage of urban wastewater collected through sewerage systems that is reported to be treated in sewage treatment plants.

**(8) Median percentage of wastewater treated by effective treatment plants**

Africa	Asia	LA&C	Oceania	Europe	N. America
0%	35%	14%	0%	66%	90%

In all regions of the world, the majority of urban water supply utilities are publicly operated. Nevertheless, many countries reported a degree of private sector participation in delivering urban water supply services. When the contractual arrangements were specifically mentioned, the options most commonly cited by developing countries were concessions and management contracts. A number of reports, particularly from African countries, mentioned that the countries were moving towards greater private sector management of water supply.

For many countries, water tariffs do not meet the cost of water production and distribution. Financial limitations in developing countries, are also a problem when the funds for investment are sufficient only to cover the recurrent costs of operation and maintenance.

**2.3 Future prospects**

Urban services face the greatest overall challenges, with more than a billion additional people needing access to both water supply and sanitation over the next 15 years, if coverage targets are to be met. This effort is equivalent to building the water supply and sanitation infrastructure to serve approximately three times the population of Northern America.



**(9) Actual and target water supply and sanitation coverage ( Population in % )**

	1990	2000	2015	2025
<b>Global water supply</b>				
Served	78.6	80.5	91.4	98.7
Unserved	21.4	19.5	8.6	1.3
<b>Urban water supply</b>				
Served	95.1	93.9	96.7	98.9
Unserved	4.9	6.1	3.3	1.1
<b>Global sanitation</b>				
Served	55.2	60.3	80	98.5
Unserved	44.8	39.7	20	1.5
<b>Urban sanitation</b>				
Served	81.9	85.8	92.4	98.9
Unserved	18.1	14.2	7.6	1.1

There are four major challenge facing the water supply and sanitation sector in the years to come:

- 1) Keeping pace with a net population growth of more than a billion people over the next 15 years;
- 2) Closing the coverage and service gap, with emphasis on sanitation which lags considerably behind water supply;
- 3) Ensuring sustainability of existing and new services;
- 4) Improving the quality of services.

Some of the conclusions that can be drawn from Table (9) are striking:

- To meet the 2015 development target of halving the fraction of the population without services, the number of people served by water supply must increase by 1.6 billion (32%), and those served by sanitation must increase by 2.2 billion (59%).
- For water, considering that only 816 million people gained access to improved water services during the 1990s, the pace has to be accelerated over the next 15 years.
- For sanitation, the challenge is even greater. During the 1990s, only 75 million people a year gained access to improved sanitation services.
- Rapid urban growth means that more than half of the additional services must be in urban areas. The lower levels of service in rural areas also mean that nearly half of the improvements will need to come in rural areas.
- Most of the work will be in Asia. This does not mean that the needs of the poor are any more acute in Asia than elsewhere, only that the majority of the people without access to water supply and sanitation services are in Asia.
- Current progress is inadequate to meet the targets. Something will have to change dramatically if the targets are to be met. In reality, as highlighted at the World Water Forum in the Hague, 17-22 March 2000, a wide range of issues would need to be resolved, and the majority of these are institutional and social, rather than technical.

More recently, the United Nations declared during the Johannesburg Summit that, the provision of clean drinking water and adequate sanitation is necessary, and they agree to halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water and the proportion of people who do not have access to basic sanitation.

In that context, the governments should try to ensure that all their population has access to drinking water and sanitation. They should try to manage equitably and durably the water resources, which are a



common heritage and they should try to entitle public authorities, responsible for the organization of drinking water supply and sewerage. When these essential conditions are met, the solutions for appropriate operation and maintenance of water supply and sanitation systems, will be achieved in case by case according to the solutions available.

There are two principal aspects of sustainability, of concern to hygiene, sanitation and water supply:

- 1) Functional sustainability: Will the system collapse into disuse because essential funds or skills for operation and maintenance cannot be found ?
- 2) Environmental sustainability: Will system operation damage the environment for future generation ? Will other environmental changes damage the water resource to the point where future services become difficult or impossible to maintain ?
- 3) Health Objectives: can technology be developed and implemented that can adequately (economically and technically) carry out preventive actions of fighting against water pollution.

Maintaining a truly sustainable system in the water supply and sanitation sector, is as much difficult and important as making the initial capital investment. The provision of safe water is a service and requires a service-orientated attitude on the part of the operators involved. Water use may be financially sound, but subject to legal and regulatory controls to see to its conservation, protection and well-balanced use. Water and sanitation services may normally be set at an affordable level for the consumers. Water supply and sanitation systems may be managed and operated in accordance with the principles of good business practice and with the regulations, which are intended to protect the consumers and the environment. The form of management will vary according to the local situation. For example it happens that the public authority is fully accountable to its customers.

While national statistics are helpful to national planners and international agencies, they are of limited value in setting priorities for practical action. For this, a more local picture is crucial and this picture cannot be built up from simple coverage statistics. More work is therefore needed to develop and apply management procedure and criteria to help clarify the current situation. Ideas about monitoring and assessment have developed significantly during the 1990s. The routine collection of data for possible use only by a distant project manager or official is no longer considered adequate, and it is increasingly recognized that monitoring needs to be designed and implemented with a view to answering specific practical questions.



### **3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC 224**

#### **3.1 Subject**

The work of the ISO/TC 224 concerns the sector of services pertaining to the supply of drinking water and to wastewater sewerage, services for which public authorities are locally responsible vis-à-vis their populations and their environment.

The ISO/TC 224 has recourse to standardisation as an instrument of progress for improving the quality of these services.

It will contribute towards :

- 1) facilitating the dialogue between the users, the authorities and the service suppliers responsible for the water supply and sewerage system services so that user expectations are better taken into account and so that the management of services by the relevant authorities is more transparent;
- 2) contributing to a better operation and management of the assets of the services, and respecting the water resources, in proposing a list of requirements to fulfil, quality assessment criteria and related performance indicators;
- 3) defining objective service quality assessment criteria and related performance indicators enabling to measure the results of the services delivered and to compare them with the objectives agreed upon between the interested parties, knowing that the quality of service may be appreciated according to users' satisfaction and respect of environment;
- 4) facilitating the monitoring of the progress accomplished within a same water supply service and a possible benchmarking between different water services.

ISO/TC 224 criteria and indicators may on a voluntary basis be introduced in support of administrative instructions or of contracts concluded between the authorities in charge of the water supply and/or sanitation services and the operators (public or private) to whom they will decide to entrust the management of the said services.

#### **3.2 Justification**

The demographic, industrial and agricultural expansion observed throughout the world has induced the highest political authorities to concern themselves with the fresh water resources required for this expansion.

It appears that these resources, in particular the portion that can be used for meeting the needs of human consumption, are becoming scarcer both quantity and quality wise, in part because of competition from other water using activities such as agriculture, mining, transportation and habitat protection, and that considerable investments will be required in order to meet the needs of the world population and more especially of the emerging countries.

There is growing widespread concern about the availability of acceptable quality water supplies in reasonable quantities at affordable prices both in centrally supplied systems and in private, rural supply situations. A clear limitation on economic growth and sustainable development will be assuring that



reasonable quantities of water of an appropriate quality are delivered reliably at an affordable price within the local market place.

In that respect, ISO/TC 224 decided to include in the term coverage, all means used to come up to consumers' expectations for water supply and sanitation; as for example, household connection, public standpipe, vendor provided water, tanker truck provision of water, and for sanitation, connection to a public sewer, or to septic system, public latrines,....

Moreover, as a result of the world consumer movement, consumers who use the water services, both in the most industrialised countries and in the emerging countries, are more and more demanding concerning the quality of the water service. They are also more and more sensitive to the transparency of the management and to the quality/price ratio of these services.

They are therefore very concerned about understanding their water invoice and about obtaining as low a rate as possible, for a specified level of service.

Admittedly, in the majority of the countries, regulations in more or less abundant number exist concerning the water intended for human consumption and the wastewater discharged after treatment to the natural environment. They decree quality criteria for the water guaranteeing the health protection of the populations and the preservation of the environment. But the purpose of these regulations is not to describe the manner in which a water supply service is to be managed.

These legal requirements may also concern other aspects. It is why the normative channel, consensus-based and associating the reflections of all the interested parties, appears the best suited for seeking to meet the needs of the users and of their environment, while complying with the regulations.

#### **4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC 224**

ISO/TC 224 currently has 20 P-members (Argentina, Austria, Belgium, Canada, France, Germany, Japan, Republic of Korea, Malaysia, Mexico, Morocco, Netherlands, Norway, Portugal, Russian Federation, Slovakia, South Africa, Spain, United Kingdom, USA), and 20 O-members (Australia, Bulgaria, Colombia, Cuba, Czech Republic, Denmark, Ecuador, Finland, Hungary, Ireland, Israel, Italy, New Zealand, Nigeria, Poland, Sweden, Switzerland, Turkey, Yugoslavia, Zimbabwe). Thus, most industrialised nations and a significant number of developing countries are represented in ISO/TC 224.

ISO/TC 224 has category-A liaisons with Consumers International, Eureau, Norm APME (European Office of Crafts, trades and Small and Medium-sized Enterprises for Standardisation), the World Bank, and the World Health Organization (WHO). In addition, ISO/TC 224 has a category-B liaison with the International Water Association, and liaisons with CEN/TC 164 "Water supply" and CEN/TC 165 "Waste water engineering".

ISO/TC 224 established 4 Working Groups. Experts are appointed to these Working Groups by the P-members of ISO/TC 224.

#### **5 OBJECTIVES OF THE ISO/TC 224 AND STRATEGIES FOR THEIR ACHIEVEMENT**

##### **5.1 Objectives**

The objectives of the proposed standardisation are to provide guidelines for service activities relating to the management of drinking water supply systems and wastewater sewerage systems.



These standards will be designed to assist the relevant public authority, and its chosen private or public operator(s) in providing the consumers with a continually improving quality of service at optimal cost.

Use of the standards will be voluntary and will be irrespective of the operator's legal status.

These standards will recommend to the public authority and its operator(s) to establish dialogue with consumers' representatives, in order to determine the quality of service that best meets the expectations of the majority of consumers.

With using these standards as a basis, the definition of the means of providing the quality of service expected, remains the responsibility of the public authority and its operator(s). They also agree on the costs, a schedule and a monitoring plan using a system of indicators.

In order to ensure an effective monitoring plan, the public authority and its operator(s) will have to choose an appropriate number of indicators related to each area in which progress is expected and together fix the target values associated with this progress. In this spirit, the standards will not impose minimum values or performance ranges for specific indicators.

In order to stick to these objectives, the ISO/TC 224 proposed the scope as follows :

- 1) The defining of a language common to the different stakeholders : consumers, local or national public authorities responsible for the water services , public or private technicians entrusted by these authorities, with the management of the water services, research departments, laboratories , etc.
- 2) The clarification of the consumers expectations, specifying the characteristics of the elements of the service as well as the manner in which to express the performances awaited by the users,
- 3) The drawing up of the list of actions to achieve, for the management of a drinking water supply system including all the operations allowing to meet the needs of consumers : production, transport, storage, distribution of drinking water, maintenance and development of the material and immaterial assets of the service. Actions relating to water demand management may also be considered.
- 4) The drawing up of the list of actions to achieve, for the management of a wastewater sewerage system including all the operations allowing to meet the health-related needs of the users and the protection of the environment and of the water resources : collection of wastewater, treatment prior to discharge into the receiving medium, or reuse in either potable or non-potable applications, conditioning of the sludges and residues in view of their recovery or elimination, maintenance and development of the assets,
- 5) The proposal, in each case, of measurable service quality criteria and performance indicators allowing to compare the observed results with the targeted objectives, given by the authority in charge of drinking water or wastewater services.

The planned standards would place particular emphasis on the «results» aspect of the different service activities and would give full scope to the authorities in charge, as regards the level of the results and the means to be implemented in order to attain them.

Consequently, the users of the standards will be free to select corresponding quality criteria, performance indicators and values for objectives to be reached.

These standards are of voluntary application. They will not act as a substitute for regulations. They will exclude standardization in the field of drinking water quality which is already dealt with by WHO (Guidelines for drinking water quality), and drinking water analysis, which is the scope of ISO/TC 147. The



development of the standards should reference and be compatible with standards of ISO/TC 176 – Quality management and quality assurance. They will exclude standardization in the field of the limits of acceptability for wastewater discharged to the receiving waters, subject already treated by national regulations.

The standard should not regulate the management structure and methodology of water and wastewater systems including contracting.

The methods of design and construction of drinking water supply systems and sewerage systems are also excluded from the scope of ISO/TC 224, as well for repair and maintenance technics. Even if these standards will recommend the operator(s) to do preventive maintenance and to repair the sewerage system, when it fails to function, they will give no indications on the repair technics, which fall within the competence of the relevant authority and/or its operator(s).

The operator may use the management system ISO 9001 and 14001 series, in order to achieve his targeted performance.

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

The ISO/TC 224 will ensure that, all stakeholders concerned by service activities relating to drinking water supply and sewerage, will be invited to join the TC. Are concerned :

- consumers' representatives ;
- governments and public authorities in charge of drinking water supply and sewerage ;
- public and private operators in charge of drinking water supply and sewerage systems operations.

In order to develop its standards, the ISO/TC 224 will examine published documents and experiences relating to service activities on drinking water supply and sewerage.

International Organisations and NGOs, which already have an experience and expertise in that field, are invited to join the TC (World Health Organisation, World Bank, International Water Association, ...).

National Authorities, operators, and non-governmental organisations will have the opportunity to bring their experience, by participating in their national delegations.

Because the operation conditions of drinking water supply and sewerage are different in developed and new developing countries, as well as in arid and temperate areas, the participation of a large panel of countries, will help ISO/TC 224 to consider all existing situations.



## 6 STRUCTURE, SCOPES AND WORK PROGRAMME OF THE ISO/TC 224

This section gives an overview of ISO/TC 224 structure, scopes and information on existing and planned standardization projects, including resources needed for their completion. The aim of this section is to demonstrate the adequacy of the proposed programme of work in relation to the business environment and/or stakeholders' needs. Only structures directly responsible for standardization projects are listed.

Therefore, no co-ordination or advisory groups are included.

**ISO/TC 224** : *Service activities relating to drinking water supply systems and wastewater Systems - Quality criteria of the service and performance indicators*

**Responsible ISO Member:** AFNOR  
**Chairperson:** Denis BALLAY  
**Secretary:** Ludovic DELEVINGNE

**Scope:** Standardization of a framework for the definition and measurement of service activities relating to drinking water supply systems and wastewater systems. The standardization includes: the definition of a language common to the different stakeholders, the definition of the characteristics of the elements of the service according to the consumers expectations, a list of requirements to fulfil for the management of a drinking water supply system and a wastewater system, service quality criteria and a related system of performance indicators, without setting any target values or thresholds.

Excludes :

- design and construction of water supply and wastewater systems, or maintenance techniques;
- limits of acceptability for drinking water quality and wastewater discharged in the receiving body;
- analytical methods.

### 6.1 Programme of work

The **principle subjects** to be dealt with in the service standards should be as follows :

- **A terminology** able to be used in the relations between the different interested parties, in particular : the consumers, the relevant authorities, their operators, the relevant administrations, the research departments, the laboratories,
- **A list of actions to achieve** for a rational and economic management of the drinking water supply and sanitation services, in compliance with the regulations,
- Proposals for **service quality criteria** and **for associated performance indicators**, in order to objectively measure the results of the services offered to the consumers and to be able to compare them with the values of objectives agreed upon either with these same consumers or internally between the relevant authority and its operator,
- Proposals for **activity indicators** (or for implemented means) which allow to realise the efficacy of the efforts deployed in order to attain the results measured by the performance indicators,
- Proposals for complexity parameters of the system, could be taken into account in order to assess, the influence of the local conditions on the observed results.



**6.2 Structure and Working Groups Secretariats**

<b>Nber</b>	<b>Title</b>	<b>Terms of reference</b>	<b>Convenor</b>	<b>Secretariat</b>
<b>CG</b>	Coordination	Coordination of the working groups, concerning planning and steering of the work	<i>Mr. Denis BALLAY</i>	<i>AFNOR</i>
<b>WG1</b>	Terminology	Define terms for drinking water supply and wastewater service activities, including different technical terms based on regional use and application, when those terms are common to several work items or upon request from another WG	<i>Mr. Dominique OLIVIER</i>	<i>AFNOR</i>
<b>WG 2</b>	Service to the consumers	Specify the characteristics of the elements of service activities relating to drinking water supply and wastewater systems, in order to meet the customers expectations. Define a language common to the different stakeholders and propose a selection of quality criteria that will be applicable to the service expected by the customer. For each of the criteria, define the indicators and tools used to measure performance, but do not set any target value or performance thresholds	<i>Mr. Enrique CABRERA</i>	<i>AENOR</i>
<b>WG 3</b>	Drinking water	Standardization of a framework for the definition and measurement of service activities relating to drinking water supply systems. The standardization includes: the definition of a language common to the different stakeholders, the definition of the characteristics for drinking water services, a list of requirements to fulfil for the management of a drinking water supply system, service quality criteria and a related system of performance indicators, without setting any target values or thresholds	<i>Mr. T. Duncan ELLISON</i>  <i>Mr. M. S PILLAY</i>	<i>SCC</i>  <i>DSM</i>



<b>WG 4</b>	Wastewater systems	Standardization of a framework for the definition and measurement of service activities relating to wastewater systems. The standardization includes: the definition of a language common to the different stakeholders, the definition of the characteristics of the elements of the service according to the consumers expectations, a list of requirements to fulfil for the management of a wastewater system, service quality criteria and a related system of performance indicators, without setting any target values or thresholds	<i>Mr Karl J. ROHRHOFER</i>  <i>Mr. Heekyung PARK</i>	<i>ON</i>  <i>KATS</i>
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## 6.3 Projects

<b>Designation</b>	ISO/AWI 24510
<b>Title</b>	Service activities relating to drinking water supply and sewerage - <b>Service to the consumer</b>
<b>Target dates</b>	ISO Stage 40 (Issuance of DIS) : <b>2005/07/01</b> ISO Stage 50 (Issuance of FDIS) : <b>2006/04/01</b> ISO Stage 60 (Publication) : <b>2006/07/01</b>
<b>Comments</b>	
<b>Relationship of this project to the business environment</b>	
<b>Actions for alignment with the business environment</b>	

<b>Designation</b>	ISO/AWI 24512
<b>Title</b>	Service activities relating to drinking water supply and sewerage - <b>Management of a drinking water supply system</b>
<b>Target dates</b>	ISO Stage 40 (Issuance of DIS) : <b>2005/07/01</b> ISO Stage 50 (Issuance of FDIS) : <b>2006/04/01</b> ISO Stage 60 (Publication) : <b>2006/07/01</b>
<b>Comments</b>	
<b>Relationship of this project to the business environment</b>	
<b>Actions for alignment with the business environment</b>	

<b>Designation</b>	ISO/AWI 24511
<b>Title</b>	Service activities relating to drinking water supply and sewerage - <b>Management of a sewerage system</b>
<b>Target dates</b>	ISO Stage 40 (Issuance of DIS) : <b>2005/07/01</b> ISO Stage 50 (Issuance of FDIS) : <b>2006/07/01</b> ISO Stage 60 (Publication) : <b>2006/07/01</b>
<b>Comments</b>	
<b>Relationship of this project to the business environment</b>	
<b>Actions for alignment with the business environment</b>	



**ANNEX - GLOSSARY OF TERMS AND ABBREVIATIONS USED IN ISO/TC BUSINESS PLANS.**

NB: This glossary gives the full name and status of terms used, in abbreviated form or in full, in the above “Business Plan for ISO/TCs”. The glossary also gives the source of the information provided. Glossary intends to help with the understanding of the terms used. Whenever any of these terms are used by contributors to this Business Plan, they are requested to use them coherently as foreseen in the glossary.

Term	Abbrev.	Definition
Standardization		Activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context.  NOTES 1 In particular, the activity consists of the processes of formulating, issuing and implementing standards. 2 Important benefits of standardization are improvement of the suitability of products, processes and services for their intended purposes, prevention of barriers to trade and facilitation of technological co-operation.
Standard		Document, established by consensus and approved by a recognised body, that provides, for common and repeated use, rules guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.  NOTE Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.
package of standards		A group, as small as possible, of inter-related standards in the scope of one or more ISO/TCs which are usually developed simultaneously to one another as parts of one standard, or standards that must be developed simultaneously.
Consensus		General agreement, characterised by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments.  NOTE Consensus need not imply unanimity.
ISO/TC International Standardization Deliverables:		
International Standard	IS	A normative document, developed according to consensus procedures, which has been approved by the ISO membership and P-members of the responsible committee in accordance with Part 1 of the ISO/IEC Directives as a draft International Standard and/or as a final draft International Standard and which has been published by the ISO Central Secretariat.
ISO Technical	ISO/TS	A normative document representing the technical



Term	Abbrev.	Definition
Specification		consensus within an ISO committee, approved by 2/3 of the P-members of the ISO/TC or SC.
ISO Public Available Specification	ISO/PAS	A normative document representing the consensus within a working group, approved by a simple majority of the P-members of the TC/SC under which the working group operates.
ISO Technical Report	ISO/TR	An informative document containing information of a different form from that of normally published in a normative document.
Amendment	Amd	An amendment alters and/or adds to previously agreed technical provisions in an existing standard.
Technical Committee	ISO/TC	A technical body responsible for the programming and planning of technical work and the monitoring and execution of this technical work. The ISO/TC is also responsible for the consensus building process among its members for individual work items.
Subcommittee	SC	A technical body reporting to an ISO/TC which, within its scope which is covered by the scope of its parent ISO/TC, is responsible for the monitoring and execution of the technical work. The SC is also responsible for the approval and consensus building process among its members for individual work items.
ISO/TC Working group And ISO/SC Working group	WG	A technical body, appointed by the ISO/TC or ISO/SC and composed of experts, responsible for the drafting of standards, in accordance to the ISO rules and the clear specifications set by the ISO/TC or ISO/SC.
Editing Committee		A committee set up by a technical body (ISO/TC or SC) at the beginning of its work, which represents the three official languages of ISO. It is responsible for the correct formulation and presentation of the standard(s) prepared by the technical body (ISO/TC or SC) and the equivalence of the texts in the three official languages.
Participating member	P-member	A member body participating actively in the work of a TC or SC, with an obligation to vote on all questions formally submitted for voting within the TC or SC on enquiry drafts and final draft International Standards and, wherever possible, to participate in meetings.
Work Item number	WI	The identification number given to a standards project in a standards work programme. It is intended that the standards project leads to the issue of a new, amended or revised standard, an ISO/PAS, ISO/TS or other ISO product.
Vienna Agreement	VA	Agreement on technical co-operation between ISO and CEN.
VA ISO lead (5.1)		Technical co-operation between ISO and CEN under the VA, where the work is done by the ISO/TC, where a formal notification of interest was received by ISO from CEN, and where parallel synchronised procedures are applied in ISO and CEN for the approval processes.
VA CEN lead (5.2)		Technical co-operation between ISO and CEN under the VA, where the work is done by the CEN/TC or SC, where a



Term	Abbrev.	Definition
		formal notification of interest was received by CEN from ISO, and where parallel synchronised procedures are applied in ISO and CEN for the approval processes.
ISO stakeholders		Individuals, institutions, organizations or enterprises who have a direct or indirect interest in the ISO System, its activities and products and who have a specific interest in the effective programming of ISO work items and their adequate resourcing.