TERMS OF REFERENCE FOR PPP VIABILITY STUDIES FOR THE WATER & SANITATION AND IRRIGATION SECTOR

FEBRUARY 2022
Contents

1. Introduction .......................................................................................................................................... 4

2. Scope of Works ..................................................................................................................................... 5

  2.1. Phase 1A - Sector Studies and Preparation of a Shortlist of Potential PPP projects ....................... 5

  2.2. Phase 1B - Comprehensive Viability Studies ..................................................................................... 6

    2.2.1. Legal and Institutional Review ...................................................................................................... 6

    2.2.2. Economic Review .................................................................................................................. 6

    2.2.3. Demand Assessment ............................................................................................................. 6

    2.2.4. Project Configuration ............................................................................................................ 7

    2.2.5. Site and Infrastructure Evaluation ........................................................................................ 7

    2.2.5.1. Incorporate Geospatial Technologies for Water Utilities management ......................... 7

    2.2.6. Project description ................................................................................................................ 8

    2.2.7. Financial Modelling and Viability Assessment ....................................................................... 8

    2.2.8. Updating of Existing Studies ................................................................................................. 9

    2.2.9. Preliminary Project Implementation Plan and Viability Study Report .................................. 9

    2.2.10. Capacity Building ................................................................................................................... 9

  2.3. Phase II ........................................................................................................................................ 10

    2.3.1. Development of PPP Implementation Plan including the Procurement Strategy .............. 10

    2.3.2. Project Information Memoranda ("PIM") .............................................................................. 10

    2.3.3. Request for Qualification Documentation ("RFQ") ............................................................... 10

    2.3.4. Prequalification ................................................................................................................... 10

    2.3.5. Request for Proposals ("RFP") Documentation ....................................................................... 11

    2.3.6. Bid Period ............................................................................................................................ 11

    2.3.7. Tender Evaluation ................................................................................................................. 11

    2.3.8. PPP Agreement Negotiations ............................................................................................... 11

    2.3.9. PPP Contract Signature and Case Study Report .................................................................. 12

    2.3.10. Financial Closure, Close-out Report and Case Study .......................................................... 12

3. Qualifications ...................................................................................................................................... 12

4. Duration of the Assignment ................................................................................................................ 15

5. Deliverables of the Assignment .......................................................................................................... 15

6. Role of The Ministry of Water, Sanitation and Irrigation ..................................................................... 16
7. Renumeration Arrangements ............................................................................................................. 16
7.2. Annex 1. Environmental and Social Impact Assessment (ESIA) Table of Content ................... 18
7.3. Annex 2. Environmental and Social Management Plan .............................................................. 20
1. Introduction
1.1. Background
The Government of Kenya (GoK) is keen to enhance the flow of private financing into infrastructure through Public Private Partnerships (PPPs) within the context of Vision 2030 target of becoming a middle income and industrialized state. As a result, a comprehensive legal and regulatory framework has been put in place by way of the Public Private Partnership Act, 2013 and the Public Private Partnerships Regulations, 2014. The Act provides for the participation of private sector in the financing, construction, development, operation and maintenance of infrastructure through a range of contractual arrangements. In addition, the act provides for the establishment of the PPP Committee as an oversight body and PPP unit as the Technical arm of the PPP Committee. The PPP Unit provides technical, financial and legal expertise to the PPP Committee and various Contracting Authorities at both National and County levels of Government in the structuring and implementation of PPP Projects. Additional details relating to the legal and regulatory framework for PPPs can be found at www.pppunit.go.ke/resources.

At present, the Government of Kenya’s efforts are focused around four priority areas popularly known as the “Big four Agenda”. These are affordable housing; healthcare; food security; and manufacturing and industrialization. Water and Sanitation being a major enabler to the Big four agenda and the Social Pillar of Vision 2030, there is need for sustained development of expansion of water and sanitation infrastructure for the Government to achieve its objectives. In view of this, with other expanding and competing GoK development needs, the Sector views PPP as an alternative for the financing of infrastructure development.

It is against this background that the Ministry of Water, Sanitation and Irrigation seeks the services of a Consultant to prioritize and prepare bankable PPP projects for implementation over the short-to-medium term such as bulk water treatment related assets/services, or water supply assets and services which includes network construction/expansion and/or operations and maintenance as the study shall demonstrate.

1.2. The Water, Sanitation and Irrigation Sector
To give effect to devolution, Kenya’s 2010 Constitution defined the responsibilities of the Central and Country Governments with respect to water supply and sanitation. To that end, the Ministry of Water; Sanitation and Irrigation is tasked with the development of the water supply services policy. In addition, the Ministry is in charge of:

- water supply services sub-sector coordination;
- oversight and technical quality assurance for water supply investments development;
- sourcing of water supply infrastructure financing; and
- availability of quality water supply services sub-sector data and information.

The County Governments are in charge of development of county public water works and the provision of water services in the counties as per Schedule 4 of the Constitution. As owners of County Water Service Providers (WSPs), they facilitate good governance, efficient and effective operations of county WSPs in line with water service regulations and standards set by the Water Services Regulatory Board (WASREB). The WASREB is in charge of regulation and compliance, setting of water service tariffs for the purposes of consumer protection, in line with Water Act, 2016. Other important agencies in the sector include:

- the Water Sector Trust Fund (WSTF), which is responsible for the financing of water service projects focusing on the underserved, financing of water research and financing of sustainable water
catchment protection initiatives by public benefit organizations such as Water Resources User Association (WRUAs);

- the Water Works Development Agencies, who are mandated with the technical aspects of water projects planning and development, including commercially viable national public water supply infrastructure. As per the Water Act, they may also be a stop-gap WSP in support of a county water service provision to ensure non-disruption of water services; and

- Water Services Providers (WSPs) who interface with water consumers through provision of distribution of water and maintenance of water service infrastructures.

With regard to the water and sanitation situation, WASREB\(^1\) indicates that water coverage in regulated areas declined from 59% to 57% between 2018 and 2019 on account of population growth (7%) outpacing expansion of access (5%). For the period under review, while an additional 854,514 people were served; the population of the service area of the WSPs increased by 2,229,267 people. In terms of sewerage coverage, the total population of the service area stood at 25,660,154 but the population served with sewer services stood at 3,921,094, representing a coverage ratio of only 15%. The challenge of service delivery is compounded by the performance of the WSPs which recorded an increase in Non-Revenue Water from 43% in 2018 to 47% in 2019.

Within respect to irrigation, the primary agency is the National Irrigation Authority (NIA), formerly known as National Irrigation Board. It was established and incorporated as a state corporation in 1966, vide Irrigation Act, Cap347 of the Laws of Kenya. This Act was reviewed and replaced with Irrigation Act 2019 and became operational on 16th August, 2019. The Act entrusted NIA with the responsibility technical and administrative responsibilities for public schemes; resettlement and compensation of farmers; development and management of irrigation infrastructure; crop production, handling and marketing and control of land use and management.

2. Scope of Works

Two phases are envisaged under the terms of this consultancy. For the first phase, it is envisioned that the consultant will support the Water, Sanitation and Irrigation Sector, as coordinated by the Ministry of Water, Sanitation and Irrigation (MOWSI), to identify and select a long list of projects that lend themselves to implementation as PPPs. To generate the longlist of candidate projects, the expectation is that the Consultant will undertake analysis that will provide a basis for the Sector, through the Water Sector PPPs working team, to determine the preliminary viability of the identified projects. Following the identification of the longlist project, the Consultant will be expected to support the Sector with the selection of a shortlist of not only bankable but immediately implementable projects. The shortlisted projects will then be subjected to comprehensive viability investigation. To that end, the Consultant will be responsible for information required; to gather what is available; to verify the information gathered; to generate any additional data needed and to ensure that the information is accurate, sufficient and complete. Under the second phase of the engagement, the Consultant will support the contracting authorities in the procurement of the projects that are determined to be the most viable within the shortlist. The details of the scope of work are outlined below for each phase.

2.1. Phase 1A - Sector Studies and Preparation of a Shortlist of Potential PPP projects

Under Phase 1A, the Consultant is expected to undertake the following tasks:

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\(^1\) Performance Report of Kenya’s Water Services Sector 2019/20
- Desk review of existing sector and past cross-sector studies\(^2\), implementation plans and projects pipeline to properly contextualize the sector and to identify a long list of projects;
- Consultations with senior Ministry staff and Water Sector PPPs working team\(^3\) to be constituted by the Ministry of Water Sanitation and Irrigation to understand priorities and the state of preparedness of projects;
- Propose an appropriate framework and methodology for identifying projects in the short and medium term;
- Prepare an initial shortlist of project concepts that can be evaluated for PPP suitability;
- Firm-up the shortlist of projects through further desk and qualitative assessments in partnership with the Ministry. The Consultant will be expected to propose a methodology and criteria through which the longlist of candidate projects will be condensed to an acceptable shortlist of at least three projects; and
- Conclude the review of the long list, shortlist the projects, screening them for its suitability for PPP present the results and prioritize three projects for the next stage of development.

2.2. **Phase 1B - Comprehensive Viability Studies**

The three prioritized projects will be subjected to detailed financial, legal and technical feasibility analysis. The scope should cover all activities that are required for preparing feasibility studies including a detailed section on environmental and social studies.

2.2.1. **Legal and Institutional Review**

Provide a diagnostic survey of all relevant legal and regulatory aspects which may affect the viability of implementing any or all of the potential projects and propose the most practical solutions available including contractual arrangements, legal amendments or other practical solutions for resolving these issues. Prepare diagnostic report on the institutional capacity of the Contracting Authorities (CAs) to determine their ability to manage the projects through implementation and operation. The analysis should include an assessment of the institution’s management capacity and, if found necessary, a capacity building plan should be formulated based on the institutional review.

2.2.2. **Economic Review**

Undertake a full economic review to assess the value of the project on the economy and project host communities. An economic and social cost benefit analysis will comprise both a qualitative and quantitative assessment of the proposed project including a determination of the Economic Internal Rate of return and Benefit-Cost Ratio for the projects. The viability study should also include ranges of estimates on the creation of jobs, health and sanitation benefits and food security impact where relevant.

2.2.3. **Demand Assessment**

Undertake a demand study that will provide the basis for conceptual design and estimates of the capital investment required as well as forecast project revenues. For brownfield projects, the existing operational and capacity utilization information should form a basis for the assessment while for Greenfield projects a forecast will need to be prepared. Also, undertake a willingness to pay study to offer an assessment of what the CA can charge or mandate to be charged as tariff or fees for the provision of services emanating from

\(^2\) The desk review of studies will encompass, among others, studies such as NRW PPP option studies done by PPIAF/World Bank and other studies that look into projects beyond bulk water supply

\(^3\) The Water Sector PPPs Working Team is to be constituted by the Ministry of Water, Sanitation and Irrigation to facilitate this assignment. The expectation is that it will draw its membership from the different subsectors. In addition, its membership is expected to comprise of experienced technical personnel.
the infrastructure project. This study should be undertaken across all economic and social segments of potential users and influencers. That report should highlight the rationale for why a certain level of tariff or fee is economically justified and likely to face no or a lower level of resistance from the users. The tariffs proposed should be in line with the water service regulations and standards set by the WASREB.

2.2.4. Project Configuration

Based on the demand study, develop a project configuration that provides the CA with a break-up of the size/capacity of each element of the project using appropriate technologies in the most efficient and economical way and making necessary amendments to the initial project concept.

2.2.5. Site and Infrastructure Evaluation

Support the CA in identifying potential challenges to project site. The Consultant will need to confirm ownership and determine the appropriateness of the location and other conditions, such as whether and to what extent will expropriation or resettlement be necessary. Evaluate existing infrastructure at the site to determine whether any assistance is required from the CA to coordinate the preparation of the site for the project. These may include but not be limited to: -

- Land requirement;
- Land evaluation (including, among other things, vulnerability of site to climate related impacts etc.);
- Land availability;
- Land acquisition and Resettlement needs where applicable;
- Relocation of utilities;
- Access to energy, water and other services;
- Management of risks related to Indigenous People.

Environmental and Social Impact Assessment (ESIA) Report to: (i) identify and assess environmental and social impacts resulting from the proposed PPP projects on the biophysical, social and economic environment, and (ii) propose risk management measures to avoid, mitigate and compensate such risks and impacts, in accordance with the IFC Performance Standards, the appropriate EHS Guidelines of the World Bank Group, and Environmental Impact Assessment and Audit Regulations 2003 established under the Environmental Management and Coordination Act (EMCA).

- Selected proposers will be expected to conduct additional, more comprehensive, environmental and social studies and to develop mitigation plans as part of final design of the projects.
- Social impact review, including gender analysis, the social and cultural elements, inclusion of marginalized groups and community consultation and identification of key social risks and their mitigation/management. This process should be guided by the IFC Performance Standards and the equator principles; and
- Access roads and other site services infrastructure.

2.2.5.1. Incorporate Geospatial Technologies for Water Utilities management

There is inevitable need to upscale technologies at all levels of operations and to sustain enhancements. Under laying of Geo-Spatial technology in line with global standards is critical for the prioritized projects to save water, save time and save money through the use of intelligent technologies. Under laying and using Geographic Information System (GIS) shall enhance the capability to have a sustainable system of records, engagement, and provide a mature information system that creates real business value across the utility enterprise.

The systems shall be designed to optimize the fundamental water, sewer, and storm water networks of utility companies by displaying all our data in interactive maps that can open on any device, anywhere and everywhere. Field crews, customer care representatives, contractors, and management shall be able to access the information needed to make smarter decisions faster, supported by achieving;
- **Asset Management** - GIS platform supports a holistic approach to asset management. The location-based technology provides fresh insights about asset performance, risks, resources, and costs.
- **Operational Intelligence** - Provide insights for operations management. Increase situational awareness, reveal inefficiencies, and make informed decisions.
- **Customer Engagement** – Ensure customer satisfaction by delivering vital information to customer service staff and the public. Real-time data delivered via easy-to-understand maps and apps that create transparency and accountability at all levels in near real-time.
- **Planning and Engineering** - Deliver workflows, designs, and solutions that increase the bottom line. Analyze projects, deliver essential workflows, and share asset information.

### 2.2.6. Project Description
Prepare a conceptual description of the project based on the existing and projected demand that include an estimated capital costing for the project, broken down by construction category. The conceptual description will be used in performing the viability studies. The analysis shall also identify the project’s scope of services, including output-based objectives and proposed performance and quality parameters.

### 2.2.7. Financial Modelling and Viability Assessment
In addition to the economic, technical, environmental, social and legal review, assess the financial viability of each project by performing the following tasks:

- **Financial Model**
  Build a financial model (also known as a “shadow” model), which will be used as a standard financial model for the project, and must be created as ‘virtual bid’, based on the same output specifications assumed in the PPP structure. The Consultant should use their experience and econometric modeling to determine the rate of return expectations of the potential private sector bidder and thereby determine the ‘virtual bid’. It must therefore cover the same categories of whole life-cycle costs, within comparable contract period(s). The financial modeling should consider the following:
  - Economic cost benefit analysis of the project and alternative technical solutions;
  - Determination of revenue requirements to meet project funding needs;
  - Determination of necessary tariff levels for the user pays project; alternatively, given the assessed market demand (volume) and the recommended user charges, determine the ‘viability gap funding’ required to attract private sector investment to the project;
  - Evaluation of economic justification for implementing the project through PPP model, at different levels of ‘viability grant funding’ from the CA.
  - Evaluation of affordability for user pays and/or public sector pays models including fiscal and public sector borrowing impacts;
  - Determination of the project financing requirements and evaluation of alternative financing structures and sources;
  - Evaluation of alternative procurement options and PPP options, including value for money analysis; and
  - Sensitivity analysis to determine the impact of changes in some key variables on all critical output parameters.

- **PPP Project Structure**
  - Detailed description of the type of PPP project proposed;
  - Anticipated roles and key responsibilities of the private sector and the CA;
  - Construction, and operational efficiencies that may realistically be expected of the private sector;
  - A summary of the output specifications for the project;
  - Other potential services that may be provided or commercial activities that may be undertaken by the private partner and not included in the initial project description;
  - Allocation of key risks;
  - Outline payment mechanism;
- Indicative financing structure (appropriate equity returns, debt service cover ratio and costs of debt etc.);

This data should be identified and used as the basis for costing. All assumptions should be clearly stated.

c) **Comparative Risk Matrix**

Design a comparative risk matrix that qualifies the liabilities associated with the recommended project configuration, and proposes how each of the risks should be anticipated, methods of mitigating the risk and recommendation on the proper allocation of the risk. This information shall be of interest to the CA in its review of the fiscal risk commitments and contingent liabilities assumed in the proposed project structure. At a minimum, the comparative risk matrix shall contain the following information:

- Risk and its description;
- Expert’s estimate of the probability that the risk will materialize, together with the rationale/assumption;
- Expert’s estimate of the impact of the risk as a percentage of the base;
- The base or amount;
- Most likely timing of the risk event;
- Cost of the risk in NPV terms;
- Risk distribution between public and private parties in terms of percentage of costs borne;
- Distribution of the cost of the risk between parties in terms of NPV amount; and
- Mitigation of risk.

d) **Value-for-Money and Affordability Analysis**

The affordability analysis should also include an expected range of revenue (fees) to be collected by the CA from the private sector provider for its budget, if applicable. In case the project doesn’t seem financially feasible, the analysis should include an estimate of the quantum of public funding that would be required to attract private sector participation and also access the economic justification for the CA to contribute such funding.

2.2.8. **Updating of Existing Studies**

Should a feasibility study already exist for a selected project, the consultant will review, update and revise the existing viability study so it meets all of the requirements included in the TOR. The focus will be on due diligence to ensure that the project has been properly prepared and that there are no obstacles to the implementing of the project; the consultant will also ensure that the expectations of the private sector are clear and will elaborate outputs and standards of service specifications for the projects, where necessary.

2.2.9. **Preliminary Project Implementation Plan and Viability Study Report**

The Consultant will prepare a comprehensive report that shall detail the findings and conclusions of the viability study, highlighting any potential problems, which may influence the viability of the project. The report shall also identify and recommend possible solutions to these problems, which the consultant shall be responsible for implementing, upon approval by the CA. The report will also include a preliminary project implementation plan and timeline which will include all activities required from the parties to implement the contracting solution, that is; task, timing, responsibilities for each task and key approval/decision points and milestones. The implementation plan will also identify activities to help build the capacity of the CA to act as a competent PPP transaction counterpart.

2.2.10. **Capacity Building**

The consultant will support the PPPD to deliver to each of the CAs and other relevant stakeholders the results of the study highlighted in the report and support the CAs in analyzing and evaluating contracting options for the project. The consultant will assist the CAs in selecting options and fully understanding their implications. The CAs will review and approve the final version of the viability studies as reviewed and updated by the consultant further to the workshops. The Consultant will regularly provide updates and support the PPPD in interacting with the CA’s nominated team and, from time to time, with the leadership
of the CA, to ensure that the outcomes and recommendations of the assignments are in line with the expectations. The Consultant will support the PPPD to also use these interactions to build understanding and knowledge about structuring PPP projects and assessing feasibility of infrastructure projects within the CA.

Based on the results of the feasibility investigation described above, the CAs in consultation with the PPPD will decide whether to proceed to project implementation on a project-by-project basis. Besides viability, the result of the investigations is expected to provide a basis for selecting projects for implementation purposes and procurement through the PPP route.

2.3. Phase II
Phase II of the consultant’s scope of work will entail provision of technical support to the contracting authorities to undertake the procurement of selected projects that are most viable as PPPs. The consultant shall only proceed with this stage of the assignment if the projects on the shortlist have been found to be technically, economically, financially, legally and environmentally viable during the viability investigation stage under Phase I and following the approval of the projects by the PPP Committee. This stage of the assignment will entail several components, which are outlined below:

2.3.1. Development of PPP Implementation Plan including the Procurement Strategy
The consultant shall; (a) update the transaction documents (if required to do so), (b) recommend an appropriate bid strategy in accordance with the PPP Act (i.e., develop a blueprint of the bid process and appropriate governance for the bid), (c) prepare a detailed Project Implementation Plan which will set out a clear timetable for the project implementation and will cover all the tasks required of all parties to procure the Projects, identifying: (i) Tasks; (ii) Timing; (iii) Responsibilities for each task; and, (iv) Key approval/decision points and milestones, (d) provide a comprehensive and detailed Project Implementation Plan preferably using MS Project, or equivalent software, indicating all the key tasks, deliverables, milestones, responsibilities, timetables and critical path for successful project implementation. This detailed plan will be discussed and agreed with the CAs and the PPPD before engagement.

2.3.2. Project Information Memoranda (“PIM”).
The consultant will be expected to prepare a PIMs for issue to interested parties that may wish to participate in or learn more about the proposed projects. The information contained in the PIMs should be of a non-confidential nature. The PIMs will include (but is not limited to) the following information: background and rationale for the proposed project including country context; statement from the appropriate Minister/Governor in support of the proposed project; a summary of the key business case issues; project scope; regulatory issues; project term; other unique project matters; key project participants and timetable for implementation.

2.3.3. Request for Qualification Documentation (“RFQ”).
The consultant will propose and agree on the contents of the RFQ document with the CAs and other specialist advisers; recommend technical and financial pre-qualification criteria for the prequalification of proposers, in line with market practice and comparable transactions (where possible); based on selection criteria agreed by the CAs, coordinate and lead the development of an evaluation framework for pre-qualification of proposers with relevant input from the CAs and other advisers as appropriate and take a leading role in the development of the RFQ, ensuring input from the CAs and any specialist advisers.

2.3.4. Prequalification
The consultant will provide advice and support to the Prequalification Committees in the evaluation of the technical, financial and legal responses received in the RFQ submissions from Prospective Proposers. In addition, they will provide input to, and support the production of the evaluation reports on the RFQ
submissions for approval by assisting the CAs in non-logistical preparations of a proposers’ conference and support such conferences as required.

2.3.5. Request for Proposals ("RFP") Documentation.
The consultant will take the leading role in the production of the RFP documentation, including but not limited to: production of the “Instructions to Proposers” section of RFPs ensuring key input from the CAs and other specialist advisers; setting the detailed deliverables list; develop the PAs for issue to Proposers with the input of other specialist advisers; develop the payment mechanisms and performance standards; setting up and managing the content, and access to the project data rooms; support the CAs in obtaining approval to issue the RFPs; production of evaluation criteria for approval by the CAs and other specialist advisers for inclusion in the RFPs; assist the CAs to obtain all required statutory approvals; draft appropriate statutory notices for publication and obtain approval to publish the same through the CAs. In the preparation of the RFPs and other bid/procurement documentation such as the draft project agreements, the consultant should ensure that the PPP Disclosure framework is appropriately reflected and standard clauses on PPP disclosure approved by GoK are included in the documentation. The consultant will also be expected to assist the CAs and the PPPD in providing the requisite disclosure of basic project and procurement information based on the disclosure framework as contained in the report on improving transparency and accountability in PPP: disclosure diagnostic report for Kenya (2018), including the Annexes therein.

2.3.6. Bid Period
The consultant will receive Pre-Qualified Bidder queries and co-ordinate responses in a timely manner, ensuring input from the CAs and other specialist advisers as required; advise the CAs on the implications of Pre-Qualified Bidder queries having consulted with other specialist advisers as required; support the CAs in all bid processes including (without limitation) preliminary bidder meetings; competitive dialogue meetings, if required and any other meetings as requested by the CAs ensuring accurate minutes are taken and distributed; attend meetings with the CAs and other specialist advisers; ensure the Data Rooms are always available and up to date acting as joint administrator with the CAs; update the RFPs if required in response to Pre-Qualified Bidder queries and the competitive dialogue process; ensure compliance by the CAs and other specialist advisers with the requirements of the RFPs and report formally and informally to the CAs as required. In addition, the consultant shall design project-specific contract management frameworks in accordance to the provisions of the Project Agreements and the projects risk allocation structures, with clear frameworks on institutional roles, actors, monitoring & evaluation methodologies and project reporting protocols and tools. These should be packaged into a manual, guidelines, norms and practices that are project-specific.
The consultant will update the feasibility study, PSC, VFM, financial models, FCCL assessments if there are any material changes as an outcome of the competitive dialogue process or for efflux of time in the bidding process; prior to the release of the final RFP for bidding.

2.3.7. Tender Evaluation.
The consultant will advise and support the Evaluation Committees in the evaluation of Pre-Qualified Bidder RFP response ensuring compliance with the evaluation criteria specified in the RFPs; produce and populate the evaluation matrices with the input of the members of the Evaluation Committees; advise and assist the Evaluation Committees in raising and obtaining responses from Pre-Qualified Proposers to clarifications as required and assist the Evaluation Committees in the production and approval of the Evaluation Reports.

2.3.8. PPP Agreement Negotiations
The consultant will assist the CAs in final negotiations of the project documents (for example PA, Direct Agreement, EPC Contract, O&M Contract, PA Schedules, Government support measures etc.); attend and support in all negotiation meetings; and advise CAs in preparing the Project Report, FCCL Report and any report as required. This task will entail:
• updating the Public Sector Comparators (PSC), Value For Money (VFM) and affordability models using updated costs based on Pre-Qualified Bidder prices and revenue information from the CAs
• recommend the make-up of the negotiation teams;
• categorizing issues appropriately, developing timelines for completion;
• coordination of the conduct of all negotiations;
• planning negotiation tactics;
• reviewing proposed sub-contracts, in particular with construction contractors and operators, to the extent forms of these contracts have not been included in the PPP contract or the tender documents
• updating of costing and all other related numbers in the financial models and in the report through the period of negotiations and financial close stages;
• advising on proposed changes to the agreed PPP contracts and/or form of sub-contracts;
• advice on public and private sector satisfaction of the conditions precedent to the PPP contracts, often including the validity of licenses and permissions obtained by the preferred bidder, formation of corporate vehicles in the form required, financial close of the project financing, and implementation of the commercial requirements for performance of the project;
• managing relationship with second proposers, including managing bid bonds and on-going discussions to prepare in case of withdrawal of the preferred proposers;
• assisting with processes for reaching agreement;
• managing and assisting with additional sets of negotiations with lenders. This may involve extended discussions of Government financial participation to protect the lenders from specific risks;
• review and negotiation of the financial documentation (which will often have a direct effect on the rights and obligations of the Government);
• providing legal opinions as required e.g. that transaction is binding on its terms, on security and financial management structure, on revenue structure and current regulatory mechanism. The consultant will ensure that all agreements reached are incorporated into all the financial, commercial and legal documentation, and will assist with drafting the necessary and related correspondence
• The consultant will be responsible for compiling the necessary submissions for the CAs to secure approval of the negotiation reports.

2.3.9. PPP Contract Signature and Case Study Report
The consultant will provide all necessary support to the CAs with all functions and activities related to signing the final PPP contracts (Commercial Close). The consultant will be expected to compile case studies covering experience and lessons learnt up to commercial close. The case study reports will be confidential documents of the CAs and the PPPD.

2.3.10. Financial Closure, Close-out Report and Case Study
The consultant will support the CAs throughout the process of finance raising for the Projects, up until Financial Close. The consultant will be expected to update the financial models and FCCL assessments through the period of financial close, covering the period between commercial close and financial close, and must incorporate any additional factors that may be required by the CAs. These case studies shall then be consolidated with the earlier ones and packaged as the final case studies for the projects. The consultant will also prepare close out reports at financial close. The close-out reports will be a confidential document of the CAs and the PPPD.

3. Qualifications
3.1 Transaction Advisor Skills and Experience Evaluation Criteria
The Transaction Advisor is expected to comprise a firm or a consortium of firms/individuals providing the requisite financial, legal, water, sanitation, irrigation, environmental and social expertise.

Qualification submissions will be evaluated against the following criteria:
a) Financial advisory, analysis and modeling experience on PPP and project finance with emphasis on water, sanitation and irrigation projects over the last 10 years;

b) PPP procurement and project structuring experience with evidence of having acted as Transaction Advisor, or part of Transaction Advisory consortium on at least 2 projects in water, sanitation and irrigation in Sub-Saharan Africa or in any other emerging markets in the last 15 years (only experience in the last 15 years will get credit, with preference given for more recent experience)

c) Engineering and design experience in the last 15 years in the field of waste water treatment; water treatment; desalination; pipeline and network; irrigation and drainage; and dam and reservoir (only experience in the last 15 years will get credit, with preference given for more recent experience)

d) The consultant must have prepared technical feasibility studies for at least 3 (three) water and sanitation projects.

e) Experience in conducting Environmental and Social Impact Assessment (ESIA) for at least 2 infrastructure projects, in the last 10 years, in accordance with international best practice including World Bank/ IFC guidelines in the water, sanitation, irrigation sector in Kenya and elsewhere in sub-Saharan Africa (only experience in the last 10 years will get credit, with preference given for more recent experience).

3.2 Key Experts Qualifications

The proposed project will require a combination of typical PPP and project finance structuring skills. The technical skillset required will draw on specialists with engineering and design experience in the field of waste water treatment; water treatment; desalination; pipeline and network; irrigation and drainage; and dam and reservoir. The standard PPP project skills required include PPP structuring; financial modelling; legal and environmental and social impact assessment skills.

The following is a list of the minimum positions of the staff expected on this project and their required credentials:

<table>
<thead>
<tr>
<th>No</th>
<th>Position</th>
<th>Expertise expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PPP Expert/Team Leader</td>
<td>A post graduate/ masters university degree in Finance, Management, Economics, Engineering, Law or any other relevant field. Must be registered with accredited professional body with a valid practicing license. A minimum 15 years’ demonstrated experience in project management with at least 5 years providing PPP transaction advisory services/development of large infrastructure projects on PPP basis including extensive experience in project structuring and risk analysis, allocation and management; project agreements; bid process management including preparation of bidding process documentation and post bid process monitoring. Successful preparation of PPP project with at least three (3) financially closed projects, of which at least one should be water and sanitation projects. Relevant qualifications and experience in water and sanitation infrastructure development, operation &amp; maintenance projects in general, and in developing countries in particular. Good English Communication and writing skills, especially in report writing, are essential.</td>
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<tr>
<td>2</td>
<td>PPP Financial Exert</td>
<td>A relevant university degree preferably with a relevant post graduate qualification. At least 10 years of professional experience</td>
</tr>
<tr>
<td>No</td>
<td>Position</td>
<td>Expertise expectations</td>
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<td>1</td>
<td></td>
<td>In PPPs and project finance, with a proven track record in financial evaluation and financial modeling of PPP projects, including value for money, affordability and fiscal impact assessments. Demonstrated experience in the structuring of project finance transactions. Prior exposure to water and sanitation projects project finance transactions, financially closed PPP projects will be an additional merit. Good English communication and writing skills, especially report writing, are essential.</td>
</tr>
<tr>
<td>3</td>
<td>PPP Legal Expert</td>
<td>A university degree in law preferably with relevant post graduate qualification. Must be registered with accredited professional body with a valid practicing license. A minimum 12 years’ demonstrated experience in drafting PPP/infrastructural implementation and financing agreement and other related documents/ agreements; PPP procurement, managing bidding process, and resolving legal issues, policy and institutional assessment; and, successful preparation of PPP projects with at least two financially closed PPP projects. Expertise in public law/administrative frameworks. Experience in water and sanitation projects will be an additional merit. Good English communication and writing skills, especially in report writing, are essential.</td>
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<tr>
<td>4</td>
<td>Kenya Legal Expert</td>
<td>A university degree in law preferably with relevant post graduate qualification. Must be registered with accredited professional body with a valid practicing license. A minimum 10 years’ demonstrated experience in drafting commercial agreements in Kenya, with additional merit for PPP- type agreements, demonstrable knowledge and experience of the legal, regulatory and institutional framework for PPPs in Kenya and of the water sector, relevant experience of public procurement/transaction management. The legal expert must demonstrate expertise and experience in drafting Project Agreements, Lease Agreements, Shareholder Agreements. Expertise in public law/administrative framework. Experience in water and sanitation sector will be an additional merit. Good English communication and writing skills, especially in report writing, are essential.</td>
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<tr>
<td>5</td>
<td>Technical experts</td>
<td>Engineering and other relevant expertise relating to design and feasibility studies; numerical modelling; master planning; geo-spatial technologies; asset management and commissioning; construction supervision and procurement within the field of wastewater treatment; water treatment; desalination; pipeline and networks; irrigation and drainage and dams and reservoirs. The individual experts designated for the fields should have relevant university degrees and 12 years of experience in the particular specialization. Must be registered with accredited professional body with a valid practicing license. Additional relevant qualifications will be of extra merit.</td>
</tr>
<tr>
<td>6</td>
<td>Environmental</td>
<td>University degree in environmental science or other related</td>
</tr>
</tbody>
</table>
### No | Position | Expertise expectations
--- | --- | ---
1 | Safeguards Specialist | Sciences. Advanced degree preferred. At least 10 years of experience in water and sanitation sector with experience in preparing environmental impact assessments.
7 | Social Safeguards Specialist | University Degree in Sociology. Advanced degree in sociology preferred. At least 7 years’ experience in water, sanitation and irrigation sector with experience is carrying out gender assessments, social impact assessment studies, social assessment for Indigenous People, Relocation of Project Affected Persons and stakeholder engagement and Grievance Redress Mechanisms.
8 | Geographical Information System (GIS) specialist | Geospatial Engineering degree or other relating degree to Geographical Information System. 10 years of working experience in development of GIS system of similar complexity for monitoring, collecting processing and analysis data for efficient management and avoidance of wastages.
9 | Procurement Specialist | University degree in supply management related course. Must be registered with accredited professional body with a valid practicing license. At least 10 years of working experience with at least having successfully procured one project under PPP financing arrangement.

### 4. Duration of the Assignment
It is estimated that the consultancy services would require a period of not more than 18 calendar months. Proposers are expected to include, as part of their proposal, anticipated dates of deliverables. Proposers are expected to provide a comprehensive and detailed Project Implementation Plan, preferably using Microsoft Project, or equivalent software, indicating all the key tasks, deliverables, milestones, responsibilities, timetables and critical path for successful project implementation capturing as a bare minimum all the tasks. This detailed plan will be discussed and agreed with the client before signing the contract. In addition, the Consultant shall submit an Inception report including an updated detailed work plan for the project implementation, covering tasks and responsibilities of all parties involved not just the Consultant’s personnel. Every two weeks thereafter the Consultant will hold progress meetings with the client to discuss any key constraints encountered by the consultant, work planned for the subsequent period, inputs and support needed from the client and other parties and will update the work plan accordingly. All reports shall be submitted to the client in electronic format as MS Word document (latest version) and printed 6 copies. Models and workflow, process and data shall be submitted electronically in their appropriate dynamic application files.

### 5. Deliverables of the Assignment

<table>
<thead>
<tr>
<th>No</th>
<th>Deliverable</th>
<th>Phase of Assignment</th>
<th>Estimated Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inception Report</td>
<td>I A</td>
<td>3 weeks after contract signing</td>
</tr>
<tr>
<td>2</td>
<td>Prefeasibility studies and sector PPP project longlist</td>
<td>I A</td>
<td>15 weeks after contract signing</td>
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</tbody>
</table>
3. Shortlist of PPP Candidate Projects and the associated longlist screening report and validation workshop reports

| IA | 21 weeks after contract signing |

4. Feasibility Study Reports and PPP Transaction Plans of the shortlist reports

| IB | 33 weeks post contract signing |

5. Prequalification Documents and Evaluation Reports

| II | 37 weeks post contract signing |

6. Draft bidding documents including ITB, Draft PPP Agreement, performance specifications and evaluation criteria

| II | 40 weeks post contract signing |

7. Tender evaluation reports

| II | 56 weeks post contract signing |

8. Project Close-out Reports

| II | 72 weeks post contract signing |

6. Role of The Ministry of Water, Sanitation and Irrigation

The client is expected, among other things to perform the following roles:

- Provide existing relevant reports, subject to availability;
- Coordinate relevant institutions and stakeholders to participate in some of the activities and provide input;
- Introduction of the Consultant to key stakeholders;
- Provide counterpart staff for necessary support in the field; and
- Approval of deliverables;

7. Renumeration Arrangements

For bid pricing purposes, proposers are to assume that at least 3 projects from within the water, irrigation and sanitation sectors will proceed to Phase IB. The consultant’s contract will be a lump sum contract and will be paid on the basis of timely and acceptable deliverables over the envisaged contract period. Proposers must submit bids in the formats that shall be prescribed in the RFP. Proposers shall specify a fixed amount for each of Phase I (the “Phase I Amount”) and Phase II (the “Phase II Amount”). After Phase I, the CAs jointly with the PPPD will decide whether to proceed with Phase II and, if so, which projects. If the CAs decide not to proceed with Phase II, the contract with the consultant will be terminated. The Phase II fees will be paid on a pro-rated basis if the CAs decide on a lesser number of projects to proceed to Phase II.

The following remuneration schedule is set for each phase of the contract. Proposers should keep these in mind when submitting their proposals.

<table>
<thead>
<tr>
<th>Payment Schedule</th>
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<tbody>
<tr>
<td>Payment Amount (% of contract value)</td>
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</table>

**Phase I**

| 1 | Inception | 10% |
| 2 | Prefeasibility studies and sector PPP project longlist | 10% |
| 3 | Shortlist of PPP Candidate Projects and the associated longlist screening report and validation workshop reports | 20% |
| 4 | Feasibility Study Reports and PPP Transaction Plans of the shortlist reports | 60% |

**Total Phase I fees**

100%

**Phase II**

<table>
<thead>
<tr>
<th>Payment Schedule</th>
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<tbody>
<tr>
<td>Payment Amount (% of contract value)</td>
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</table>


<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Draft bidding documents including ITB, Draft PPP Agreement, performance specifications and evaluation criteria</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>Prequalification Documents and Evaluation Reports</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Final bidding documents after completing the competitive dialogue with potential bidders (includes RFP, PPP Agreement, performance specifications and evaluation criteria)</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>Tender evaluation reports</td>
<td>30%</td>
</tr>
<tr>
<td>5</td>
<td>Project Close-out Reports/Financial closure</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td><strong>Total Phase II Fees</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Payment amounts relating to items in Phase II in the table above will be prorated to the number of projects that proceed to Phase II.
7.2. **Annex 1. Environmental and Social Impact Assessment (ESIA) Table of Content**

The consultant will prepare the ESIA according to the following table of content:

a) **Executive summary.** Concisely discusses key findings and recommended actions.

b) **Project description.** Concisely describes the proposed facility and its associated facilities, its geographic location, including detailed maps, and its layout. Indicates for reference the need for any resettlement plan or indigenous peoples’ development plan.

c) **Policy, legal, and administrative framework**
   i. Discusses the policy, legal, and administrative frameworks within which the EA is carried out.
   ii. Describes KoK requirements and procedures, including reporting requirements of NEMA
   iii. Describes the relevant World Bank requirements relevant to this Project, including the World Bank Group General Environmental, Health and Safety (EHS) Guidelines and the appropriate Industry Sector Guidelines
   iv. Explains the environmental requirements of any co-financiers.
   v. Identifies relevant international environmental agreements to which the country is a party.

d) **Baseline data**
   i. Presents data directly relevant to decisions about project location, design, operation, or mitigatory measures, including physical aspects (such as topography, landforms, geology, soils, climate, air quality, and hydrology), and socioeconomic conditions (such as demography, settlements, community structures, vulnerable and marginal groups, sources and distribution of income, employment and labor markets, land use, and cultural heritage).
   ii. Identifies any changes anticipated before the project commences.
   iii. Considers current and proposed development activities within the project area but not directly connected to the project.
   iv. Collates data from existing sources, and if necessary, collects original data
   v. Identifies and estimates the extent, quality, accuracy and reliability of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.
   vi. Organizes and presents data according to three levels of detail: (a) footprint, (b) a buffer area around the project and its associated facilities, and (c) area of influence.
   vii. Presents summary data in geographic format.

e) **Environmental impacts**
   i. Predicts and assesses the project’s potential positive and negative environmental and social impacts that might change the baseline conditions, in quantitative terms to the extent possible, during the construction, operation and decommissioning phases.
   ii. Differentiates between short, medium and long-term impacts, and estimates the magnitude of impacts, and identifies generic both generic environmental and social impacts and site-specific impacts.
   iii. Identifies mitigation measures and any residual negative impacts that cannot be mitigated.
   iv. Explores opportunities for environmental enhancement.
f) **Analysis of alternatives**

i. Systematically compares feasible alternatives to the proposed facility associated ancillary facilities, such as technology, design, and operation--including the “without project” situation--in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements.

ii. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible.

iii. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

g) **Public consultations and disclosures**

i. The consultant is expected undertake minimum of two public consultations for project, during the preparation and finalization of the ToRs and when the draft ESIA reports is ready

ii. The public consultations should be documented, including both the positive and negative concerns of the Project Affected Persons (PAPs) and how their views are incorporated into the design of the project

iii. Disclosure of the report shall be done in a manner, form and language that are understandable, accessible which enable the public full participation.

h) **Appendixes**

i. List of EA report preparers--individuals and organizations.

ii. References. Documents all sources of written information, both published and unpublished, used in the ESIA.

iii. Records of public participation and consultations for obtaining the informed views of the affected and interested parties, as well as local nongovernmental organizations (NGOs), on the positive and negative impacts of the proposed project. The records will summarize concerns and opinions presented during the consultations. The record will also specify any means other than consultations (e.g., surveys) used to obtain the views of affected groups and local NGOs.

iv. Records of consultation meetings with institutional stakeholders

v. Tables presenting the relevant data referred to or summarized in the main text.

vi. List of associated reports (e.g., resettlement plan).
7.3. **Annex 2. Environmental and Social Management Plan**

The ESMP will specifically describe individual mitigation and monitoring measures during both construction, operation and decommissioning, assign institutional responsibilities, and estimate the resources required for its implementation. The ESMP will include:

a) **Mitigation Plan.** Identifies feasible and cost-effective measures that may avoid potentially significant adverse environmental impacts or reduce them to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient. The plan distinguishes between the construction and operations phases. The plan is organized specifically, the plan:

i. identifies and summarizes all anticipated significant adverse environmental impacts (including those involving indigenous people or involuntary resettlement), and identifies both generic and site specific environmental and social mitigation measures during construction and maintenance phases;

ii. describes with technical details--each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;

iii. include emergency/disaster preparedness plans;

iv. describes with details other plans that will be required during the construction and operation phases (e.g. Contractor ESMP, Occupational Health and Safety plans and labour influx plan).

v. estimates any potential environmental impacts of these measures;

vi. provides linkage with any other mitigation plans (e.g., for involuntary resettlement, indigenous peoples, or cultural property) required for the project.

vii. includes additional data collection to fill identified data gaps

b) **Contractor clauses**

i. Defines environmental and social clauses that the promoter will include in bidding documents and contracts for the construction and supervision consultants, to ensure satisfactory environmental, social, health and safety performance of contractors.

ii. The clauses will cover occupational health and safety in communities affected by the rehabilitation activities and its associated ancillary facilities, worksite health and safety; environmental management of construction sites; labor camps/labor influx; labor rights and the employment of community members; and land, property and livelihood compensation.

c) **Monitoring Plan**

i. Defines monitoring objectives and indicators, and specifies the type of monitoring, with linkages to the impacts assessed in the EA report and the mitigation measures described in the ESMP.

ii. Provides: (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

d) **Institutional Arrangements**

i. Describes institutional arrangements, responsibilities and procedures within the PPP.
Unit, the implementing partner, and the concessionaire and its contractors to carry out each of the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

ii. Includes training of contractors regarding the environmental and social clauses that apply to them.

iii. Estimates the resources required by the concessionaire to implement and monitor the ESMP, such as level of effort (LOE), and equipment.

iv. As necessary, proposes capacity building, additional technical support or organizational changes, to ensure the timely and effective implementation of the ESMP.

e) **Grievance Redress Mechanism**
   i. Describes the GRM procedures for receiving, handling and resolving complaints for each project

f) **Implementation Schedule and Cost Estimates:**
   i. Implementation schedule for mitigation measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans;
   
   ii. the capital and recurrent cost estimates and sources of funds for implementing the EMP.

h) **Chance Find Procedures**
   i. Describe the ‘Chance Find’ procedures to ensure preventive and mitigation measures are formulated and implemented in the event cultural resources are encountered during project activities

   Implementation Schedule and Cost Estimates:
   i. Implementation schedule for mitigation measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans;

   ii. the capital and recurrent cost estimates and sources of funds for implementing the EMP.