

**ISO/TC 224/WG 2**

Service to users

Convenor

Dr. Enrique Cabrera Jr.
Instituto Tecnológico del Agua
Universidad Politécnica de Valencia
Apdo. 22012 – 46071 Valencia
Spain
Tel.: +34 96 3879898
Fax: +34 96 3879899
e-mail: qcabrera@ita.upv.es

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WORKING DRAFT – WG2 SERVICE TO USERS**Notes by the WG Convenor:**

- WG2 experts believe that this draft is to some extent of a different nature than those of WG3 and WG4. First, the target audience of the document may be different (e.g. the document currently addresses users' expectations that pertain both to responsible bodies and the service provider). In addition, it is written from a different perspective (the users' perspective and not a management point of view). Therefore parts of the drafts from WG3, WG4 and WG2 may be on the same issues, but may contain different guidelines (due to the differences in perspective and target audience).
- In light of this, Working Group 2 experts would like to use the internal consultation to be carried out before the Rabat meeting to specifically ask member bodies to consider the following aspects:
 - Introductory text specific to WG2 (will accompany the general introduction). Overall, the introduction should address, among others, right to water and sanitation, differences in nature with documents from WG3 and WG4 (being a document specifically addressed to users' needs) and purpose and structure of the document.
 - Names of chapters. WG2 has always used the original table of contents proposed by the TC secretariat. WG2 experts acknowledge that some of these headings do not exactly portray the contents of each chapter.
 - To what extent should the WG2 document be harmonized with WG3 and WG4 documents? For instance, what should be the

normative relationship between the documents (e.g. the normative references may be in only one direction –one document may need another for its application, but not the reciprocal way-)

- Informative annexes. Experts agreed to include an annex on sustainable development. Additionally, experts believe that a limited number of additional performance indicators for those areas only covered by guidelines can be provided as examples.
- Member bodies are welcome to contribute on the specific documents that should be referenced out of the general list suggested in Bibliography series in the internal consultation.

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1 Scope

This standard specifies the characteristics of the elements of service activities, relating to drinking water supply and wastewater system, in order to meet the users expectations. It includes:

- The definition of a language common to the different stakeholders.
- The definition of the elements and characteristics of the service to users needed to meet users' expectations.
- The definition of users' needs and expectations.
- Service to users quality criteria and related system of performance indicators.

2 Normative references

ISO XXX (established by ISO TC224)
TC 224 to decide

3 Terms and definitions

4 Components of the service

4.1 General

The service to users comprises a series of processes that include contract management, the provision of the service as such, the relationship with the users and the billing for that service. Most of the components of the service with regards to users are common to water supply and wastewater services unless stated otherwise.

4.2 Provision of the service

4.2.1 Application for service

Procedures for users to apply for water supply and waste water services

4.2.2 Water supply / Waste discharge

Procedures for supplying water or providing wastewater services.

4.2.3 Crisis management

Organisation of users' information and measures to maintain or restore service and to prevent or minimize the impact on the system and the damages on assets and properties in case of major incidents or natural catastrophes

4.3 Contract management and billing

4.3.1 Service agreement

Establishment of an agreement, implicit or explicit, between the user and the service provider.

4.3.2 Billing

Conditions relating to billing for service, terms of payment and information on applicable rates.

4.4 Relationship with the users

4.4.1 Identification and general information

Procedures providing information on the service to the user.

4.4.2 Contact with users

Involves all forms of communication between the user and the service providers.

4.4.3 Request processing

Written or verbal response to the user and any resulting actions necessary to address the user's request or complaint or notification.

4.4.4 Participation of users

Procedures enabling participation of users in how the service is supplied.

5 Users' needs and expectations

5.1 General

The quality of the service provided to the users depends on their needs and expectations and the ability of the service provider to meet them. All elements of need and expectation listed, relate to both water supply and wastewater services unless stated otherwise.

5.1.1 Access to water and sanitation

Because water and wastewater services are considered a basic human need, the users and potential users expect that all practical steps will be taken to ensure their access to drinking water and sanitation. Where fixed network extension is not practical, they would expect other service provision to be made available. They also expect that responsible bodies plan the development of adequate types of water supply and sanitation, and inform them on the time schedule.

5.2 Quality of the service

5.2.1 Time to establish connections

The user expects to be connected to the service in a reasonable and specified amount of time where the service is available. An explanation may be required on the specific conditions under which the connection can be made and when.

5.2.2 Repairs

The user expects that the repairs to be carried out by the service provider are made within a reasonable amount of time. The user expects to be warned in advance of planned repairs that affect the service. The user expects that unplanned repairs that affect the service are finished within a reasonable amount of time. In all cases the user expects the inconvenience will be minimized.

5.2.3 Price of service

The user expects to be provided with the service at a fair price and that the responsible body will ensure that affordability is not a barrier to access to the service.

5.2.4 Quantity of supply (Water Supply)

The user expects to receive sufficient quantity of water at the point of delivery to satisfy their needs.

5.2.5 Pressure (Water Supply)

The user expects an adequate level of water pressure at the point of delivery at all times (in pressurized networks).

5.2.6 Continuity of supply (Water Supply)

The user expects a water supply on a continuous basis. In the event that continuous supply is not possible, the user expects that supply be managed in an equitable manner.

5.2.7 Coverage and availability of water (Water Supply)

The user expects that water supply is provided within the service area under the responsibility of the service provider, and that water is made available where fixed network coverage does not exist.

5.2.8 Waste discharge (Wastewater)

The user expects to be able to discharge sewage at any time and without delay or risk to human health directly into the wastewater system.

5.2.9 Floods (Wastewater)

The user expects that no wastewater system floods affect a property. In the case of a flooding event, the user expects that its duration and effects will be minimized.

5.2.10 Coverage and availability of wastewater services (Wastewater)

The user expects that wastewater service is provided within the service area of responsibility of the service provider, and that other forms of sanitation are made available where fixed network coverage is not available.

5.3 Contract management and billing

5.3.1 Availability of a clear agreement

The user expects a service agreement with clear, fair and documented conditions. The user expects to be informed of any change to the agreement or its conditions, in a reasonable amount of time. Additionally, the user expects procedures for the establishment and cancellation of the agreement.

5.3.2 Fairness of billing

The user expects to be fairly billed for the service provided.

5.3.3 Response to billing complaints

The user expects a response to a billing complaint from the service provider that clearly resolves the problem in a reasonable amount of time, with fair consideration of any monetary issues caused by billing errors.

5.3.4 Clarity of billing

The user expects clear, accurate and detailed information on the structure and content of bills, available while the service agreement is in force.

5.3.5 Methods of payment

The user expects regular billing and flexible methods of payment.

5.4 Relationship with the service

5.4.1 General

The user expects:

- any enquiry addressed to the service provider or the relevant authorities by any means to be responded to and resolved within a reasonable amount of time;
- guaranteed confidentiality;
- updated available information;
- competent and respectful contact persons.

5.4.2 Telephone enquiries

The user expects telephone calls to be responded to in a reasonable amount of time, either directly or by being transferred to the appropriate service department. The user expects telephone availability for emergencies at all times.

5.4.3 Visits to service provider offices

The user expects to be welcomed and assisted effectively and directed to the appropriate person. The user also expects:

- convenient opening hours that are respected;
- reasonable, well-managed waiting times;
- suitable public reception area guaranteeing confidentiality;

5.4.4 Visits to the user

The user expects that any employee from the service provider respects the appointment time, shows proper identification and minimizes the inconvenience to the user.

5.4.5 Written complaints and requests

The user expects that any written complaints or requests (including those by electronic media, such as e-mails and faxes) are carefully considered. The user expects a clear, accurate, personalised response in a reasonable amount of time.

5.4.6 Notification on restrictions and interruptions

The user expects to be notified of any restrictions or interruptions of the service.

5.4.7 Availability of service information

The user expects that all information regarding public aspects of the service, according to local conditions, including the designation of responsibilities, is issued by the service provider and relevant authorities in an open and transparent manner.

5.4.8 Community outreach

The user expects the service provider to proactively provide information regarding the system through community outreach efforts.

5.4.9 Participation of the users

The user expects that participation is encouraged and enabled by a transparent participatory process and the right to put forward the users' interest in such matters as prices, standards and network development.

5.5 Protection of the environment

5.5.1 Use of natural resources

The user expects that the service provider makes a sustainable use of the water resources, as well as other natural resources.

5.5.2 Wastewater treatment (Wastewater)

The user expects efficient and effective treatment of wastewater that complies with applicable local regulations and/or guidelines, before it is returned to the environment.

5.5.3 Environmental impact

The user expects that the negative environmental impacts resulting from the service provided are minimized and kept within reasonable and legal limits at all times.

5.6 Safety and emergency management

In the event of an emergency affecting the service or the safety of the users, the user expects timely information on the following:

- nature of the incident;
- risks involved;
- contact details;
- what to do;
- time before normal service is resumed;
- temporary solutions available

The user also expects that all negative impacts resulting from emergency situations are minimized.

5.7 Quality of water (Water Supply)

5.7.1 Public health quality of water

The user expects to be supplied with quality water that poses no threat to public health and complies with applicable local regulations and/or guidelines.

5.7.2 Aesthetic and sensory quality of water

The user expects to be supplied with unobjectionable water with regards to taste, colour and odour.

6 Introduction to performance indicators

Note: A short explanation of performance indicators should appear here.

More detailed contents about definitions and implementation of performance indicators systems (similar to those appearing in WG3 and WG4 drafts) should appear in a normative annex.

7 Guidelines for service assessment and improvement

7.1 General

The service to the users should be assessed and can be improved taking into account the users' expectations. The fulfilment of these expectations can often be measured by means of performance indicators although in some occasions no universal measure can be applied and only improvement guidelines can be given. Performance indicators and guidelines are linked to the users' expectations defined in chapter 5.

The guidelines and performance indicators presented in chapter 6 are intended to be universally relevant, however particular performance indicators included here may not be applicable in all circumstances (e.g. in populations with high illiteracy rates performance indicators based on written complaints will not be valuable, in non network systems performance indicators related to pressure measures will not be relevant, etc.).

Additionally, these performance indicators are not intended for metric benchmarking (among or within countries) since the corresponding context information has not been defined.

In light of varying degrees of economic development the guidelines and performance indicators presented here may not be applied yet in some countries, in which case they should be considered as goals for continuous improvement.

6.1.1. Access to water and sanitation

Guidance: Relevant authorities and responsible bodies should take institutional and economical measures to put in place water supply and wastewater systems which could include resource management, fixed network extension and alternative means of supply for those who are not connected.

The fact that certain communities are not connected to fixed water and sanitation networks should not be taken to mean that there is no service to which the standard should apply. There should be other provision such as wells, mobile water delivery, regulated vendors and water points, latrines, septic tanks and other forms of provision, which should be considered as part of the service.

Measures to ensure equitable access may include grants, loans, social tariffs, subsidies (and/or cross subsidies among income households), free allocation of safe water to meet human basic needs, etc.

7.2 Quality of the service

7.2.1 Time to establish connections

Performance Indicator: Number of new connections installed within a target time / total number of new connections requested x 100 (%)

Comment: For the performance indicator to be applied, a local customer service commitment should exist specifying a maximum connection time (in days) for regular connections, and the comment that in some countries compensation is offered when the deadline is not met. Special connections should be addressed individually.

- Connection time should be defined as the period from the time the user application process is completed until the service is available for the user.
- The application procedures should be clearly specified by the service provider or the relevant authority

7.2.2 Repairs

Guidance: For planned repairs the service provider should inform the user in advance with an estimate of the time and duration of the interruption of the service. For unplanned repairs that affect the service, the service provider should inform the user about the estimated time until normal service is restored. In all repairs the service provider should minimize the inconveniences to the user.

7.2.3 Price of service

Guidance: The responsible body should make publicly available elements composing the total cost of the service and the extent to which this cost is covered by revenues from the users.

The extent, nature and purpose of relevant subsidies should be identified, as should any calculations of affordability for users. Information on those factors influencing variations in price (e.g. cost inflation, environmental regulations, emergencies, network extensions, water quality and availability, etc.) should also be given.

7.2.4 Quantity of supply (Water Supply)

Guidance: The service provider and the relevant authorities should make adequate estimations of future demands. The estimates should lead to a reliable water supply in the future that satisfies those demands.

The service provider and relevant authorities should also promote an efficient use of water.

7.2.5 Pressure (Water Supply)

Performance indicator: Number of written pressure related complaints / total number of contracts

7.2.6 Continuity of water supply (Water Supply)

Performance Indicator: $(\text{Number of hours when the system is pressurised during the year} / (365 \times 24)) \times 100 (\%)$

Comment: When there are subsystems supplied in different periods of time, the indicator has to be assessed individually for each subsystem and the result is a weighted average using the number of service connections of each subsystem as weighting factor. In leap years, 365 should be replaced by 366.

Interruptions due to unplanned system failures or to on-going repair or rehabilitation works should not be accounted for by this variable. In most intermittent supply systems, supply interruptions are not simultaneous all over the network. When there are subsystems supplied in different periods, the indicator has to be assessed individually for each subsystem and the result is a weighted average using the number of service connections of each subsystem as weighting factor.

Guidance: For non network systems, regular service should be provided at reasonable intervals known by the user.

7.2.7 Coverage and availability of water (Water Supply)

Performance indicator: Number of properties with access to the water supply service / total number of properties in the geographical area covered by the service provider *100 (%)

Comment: If accurate data is available the number of properties can be replaced by the resident population with access to the service. When evaluating this indicator, significant changes in the number of properties or the resident population should be taken into account.

7.2.8 Floods (Wastewater)

Performance indicator: (Number of registered users' properties flooded by sewer overflows) / (total number of registered users' properties)*100 (%)

Comment: Floods originated by exceptional natural conditions should not be accounted for in this indicator.

7.2.9 Coverage and availability of wastewater services (Wastewater)

Performance indicator: Number of properties with access to the wastewater service / total number of properties in the geographical area covered by the service provider * 100 (%)

Comment: If accurate data is available the number of properties can be replaced by the resident population with access to the service. When evaluating this indicator, significant changes in the number of properties or the resident population should be taken into account.

7.3 Contract management and billing

7.3.1 Availability of a clear contract / agreement

Guidance: The service agreement should have clear, fair and documented conditions and comply with local regulations and guidelines. Any changes in the agreement should be notified to the user and the cancellation procedures should be flexible.

7.3.2 Fairness of billing

PI: Number of written billing related complaints / total number of contracts

Guidance: The fairness of metering can be assessed estimating the average precision of meters from statistical samples. The user should be informed that in most cases, the water meter's inherent error always tends to under measure supply.

In the case of specific complaints about the accuracy of a meter, the service provider should perform a meter test in the presence of the user, and replace it when appropriate.

In the event of billing on the basis of methods other than metering, the service provider should make clear the basis for the calculation of the bill and allow for mechanisms that safeguard against billing errors, in which case the service provider should have a clear procedure for reimbursement.

Depending on the terms of the service agreement, in the event of failure to supply, the bill may be reduced accordingly.

7.3.3 Response to billing complaints

PI: Number of billing complaints answered within the specified time / Total number of billing complaints x 100 (%)

Comment: A local customer service commitment should exist specifying a maximum response time (in days) for billing complaints.

7.3.4 Clarity in the bill

Guidance: Bill contents should be as clear and understandable for each registered customer as possible. Service providers and relevant authorities may prepare documents that will enable a better explanation of the terms of the bill to the user (rates list, especial cases, etc.)

7.4 Relationship with users

7.4.1 Telephone enquiries

Guidance: Service providers should not only answer the telephone calls, but also provide final solutions or answers to users in a timely manner. The targeted period of time will depend on each service provider.

7.4.2 Visits to service provider offices

Guidance: Service providers should take efforts in their offices to:

- Establish convenient opening hours that are respected;
- Provide the means to have reasonable, well-managed waiting times;
- Prepare a suitable public reception area that guarantees confidentiality;
- Provide the customer with easy understandable documents;
- Simplify as much as possible the procedures for applications;
- Disclose water related information actively

7.4.3 Visits to the user

Guidance: Service providers employees in their visits to the user should make sure that:

- They are properly identified
- They act in a polite and competent manner
- Confidentiality is guaranteed
- They comply with the previously made arrangements and appointed hours

7.4.4 Written complaints and requests

PI: (Number of written complaints answered within the target time) / Total number of written complaints) * 100 (%)

Guidance: Service providers should not only answer written complaints, but also should try to provide a final solution or answer to the users. The targeted period of time will depend on each service provider. A local customer service commitment should exist specifying a maximum response time (in days) for written complaints.

7.4.5 Notification on restrictions / interruptions

Guidance: The service provider should notify in advance the affected users' about any planned restrictions or interruptions of the service. In the case of unplanned restrictions or interruptions the service provider should advise on the reason and the expected duration of the service restriction or interruption.

7.4.6 Availability of service information

Guidance: The service provider and the responsible body should openly and transparently provide the users with general information including public aspects of the service and the designation of responsibilities according to local conditions. This information should be provided in a manner to make the greatest impact on the greatest number of users.

Comment: Users may request the service provider or relevant authority to disclose information. There are some cases that information disclosure is controlled by law. However, when possible, service providers and relevant authorities should disclose information actively when requested to do so.

Example:

Depending on local conditions public aspects of the service may include:

Customer service:

- Contact details (office hours, telephone contacts)
- Complaints procedures
- Billing procedures and payment procedures
- How to get help to pay the bill (e.g. social security)

Legal framework:

- Customer contracts
- rights of users
- responsibilities of users
- rate structure and level
- rate setting procedures
- existing service provider contracts (e.g. concessions, management agreements)
- proposals for new or renewed service provider contracts
- procedures for service provider contract awards

Operational matters:

- time lines for service extension
- emergency procedures

Financial matters:

- cost structure
- pricing formula

7.4.7 Community outreach

Guideline: The service provider should participate in local community activities, whenever these are in touch with the service items. This participation can lead to a good relationship with the local community by providing information actively. This detail becomes crucial especially when it is essential to get good cooperation of community and volunteer activity in the case of emergency.

7.4.8 Participation of the users

Guidance: The service provider and/or responsible body should encourage and promote participation by users which can take several forms. Examples are:

- Ongoing consultation through standing user committees which may monitor customer complaints and standards of service
- Participation in dispute resolution for individual cases
- Consultation at critical decision points such as new programmes to extend networks, setting prices for a new period, consideration of content of new operator contracts. Consultation can take place between users and service providers or between users and responsible bodies, or both, either jointly or separately.

7.5 Protection of the environment

7.5.1 Efficiency in the use of resources

Guidance: The service provider and relevant authorities should strive for efficiency and sustainability in the use of water and other resources (e.g. energy) while complying with local regulations and guidelines. Water suppliers should strive to reduce leakage in the system.

The service provider and relevant authorities should also undertake actions such as:

- Cooperate to minimize contamination of the environment
- Establish source water protection
- Monitor the quantity and quality of water resources in catchment areas
- Participate in commissions responsible for river basins

7.5.2 Wastewater treatment (Wastewater)

Guidance: The service provider and the relevant authorities should provide the users with information regarding the applicable local regulations and guidelines, and the level of compliance with those regulations and guidelines.

7.5.3 Environmental impact

Guidance: Service providers should take actions to positively minimize the environmental impact. The results of implementation should be communicated to the users. These actions should be in accordance to local regulations and guidelines and could be guided by an environmental management system (e.g. ISO 14000s).

7.6 Safety and emergency measures

7.6.1 Safety and emergency procedures

Guidance: The service provider should develop an emergency plan that includes training procedures and appropriate information for the users.

7.7 Quality of water (Water Supply)

7.7.1 Public health quality of the water

PI: Total number of treated water tests complying with the local regulations and guidelines in a year / total number of tests of treated water carried out during the year x 100

Guideline: The service provider should include in a periodic report (e.g. the annual report) a summary of water quality related problems.

7.7.2 Aesthetic and sensory quality of the water

PI: Number of written complaints related to water quality issues / total number of contracts

Guidance: Complaints are not the only measure for perception of quality. It can be complemented by customer surveys on a periodic basis.

Comment: Total number of complaints is not necessarily an indicator of poorer service, but it may be correlated to possibility of complaints. Complaints should address quality issues of the product regarding the service, and not others (e.g. temperature).

8 Bibliography

- **ISO 9000 series**
- **ISO 14000 series**
- **WHO drinking water requirements**
- **WHO sanitation guidelines**