**Cost-Plus Distribution Improvement Contract**

**Terms of Reference: Explanatory Note**

This TOR is one of four designed to produce innovative types of NRW Reduction Contracts. The TORs are designed to be used as part of an NRW-reduction project being implemented in accordance with the NRW Manual.[[1]](#footnote-2) It is assumed that the consultant will be engaged after completion of an Initial Assessment, and if needed, a Field Assessment (see Section 5 of the Manual). That assessment will have gathered information on the Water Balance, assessed whether NRW control is needed, whether a contract-based approach is appropriate, and what the goal of the contract should be.

Various types of contracts could be developed. Four are listed in Appendix B of the Manual and are described briefly below. Terms of Reference for development of each type of contract have been developed.

1. **DBOM (Physical Loss Reduction) Contract**—these contracts are focused on reducing physical losses. They provide high levels of incentive and risk transfer by making the contractor responsible for all costs, with payment dependent on the volume of loss reduction achieved. They also require construction of DMAs and other physical infrastructure. They can be considered the NRW-reduction equivalent of a Design-Build-Operate-Maintain contract for water production and treatment. This contract type has several variants. The differences between the variants mostly concern the degree of risk transfer to the contractor, and the specificity with which network rehabilitation and remodeling requirements.
2. **24/7 Self-Optimizing Contract (SO24/7)**—this innovative model provides the contractor with incentives based on the value to the utility of key outputs—including customers moved to 24/7 supply, and revenue collected—as well as inputs, such as bulk water used. This design provides for considerable flexibility, and reduces the amount of upfront engineering work required in contract preparation. So long as the utility is able to value the outputs it wants to achieve, the design of the works adapted by the contractor as it gains more information.
3. **Cost-Plus (for use in Competitive Discovery) Distribution Improvement Contract—**this contract type simply pays the contractor for work done on NRW-reduction at actual cost plus a margin. Actual costs are disclosed though an agreed ‘open book’ process that allows the utility to see the costs the contractor incurred. The ‘plus’ component would be a standard profit element on top of costs, typically less than 10 percent. Modest incentive payments for improvement in specified key performance indicators can also be included. The cost-plus contract is quick to implement, but typically does not maximize good value for money.
4. **NRW-Reduction Incentivized Program Management Contract**—Program management contracts separate the ‘brains’ of the operation (planning interventions such as DMAs and action leak control) from the ‘brawn’ of implementing the works. A program management contract is a professional services contract, in which the utility is paying for a team of experts to design, procure, and supervise NRW-reduction works. Actual implementation is done by third-party works contractors. The program manager is paid a program management fee—typically around 10 percent of the value of the works—and is also incentivized with performance pay for improvements on specified key performance indicators.

Situations and Reasons to use the Cost-Plus Distribution Improvement Contract TOR

These TOR should be used is for engaging a consultant to develop the contract type known as a ‘Cost-Plus Distribution Improvement Contract’. This contract would be selected in conditions where it is desirable to bring in a specialized firm to design and implement works to improve the performance of a utility’s distribution system, but because of time constraints, lack of information, or risk, it is not possible or desirable to make the contractor take any significant risk on the costs of results of the program.

Cost-plus contracts should generally not be used for large or long term distribution improvement contracts, since they do not provide significant incentives for efficiency. However, they may be desirable in the following situations:

1. **Competitive Discovery Strategy**. A competitive discovery strategy refers to an NRW-PBC contract design and procurement approach in which cost-plus contracts are used first in, say, three pilot zones. A separate firm is contracted for each zone. Each firm is asked do its best to improve the network’s performance on specified parameters (such as physical loss reduction, commercial loss reduction, or increase in hours of supply). Each firm must report its costs and its results. Having three firms do this enables the utility to learn the costs of achieving the desired performance improvements. It also delivers quick results early in the program. The utility uses the information on costs to design a more highly incentivized NRW-PBC to use in rolling out the distribution improvements to the rest of its network. This strategy is described in the Manual, Appendix B, Section B.6.
2. **Emergency Improvements**. There may be emergencies in which reduction in physical losses will be the best way to end a severe water shortage, but in which there is no time to develop the baselines and costs estimates needed for a highly incentivized contract. A cost-plus contract can allow the needed water savings to be delivered quickly in such circumstances.
3. **High Risk Environments**. In some situations, institutional, political or civil disturbance risks are so high that contractors will not take any risk on results. In fragile or conflict-affected states, for example, contractors may not believe that results will be under their control, or may not trust that the systems used to measure results will work with integrity. A cost-plus contract may be the only option for bringing in specialized firms to take charge of NRW reduction and network improvement in these circumstances.

## Cost-plus Approach

The essential elements of the cost-plus contract are as follows:

* **KPIs reporting**. Key performance indicators (KPIs) are specified. These may be hours of service, or physical losses, or total losses, or cash collected, as examples. The client or contractor needs to institute a way to measure changes in these KPIs. However, no targets for the KPIs are set—rather, the goal is to make as much of an improvement as possible within the time and budget.
* **Budget**. The client will set a not-to-exceed budget for the contract
* **Cost-plus payment**. The contractor will report to the client the actual costs of the works and services provided, and be paid these costs plus a margin.
* **Open-book**. The contractor must provide detailed report of the work done, the costs incurred, and the results achieved. This is not just to justify the charges, but to ensure that the client gains information on the costs of various approaches to improving the distribution KPIs.

## Process for Using This TOR

This TOR is designed to be used by a TTL at Phase 6 of the Manual. It covers the work of both Phase 6 and Phase 7.

**Cost-Plus Distribution Improvement Contract**

**Terms of Reference DRAFT**

**Project/Assignment Title: Country Support: Preparation of ‘Cost-Plus Distribution Improvement Contract’ for [utility/town]**

**Task Team Leader: <XXXX>**

**Manager: <XXXX>**

**Department/Division: GWADR (Water Global Practice)**

**Location: Washington DC**

**Appointment Type: Firm**

**Date of Assignment: <XXXX>**

**International Recruitment: x yes 🞏 no**

**A. Background and Objectives**

**Country, Municipality, Utility**

*[In this section a description on country, municipality and utility background should be described by the TTL.]*

**Objective of this Assignment**

The objective of this assignment is to develop an NRW Reduction Contract of the type that the Manual[[2]](#footnote-3) describes as a Cost-plus Contract.

The aim of this contract will be to engage a specialized firm, on contract, to design and implement a distribution network improvement program that, by controlling losses, has the effect of improving the performance of the distribution system on specified dimensions, and reporting to the utility he costs of those improvements.

**Previous work**

This assignment builds on work already done to investigate the suitability of a contract for NRW reduction as a way to achieve the goals of the utility. In particular, *[describe here the findings of the Initial Assessment and (if one was done) the Field Assessment. These reports will be provided to the shortlisted consultants. Describe any other preparatory work done]*

**Related work**

*[If the NRW PBC is part of a larger investment or reform project, describe here the other components of the project. Mention useful reports and other documents, and say that they will be made available to the shortlisted consultants.]*

**Supported by a Global Program**

This project supported by a World Bank Program designed to catalyze better Performance Based Contracts (PBCs) for NRW Management. Better practices are identified in the short term as faster and more cost-effective preparation of PBC transactions and increased number of market participants (suppliers and seekers) active in the market, and in the medium-to-long term by improved efficiency of NRW-Reduction Programs supported by donors (including better value-for-money of PBC activities in NRW management and better sustainability of NRW performance improvements in participating utilities after a PBC has been completed. [For more information on the global program, go to insert reference to website or resource link if applicable]

**Relationship to NRW-reduction Contracts**

The contract designed under this TOR may be focused on reducing total NRW, or one component of NRW. Alternatively, the performance sought may be increasing hours of supply by reducing NRW per hour of pressurization of the network, and thus allowing longer hours of supply for any given distribution input volume.

# B. SCOPE OF WORK

# Phase 1: Confirm Situation and Approach

The idea here is to record all relevant information in one place and ensure it is all agreed. Only limited research should be required. Phase 1 is expected to take about one week.

The consultant should review the work done in the Assessment phase, and discuss with the client and the Bank to ensure that there is consensus on the objectives of the contract, and the current situation. These should include:

* **Stakeholders**. Listing the key stakeholders in the project, and consulting with all of them.
* **Reason for using cost**-**plus contract**. Documenting the reasons that a cost-plus contract is desired, and how it fits into an overall strategy for improving utility performance.
* **Objectives of the contract**. Documenting what the contract is intended to achieve, in terms of performance improvement and information revelation, as well as any other objectives.
* **Information availability**.Documenting what is known about the water balance, service levels, network configuration and management. Estimating the degree of accuracy with which with information is known, and highlight major gaps or possible biases in the estimates. Document extent to which systems exist to measure changes in Key Performance Indicators which might be suitable for inclusion in the contract.
* **Budget**. Determine how much the client can spend on works and services provided under the contract.
* **Client capacity**. Assess and describe the extent to which the client will be able to monitor and verify the consultant’s work, its cost reports, and its improvements in performance.

**Output:** An Existing Situation Report summarizing the points above.

**Competitive Discovery Approach**

If the cost-plus contract is to be used in a competitive discovery strategy, the consultant will need to advise the client, and help the client to decide on the overall competitive discovery strategy. This would include matters such as:

* **The number of contractors to be engaged**. This will involve consideration of a trade-off between more information revelation and greater competition in a second stage that will flow from having more contractors, versus the cost and complexity of managing more contractors. It may be that having three contractors strikes the right balance in many cases, but this needs to be considered in each situation.
* **The extent and duration of the competitive discovery phase**. If the cost-plus contracts cover a relatively large part of the network, and are of relatively long duration, then the more work can be done quickly, and more information revealed. On the other hand, the more extensive and longer the cost-plus contracts are, the less will be done under the (presumably more efficient) highly-incentivized contract that will follow in the second phase. It may be that having three contracts each for 5% to 10% of the total network, and each lasting two years, with the preparation of the incentivized contracts starting after one year, might strike the right balance, but this must be assessed in each situation.
* **Mechanisms for moving the second stage**. This will involve ensuring that the client has the systems, skills and assistance in place to gather and process the relevant information from the cost-plus contractors, and to design and procure the incentive contract in good time for the second stage.

**Output:** A Competitive Discovery Strategy making recommendations on the points above.

# Phase 2: Develop Contract and Procurement Strategy

The consultant is to design and draft a suitable cost-plus contract and procurement strategy, and sound out market interest.

## Contract Design and Drafting

The consultant should design and draft the contract. The contract must:

* Specify the improvements sought, and provide a way in which those improvements can be measured
* Confer on the contractor considerable freedom to design and implement a program to achieve those improvements, through improving the condition, configuration and management of the distribution network in an area (as well as improving other parts of the utility if appropriate)
* Require the contractor to report on improvements in a verifiable way
* Require the contractor to report on costs in a verifiable way
* Provide for the contractor’s costs to be reimbursed, up to a specified budget, while providing controls to ensure that costs are reasonable, in so far as those controls are compatible with the overall objective of giving the contractor freedom to implement a program of its own design, rapidly and effectively
* Ensure the that contract is commercially attractive to skilled contractors, while not being more costly than necessary for the utility
* Provide some mechanisms to encourage good performance, to the extent possible in a situation in which there may be limited information on the starting position, and the costs of improvement, and in which contractors may be reluctant to bear any significant risk.

The consultant must include all necessary commercial, technical, and legal parts of the contract including those set out below.

Objective. The objectives for the contract must be specified, including:

* The Key Performance Indicators on which improvement is sought
* The cost information which the utility wishes to learn
* Insights into effective techniques, the condition of the network, and components of the Water Balance that are sought.
* Any other objectives.

Contract area. This should define the area of the network on which the contractor is to work.

If the contract is being used as a part of Competitive Discovery Strategy (see explanatory note) thought will need to be given to specification of pilot areas, considering the following factors:

* The desirability of a degree of comparability between the various contractors
* The need to have pilot zones which can easily be hydraulically separated from each other and the rest of the network, and into which input volumes can easily be both controlled and measured
* The desirability of the pilot zones being representative of the network as a whole.

Authority. The authority the contractor will have on questions such as implementing work, directing staff and incurring expenditure.

Approval arrangements. The things on which the contractor needs approval, and how that approval is to be obtained.

Contributions provided by the Utility. All contributions from the utility, for example of information, staff, materials, or anything else, should be spelled out.

Measurement and report on improvements. How Key Performance Indicators (KPIs) are to be specified, reported on and measured.

The KPIs may include:

* **Service Levels**, such as:
  + Continuity of supply
  + Reliability of supply
  + Pressure at customer premises
  + Chemical and bacteriological parameters of water being received by customers, and comparison with drinking water standards; as well as
  + Description of the systems and methods used to assess Service Levels.
* **System Input Volumes** to the Contract Area
* **Financial performance indicators,** such as:
  + Revenue (which may be the total from the contract area, or per unit of input volume)
  + Costs (such as pumping costs or electricity consumption in the contract area)
  + Collections.

The contract may require that the contractor put in certain systems to measure the KPIs specified, and provide for reporting formats, procedures, and independent audit.

Mandated works. While the contract should give the contractor freedom to develop a plan best suited to improving the KPIs, some works may be mandated. These may include:

* Work related to creation of information, such as installation of production meters and zonal meters
* Work on the network, such as hydraulic isolation of the contract area from the rest of the network
* Replacement of specified items
* Creation of District Metering Areas (DMAs) within the contract area
* Work related to the commercial function, such as customer cadaster, testing or replacement or installation of customer meters, meter-reading, bill delivery, or collections
* Maintenance of the system after the targeted gains have been made
* Training, capacity-building, and hand-back.

**Authorized works.** The contract should specify the types of work the contractor is authorized to do, and the parts of the utility the contractor is authorized to work on. Typically, the contractor would be authorized to work on all the distribution infrastructure in the contract area. Thought may also need to be given as to whether the utility will allow the contractor to work on certain elements of the system. Items to consider for specific inclusion or exclusion from the authorized scope of work include:

* Production and treatment facilities in the contract area, such as embedded boreholes
* Service connections
* Customer meters
* Pipes or plumbing that is customers’ property
* Pipes above or below a certain diameter
* Pipes that supply areas outside the contract area (if hydraulic separation has not been achieved)
* Parts of the commercial system, such as the customer database, or the meter reading or billing system.
* Making customer connections
* Removing or regularizing unauthorized connections
* Disconnecting customers for non-payment.

**Cost-plus payment.** The contract must specify how the contractor will be reimbursed for costs incurred. This should include:

* The total limit on payments under the contract
* Any limits on which costs may be reimbursed
* Any pre-approvals of costs that are required
* How the costs of the contractor’s own staff are to be assessed and paid
* How any intangible assets employed by the contractor may be paid for
* How the contractor is to be make a profit, whether through a mark-up, a management fee, or some other mechanism
* How costs are to be reported and invoiced
* How reported costs and invoices are to be validated and audited
* How the cost reporting system can best allow the utility to link costs incurred to improvements made, and so learn the costs of making improvements on its system.

**Performance payment.** The contract may include a performance payment for improvements on the KPIs, or a deduction for use of distribution input above a certain volume. However, these payments should not undermine the essentially cost-plus, low-risk design of the contract.

**Funding sources.** The financial arrangements should be specified, including the sources of funds which will be used to pay the contractor, and any mechanisms intended to enhance the contractor’s security of payment (such as escrow accounts, or payments directly from an international financial institution (IFI), or from the proceeds of an IFI loan).

Constraints. Any constraint within which the contractor must operate. These may include things such as: maximum financing available; maximum budget available for payment to the contractor; maximum system input volume that may be used; or minimum service levels that must be sustained to various customer groups during the improvement works.

**Consultation and information sharing.** Any requirements for consultation and information sharing beyond reporting on results and costs should be specified.

**Follow on work.** The contract shall specify how, and on what terms, the contractor may participate in a second phase of the program, including a competitively bid incentivized contract, or other follow on work that is envisaged.

**Output:** A Draft Cost Plus NRW Reduction Contract addressing the above points.

## Market Sounding

The Consultant will sound out suitable potential bidders to see if there is sufficient interest in the transaction to create competitive tension. The results of the market sounding shall be presented to the client in a market-sounding report, and taken into account in the design.

**Output:** A Market Sounding Report summarizing the level of market interest, and detailing any changes proposed to the Draft Contract as a result of the Marker Sounding, with reasons.

## Environment, Safety and Social Due Diligence

Note: this may only be needed for a standalone project. If the NRW PBC is part of a larger project, the ESIA work may be bundled into that done for the larger project.

The Consultant will assess the extent to which the work done under the contract will have environmental, safety or social implications, and recommend what needs to be done to ensure compliance with local and national standards, and World Bank Group requirements, in these areas. Cost implications must also be identified.

**Output:** An Environment, Safety and Social Due Diligence Report, summarizing the above items.

## Procurement Strategy

The Consultant shall develop and apply an appropriate set of qualification criteria, and a recommendation for how bids will be evaluated and the winning bidder selected. This shall include:

* Recommending a qualification strategy, including, qualification criteria and whether to do prequalification. Qualifications which may be required for the second stage of a competitive discovery process arrangement may be considered here, and included if that seems desirable.
* Setting out a proposed transaction timeline and workplan
* Recommending a selection method. Note: that in a cost-plus contract that is intended to be low risk for the contractor, quick to prepare, and deliver a high-quality operator, it may not be appropriate to base selection on cost, or on output to be achieved for a fixed budget.

The consultant should assess the advantages and disadvantages of several methods of selection, and recommend one that is consistent with the philosophy and objectives of the contract. Methods to consider include: quality based selection; selection based on lowest mark-up on costs offered; or on cap on total mark-up.

**Output:** A recommended Procurement Strategy covering the above items.

## Phase 2 Transition Plan

In cases where the cost plus contract is being used as the first stage in a two story process of competitive discovery, The consultant shall provide the utility with a plan to take full advantage of the competitive discovery and manage the transition to a separate second stage. In doing so, the consultant shall advise on:

* The information to be collected from the first stage contractor, and how it is to be stored, analyzed, and used to design and implement the second phase.
* The design of the second stage, including an initial indication of what might be appropriate and a process for using information from the first stage to finalize the design for the second stage
* A procurement plan for the second stage, which should include the transition from the first stage to the second stage, including whether it will be competitive or by negotiation. If competitive, state how to handle matters such as: whether the first stage contractors will automatically be qualified for the second stage, whether firms would be excluded for any reason; and how competitive tension can be achieved, including by ensuring that new bidders can access the information generated in the first stage, or that the number of packages offered in the second stage is less than the number offered in the first stage.
* A handover plan for management of the transition from the first stage to the second stage
* Technical assistance the utility would benefit from in successfully implementing the Transition Plan. This could include matters such as:
  + Monitoring, and supervision of the first phase contractors
  + Collection and analysis of the data generated
  + Contract design and procurement for the second phase
  + Handover from the first to second stages

Output: A Transition Strategy noting recommendations on the above points.

# Phase 3: Manage Competitive Selection Process for Contractor

The Consultant shall run a competitive process to select a suitable contractor, in accordance with the Procurement Strategy agreed to in Phase 1. To do this, the Consultant shall perform the following tasks.

* Market the transaction
* Development and implement qualification criteria and a system for qualifying bidders
* Prepare the Request for Proposals, including:
  + Instructions to Bidders
  + Evaluation criteria
  + Information Memorandum
  + Any other legal documents required for the conclusion of an effective transaction
* Manage the bidding process for the client, including a bidders’ conference (if appropriate) dealing with requests for clarification, and receiving bids and keeping them confidential.
* Assist the client in evaluating the bids
* Assist the client in any negotiations needed to reach commercial close
* Assist the client in managing the relationship with the contractor for the first three months after the client team starts work
* Assist the client in managing stakeholder relationships and communication throughout this phase

**Outputs**:

* Qualification Report
* Request for Proposal
* Evaluation Report
* Wrap-up Report at the completion of the assignment. This shall describe the development and implementation of the contract, describe strengths and weaknesses of the approach, offer lesson for similar initiatives in the future, and suggest next steps for the client.

**C. SPECIFIC INPUTS TO BE PROVIDED BY THE CLIENT**

The World Bank will make available all relevant documents provided by its Client and other organizations. All information and background documents provided as part of this RFP are for the sole purpose of preparing the Technical and Financial proposal for this assignment. All information should be treated as confidential and not used for any other purpose.

**D. SPECIAL TERMS & CONDITIONS / SPECIFIC CRITERIA**

**Language**

All reports should be prepared in English, unless otherwise specified, and delivered in Word format. The financial model shall be delivered in Excel format.

An executive summary of the various documents may be provided in the primary language of the client.

**Timing/Assignment Duration**

The Consultancy will start on <XXXX>. The assignment is expected to be completed in <XX> months.

**Reporting**

The Consultants will report to TTL based in <XXXX> who will coordinate with the other members of the World Bank Task Team.

**Payment Schedule**

<XXXX> To be included by the TTL / procurement advisor

Required Qualifications and Experience

The Core Team will have the following qualifications:

* **Team Leader** – Must have:
  + Led the design and implementation of at least 3 successful projects involving distribution system improvements
  + Worked on at least 3 projects involving non-revenue water control.
  + At least 10 years’ experience working with water utilities
  + Worked on at least 2 utility improvement projects in developing countries and at least 1 utility improvement project in developed countries
  + A degree in engineering, economics, finance or law.
* **Distribution Network Improvement Engineer** – Must be a qualified engineer, and have:
  + Worked on least 5 projects to help water utilities control Non-Revenue Water
  + At least 5 years of experience working with water utilities.
* **Lawyer** – Must have:
  + A degree in law
  + At least 5 years’ experience advising on commercial contracts related to infrastructure
  + Knowledge of the laws of the country concerned with utilities and contracting
* **Environmental and Social Specialist** – Must have:

*[Only include if ESIA is included in Scope of Work]*

* + A relevant degree
  + At least 5 years of experience advising social impacts and compliance for infrastructure projects
  + Worked on social impact analysis for at least 2 World Bank projects
  + Worked on social impact analysis for at least 2 projects in the country in which the project will take place

**Additional points about the team**

* The Team Leader may also fill the position of either Distribution Engineer or Lawyer, provided he or she meets the criteria for both positions for which he or she is proposed
* It will be acceptable to one person as both environmental and social specialists, provided he or she meets the criteria for both positions
* It is acceptable to propose additional team members in addition to the core positions listed.

Potential Downstream Work

Downstream work is possible following this assignment for the repetition or scale-up of the approach, further assistance to the client with management of the contract, or development of a second stage such as one or more competitively bid incentivized contracts.

1. “Operational Manual: Global Program on Developing Good PBC Practices for Managing NRW,” The World Bank, December 2016. The Operational Manual describes the process for planning and implementing non-revenue water (NRW)-reduction projects, specifically through Performance-Based Contracts (PBCs). It focuses on the process and key decisions to be made. It outlines how the national government, the water utility, the World Bank, and the consultant should work together to improve water service quality and sustainability by correctly assessing when NRW PBCs will be useful, and implementing them well. [↑](#footnote-ref-2)
2. “Operational Manual: Global Program on Developing Good PBC Practices for Managing NRW,” The World Bank, December 2016. The Operational Manual describes the process for planning and implementing non-revenue water (NRW)-reduction projects, specifically through Performance-Based Contracts (PBCs). It focuses on the process and key decisions to be made. It outlines how the national government, the water utility, the World Bank, and the consultant should work together to improve water service quality and sustainability by correctly assessing when NRW PBCs will be useful, and implementing them well. [↑](#footnote-ref-3)