ASSESSING INTEGRITY MANAGEMENT
IN WATER UTILITIES

Umrbek Allakulov¹, Jacopo Gamba², Marcello Basani, Ph.D³, Diana Cáceres⁴, Marcos Mendiburu, Daniela Patiño Piñeros⁵

KEYWORDS
Water, utilities, urban, integrity, corruption, assessment, data, SDG6

ABBREVIATIONS
WIN Water Integrity Network
COSO Committee of Sponsoring Organizations of the Treadway Commission
IDB Inter-American Development Bank
SDG Sustainable Development Goal

ABSTRACT

As climate crisis deepens, access to water and sanitation services will become an increasingly pressing concern for megacities. At the same time, integrity and corruption risks inherent in the sector will result in less resilient, less socially inclusive, and costlier infrastructure, ultimately undermining climate change adaptation initiatives and threatening water security. The consequences of both corruption and the climate crisis are borne by the increasing number of poor and marginalized populations in megacities.

Water utilities are critical anchor institutions for megacities. Ensuring integrity and preventing corruption within utility organizations is key to achieving water security. To assess, prioritize, and address integrity risks in water utilities, the Water Integrity Network (WIN) with assistance from the Inter-American Development Bank (IDB) has developed an integrity assessment framework. The approach is currently being pilot tested in a number of cities.

This paper conceptualizes integrity risks in water utility organizations, describes the integrity assessment methodology, and presents the preliminary results from two pilot test applications of the assessment tool.

1 Water Integrity Network (WIN)
2 Inter-American Development Bank (IDB)
3 Inter-American Development Bank (IDB)
4 Water Integrity Network (WIN)
5 Water Integrity Network (WIN)
1 INTRODUCTION

1.1 Integrity risks in urban water and sanitation during climate change

Urban water utilities are responsible for planning (in the case of public utilities), developing, and maintaining a host of services in cities, including drinking water supply, sanitation and wastewater services. Urban water utilities therefore play a vital role in the achievement of the Sustainable Development Goal (SDG) 6 on water and sanitation and SDG 11 on sustainable cities and communities. Water utilities simultaneously grapple with a host of challenges, including meeting rising demands for water supply, reducing their carbon footprint and adapting to climate change, expanding services to unserved and underserved areas, maintaining the affordability of water services, protecting the health of water bodies and waterways, etc. All these challenges require utility organizations to be innovative, resilient, efficient, and effective. However, integrity failures and corruption risks can significantly undermine utility organizations’ performance in many respects.

A variety of corruption risks is prevalent at every point along the water and sanitation service delivery chain (Trapnell, Jenkins and Chêne, 2017, p52). Urban water utilities are especially vulnerable to such risks as they operate as natural monopolies, implement technically complex projects with high initial capital and maintenance costs, employ large teams of people, and are accountable to multiple stakeholders in a sector which is notoriously fragmented. These factors make it difficult for outside actors and civil society to meaningfully participate in decision-making, provide oversight and ensure accountability (Transparency International, 2008). When the risks materialize, corruption can result in substantial financial losses, poor quality infrastructure, reduced quality and availability of services. Ultimately, corruption in water and sanitation service delivery undermines affordable access to services, which disproportionately affects the poor and marginalized (Jenkins, 2017).

In addition, increasing investments in the sector aimed at building resilience to climate change further amplify corruption risks. The water sector is among the sectors that are most frequently identified as “key priority sectors” for climate adaptation in nationally determined contributions (Micale, et al, 2018). Consequently, a substantial portion of climate funds will be channeled through the water and sanitation sector. In 2018, multilateral development banks alone spent USD 4.7 billion or 10.8% of their total climate portfolio on water and wastewater systems (GIZ, 2019). Climate finance originates from a variety of sources, including local, national bilateral and multilateral, as well as other alternative sources. Some of these are untested funding channels, most employ highly technical solutions and bring in new stakeholders for the sector. These conditions and the large investments involved, heighten risks for corruption in the sector (UNDP, 2015).

1.2 Integrity as a driver of utility performance

There is ample evidence which suggests that there is a virtual cycle between integrity and various aspects of organizational performance. A study based on data from US-based firms finds that “high levels of perceived integrity are positively correlated with good outcomes in terms of higher productivity, profitability, better industrial relations, and higher level of attractiveness to prospective job applicants” (Guiso, Sapienza and Zingales, 2015). Similarly, organizational virtues, such as integrity, ethics, and honesty, are found to be strongly and positively associated with employee satisfaction, engagement, and compliance (Chun, 2016, Gartner, Inc, 2019). Furthermore, organizations with strong integrity culture and integrity management practices are likely to incur less costs due to corruption and fraud. Companies with effective anti-corruption controls combined with clearly communicated ethical guidelines report up to 50% fewer incidents of corruption than others (PricewaterhouseCoopers, 2007).
Evidence in terms of the costs and benefits of integrity as it specifically relates to water utility organizations is rather sparse. Some existing studies lend support to the theory of a vicious cycle of corruption, whereas others reaffirm the virtuous cycle between integrity and performance. For example, Jha (2005) concludes that poor performance observed in the examined water utilities in the Caribbean "is wholly due to institutional problems" and integrity violations such as abuse of political discretion in major decisions, theft, under-billing, etc. In contrast, a qualitative study involving four utility organizations in Latin American countries finds that utility organizations with more advanced transparency measures (including disclosure of information, corruption risk assessments, stakeholder engagement) as well as with better corporate governance structures (including clear policies, decision-making processes, and commitment to integrity from top management) are comparatively more efficient than organizations with less transparent practices in similar contexts (Barreto-Dillon, L. et al, 2018). Similarly, Andrés, Schwartz and Guasch (2013) conclude that integrity control measures, such as accountability systems to prevent discrentional management and greater transparency in communication, are among the key determinants of sector performance in three infrastructure services: electricity, water and sanitation, and fixed telecommunications.

All in all, there is an emerging consensus in existing literature which suggests that proactive management of integrity and corruption risks can help utility organizations prevent leakage of financial resources, improve trust and creditworthiness, boost employee morale and motivation, and ultimately improve their overall performance.

1.3 Integrity assessment tool for water utilities

The integrity assessment tool presented in the next sections of the paper emerged from experiences with implementing the Integrity Management Toolbox approach. The Integrity Management Toolbox refers to an adaptable set of resources and workshop methodologies to support integrity management in water sector organizations. Since 2012, WIN, cewas, Caritas Switzerland, SIWI, and GIZ have been developing and implementing Integrity Management Toolboxes, predominantly with water and sanitation service providers. Usage of Integrity Management Toolboxes in various countries brought to light a lack of data and quantitative evidence on the strengths and weaknesses of integrity management approaches of water utility organizations.

Existing benchmarking and assessment tools tend to focus heavily on financial and operational performance indicators. Often they offer limited insight on integrity risks and countermeasures in place. To ensure an effective integrity management approach, water utilities require a robust integrity assessment methodology that 1) is tailored to the specificities of the organizations, 2) is capable of systematically assessing integrity management practices, and 3) offers actionable insights.

To respond to the identified need, WIN and the IDB launched a joint initiative to develop an innovative integrity assessment tool for water utilities. The main objective of the new assessment tool is to help assess the preparedness levels of water utilities to prevent integrity and corruption risks from materializing in their organization. Ultimately, the assessment results are expected to support utility organizations in improving their performance by implementing evidence-based integrity practices.

1.4 The paper structure

This paper is organized as follows. First, the methodology behind the integrity assessment tool is described in detail. Next, the preliminary results from the application of the assessment tool by two service providers in Mexico are presented. The final sections of the paper discuss the lessons learned...
during the pilot tests and elaborate on the potential benefits of the assessment tool for utility organizations in megacities.

2 METHODS

2.1 Structure of the integrity assessment tool

The integrity assessment tool for water utilities consists of three main components: principles, indicators, and components. The full content of the assessment tool is presented in the Annex.

2.1.1. Principles

The main building blocks of the integrity assessment tool are the five principles of integrity management, which draw on the five Fraud Risk Management Principles established by Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the 2016 Fraud Risk Management Guide. The integrity principles aim to assist utility organizations in creating an integrity management approach to protect themselves and their stakeholders from various forms of integrity and corruption risks. For the integrity management approach of an organization to be effective, each of the five principles need to be present and functioning. In addition, the five principles need to operate together in an integrated manner.

The principles are assessed on a 0 to 100% scale, determined by the scores of a set of indicators for each principle. The five principles assessed in the integrity assessment tool are:

1) Control environment
The utility organization clearly communicates the expectations of the board of directors and senior management and their commitment to high integrity and ethical values regarding managing integrity and corruption risks. The indicators under this principle assess the fitness for purpose of the organization’s anti-corruption policy and code of conduct (or similar documents) and capture the degree to which the described practices are adhered to.

2) Risk assessment
The utility organization has adequate capacity in place to detect corruption and regularly conducts comprehensive corruption risk assessments. The indicators under this principle evaluate the capacity of the organization to detect, analyze, and prioritize likely integrity and corruption risks. In addition, the indicators closely examine the content and regularity of the risk assessments.

3) Integrity controls
The utility organization implements corruption and integrity control activities to reduce the risk of corruption events occurring and increase the probability of detection if malpractices occur. The indicators under this principle review the comprehensiveness of the controls implemented in the utility organization and verify the degree to which the controls are functional.

4) Corrective action
The utility organization takes a coordinated approach to investigation and corrective action to address integrity and corruption-related malpractices appropriately and in a timely manner. Under this principle, the indicators evaluate the ability of the organization to institute disciplinary action, sanctions, and other appropriate corrective measures in response to corruption perpetrated by both employees and external stakeholders.
5) Monitoring

The utility organization performs ongoing evaluations to ascertain whether each of the first four principles of integrity risk management is present and functioning, and ensures that appropriate action is taken in response to external audit and monitoring findings. The indicators under this principle assess the appropriateness and functionality of internal monitoring mechanisms as well as the responsiveness of the organization to external accountability mechanisms.

2.1.2. Indicators

Each principle is broken down into a number of indicators, which are themselves broken down into components. The indicators are assessed on a 0 to 100% scale, determined by the scores of their respective components. In total, an initial set of 16 indicators are distributed across the five principles. The indicators represent minimum standards of integrity management processes and practices required to ensure a comprehensive integrity management approach in utility organizations.

The final set of indicators employed in the methodology draw on internal control and integrity management practices documented across different sectors. They were improved with feedback from utility organizations and WIN partner organizations and peer-reviewed by water sector and governance experts. Depending on the circumstances of the utility organization, the principles can be assessed more in-depth using additional indicators.

2.1.3 Components

To aid the assessment of the indicators, each is composed of several components. During data collection, components take binary values: 1 if the component of an integrity process or practice is in place and 0 otherwise. Data verification is performed at the component level. If it is determined that a component is functional, then the component retains its score of 1. Otherwise, the component score is downgraded to 0.

2.2 Assessment process

Figure 1 provides an overview of the four phases of the assessment process. In the pilot tests of the assessment, due to travel restrictions caused by the COVID-19 pandemic, all phases of the assessment were conducted online.
Figure 1. Pilot test phases

In phase 1, the facilitators of the assessment provide an introduction to the utility organization on the assessment tool objectives and methodology, as well as the assessment process. The utility organization appoint a team member to engage and support the facilitator in collecting the necessary data. In phase 2, the facilitators verify the obtained data by reviewing supporting documents as well as by conducting interviews with different members of the utility team. Phase 3 involves validation workshops, where the results of the assessment are presented to the utility organization. During the validation workshops, the utility organizations present action plans to address gaps identified in the assessment. Phase 4 entails reporting on the results of the assessment and following-up on the action points emerging from phase 3.

3 RESULTS

Currently, the integrity assessment tool is being pilot tested in four water utilities in the Latin American region. The sections in this chapter show the results from the pilot test application involving two water utilities in Mexico. To protect the confidentiality of the participating utilities, the results are presented in an anonymized form.

3.1 Utility profiles

Utility A is a publicly owned and operated utility in Mexico and provides water and sanitation services in both urban and rural areas. Utility A serves a population between 1,000,000 and 5,000,000 people. It employs between 1000 and 2000 employees.

Utility B is a publicly owned and operated utility in Mexico and provides water and sanitation services in urban areas. Utility B serves between 500,000 and 1,000,000 people. It employs fewer than 1000 employees.
3.2 Assessment results

The results obtained from the pilot test application of the integrity assessment tool are illustrated in radar charts in Figure 1 and Figure 2. As evident from the figures, utility A scores higher than utility B across all principles, with the exception of Principle 4 on which both organizations achieved 70%. Utility A achieved an average score of 61% (the scores of individual principles are equally weighted) as opposed to the average score of 44% of utility B.

The assessment results and charts are intended to help the utility organizations identify major areas for improvement. In addition, the scores of the individual indicators are presented to the utility to zero in on specific integrity processes and practices that may require attention. The indicator scores are presented in a traffic light scale to visually guide management attention to specific areas.

Figure 2. Results of integrity assessment, utility A
3.3 Data Verification

Phase 2 of the assessment process entails the verification of data feeding into the indicator scores. This exercise helps to distinguish between integrity processes and practices that exist on paper (de jure) and the ones that are actually implemented (de facto) in the utility organizations.

Data verification was carried out in two ways for the pilot tests. A review of supporting documents was conducted to determine whether selected integrity management processes were documented, and where possible, to establish whether the processes were implemented in practice. In addition, interviews with key utility personnel were conducted to fill any remaining evidence gaps.

Supporting documentation used in the verification phase included a range of documents and records, including manuals, progress or annual reports, statistics on various aspects of the organizations, records of customer complaints, etc. A majority of the reviewed documents were internal documents. Reports to external bodies were reviewed to verify particular indicators (e.g. complaints against civil servants).

The following common lessons were learned from the data verification exercise in the two utility organizations:

- The majority of the integrity management processes and practices assessed are mandated in the laws and regulations, or exist in by-laws of the utility organizations. However, some of the processes and practices are not implemented, while the implementation of others is not well documented.
• Some of the identified gaps in terms of the lack of documentation raised awareness about the importance of keeping records and disclosing information in a timely and accessible manner.

• Some of the supporting documents are already disclosed publicly, often in response to existing legislation such as access to information laws. However, the participating organizations can greatly enhance their transparency by proactively disclosing integrity-related information beyond the legal requirements.

• Internal control and internal audit departments and committees possess most of the required documents for verification and are key to the assessment process.

3.4 Validation of the results

In phase 3 of the assessment process, validation workshops were conducted with the participating utilities. A key aspect of integrity management in an organization is to ensure active participation and input from all functions of the organization in assessing and addressing integrity risks. In utility A, there is an internal control and performance committee composed of managers and supported by an internal control liaison officer in each administrative unit. However, such a structure is not present in utility B, which can undermine its ability to effectively and comprehensively address integrity risks in the organization. The validation workshops played an important role in stimulating dialogue between different departments of the utility to ensure the five integrity principles are addressed in an integrated manner.

The validation workshops helped generate a sense of ownership of the assessment results across the organization. All shortcomings identified in the assessment were found to be valid. The participating managers from different departments jointly formulated and agreed on future actions to address the identified gaps in their integrity management approaches. Utility A committed to the following action points: 1) finalize and approve its code of conduct; 2) develop an articulated integrity policy through a written document - which is actually recommended by the state legal framework; 3) incorporate integrity and anti-corruption provisions (such as conflict of interest issues) in tenders; 4) increase the efforts concerning advertising of job vacancies. In the case of utility B, the following actions were agreed upon: 1) adopt a code of conduct; 2) develop and adopt an integrated integrity policy or strategy; and 3) explore assessing integrity-related risks.

The participating utilities provided feedback and recommendations with regards to future improvement of the integrity assessment tool. In general, no major shortcomings in terms of the methodology were reported. Both utilities reported having gained better awareness and significant insight on their integrity management approaches. Thus, the results of the initial pilot tests suggest the tool methodology is comprehensive and offers useful evidence for action.

3.5 Implications for megacities

One of the major problems that utilities in megacities grapple with is the lack of investment funds for expanding and maintaining water infrastructures (Varis et al., 2006). As public investments in the water and sanitation sector are not sufficient to achieve SDG 6, utilities need to enhance and prove their creditworthiness to attract market-based financing. Corruption risks are among the key reasons why commercial banks perceive the water sector as a high risk sector (OECD, 2010). Proactively assessing organizational capacity to prevent integrity and corruption risks, addressing identified gaps in the assessment, and communicating about the organization’s integrity management approach to investors can help water utilities improve their creditworthiness and attract investments on more favorable terms.
Another major challenge that is particularly relevant to water utilities in megacities is the provision of water and sanitation services to the growing number of slum dwellers. Integrity failures and corruption are among both the causes as well as consequences of the lack of access to water and sanitation services in slums. On the one hand, private vendors, cartels or even water mafias have been known to collude with public water officials to profit from service disruptions (Transparency International, 2008). On the other hand, the lack of formal services forces slum dwellers to rely on informal private operators, who use their monopoly power to charge fees several times more per unit of water than in the higher-income areas of the same cities. For example, in some seasons households in the slums of Mumbai spend an average of 52 to 206 times more than the standard municipal charge per 1000 liters for water (Subbaraman et al., 2013). Slum dwellers also often experience bribery (Haider, 2016) and sextortion to access services (Namachanja, 2017). As integrity and corruption risks are prevalent, and possibly heightened, in service delivery to slum dwellers, it is imperative that utilities in megacities assess their organizational capacity to prevent and address these risks.

In general, when properly implemented, the integrity processes and practices reviewed in the assessment tool can help prevent various integrity failures and mitigate corruption risks in water and sanitation service delivery in megacities. In the meantime, further research is required to better understand the complexities and idiosyncrasies of integrity management in water and sanitation service delivery in megacities, and to effectively incorporate them in the integrity assessment tool.

Conclusions

Water utilities can improve their performance by implementing evidence-based integrity management practices and processes. The integrity assessment tool for water utilities, presented in this paper, is designed to help assess the comprehensiveness and effectiveness of the integrity management approach of utility organizations.

The tool has been pilot tested with two utility organizations, which differ significantly in terms of their size, corporate governance arrangements, resource endowment, among others. The results of the pilot tests demonstrate that, despite these differences in the organizations, the assessment tool enabled the identification of the strengths and shortcomings in their integrity management practices and processes. The data and evidence generated during the two pilot assessments were found to be useful in formulating strategies and actions to improve integrity management in the participating organizations.

The tool is suitable for self-evaluation purposes by utility organizations and can facilitate internal dialog between different parts of the organization to address integrity management in an integrated manner. It can also be used to support external accountability through independent verification of the data and results. The integrity assessment tool for water utilities can therefore be a valuable resource for water utilities, regulators, and other relevant stakeholders seeking to improve utility performance through evidence-based integrity management.
References


GIZ (2019). Water Integrity as an Opportunity - The Relationship between Climate Change Finance and the Water Sector. [online] Available at: https://www.waterintegritynetwork.net/?docs=15870.


### Annex – Integrity Assessment Tool for Water Utilities

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<th>Principle</th>
<th>Code</th>
<th>Indicator</th>
<th>Components</th>
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|                                  |       | IRM1.1: Executive leadership proactively communicates its integrity standards and anti-corruption policy | The utility has an approved anti-corruption policy (or similar) in place  
The utility has an established practice of regularly (at least once a year) communicating its anti-corruption policy to contractors and suppliers  
The utility has an established practice of regularly (at least once a year) communicating its anti-corruption policy to its staff  
The utility has an established practice of regularly (at least once a year) communicating its anti-corruption policy to customers  
The code of conduct (or a similar document) contains all of the following elements: an ethical decision framework for decision making, generic examples of what constitute acceptable and unacceptable behaviour, guidelines to report problems anonymously, accountability and disciplinary policies for unethical behaviour, a listing of ethics and compliance resources.  
The code of conduct was reviewed within 3 calendar years preceding the assessment date  
The code of conduct was revised after the most recent changes to workplace profile, including restructuring, relocation, changes in key roles or decision making processes  
The code of conduct was revised after the most recent changes in the external environment, including sector reform, new relevant legislation, government strategy, business practices of contractors  
The code of conduct training is routinely given to new employees as part of their induction program  
|                                  |       | IRM1.2: The utility implements an up-to-date code of conduct                |                                                                                                                                                                                                                                                                                                                                 |

1. Control environment
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<th>Indicator</th>
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<tr>
<td>2. Risk assessment</td>
<td>IRM2.1</td>
<td>Roles and responsibilities in relation to corruption prevention are clearly defined</td>
<td>receive complaints, investigate allegations, institute and complete disciplinary action for cases of corruption, refer allegations of corruption to a relevant law enforcement agency or other appropriate agencies/bodies</td>
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<td></td>
<td>IRM2.2</td>
<td>The utility conducts comprehensive corruption risk assessments</td>
<td>Corruption risk assessment covers all of the following risk areas: fraud, corruption, conflicts of interest, gifts, purchasing and tendering, staff hiring, reporting corruption and unethical behavior, discrimination, harassment, sextortion, use of official resources, theft of utility property, irregular procurement, nepotism, bullying of employees, bribery, misleading stakeholders, leaking of confidential information, substance abuse</td>
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<td>At least one corruption risk assessment was conducted within the 3 years preceding the assessment</td>
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<td>Corruption risk assessment was conducted after the most recent changes to workplace profile, including any reorganization, relocation, changes in key roles or decision making processes</td>
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<td>Corruption risk assessment was conducted after the most recent changes in the external environment, including sector reform, new relevant legislation, government strategy, business practices of contractors</td>
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<td><strong>3. Integrity controls</strong></td>
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<td>IRM3.1</td>
<td>The utility implements a conflicts of interest policy</td>
<td>There is a mechanism for board members and employees to self-disclose to the organization any potential or actual conflicts of interest. The agenda of the board of directors includes a standing item on declaration of interests to enable attendees to identify any conflicts of interest relating specifically to the agenda items being considered. There is a mechanism for contractor to self-disclose to the organization any potential or actual conflicts of interest. There is a gift policy which states whether employees are allowed to accept gifts and defines the acceptable value and type of gift permissible to employees.</td>
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<td></td>
<td>IRM3.2</td>
<td>The utility implements a whistleblowing policy</td>
<td>A whistleblowing policy exists which clearly spells out the protection offered to employees against discrimination, dismissal or other forms of retribution for reporting misconduct and cooperating with an audit or investigation. The whistleblowing policy enables anonymous and non-traceable reporting. Whistleblowers are offered incentives for reporting violations.</td>
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<td></td>
<td>IRM3.3</td>
<td>Recruitment and selection policy and procedures are merit based</td>
<td>Positions are advertised in public and social media. All positions have a clear job description and statement of the minimum competencies. There is an objective and transparent shortlisting and interview process that facilitates a fair assessment of each applicant irrespective of gender, race, ethnicity, religion and disability. The outcome of the recruitment process is publicly announced. There is a process for objections relating to recruitment.</td>
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<td></td>
<td>IRM3.4</td>
<td>The utility implements procurement controls</td>
<td>The following tasks are apportioned between different departments or individuals: procurement requisition, requisition approval, purchase order issuance, receiving (inspecting good or services), payment disbursement. Utility performs background checks and integrity due diligence of the suppliers. Pre-bid solicitation documents are reviewed for any restrictions on competition.</td>
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</table>
| IRM3.5 | The utility implements comprehensive disclosure measures | Contracts are awarded based on predetermined criteria  
Policies prohibit the acceptance of personal gifts or gratuities from vendors, subcontractors, and contractors  
Purchases are reviewed to detect out-of-line costs and excessive amounts  
The utility discloses key financial information (minimum checklist: revenue, profit, cash flow from operating activities, gross investment, return on equity, equity/asset ratio, dividends, audit reports, tariff structure)  
The utility discloses key non-financial information (minimum checklist: background information about the board members and senior managers, voting structures, relationships with stakeholders and public, organizational structure, risk management procedures, redress mechanisms, service level standards)  
Both key financial and non-financial information are available in a searchable format on the company website |
| --- | --- | --- |
| IRM3.6 | The utility implements user feedback and participation measures | The utility implements a public participation policy, which requires direct annual meetings with each customer segment defined by stakeholder group (including gender, socioeconomic status, geography, ethnicity and language) and assigns staff responsibilities for recording, reviewing, and responding to citizen feedback  
The utility has a functioning complaints mechanism, which assigns staff responsibilities for recording complaints, reporting complaints to the appropriate managers, resolving complaints, and responding to users |
| IRM3.7 | The utility implements management and financial controls | There is an approved annual budget and all expense accounts are reviewed and analyzed using comparisons with budgeted amounts  
Reconciliation of accounts is carried out at regular intervals, such as monthly or quarterly (minimum checklist: reconciliation of accounts receivable, accounts payable, bank statements, and payroll registers to the general ledger control accounts)  
The employee payroll list reviewed periodically for duplicates and ghost employees |
The utility conducts random, unannounced audits of inventory, cash, expense, purchasing, billing, and other accounts by internal or external auditors.

The utility implements a non-revenue water reduction program, which includes all of the following components: water balance analysis, leak detection, repair and maintenance, performance incentives, field audits, commercial audits.

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<tr>
<td>4. Corrective action</td>
<td>IRM4.1</td>
<td>Disciplinary actions are taken against staff who commit integrity violations</td>
<td>The utility has a written policy to guide managers and to better ensure consistency in disciplinary action against integrity malpractices and misconduct</td>
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<td>Records of all allegations of malpractice or corruption, as well as any resulting disciplinary action are held centrally (such as with Human Resources)</td>
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<td>Disciplinary action and outcomes are publicised after an investigation and once action has been taken, to make staff aware of the consequences of corrupt behaviour</td>
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<td></td>
<td>IRM4.2</td>
<td>External organizations and individuals are sanctioned for non-compliance with organization's anti-corruption rules</td>
<td>Evidence shows that both management and non-management staff have been subject to disciplinary action in 3 years preceding the assessment</td>
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<td>The utility has a written and approved sanctions policy</td>
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<td>Records of sanctions, a black and/or white list of contractors are held centrally and accessible to conduct background checks on bidders</td>
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Sanctioned organizations are required to implement comprehensive corrective measures to enable them to resume relationship with the utility and accept a cooling off period of ineligibility to undertake work for the utility.

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<tr>
<td>5. Monitoring</td>
<td>IRM5.1</td>
<td>The utility continuously monitors integrity risks</td>
<td>Internal audit regularly reports on integrity risks to the board of directors. The board of directors monitors the risk of management override and fraud.</td>
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<td></td>
<td>IRM5.2</td>
<td>The utility performs ongoing evaluations to ascertain whether the integrity risk management is functioning effectively</td>
<td>Board provides oversight of integrity risks by regularly reviewing and assessing the organization's integrity risk management programs and relevant departments. An independent auditor assesses the utility's implementation of integrity risk management.</td>
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<td></td>
<td>IRM5.3</td>
<td>The utility is responsive to external monitoring and accountability mechanisms</td>
<td>Based on the findings from external audit, the utility implements an action plan, which includes target dates for completing the actions. The utility implements a detailed action plan to comply with standards and directives set by the relevant regulatory body for water and sanitation services.</td>
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1 The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a joint initiative of five US-based professional associations and is dedicated to providing thought leadership through the development of frameworks and guidance on enterprise risk management, internal control and fraud deterrence.