# Water Working Notes

Note No. 23, January 2010

# TEMPLATE FOR ASSESSING THE GOVERNANCE OF PUBLIC WATER SUPPLY AND SANITATION SERVICE PROVIDERS

Alain Locussol and Meike van Ginneken





**Water Working Notes** are published by the Water Sector Board of the Sustainable Development Network of the World Bank Group. Working Notes are lightly edited documents intended to elicit discussion on topical issues in the water sector. Comments should be e-mailed to the authors.



# **TABLE OF CONTENTS**

Abo	out the Authors	iv
Ackı	nowledgments	iv
Α.	Objective of the Note	1
	Using the template	1
	How this template was developed	2
B1.	Template Part 1: Mapping WSS Service Providers	5
	Overall Policy Environment	5
	Functioning of WSS Service Providers	7
B2.	Template Part 2: How are the Key Functions of the WSS Service Performed	
	Development of the WSS Infrastructure	
	Operation of the WSS Service	
	Financing of the WSS Infrastructure Development	
	Economic Regulation of the WSS Service	
C.	Presenting the Governance Assessment	
Ann	ex 1: Recent World Bank Work on Governance of WSS Service Providers	17
Ann	ex 2: IBNET and other Metric Indicators	
Ann	nex 3: Examples of Accountability Frameworks	21
Ann	nex 4: Example of Summary Assessment per Topic	25
Ann	ex 5: Example of Summary Governance Assessment	

## **ABOUT THE AUTHORS**

Alain Locussol is a freelance consultant (alocussol@gmail.com)

Meike van Ginneken is a senior water and sanitation specialist in the Africa Region of the World Bank (mvanginneken@ worldbank.org).

Approving Manager: Diego Rodriguez, ETWWA

### **CONTACT INFORMATION**

To order additional copies, please contact the Water Help Desk at whelpdesk@worldbank.org. This paper is available online at http://www.worldbank.org/water.

### ACKNOWLEDGEMENTS

This report was funded by the Bank-Netherlands Water Partnership, a facility that enhances World Bank operations to increase delivery of water supply and sanitation services to the poor. The study was carried out by the Water Anchor of the World Bank.

The authors wish to gratefully acknowledge the following colleagues in the Bank for their comments and inputs World Bank: Bill Kingdom, Yao Badjo, Maria-Angelica Sotomayor, and Sasha Danilenko. We also would like to thank Alassane Baba-Moussa and Aladji Dieng for testing the template through case studies in Benin, Guinea, and Togo.

### DISCLAIMER

This volume is a product of the staff of the International Bank for Reconstruction and Development/The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without

permission may be a violation of applicable law. The International Bank for Reconstruction and Development/The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, telephone 978-750-8400, fax 978-750-4470, http://www.copyright.com/. All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA, fax 202-522-2422, e-mail pubrights@ worldbank.org.

# A. OBJECTIVE OF THE NOTE

This note proposes a template for assessing the governance of urban water supply and sanitation (WSS) service providers and its impact of the quality of service and performance of operations. The template can be used for decentralized autonomous public corporations responsible for providing the WSS service to customers as well as other institutional arrangements ranging from government departments to autonomous public WSS asset holding companies subcontracting operations to professional operators.

This template complements the extensive work done on performance indicators through the International Benchmarking Network for Water and Sanitation Utilities (IBNET).<sup>1</sup> IBNET has developed a series of indicators to help carry out a complete physical check-up of an urban WSS sector or an urban WSS service provider. Annex 2 gives the complete list of IBNET metric indicators aimed at measuring service coverage, efficiency, reliability, financial sustainability, environmental sustainability, and affordability. When reliable data are generated, the indicators give an excellent snapshot of the quality of the WSS service and of the performance of WSS service providers and picture of their evolution over time. In many cases however, it is difficult or even impossible to find reliable data on basic parameters. Designing and implementing a program aimed at generating reliable data is often one of the first gaps to be addressed to help define and monitor the progress of performance improvement programs.

The performance of a WSS service provider is obviously influenced by its corporate governance and the environment it operates in. Too often the functions of policy formulation, regulation of the WSS service, ownership of WSS assets, financing of WSS infrastructure development and provision of WSS service are governed by unclear and unenforceable mandates and/or contracts. While IBNET provides an excellent framework to measure the performance of a WSS service provider, no standard appraisal methodology exists for the governance of the WSS service provider and its environment. This template sets out to fill this gap. The template has been developed at the request of World Bank staff that feel that it could help improve effectiveness (with practitioners converging to some more standardized approach) and efficiency (no need to reinvent the wheel). The template is aimed at assessing the situation in one city or country, including making comparisons over time (e.g. before and after certain interventions). Although not a benchmarking tool per se, it also allows to make cross comparisons—at least within countries if not between countries.

### Using the template

A template is 'a document or file having a preset format that can be used as a starting point for a particular application so that the format does not have to be recreated each time it is used'. The idea of the template for assessing the governance of public WSS service providers is that it can be used as terms of reference (TOR) for a consultant or a team of consultants assessing various WSS service providers. The template is not a rigid checklist but rather a set of questions to facilitate the organization of reviews.

This template looks at the institutional set-up of WSS service providers, how they relate to their environment, and how key functions are carried out. The template does not only focus on the piped WSS service and the performance of official WSS service providers but also at the provision of substitute to piped WSS services.

The note has two main parts. Part B describes the actual template. It includes a set of questions and simple instructions on how to provide the answers. It focuses on two main governance aspects:

• Part B1 maps WSS service providers and their environment. It focuses on: (i) the accountability framework within which WSS service providers operate; (ii) the

<sup>&</sup>lt;sup>1</sup> A project funded by DFID and implemented in partnership with the World Bank and the Water and Sanitation Program. http://www.ib-net.org.

overall policy environment; and (iii) their internal functioning.

Part B2 reviews how the key functions of: (i) development of the WSS infrastructure; (ii) provision of the WSS service; (iii) financing of the WSS service and development of the WSS infrastructure; and (iv) economic regulation of the WSS service are performed.

The actual template is followed by a format for presenting the findings of the assessment (part C). The format includes: (i) a snapshot of the current situation; (ii) a graphic representation of the accountability framework; and (iii) a diagnosis of the apparent performance gaps to be addressed.

### How this template was developed

This template was developed based on the body of research recently carried out by the World Bank on public utilities and the environment in which they operate. A list of recent papers on governance of WSS utilities is given in Annex 1. The draft template was reviewed by sector professionals across the World Bank. A review meeting endorsed the general approach and asked the authors to extend the template to include ideas on how results of the 'diagnostics' could be presented succinctly to decision makers. In addition, the meeting defined a preliminary list of countries for potential piloting.

A second draft was field-tested in three West African countries (Benin, Guinea, and Togo) in early 2009 using this note as the basis for the TOR. The findings of the pilots are summarized in box 1. The following feedback from the two consultants, both former general managers of West African WSS utilities, who carried out the assessments was taken into account in this final version of the template:

• Despite its apparent rigidity, the template has greatly facilitated the organization of reviews, interviews and/

### Box 1: Findings from field testing in Benin, Guinea, and Togo

Field-testing in three West African countries (Benin, Guinea and Togo) showed three fairly similar accountability frameworks which can be summarized as follows:

- A corporatized public WSS service provider, placed under a board of directors (including various ministries, local governments, customer and staff representatives) is responsible for providing the water service (sewerage systems are either embryonic or inexistent) in all urban centers and for developing the WSS infrastructure;
  - Sales revenue are usually sufficient to recover O&M costs and contribute marginally to the Capex; debt to the Government has usually been written off;
  - Financial statements are independently audited, but performance is never reported to an independent regulatory body, even if standard performance indicators are monitored;
- A Ministry in charge of WSS sets WSS policies and standards; and
- A Central Government provides the bulk of the financing for WSS infrastructure development (mostly provided by International Financing Institutions (IFI) and bilateral donors), appointing the managing director of the WSS service provider and fixing WSS tariff levels and structures.

Interestingly enough, the assessments have identified similar performance gaps:

- Limited autonomy of the WSS service provider, even it this does not usually translate in overstaffing;
- Absence of pro-poor WSS policy that translates in fairly low connection ratios;
- Absence of sanitation policy;
- Often unclear objectives pursued by the WSS tariff;
- Commercial performance affected by low collection ratios, in particular from public customers which represent a significant share of sales;
- Interaction with private customers often needing improvement; and
- Too low human resource development budgets.

or investigations; it is well adapted to understand the accountability framework of an urban WSS sector;

• More guidance needs to be provided on: (i) judgments to be made for presenting the summary assessment

per topic (Annex 4); and (ii) the exact definition of metric indicators to be mentioned in the summary assessment (Annex 5).

# PART B1. MAPPING WSS SERVICE PROVIDERS AND THEIR ENVIRONMENT

This section focuses on the overall legal and institutional environment within which WSS service providers operate and their internal functioning. It contains an organized list of questions that can facilitate interviews and review of utility reports. The aim of the list of questions is not to provide a yes/no checklist, but rather to guide the assessor through a comprehensive review of the service provider and its environment. In the assessment, particular attention should be paid to:

- Identifying the main actors of the urban WSS sector and clarifying their exact mandate with regards to the key functions of: (i) policy formulation; (ii) WSS asset management and infrastructure development; (iii) WSS service provision; (iv) financing the WSS service and the development of the WSS infrastructure; and (v) regulation of the WSS service;
- Clarifying the contractual arrangement that allow the actors to interact between each other; and
- Assessing the adequacy of the instruments (or procedures) used by the actors to fulfill their mandates.

Actors, mandates, contracts and instruments constitute what this note refers to as the accountability framework within which WSS service providers operate. The graphs and tables given in Annex 3 present examples of accountability frameworks.

Official policies are often not fully carried out in countries with weak governance regimes. Looking at the de facto functioning of institutions, rather than at the paper policy framework is critical. To better map WSS service providers, it is first proposed to carry out a review of the overall policy environment of the urban WSS sector and to pay a particular attention to: (i) discrepancies between official policies and their actual implementation; (ii) incentives, whether adequate or perverse, that could affect the quality of the WSS service and the performance of WSS service providers; and (iii) the vested interests that may be affected by changes in the way the WSS business is carried out thus tempted to block their implementation.

### **Overall Policy Environment**

A thorough review of the existing legislation related to the urban WSS sector should first be carried out to assess the best performance that can be expected from current policies, institutional arrangement and distribution of responsibilities. The review should place the WSS sector within the context of, among others: (i) water resource management; (ii) decentralization; (iii) municipal management; (iv) public sector management; (v) regulation of public services and of course the reforms, if any, being undertaken in these sectors. The review should clarify if the current legislation is unambiguous on the topics listed below.

**Responsibility for the WSS service and market structure**. It should be clarified:

- Which level(s) of government (central, regional, local) is(are) responsible for the WSS service;
- The rationale put forward by the government in case responsibilities are split among different levels of governments;<sup>2</sup>
- If the responsibility of WSS service providers also includes on-site sanitation and/or storm water drainage; and
- If the WSS service is provided by an entity also in charge of producing, transporting and/or distributing as electricity.

<sup>&</sup>lt;sup>2</sup> For example: (i) water production under a central or regional agency and water distribution under a municipal agency;
(ii) construction under a central agency and operation under a local agency; (iii) water supply under one agency and waste water collection and treatment under another agency.

**Unbundling of key functions**. A graph and a table similar to those given in Annex 3 should be prepared to clarify:

- If the functions of: (i) policy formulation; (ii) asset management and infrastructure development; (iii) provision of the service; (iv) financing of the service; and (iv) regulation of service are separated (these topics are further developed in Section D below); and
- The exact mandate of each entity, the contractual arrangement between the various actors, and the key instruments and procedures under which they are supposed to operate.

### Service standards. It should be clarified:

- Which entity is responsible for setting service standards such as coverage, drinking water quality, permanence of water service, pressure or effluent water quality:
- Which entity is responsible for ensuring that service standards are complied with;
- If penalties are supposed to apply in case of non compliance and which entity is supposed to levy them.

### Cost recovery and pricing. It should be clarified:

- Which entity sets cost recovery and pricing principles;
- If pricing principles clearly specify that costs have to be recovered from customers, tax payers or a combination of both;
- If billing has to be established on the basis of metered quantities of water consumed;
- If the type of costs to be recovered from customers is specified; (see section on economic regulation below);
- If pricing principles refer to the Long Run Marginal Cost of water as an instrument for managing demand for water and to the design of tariff structures (see section on economic regulation below).

**Autonomy of WSS service providers**. In order to present the degree of autonomy of WSS service providers, it should rapidly be clarified (all the topics listed below are further developed in Section C):

- If WSS operations are to be ring fenced, if WSS service providers have to be incorporated and, if yes, which legislation applies;<sup>3</sup>
- How the issue of ownership of WSS assets is dealt with;<sup>4</sup>
- If WSS service providers are responsible for preparing and implementing WSS infrastructure development plans;
- Which procurement rules apply to WSS service providers;
- Which statutes apply to the staff of WSS service providers;
- If WSS service providers are encouraged (or forbidden) to enter into public-private partnerships (PPP) to carry out certain or all of their tasks to professional operators;
- If WSS service providers are required to report on their performances to a regulatory authority;
- Who eventually sets WSS tariffs; and
- If financial statements of WSS service providers have to be independently audited.

### *Water resources management and environmental protection*. It should be clarified:

- If the provision of water for human consumption has priority over provision of water for agricultural or industrial uses;
- How the mechanisms for allocating water entitlements (and pollution rights) work; in particular it should be mentioned if the trading of water entitlements (and pollution rights) between users is allowed;
- If the use of bulk water sources is to be taxed and what are the basis for calculating the tax; and
- How the monitoring of the capacity and water quality of aquifers and surface water bodies work and which remedies exist in case of non compliance with abstraction rights and quality standards.

*Substitutes to the piped WSS service*. Particular attention should be paid to this particular topic and the following:

 $<sup>^{\</sup>scriptscriptstyle 3}$  For example, state owned enterprise law, municipal law or commercial law.

<sup>&</sup>lt;sup>4</sup> For example if ownership cannot be transferred by the central government, can WSS assets be placed in "concession" with autonomous public or private WSS service providers?

- If groundwater abstraction rights by households, real estate developments, or businesses have to be applied for and how mechanisms for monitoring and taxing (if applicable) individual groundwater abstraction actually function; and
- If tanker trucks, water vendors, or sludge handlers have to apply for a license for supplying water or emptying septic tanks their activities are monitored.

### **Functioning of WSS Service Providers**

Clarifying the exact mandate of WSS service providers and their functioning should be the next step of the review. In case the functions of WSS asset development and WSS service operation are separated and carried out by two public entities<sup>5</sup>, the functioning of each entity should be described. This section builds on the Bank Note on "Characteristics of Well-Performing Public Water Utilities" (Annex 1) and clarifies the various indicators proposed for assessing: (i) external autonomy; (ii) external accountability; (iii) internal accountability for results; (iv) market orientation; (v) customer orientation; and (vi) corporate culture.

### Mandate of WSS service providers. It should be clarified if:

- The government responsible for the urban WSS sector has permanently delegated the WSS service to autonomous providers and taken decrees to define the boundaries of their service areas and their exact mandates; if this is the case, the review should clarify the content on this legislation;
- The government and WSS service providers have entered into secondary agreements, such as performance memorandum of understanding (or *contrat plan* in French) to define shorter term mutual commitments, such as performance objectives, capital expenditure program or tariff adjustments. If this is the case, the content of such short term agreements and the conditions of their implementation, in particular for measuring the performance of both parties, should be described; and
- A mechanism is provided for resolving disputes between the government and WSS service providers and if it works satisfactorily.

### Incorporation and shareholding. It should be clarified:

- If there is any *de jure* or *de facto* restriction to the legislation that applies to the incorporation of public WSS service providers; in particular it should be explained how the issue of ownership of shares and distribution of dividends is dealt with, if the commercial law applies; and
- The composition and operation of boards of directors (BOD) including: (i) appointment criteria, in particular if the BOD is supposed to include managing directors (MD) of WSS service providers, representatives of consumer associations and/or of the business community; (ii) selection procedures for members and chairpersons; (iii) the frequency of meetings and the setting of agendas; (iv) the compensation of BOD members; (v) the code of conduct and treatment of potential conflicts of interests; and (vi) the actual capacity of the BOD to provide guidance to achieve objectives.

### Management teams. It should be clarified:

- Who appoints the MD: the government in charge of the WSS service or the BOD;
- Under which conditions MD and managers are supposed to be recruited: (i) competitively from the market; or (ii) from a pool of civil servants;
- Which procedures are followed for preparing job descriptions, short lists and interviews of candidates and for making contract proposals (duration, compensation);
- If specific performance targets are set in managers' contracts and if bonuses (and/or penalties) are provided for and actually applied;
- The frequency of meetings between MD and BOD; and
- If there is evidence (or rumors) that: (i) pressures are exercised by the government or members of BOD during the recruitment process; and (ii) management positions are open for illicit bidding by those who eventually make decisions.

<sup>&</sup>lt;sup>5</sup> This is the case for example in Nairobi, Kenya; Dar es Salaam, Tanzania; or some Indian states.

### Staff. It should be clarified:

- Under which conditions staff are supposed to be recruited and laid off; in particular the degree of freedom MD have to right size staff should be mentioned;
- Which procedures are followed for preparing job descriptions, short lists and interviews of candidates;
- If WSS service providers can determine salary scales and overall compensation packages (contract durations, annual and sick leaves, medical insurance, pension...) that apply to the staff and, if yes, according to which criteria (public or private sector scale);
- If the staff is formally organized in trade union(s) or staff association(s) mandated to negotiate compensation packages with management and if negotiations are usually carried out in a constructive manner; if strikes have affected WSS service providers, their reasons should be mentioned;
- If staff are subject to regular performance evaluation by managers, if performance targets are typically set in contracts and if bonuses (and penalties) are provided for and actually applied;
- If promotions are made on merits and if factors influencing promotion and salary are clear and well understood by staff;
- If absenteeism and high turnover are perceived to be key issues; and
- If there is evidence (or rumors) that: (i) pressures are exercised by the government or members of BOD during the recruitment and promotion processes; and (ii) that positions are open for illicit bidding by those who eventually make decisions.

### Training. It should be clarified:

- What percentage of the annual turnover is devoted to internal and external training activities;
- Who are the providers of external training: universities, training centers, professional associations;
- The content of training activities: (i) WSS infrastructure development including, design, procurement, construction supervision, environmental protection and resettlement issues; (ii) technical operations including efficiency programs such as non-revenue water (NRW) reduction, energy savings...; (iii) commercial opera-

tions and customer management; (iv) accounting and financial reporting; (v) quality control; (vi) management techniques, team building and communication; and

• If there is an independent process for certifying the competence of specialized technical or managerial positions and if certification is required as a basis for recruitment.

### Financial management. It should be clarified:

- Which accounting principles apply to WSS service providers;
- If WSS service providers have a sufficient number of certified accountants, adequate hardware and software for preparing financial statements;
- If accounting procedures are recorded in internal accounting guidelines;
- If ceilings are set for procuring goods, works and services by operational departments, if they are adhered to and if they are perceived as being an impediment to efficient operations;
- Which auditing rules apply and the quality of the audits carried; and
- If WSS service providers have in the past been able to timely take actions for addressing audit qualifications.

### Corporate culture. It should be clarified if:

- The mission statements of WSS service providers are clearly spelt out and if managers and staff identify with it;
- Internal communication processes used to convey management decisions to staff and obtain staff feedback are working satisfactorily;
- Clear procedures exist for each task, an internal audits procedures have been established and if ISO certifications have been applied for (and obtained); and
- WSS service providers are active members of national or international professional associations.

### *Reporting*. It should be clarified:

 If WSS service providers are required to report to a regulatory body on its technical, commercial and financial operations and if the data provided are to be independently validated.

### PART B2: HOW ARE THE KEY FUNCTIONS OF THE WSS SERVICE PERFORMED?

This section reviews how the key functions of: (i) development of the WSS infrastructure; (ii) operation of the WSS service; (iii) financing of the WSS service and WSS infrastructure; and (iv) economic regulation of the WSS service are performed.

### **Development of the WSS Infrastructure**

Mandate of WSS infrastructure developers. Clarifying under which conditions WSS infrastructure is rehabilitated and extended should be the subject of particular attention. It is one aspect of WSS service that could lead to significant inefficiencies as a result of inadequate design, procurement and project implementation procedures as well as to diversion of public funds through corrupt practices. While in most cases WSS service providers, acting as owners of the WSS assets, act as WSS infrastructure developers, it should be clarified which entity(ies) is(are) is responsible for the key steps of the project cycle including: (i) assessing demand; (ii) preparing infrastructure development plans; (iii) drafting financing applications; (iv) preparing project designs; (v) overseeing the procurement process and (vi) supervising construction.

**Demand assessments**. It should be clarified if extension projects are to be dimensioned on the basis of:

- Standard per capita consumption, standard target horizons and standard technologies set by a central engineering agency; or
- Regularly updated surveys for assessing customer preferences and actual demands, willingness to pay for WSS services, and elasticity of demand to pricing. In particular it should be assessed if customers are:

   (i) offered options for water supply such as individual connection, shared connection or public standpipe;
   (ii) offered options for waste water such as individual sewer connection, septic tanks, latrines and soak away;
   (iii) explained the tariff structure and preferential treatment that could apply to low income households.

*Infrastructure development plans*. It should be clarified if WSS infrastructure developers are required to:

- Employ specialized public or private planning consultants to prepare or update WSS infrastructure development plans, and if yes, if standard TOR for such studies have been developed, for example by a central engineering agency;
- Identify least cost solutions according to economic, financial, environmental and social criteria set for example by a central engineering agency; and if yes if the remuneration scheme of consultants is conducive to seeking the least cost solution; and
- Consult with stakeholders and reflect their valid concerns into account to arrive at a consensus on the final version of the proposed development plan.

**Financing applications**. The content of the applications to be submitted by the WSS infrastructure developer to its financiers should be described; in particular, it should be clarified if financial applications have to include, in addition the technical description of the project:

- Assurances that environmental and social, e.g. resettlement, procedures are complied with;
- A description of the proposed implementation arrangements;
- A description of the proposed operation plan; and
- A detailed financial forecast to demonstrate that the proposed project is affordable by WSS service providers within the limits of the approved WSS tariffs and expected operational performance.<sup>6</sup>

*Project designs*. It should be clarified if WSS infrastructure developers are required to:

<sup>&</sup>lt;sup>6</sup> The Note on "Characteristics of Well-Performing Public Water Utilities" includes a more detailed list of financial indicators than that provided by IBNET; this list is given in Annex 2.

- Employ specialized public or private engineering consultants to prepare preliminary and detailed designs, and if yes if their remuneration scheme is conducive to seeking least cost solutions; and
- Use standard technical specifications: in particular, it should be clarified if restrictions are imposed on, among others, pipe materials, storage tanks materials, meters or treatment processes.

**Procurement**. It should be clarified if the WSS infrastructure developers:

- Are required to follow public procurement rules;
- Have a track record of procurement of large contracts;
- Are required to employ private procurement agents or public procurement agencies for contracts above set thresholds for goods, works and services;
- Are required to use standard bidding documents (BD) for the procurement of goods, works and services and standard requests for proposals (RFP) for consulting services developed, for example, by a central engineering agency;
- Are required to clear BD, RFP and bid evaluation reports (BER) for large contracts with specialized procurement agencies; and
- Have a track record of complaints for mishandling the procurement process during the bidding period or the bid evaluation period.

*Project implementation procedures*. It should be clarified if WSS infrastructure developers are required to:

- Employ specialized public or private engineering consultants to supervise construction; if yes, their remuneration scheme should be clarified; and
- Employ independent technical auditors to ensure that supervision consultants are carrying out their tasks according to their terms of reference and good practice.

# Suspected corruption associated with WSS infrastructure development. The review should document if:

• There is evidence (or suspicion) of: (i) systematic differences between prices obtained by private developers and public WSS infrastructure developers for comparable works (concrete, trenches, pipe supply and laying...); (ii) existence of cartels of contractors limiting competition and maintaining prices artificially high; (iii) attempts to influence the content of BD and the conclusions of the BER to favor particular suppliers, contractors and service providers; and (iv) collusion between contractors and construction supervisors to reduce the quality of goods and works; and

 WSS service providers have credible plans to eradicate or limit corruption associated with infrastructure development.

### **Operation of the WSS Service**

*Mandate of WSS service operators*. In most cases, WSS service is provided directly to customers by service providers who also play the role of infrastructure developers. However, the template also covers cases where part or the entirety of the service provision is sub-contracted to public or private professional operators under service, management and/or lease/*affermage* types of contracts.

*Technical operations*. It should be clarified if WSS service operators:

- Have developed a set of operation manuals and procedures for water production, water distribution, waste water collection and waste water treatment facilities and if these manuals are referred to by staff in their day to day operations;
- Monitor on a regular basis: (i) water produced, water sold, NRW, waste water collected and treated;
   (ii) energy and chemical consumptions; (iii) operation of the storage tanks; (iv) pressure at which water is delivered at critical points of the distribution system;
   (v) overflows of sewers; (vi) drinking water quality at production and distribution points; and(vii) effluent quality;
- Implement programs aimed at increasing efficiency including for example: (i) leaks and NRW reductions;
   (ii) identification of illegal connections; (iii) reduction of energy and chemical consumptions; and

• Implement asset management plans and provides sufficient budget for preventive maintenance and replacement of equipment and works.

*Commercial operations and customer relations*. In addition to describing the content of standard contracts between WSS service providers and customers, it should be clarified if WSS service operators:

- Have developed a set of operation manuals and procedures for commercial activities;
- Offer several choices of level of WSS service such as:
   (i) individual connections, shared connections, public standpipes for water supply; and (ii) individual connections, connections of black waters only, or septic tanks emptying for waste water and sludge;
- Are required to meter water consumed as a basis for billing: if yes, percentages of connections metered, percentages of meter in working order, and percentages of billing established on metered consumption should be indicated;
- Periodically monitor production and consumption and:
   (i) read bulk and individual meters; (ii) rotate meter readers to avoid possibilities of illegal deals with customers; (iii) implement a comprehensive meter testing, maintenance and replacement program;
- Disconnect customers in arrears and promptly reestablish the service once payment is made;
- Systematically seek feedback from customers on the quality of the service they receive; procedures for seeking feedback should be described;
- Handle complaints in a timely manner and make available to the public independent assessments of their performance for handling complaints; and
- Implement a dispute resolution mechanism that is understood and well accepted by customers.

**Affordability**. It should be clarified if WSS service operators:

- Implement programs to favor connection to water distribution networks and sewers; if yes, financing conditions offered should be described;
- Apply WSS tariff structures or subsidy schemes aimed at limiting WSS bills for a minimum consumption of

piped water to amounts compatible with revenues of low income households; and

• Bill customers at periodicities that meet assessed cash flows of low income households; or implement programs of pre-payment meters in low income areas.

*Service to the poor*. It should be clarified if the WSS service operators:

- Are allowed to extend the WSS service to informal settlements and slums where the poor are likely to live and if not if they are required to provide bulk supply at the boundaries of such settlements; and
- Routinely consult with representatives of informal settlements to design and implement WSS service options that meet their demand and willingness to pay.

**Public-private partnerships**. It should be clarified if the legislation encourages (imposes or forbids) public-private partnerships (PPP), and if yes if standard selection procedures and contracts have been developed, for example by a central engineering agency. If WSS service providers have entered, or plan to enter into service, management or lease/*affermage* contract with professional operators, the following should be described:

- Tasks contracted out;
- Allocation of the main risks (technical, operational, commercial, financial, foreign exchange...); and
- Content of the operation contract(s) should, with a particular attention paid to: (i) the remuneration scheme of the professional operator(s); (ii) the main incentives built in the partnership(s) for improving the quality of the WSS service and the performance of WSS operations; (iii) the assessed performance(s) so far; and (iv) the dispute resolution mechanism(s).

Suspected corruption associated with WSS service provision. It should be clarified if:

• There is evidence (or suspicion) of illegal payments made by customers to staff of WSS service operators in charge of commercial operations for falsifying meter readings or billings, expediting repair works or new connections or not reporting illegal connections; and

• WSS service operators have credible plans to limit illegal practices linked to commercial operations.

# Financing of the WSS Infrastructure Development

#### Mandate of the financiers of the WSS infrastructure devel-

*opment*. To develop their infrastructure, public WSS service providers are likely to rely on a mix of cash generation, government grants, debt financing provided by government owned lending institutions and, in some cases, by local capital markets. Ideally, during appraisal of financing applications submitted, these various financing agencies ensure that the future financial performance of WSS service providers, as measured by financial ratios given in Annex 2 will remain within acceptable limits. Before reviewing the instruments used by the various financing sources, it should be clarified:

- If conditions under which WSS service providers can access public financing to develop WSS infrastructure and, if applicable, complement operating revenues, are clearly spelt out: for example do medium term infrastructure development plans, performance improvement plans, unqualified audited financial statements or financial forecast showing achievement of financial ratios have to be submitted together with financing applications?
- If financing conditions that can be afforded by WSS service providers, i.e., the mix of cash generation, grants and debt have been based on a detailed estimate of future cash flows, willingness to pay of the customers and willingness to adjust by the government or regulatory authorities; and
- The tax regime that applies to public WSS providers.

# *Central and regional government financing mechanisms*. It should be clarified:

• Which procedures are followed for including an urban WSS project in the government capital budget document; in particular the documentation submitted to

justify the project, the review of the application by the government and the criteria used for selection should be described;

- If the government provides grant financing or debt on concessionary conditions for specific programs aimed at, for example, favoring connection of low income households to piped WSS infrastructure, extending networks to low income areas or abating pollution;
- The standard: (i) levels of government contribution in percentage of the project cost; (ii) financing terms; (iii) conditionality attached; (iv) content of the standard financing agreement, if any;
- If several levels of governments are involved in the financing of specific activities, e.g., central government for financing infrastructure development and regional or local government for complementing operating deficits, if applicable; and
- The role played during project implementation.

# *Government owned lending institutions*. It should be clarified:

- Which appraisal procedures are followed and in particular if criteria other than financial criteria are taken into account;
- Which guarantees, if any, are typically requested from regional and central governments and usually provided by the latter;
- The standard: (i) levels of contribution in percentage of the project cost; (ii) financing terms; (iii) conditionality attached; (iv) content of the standard financing agreement, if any; and
- The role played during project implementation.

*Local capital markets*. In case public WSS service providers are allowed to mobilize funds on commercial terms, it should be clarified:

- If local capital markets are able to provide debt at conditions compatible with that of the WSS sector for which depreciation periods are longer than most other infrastructure sectors;
- Conditions under which the municipal bond market has been or can be tapped (if applicable);

- The appraisal procedures followed by commercial banks and in particular if criteria other than financial criteria are taken into account;
- Guarantees, if any, that are typically requested from regional and central governments and guarantees that are usually provided;
- The standard: (i) levels of contribution in percentage of the project cost; (ii) financing terms; (iii) conditionality attached; (iv) content of the standard financing agreement, if any;
- The role played during project implementation; and
- If private investors are allowed to buy shares of public WSS service providers.

### International (and bilateral) financing institutions. It is

likely that IFI and bilateral financing agencies play an important role in the financing of the development of the WSS infrastructure. If WSS service providers have recently benefited from such financial assistance, a particular attention should be devoted to:

- The country assistance strategies of the IFI and bilateral financing agencies;
- The procedures followed for identifying, preparing, appraising and supervising projects, and in particular the key criteria used to appraise the financed projects;
- The financing mechanisms used, e.g.: (i) specific projects with implementation procedures of the financing agencies; of (ii) budget support operations relying mostly on government's procedures;
- Attempts to harmonize procedures followed by various agencies for appraising and supervising WSS projects;
- Standard on-lending terms and conditionality to WSS service providers, if funds are made available to the government or standard lending terms and conditionality if funds are made available directly to the WSS service provider, with the guarantee of the government; and
- The perceived role IFI and bilateral financing agencies have played (or still play) in enhancing the discipline in the planning, appraisal and implementation processes and the transparence of procurement, financial management, environmental and social procedures.

### **Economic Regulation of the WSS Service**

*Mandate of the regulator*. Conditions under which tariff levels and structures and service standards are set and the quality of the WSS service and the performance of WSS service providers are monitored should finally be reviewed.

**Operations of the regulator**. If a formal regulatory body exists, its operations should be assessed against the following key criteria:<sup>7</sup>

- Independence: is the regulator insulated from shortterm political pressures and able to make decisions without prior approval from other government agencies; is the regulator funded from independent sources of revenue;
- Accountability: can the parties whose interests may be affected by the regulator's decisions appeal them;
- Transparency: are decisions made by the regulator supposed to be supported by documentation available to the public;
- Predictability: do decisions follow principles and rules that can be amended only after extensive public notice;
- Requisite powers: does the regulator have the power to perform his mission, including setting tariffs, monitoring market and service quality, addressing market power and designs, investigating and mediating consumer complaints, providing dispute resolution mechanisms, compelling provision of information and monitoring and enforcing its decisions;
- Institutional characteristics: are education levels and compensation packages of the regulator's staff comparable with that of the regulated entities; are decisions taken by a group of commissioners rather than by individual staff; are decisions subject to appeal to legally designated court or tribunal; do these court or tribunal have minimum regulatory expertise; and
- Integrity: is the regulator staff subject to strict rules when it comes to the payment of gratuities of all kind and conflicts of interest.

<sup>&</sup>lt;sup>7</sup> Evaluating Infrastructure Regulatory Systems: Brown, Ashley, Jon Stern, Bernard Tenenbaum and Defne Gencer; the World Bank, 2006.

*Tariff setting principles*. Whether a regulator exists or not, it should be clarified if the current legislation and/or procedures set clear tariff setting principles, in particular with regards to:

- Economic criteria: are WSS tariffs supposed to be set in reference to the long run marginal cost (LRMC) of water for a particular WSS operation and to include the cost of externalities?
- Efficiency criteria: are WSS tariffs supposed to be set in reference to: (i) efficient operations, with NRW, energy and chemical consumptions and staffing ratios set at optimum levels; and (ii) efficient development, with WSS projects meeting the least cost option criteria?
- Financial criteria: are WSS tariffs supposed to be set to:

   (i) cover O&M costs, O&M plus depreciation and financing costs, or O&M and debt service;
   (ii) generate cash from operations to cover a set percentage of the capital expenditures; or (iii) yield a rate of return on equity invested in the WSS utility by its public partners, or a rate of return on WSS net fixed assets?
- Equity criteria: are WSS tariffs designed (or forbidden) to provide cross-subsidies between: (i) different WSS systems where water production and distribution and waste water collection and disposal costs differ; and (ii) various categories of customers (residential, commercial, industrial, public...) within a same system? and
- Simplicity criteria: are WSS tariffs structures supposed to include several bands and categories?

*Tariff resetting*. It should also be clarified conditions under which:

- WSS tariffs are protected against inflation, for example through automatic indexation; and
- WSS tariffs are periodically reset to reflect major changes in the WSS service such as: (i) efficiency gains achieved by WSS service providers; (ii) changes in the respective weight of O&M costs; and (iii) future development of the WSS infrastructure. As mentioned above, the coherence and predictability of instruments used to support decisions should be carefully assessed.

### Performance monitoring. It should be clarified:

- How WSS service providers are supposed to report on indicators to measure the quality of the WSS service and the performance of its operations;
- If there is a mechanism for independently validating data;
- If penalties apply (and have indeed applied) in case of non compliance with minimum standards; and
- A central database of indicators is maintained with the objective of benchmarking industry standards and better supporting tariff setting decisions and/or conditionality to be attached to financing agreements.

*Service to the poor*. It should finally be clarified if the service to the poor is especially monitored, in particular through regular surveys to assess the adequacy of the subsidy schemes, if any, for favoring connection to piped systems and/or minimum consumption of piped water.

# PART C. PRESENTING THE GOVERNANCE ASSESSMENT

A main report should be prepared to cover the various topics listed in Section B above. It is recommended to include all subheadings listed in the template. However, every WSS service provider is different and of course certain sections should be expanded to allow for proper discussion. The use of graphs and tables (see for instance Annex 3) is encouraged.

It should be complemented by two Annexes:

- A first Annex should include a table to show the recent evolution of the various metric indicators listed in Annex 2 to this paper. It should also include a discussion on: (i) the reliability of the data provided; and (ii) if available, how these indicators compare with regional and national indicators; and
- A second Annex should summarize the assessment of the governance of WSS service providers and include a table to:
  - signal the existence of the mandates, contracts and instruments listed in Section B: by simply indicating "yes" or "no";
  - rate the adequacy of the mandates, contracts and instruments: by indicating "good", "fair" or "bad" and providing a cross reference to the main report for supporting the rating.

Annex 4 to this note gives an example of such a summary assessment for the functioning of WSS service

providers. Five similar tables should be developed for the other key topics covered by the assessment: (i) overall policy environment; (ii) development of the WSS infrastructure; (iii) operation of the WSS service; (iv) financing of the WSS infrastructure development; and (v) economic regulation of the WSS service. It is recommended that the ratings in Annex 4 are validated through a group discussion, rather than based on the opinion of one assessor.

A summary of the above report and its two Annexes should also be prepared for the decision makers. Annex 5 to this note paper gives an example of such a summary that includes:

- A one-page note describing the quality of the WSS service, performance of WSS service providers, governance of WSS service providers and identifying the key performance gaps;
- A selection of key metric indicators;
- A graph depicting the current accountability framework.

A specific report on substitutes to the piped WSS service, role of vested interests and importance of the corruption could also be prepared if these issues are perceived to require special attention.

# ANNEX 1: RECENT WORLD BANK WORK ON GOVERNANCE OF WATER SUPPLY AND SANITATION SERVICE PROVIDERS

In the past few years, the World Bank has implemented a program to help utilities in developing countries provide better water supply and sanitation services. This Annex provides an overview of recent and ongoing World Bank knowledge pieces on urban utility reform. For an updated and complete list, please check on www.worldbank.org/water.

Models of Aggregation for Water and Sanitation Provision (S. Myers, B. Kingdom, 2005)

Financing Water Supply and Sanitation Investments: estimating Revenue Requirements and Financial Sustainability (A. Baietti, P. Curiel, 2005)

Financing Water Supply and Sanitation Investments: Using Risk Mitigation Instruments to Bridge the Financing Gap (A. Baietti, P. Raymond, 2005)

Characteristics of Well Performing Public Water Utilities (A. Baietti, B. Kingdom, M. van Ginneken, 2006)

Consumer Cooperatives: An Alternative Institutional Model for Delivery of Urban Water Supply and Sanitation Services? (F. Ruiz-Mier, M. van Ginneken, 2006)

Explanatory Notes on Key Topics in the Regulation of Water and Sanitation Services (E. Groom, J. Halpern, D. Ehrhardt, 2006) Economic Regulation of Urban Water Supply and Sanitation Services: Some Practical Lessons (D. Ehrhardt, E. Groom, J. Halpern, S. O'Connor, 2007)

Consumers Count; A Review of Ways To Improve Water Supply And Sanitation Services By Making Utilities More Accountable To Their Users (M. Muller, R. Simpson, M. van Ginneken, 2008)

Key Topics in Public Water Utility Reforms (M. van Ginneken, B. Kingdom, 2008)

Deterring Corruption and Improving Governance in the Urban Water Supply & Sanitation Sector: A Sourcebook (J. Halpern, C. Kenny, E. Dickson, D. Ehrhardt, C. Oliver, 2008)

Guiding Principles for Successful Reforms of Urban Water Supply and Sanitation Sectors (A. Locussol, M. Fall, 2009)

Public Private Partnerships in Urban Water Utilities – Findings from Developing Countries (P. Marin et al, 2009)

Reforming Urban Water Utilities in Western and Central Africa: Experiences with Public-Private Partnerships (M. Fall, P. Marin, A. Locussol, R. Verspyck, 2009)

# **ANNEX 2: IBNET AND OTHER METRIC INDICATORS**

Template Category	IBNET Category	Indicators	Comments
Access	Service coverage	<ul> <li>Water coverage</li> <li>Water coverage; connections<sup>a</sup></li> <li>Water coverage; public water points</li> <li>Sewerage coverage</li> </ul>	<ul> <li>% of pop. in service area</li> </ul>
	Water consumption and Production	<ul> <li>Water production</li> <li>Water consumption</li> <li>Residential consumption; connected</li> <li>Residential consumption; public WP</li> <li>Other consumption</li> </ul>	<ul> <li>lpcd; m<sup>3</sup>/conn./month</li> <li>lpcd; m<sup>3</sup>/conn./month</li> <li>% of total consumption;</li> <li>lpcd</li> <li>lpcd</li> <li>% of total consumption</li> </ul>
Efficiency	Non-revenue water	• NRW	<ul> <li>% of production;</li> <li>m<sup>3</sup>/km/day;</li> <li>m<sup>3</sup>/conn./day</li> </ul>
	Metering practices	<ul> <li>Metered connections</li> <li>Billing based on metered consumption</li> </ul>	<ul> <li>% of total</li> <li>% of total sales (in m<sup>3</sup>)</li> </ul>
	Piped network per- formance	<ul><li>Pipe breaks</li><li>Sewer system blockage</li></ul>	<ul><li>breaks/km/year</li><li>blockages/km/year</li></ul>
	Cost and staffing	<ul> <li>Operation cost (water and waste water)</li> <li>Operation cost (water only)</li> <li>Operation cost (waste water only)</li> <li>Staffing ratio</li> <li>Staff breakdown</li> <li>Labor costs</li> <li>Energy costs</li> <li>Contracted out services</li> </ul>	<ul> <li>US\$/m<sup>3</sup> sold; US\$/m<sup>3</sup> produced; break- down between W and WW</li> <li>US\$/m<sup>3</sup> sold;</li> <li>US\$/waste water population served</li> <li>by 1,000 W conn.; by 1,000 WW conn.; by 1,000 total W &amp; WW conn.; per 1,000 people served.</li> <li>% water; % waste water</li> <li>% of total operating costs</li> <li>% of total operating costs</li> <li>% of total of operating costs</li> </ul>
Reliability	Quality of service	<ul> <li>Continuity of service</li> <li>Discontinuous water supply</li> <li>Quality of water supplied</li> <li>Complaints about W &amp; WW services</li> </ul>	<ul> <li>hours per day</li> <li>% of total water customers</li> <li>Residual chlorine tests carried out as % or required; % of test that pass standard</li> <li>% of total W &amp; WW conn.</li> </ul>
			(continued on next page)

<sup>&</sup>lt;sup>a</sup> In cases where the number of inactive accounts is important, it figures should be provided for total and active connections.

Template for Assessing the Governance of Public Water Supply and Sanitation Service Providers

continued)			
Template Category	IBNET Category	Indicators	Comments
Financial sustainability	Billings and collec- tions	<ul> <li>Average revenue W &amp; WW</li> <li>Water revenue</li> <li>Waste water revenue</li> <li>Resid. fixed component of water tariff</li> <li>Ratio of industrial to residential tariff</li> <li>Collection period</li> <li>Collection ratio</li> </ul>	<ul> <li>US\$/m<sup>3</sup> water sold; US\$/ water conn./ year; breakdown between W and WW</li> <li>% residential; % industrial/commercial; % institutions</li> <li>US\$/person served</li> <li>% of average bill; breakdown between W &amp; WW</li> <li>Ratio; breakdown between W &amp; WW</li> <li>Days of billing</li> <li>% cash income/billings</li> </ul>
	Financial perfor- mance	<ul><li> Operating cost coverage</li><li> Debt service ratio</li></ul>	<ul> <li>Ratio: operating revenue/operating costs</li> <li>% cash income/debt service</li> </ul>
	Assets	Gross fixed assets	<ul> <li>US\$/ W &amp; WW pop served; breakdown between W and WW</li> </ul>
Environmental sustainability	Quality of service	• Waste water treatment	<ul><li>% at least primary treatment</li><li>% primary treatment only</li><li>% secondary treatment</li></ul>
Affordability	Affordability of services	<ul> <li>Total operating revenue per served pop/GNI per capita</li> <li>Average water bill for 6 m<sup>3</sup>/ month</li> <li>Residential fixed component of tariff</li> </ul>	<ul> <li>%</li> <li>US\$/year</li> <li>US\$/conn/year; breakdown between W and WW; % of total average bill</li> </ul>

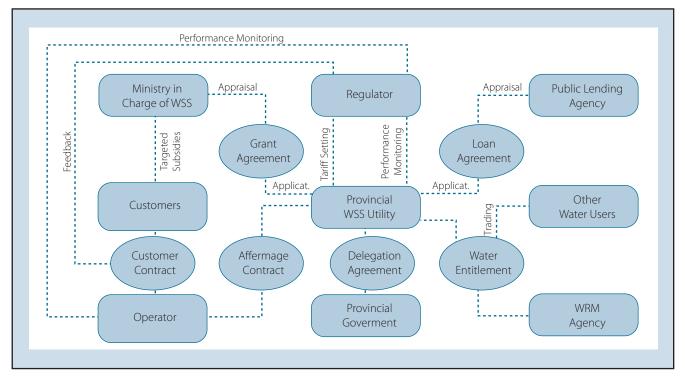
# **ANNEX 3: EXAMPLES OF ACCOUNTABILITY FRAMEWORKS**

Graph 1 and table 1 below describe a fairly unbundled accountability framework of a WSS sector where:

- A central ministry in charge of the urban WSS sector primarily: (i) sets urban WSS policies; (ii) provides grant financing to autonomous WSS utilities to support specific projects, such as pollution abatement; and (iii) directs targeted subsidies to low income residential customers;
- A provincial government, responsible for urban WSS in its territory, delegates the provision of the WSS service to an autonomous public WSS, it is the owner of;
- An autonomous public WSS utility, to be run as a commercial entity, finances its operations from cash generation, grants provided by the central government for specific projects and debt provided by a public financing institution specialized in lending to decentralized

governments (mostly municipalities); this financing institution raises funds mostly from the central government, international financing institutions and local capital markets;

- The public WSS service provider utility sub-contracts the technical and commercial operations of the WSS service to a professional operator within the framework of a medium term *affermage* contract; the customers are under contract with WSS service operator;
- The central government transfers to an independent regulator the responsibility for setting customer tariffs in line with its policies and for monitoring the quality of the WSS service and efficiency of WSS development and operations;
- A separate central government agency, responsible for allocating water entitlements to water users, oversees the trading of water entitlements between water users.

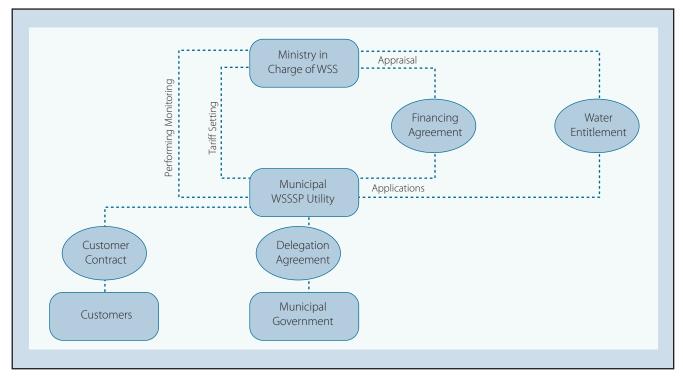


### Graph 1: Example of Highly "Unbundled" Accountability Framework

Actor	Mandates	Contracts	Instruments
Central urban WSS ministry	<ul> <li>Setting urban WSS policies</li> <li>Providing grant financing for specific WSS projects</li> <li>Providing targeted subsidies</li> </ul>		<ul><li> Appraisal of grant financing applications</li><li> Poverty surveys</li></ul>
Provincial government	Overseeing urban WSS service in its territory	Delegation agree- ment (bylaws)	Chairmanship the WSS utility's     BoD
Public WSS utility, mostly acting as developer	<ul> <li>Managing and developing WSS infrastructure</li> <li>Providing WSS service</li> </ul>	<ul> <li>Delegation agreement (bylaws)</li> <li>Affermage contract</li> <li>Financing agreements</li> <li>Water entitlements</li> </ul>	<ul> <li>Asset management plans</li> <li>Demand assessments; infra- structure development plans; financing applications</li> <li>Design, procurement, imple- mentation supervision</li> <li>Audits of operator's activities</li> <li>Consolidated financial state- ments</li> <li>Dispute resolution mechanisms</li> <li>Reporting to regulator</li> </ul>
Professional WSS service operator	<ul> <li>Operating and maintaining WSS assets</li> <li>Meter reading, billing and collection</li> <li>Interacting with customers</li> </ul>	<ul><li><i>Affermage</i> contract</li><li>Customer contracts</li></ul>	<ul> <li>Technical operating manuals</li> <li>Commercial operating manuals</li> <li>Operating financial statements</li> <li>Dispute resolution mechanisms</li> <li>Reporting to utility and regulator</li> </ul>
Customer	Paying for WSS service	Customer contracts	<ul><li>Customer surveys</li><li>Dispute resolution mechanisms</li></ul>
Public lending agency	Providing debt financing for WSS infrastructure projects	Financing agree- ments	<ul> <li>Appraisal of financing applica- tions</li> <li>Supervision of compliance with conditionality</li> </ul>
Regulatory body	<ul> <li>Setting customer tariffs</li> <li>Monitoring WSS operations efficiency</li> <li>Monitoring WSS service quality</li> <li>Applying penalties</li> </ul>		<ul> <li>Customer surveys</li> <li>Economic and financial models</li> <li>Technical audits of reporting by developer and operator</li> </ul>
Water resource agency	<ul> <li>Allocating water entitlements</li> <li>Monitoring water quantity and quality</li> <li>Setting and collecting bulk water tariffs</li> <li>Monitoring trading of water entitlements</li> <li>Applying penalties</li> </ul>	• Water entitlements	<ul> <li>River basin and aquifer models</li> <li>Water abstraction and quality monitoring</li> <li>Economic and financial models</li> <li>Dispute resolution mechanisms</li> </ul>
Water users	Paying for bulk water abstraction	• Water entitlements	<ul><li>Trading of water entitlements</li><li>Dispute resolution mechanisms</li></ul>

### Table 1: Actors, Mandates, Contracts and Instruments of the Unbundled Accountability Framework

Graph 2 on the contrary describes the compact accountability framework of a WSS sector where a central government ministry in charge of WSS at the same time is responsible for: (i) setting policies; (ii) providing financing; and (iii) setting tariffs and monitoring performance of a municipal WSS utility that is both the developer of the WSS infrastructure and the operator of the WSS service.



### Graph 2: Example of "Compact" Accountability Framework

# **ANNEX 4: EXAMPLE OF SUMMARY ASSESSMENT PER TOPIC**

Below is an example of the summary assessment for the functioning of the WSS service provider. Detailed criteria and numerical scoring system for the process benchmarking will be developed in the future. It is recommended that the ratings in Annex 4 are validated through a group discussion, rather than based on the opinion of one asses-

sor. Five similar tables should be developed for the other key topics covered by the assessment: (i) overall policy environment; (ii) development of the WSS infrastructure; (iii) operation of the WSS service; (iv) financing of the WSS infrastructure development; and (v) economic regulation of the WSS service.

	Process Benchmarking					
	Yes	No	Rating		Rating	
Functioning of WSS Service Provider			Good	Fair	Poor	Ref.
Mandate						
Permanent delegation agreement or bylaws						
Short term performance agreement						
Dispute resolution Government/Provider						
Incorporation and Shareholding						
Obligation of ring-fencing						
Obligation of incorporation						
Ownership of shares						
Distribution of dividends						
Board of Directors						
Appointment criteria						
Selection of chairperson						
Frequency of meetings and agenda						
Compensation						
Code of conduct						
Actual capacity to guide management						

#### **Table 2: Example of Summary Assessment**

(continued on next page)

### Table 2: Example of Summary Assessment (continued)

	Process Benchmarking					
	Yes	No	Rating			<b>Main</b> Report
Functioning of WSS Service Provider			Good	Fair	Poor	Ref.
Management Team						
Appointment by BOD						
Competitive recruitment						
Competitive compensation package						
Transparence of selection						
Performance targets in contract						
Interaction with BOD						
Staff						
Management freedom to right size						
Competitive recruitment						
Competitive compensation package						
Transparence of selection						
Existence of trade unions						
Performance evaluation						
Promotion made on merit						
Absenteeism						
Training						
Training budget						
Adequacy of training programs						
Universities						
Traning centers						
Professional associations						

(continued on next page)

### Table 2: Example of Summary Assessment (continued)

		Process Benchmarking				
	Yes	No	Rating			<b>Main</b> Report
Functioning of WSS Service Provider			Good	Fair	Poor	Ref.
Certification process						
Financial Management						
Corporate accounting						
Internal accounting procedures						
Adequacy of						
Staff						
Hardware						
Software						
Existence of ceilings for procurement						
Independent audits						
Capacity to address audit qualifications						
Corporate Culture						
Existence of a mission statement						
Adequacy of internal communication						
Existence of procedures						
Existence of quality control						
Application to ISO certification						
Membership of professional associations						
Reporting						
Obligation to report to regulator						

## **ANNEX 5: EXAMPLE OF SUMMARY GOVERNANCE ASSESSMENT**

# A. Snapshot at the Water Supply and Waste Water Service in Abcdef (2006)

Quality of the service: In 2006, out of the 5 million people living in the city *Abcdef*, 70% were directly connected to the public piped water and 50% to sewers. 15% of the population lived in military and private developments that operate their own water supplies and 15% in informal settlements served by private water vendors. 35% of the population relied on septic tanks, 10% on latrines; 20% had no access to adequate sanitation. Water was distributed on a permanent basis in about half of the city and for an average 12 hours per day in the other half, despite a production capacity of 275 lpcd. Only half of the waste water collected received secondary treatment; the remainder was discharged directly in the *Ghijkl* River.

Performance of the service provider: WSSSP is responsible for piped water and waste water management; the municipality is in charge of on-site sanitation and storm water drainage. In 2006, WSSSP produced 350 million m<sup>3</sup>, billed 60% of it and collected 75% of the bills. Two thirds of accounts receivable, equivalent to 500 days of billing, were with public agencies. WSSP employed 9,000 permanent employees. The outsourcing of billing and collection initiated in 2003 was terminated after 18 months. The average tariff US\$0.60/m<sup>3</sup>, the highest in the country, allowed WSSSP to only recover O&M costs of US\$95 million. Since 2002, WSSSP has been unable to service a debt of US\$25 million/ year and to contribute to its capital expenditure program of about US\$15 million/year, now mostly financed by provincial and municipal grants. WSSSP financial statements have been audited by the provincial auditor since 2000. WSSSP tariff includes many bands and categories, with an industrial tariff six times that that applies to residential consumption below 30m<sup>3</sup>/month; several large industries representing 25% of WSSSP's revenue now envisage to develop their own supplies. The cost of a small residential connection (US\$150) represents 1.5 month of income of households in the first quintile.

Governance of the service provider: WSSSP is a municipal company created in 1999 in application of the Decentralization Act. Its board of directors, chaired by the mayor, includes municipal civil servants and staff representatives. WSSSP managing director is appointed for three years after open competition, a process that has so far failed to attract competent managers from the private sector. Members of the management team are primarily civil servants seconded from the provincial WSS department. WSSSP relies mostly on the expertise of this department for preparing its infrastructure development plans and extension projects and for supervising project implementation. Procurement above US\$100,000 has to be vetted by the provincial tender board. Loans totaling US\$225 million mostly contracted prior to 1999 have hitherto been provided by the public municipal bank with the guarantee of the provincial government. To address inefficiencies of municipal WSS service providers a provincial WSS regulator was created in 2003 n application of the Public Utility Act. WSSSP reports on its performance to the regulator, but tariffs set by the latter are subject to approval of the mayor.

**Performance gaps**: The assessment has detected a series of performance gaps to be addressed:

- WSSSP board of directors does not include representatives of the vibrant local business community and of customers; a more business oriented board should attract good managers.
- WSSSP is over-staffed; many commercial and O&M tasks should be more efficiently carried out if outsourced.
- WSSSP has little grip on its infrastructure development plan; there is evidence that WSSSP does not get best advice from the provincial WSS department for planning, design and implementation.
- WSSSP is not responsible for procuring major works; there is evidence that prices obtained by the provincial WSS department and tender board are 25% higher than that obtained by the private sector.

- Loose conditionality attached to debt and grant financing has resulted in low financial discipline; WSSSP balance sheet should be cleaned up as part of a financial recovery plan; the quality of audits should be improved and qualifications addressed.
- The WSS tariff average level does not need adjustment, because of potential efficiency gains; its structure should be simplified to be more equitable; connection costs need to be reduced.
- Data submitted to the regulator are of poor quality; independent validation is needed.

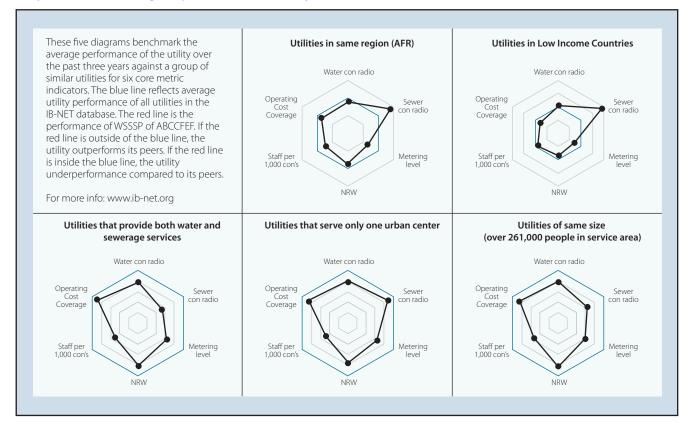
### **B. Selected Metric Indicators**

	Unit	2004	2005	2006
Population is service area	000′	4,500	4,750	5,000
Water connections (active)	000′	300	325	350
Water connection ratio	%	66	68	70
Sewer connections	000′	159	269	271
Sewer connection ratio	%	35	36	34
Average production	lpcd	250	295	275
Metering level	%	40	45	50
NRW	%	39	41	40
Wastewater – at least primary treatment	%	15	15	30
Total staff		8.750	8,750	9,000
Staff per 1,000 connections		17.2	15.8	15.0
Operating Cost Coverage <sup>2</sup>	ratio	0.95:1.0	1.0:1.0	1.05:1.0
Debt service ratio <sup>3</sup>	%	NA	0	20

<sup>1</sup> Total water and sewer connections

<sup>2</sup> Operating revenues divided by cash operating costs

<sup>3</sup> Cash income divided by debt service



#### Graph X: Benchmarking the performance of utility WSSSP of ABCDEF to similar utilities

Graph 3: Accountability Framework of the WSSSP of ABCDEF

