

# REPUBLIC OF MOZAMBIQUE

# MINISTRY OF PUBLIC WORKS, HOUSING AND WATER RESOURCES



# WATER SERVICES AND INSTITUTIONAL SUPPORT PROJECT II (WASIS II)

# **IDA Grant D110**

# CONSULTANCY SERVICES FOR THE REFINING AND IMPLEMENTATION OF ASSET MANAGEMENT STRATEGY

Contract Nrº FIPAG/WASIS II/CON-48/21

TERMS OF REFERENCE

# **CONTENTS**

I. BAC	CKGROUND	.4
1.1 Leg	gal Context	.5
II. OBJ	JECTIVES	.5
III. JUS'	TIFICATION	.6
3.1 Ma	anagement Systems Status	.6
IV. SCC	OPE OF WORK AND EXPECTED RESULTS	.6
4.1. Pre	eparation and Project Planning	.6
4.2. De	efinition of Assets Management Procedures	.7
4.3. As	sets Inventory, Registration and Labelling	.8
4.4. Ac	counting Reconciliation with Physical Inventory	.8
4.5. Ev	aluation of the Assets	.8
4.6. Da	ta Integration	.9
4.7. Tra	aining	.9
4.8. Mo	onitoring and Validation	10
V. DEL	LIVERABLES/ TIMING	10
VI. QUA	ALIFICATIONS AND RESOURCE REQUIREMENTS	11
6.1. Qu	nalification of the Consultant Firm	11
6.2. Tea	am Composition	12
VII. OTH	HER REQUIREMENTS AND CONSIDERATIONS FOR THE SERVICES	13
7.1. Co	onsultant Performance	13
7.2. Ge	eneral Reporting Requirements	14
7.3. Pay	yments	14
VIII. GEN	NERAL INFORMATION OF THE CONSULTANT	15
8.1. Str	ructure of the proposal	15
IX. ANN	NEXES	15
Anne	ex 1 – Summary of FIPAG's WSS	15

# **ACRONYMS**

AM Assets Management

DMF Delegated Management Framework

DRs Regional Companies

ERP Enterprise Resource Planning
GoM Government of Mozambique

ICT Information and Communication Technology

ICTMP Information and Communication Technology Master Plan

IVS International Valuation Standards

NIRF International Financial Reporting Standards

PIGI Integrated Information Management Platform

QGD Delegated Management Board

SCAF Admin & Finance Central Services

SCPI Project & Investment Central Services

SCPDN Planning and Business Development Central Services

SD Start Date

ToR Terms of Reference

WASIS II Water Services and Institutional Support

WSS Water Supply Systems

#### I. BACKGROUND

The Republic of Mozambique has received a grant from the International Development Association toward the cost of the **Water Services and Institutional Support Project (WASIS II)**, and it intends to apply part of the proceeds of this grant towards the contracting of a Consultancy for **Refining and Implementation of Asset Management Strategy.** 

The Government of Mozambique (GoM) is implementing reforms in the urban water supply sector aimed at improving coverage, quality and efficiency of services. The reform program has involved the reorganisation of sector Governance mechanisms, which have facilitated a transition towards decentralised water supply operations and management, including service regulation, investment planning, and private sector participation in operations.

Decree 73/98-Dec23 establishes the main objectives of FIPAG, manage the water supply assets and the public investment program in the water supply systems (WSS), to promote the participation of the private sector in the management of WSS, and to create the bases for efficient management and operation of WSS, aiming to improve the level of services.

FIPAG is a nationwide public institution, legal entity, with autonomy to make administrative, financial and asset management decisions, overseen by the ministries that oversee the water supply sector (sectoral oversight) and finance (financial oversight). FIPAG is active in 28 municipalities and 2 villages grouped in four Operational Regions, namely:

- **Metropolitan Regional of Maputo**: covering Municipalities of Maputo, Matola, Boane and part of the Marracuene district;
- **Southern Regional**: covering Municipalities of Xai-Xai, Chibuto, Chókwè, Inhambane and Maxixe;
- **Centre Regional**: covering Municipalities of Beira, Dondo, Quelimane, Mocuba, Tete, Gorongosa, Chitima, Moatize, Chimoio, Manica and Gondola;
- Northern Regional: covering Municipalities of Nampula, Pemba, Cuamba, Lichinga, Mozambique Island, Angoche, Nacala (Nacala Porto and Nacala-A-Velha), Montepuez and Mueda Plateau (Mueda, Nangade and Muedumbe);

The FIPAG operations are based on the principles defined by Decree 72/98-Dec23, which approves the Delegated Management Framework (DMF).

Thus, and according to its attributions and responsibilities provided in the DMF for water supply in Mozambique, FIPAG intends to develop a set of strategic actions, to increase the life cycle of its water supply assets, following the global model of asset management, defining and implementing active management procedures and policies. Digital working platforms and modules for asset management including their maintenance are part of the actions.

To maximize investments made and ensure the sustainability of the water supply service and the recovery of investments, FIPAG intends to follow the international practices for the management of assets, processes, procedures and sustainable management platforms.

Specifically, FIPAG aims to ensure better asset life cycle management, to improve planning in preventive and corrective maintenance in order to maximise the value of infrastructural investments, to plan investment for the short, medium and long term, based on reliable and up-to-date information and, then to attract more financing to the WSS in Mozambique, on a sustainable basis.

FIPAG already has a data model, which has allowed defining the information collected for the existing data base inventories that is stored on an integrated information management platform – PIGI. The existing information may be assessed to perform the services under this assignment.

# 1.1 Legal Context

The public agencies and entities are required to provide effective asset management and internal systems appropriate to their management, supported by legal instrument like "Public Assets Regulations", Decree 23/2007, Aug 9.

FIPAG is required to comply with all the following regulation without exception. The legal instruments to be considered during this consultancy service are not limited to those indicated below.

**Decree 42/2018 of July 24<sup>th</sup>** - Legal instrument and basic regulator, it defines a uniform and harmonized system of rules and procedures on the management, supervision, use and conservation of the public assets, in its public and private domains, including the public cultural assets.

The Ministerial Diploma 78/2008 of September 4<sup>th</sup> - It is a legal provision that approves the general classification of public assets, instruments or mechanisms to assist the property registry and inventory, instrument of the management of the public assets, under Decree 42/2018 of July 24<sup>th</sup>.

Thus, FIPAG's property assets fall into the above provisions, as well as in the internal regulations existing in FIPAG. In this context, for better management, FIPAG should oversee its assets, needing these to be identified, grouped, registered, inventoried, labelled, classified, valued, accounted for, conserved (maintenance), and controlled when moved and/or replaced, until the end of the asset lifecycle.

#### II. OBJECTIVES

In order to define appropriate structured line of action, taking into account the benefits that this process may bring, we intend to hire specialized consulting services in processes and Asset Management (AM) for the development of FIPAG's Asset Management Model, in order to achieve the following objectives throughout FIPAG's geographic areas of responsibility:

- Definition of Assets Management procedures;
- Physical inventory and assets labelling, with the classification of assets in terms of class to generate unique registration;
- Evaluation of Assets assign a fair market value to each asset;
- Harmonization, updating and correction of any existing discrepancies between accounting records and physical inventory, in accordance with relevant legislation;
- Management and maintenance of assets, using a digital platform compatible with others currently in use in FIPAG, including all related equipment;
- Integrated data management between FIPAG Head Office, Regional Companies and Operational Areas;
- Strict compliance with the procedures and regulations provided for in the legal framework;
- Training in Asset Management.

It is crucial that all phases of the consultancy services to be provided, including the practical actions, be carried out with the active involvement of FIPAG teams designated for this purpose. Therefore,

the consultant must plan an approach for the teams to work together, monitoring and validating the tasks performed by them, during those consultancy phases and, in training and post-training, ensuring an effective transfer of knowledge to FIPAG teams.

#### III. JUSTIFICATION

In general, FIPAG presents the following main challenges:

- > Existing discrepancies between accounting records and physical inventory, which need to be harmonized, updated and corrected;
- \ Lack of detailed and reliable information of existing assets;
- Out-of-date values of existing property and infrastructure;
- Weak management of the asset life span;
- Need to develop an integrate management system solution for interaction between existing digital platforms.

# 3.1 Management Systems Status

#### a) Administrative and Financial

For financial management, FIPAG has been using the Primavera Enterprise Resource Planning (ERP) system with the modules of Accounting, Treasury, Sales, Purchases, Assets. The system provider is responsible for the maintenance, development of some functionality and technical assistance of the ERP. There is a constraint that there is no integration between the commercial management module and the accounting module.

#### b) Maintenance and Asset

FIPAG does not have Asset Classification and Asset Management, Inventory, Reconciliation and Fixed Assets policies. FIPAG aims to improve the information available in the company, as well as the present asset condition and quantity.

It is intended that the inventory of the assets be carried out in all locations where FIPAG holds relevant assets.

#### c) Stock Management

There is no specific integrated digital software for stocks management.

#### IV. SCOPE OF WORK AND EXPECTED RESULTS

#### 4.1. Preparation and Project Planning

**Objective:** Create a work plan for the preparation of the implementation of Asset Management Model, detailing steps, products, actions, responsibilities, duration and any characteristic necessary for the successful execution of the project.

#### **Activities:**

- Obtain institutional information from FIPAG's Business and Operation Departments, including applicable legislation and internal regulations;
- Elaborate the Project Plan and define the project team In the configuration of service phases, characterise FIPAG regarding the management and evaluation of assets and present the structuring of the information to be made available;
- > Present the methodology of work;
- Hold the inception meetings to align the view/understanding on the project;
- > Initial meetings for presentation and dissemination of the project planning to the universe of all operational areas of FIPAG, highlighting critical phases for support needs. These meetings are decisive for the creation of an involvement of all Operational Areas and thus guarantee the necessary and indispensable contribution and Client participation.
- > There must be conducted interviews with FIPAG Central Managers (SCAF, SCPI and SCPDN), in order to collect the maximum of information about current processes and define which processes to implement in the future, allowing wise control of assets.
- > Establish the necessary infrastructure to carry out the project: workspace, equipment, software;
- > Prepare and submit the project plan;
- > Prepare the proposed planning for monitoring report.

# 4.2. Definition of Assets Management Procedures

**Objective:** Create basic conditions that guarantee FIPAG the continuity of safe and systematic management of their assets.

#### **Activities:**

- Analysis of the Global Model of Asset Data Management in use at FIPAG and presentation of improvement proposals covering also the following aspects:
  - o Definition of assets to be inventoried and assets not to be inventoried;
  - o Information to be associated with the assets in terms of physical location, organic integration, cost centre, technical characteristics, etc.;
  - o Classification of each typology of assets in terms of Class;
  - o Amortization rate to be attributed to each type of assets;
  - o Levels of aggregation and disaggregation of assets;
  - Type of management to be carried out for each type of asset (individual, by quantities, lots, complex, simple);
  - o Specific labelling rules for each type of assets;
  - o Definition of the file to be handed-over for data integration in the asset management modules (fixed assets, assets and maintenance) used by FIPAG;
- Definition of Provisional Procedures before starting the physical inventory, to control the incidents recorded during the inventory and reconciliation works (acquisitions, transfers, write-offs);
- > Definition of Final Procedures which define the information circuits to be followed after the completion of the project, in relation to:
  - o Acquisition of goods;
  - o Transfer of goods;
  - o Breakdowns, Repairs and Maintenance;
  - Asset disposal and write-offs;
- Seminars for discussions of the phase report to present at FIPAG Head Office level.

# 4.3. Assets Inventory, Registration and Labelling

**Objective:** The property and inventory registry are the basis of all the necessary information for the management of the assets. Therefore, it is important to follow standardized criteria for the infrastructures, establishing a hierarchy and structure of locations transversal to all Operational Areas.

#### **Activities:**

- Define the methodology to be implemented for the inventory and labelling of Assets;
- > Integration of the inventory methodology, preserving the form of use and maintenance of the Primavera or SAP asset control, already in use at FIPAG;
- $\rangle$  Confirm the forms and method of classification imposed by legal regulations: Diploma 78/2008 and Decree 42/2018 from 24<sup>th</sup> of July;
- Individually label each asset (total of assets), using a sequential numbering for the tags with Bar or QR code system where the information to be attributed to each typology of elements (assets) will be defined by law, taking into consideration International Financial Reporting Standards (NIRF) and appropriate information from inventories already carried out and the database in use at FIPAG. This activity needs to be conducted by the staff of water companies or FIPAG regions under the supervision of the consultant. The consultant needs to supply the hardware and software for the labelling and training of the staff. The consultant must bear the cost of inventory labels and other technical equipment used in the provision of services;
- Define criteria to be used to control the quality of the information collected, ensuring a form of electronic collection:
- Define and supply technical equipment to be used for the purpose and hand-over to the Client.

# 4.4. Accounting Reconciliation with Physical Inventory

**Objective:** Analyse the differences between the assets and the respective values recorded in the accounting system (ERP - Primavera fixed assets module or SAP) and the physical data that will result from the inventory process to be carried out and validated by the Consultant. Inventory and reconciliation must be mandatory to ensure the reliability and quality of process data.

#### **Activities:**

- Develop a methodology to be implemented for the reconciliation and physical accounting standardization of the Assets;
- > Establish criteria to be used to control the quality of the information collected; controls can be carried out by sampling;
- > Identify the assets not registered in the accounting records, the obsolescent assets and the assets that must be proposed for write-off;
- Reconcile this inventory with the existing accounting fixed assets records and correct whenever necessary;
- Reconciliation and standardization of all fixed assets with the new databases resulted from this work;
- > Define technical equipment to use in this phase.

#### 4.5. Evaluation of the Assets

**Objective:** To determine the reasonable value for continuing usage of the assets, taking into account the rules defined for the evaluation of assets in Decree 42/2018 of July 24th and the criteria established in the International Valuation Standards (IVS).

For this purpose, the inventory must be valued using the following criteria:

- (i) at acquisition value (historical cost) in which Regional Companies have supporting documents for this purpose;
- (ii) at the cost of Construction or Production;
- (iii) by the value resulting from the comparative market assessment in the case of donated assets, exchanged assets and assets that, due to their age, have not been recorded in the accounts within the scope of the transfer of Public Systems to FIPAG.

The evaluation of the Assets will also have to take into account the condition survey of the assets and the depreciation criteria to use thereafter. The evaluation date shall be reported to the date of the condition survey inspection visits.

#### **Activities:**

- Develop a methodology to be implemented for the evaluation of the Fair Value of FIPAG's Assets;
- Define criteria to be used to control the quality of the collected information;
- Define technical equipment to be used in this phase;
- Determine the remaining life span, so that FIPAG can apply the respective accounting amortizations to each of the evaluated assets.

#### 4.6. Data Integration

**Objective:** Create a set of files in such format, compatible with inventoried data, dully labelled, evaluated and valued, that will serve for direct integration into, the Asset Management Module, the Integrated Maintenance Management Module and other existing asset management platforms in use at FIPAG and its Regional Commercial Companies.

#### **Activities:**

- Create the set of files and integrate the inventoried data, dully labelled, evaluated and valued;
- Submission of a proposal of Software for the Management and Maintenance of Assets, and preparation of Tender Documents for procurement of this Software and related hardware equipment;
- > Presentation of reports of all previous phases for discussion at FIPAG's Head Office level.

# 4.7. Training

**Objective:** Training to FIPAG's Asset Management Department Team including Regional Water Companies' teams on the classification and management rules defined in the data model and procedures so that the teams can update the inventory thereafter, whenever there is a need to integrate new assets, and can work independently in the future management of the assets.

#### **Activities:**

- > Prepare the program content for training and coaching to FIPAG team;
- Prepare the methodology used to transfer knowledge to FIPAG teams, taking into account the following aspects:
  - Implementation of a set of methodologies that will allow the team to better manage the life cycle of assets;

- o Registration of assets including their geographic location;
- Evaluation, accounting and financial valuation of assets, including their depreciation and amortization:
- o All matters related to the appropriate implementation of the Global Asset Management Model and Asset Management Manual (to be prepared by the Consultant);
- > Support FIPAG teams and follow-up. The consultant must provide an approach to monitor and validate the tasks performed by the teams during training and post-training, ensuring an effective transfer of knowledge;
- > The training tasks will be carried out at the Academy of the Development of Skills and Professional Careers, and it is expected that some practical aspects of the training will be onthe-job training implemented in the field.

# 4.8. Monitoring and Validation

**Objective:** Follow-up missions will be planned to monitor the work performed by FIPAG's teams post-training and ensure the quality of data handling at all stages of the process.

#### **Activities:**

- Define the methodology to use for monitoring and validation. Provide an approach to monitor and validate the tasks performed by the teams during training and post-training;
- Follow-up and validation missions, at least two missions;
- > Prepare the activity report with a summary of the main data obtained in the monitoring and follow-up.

#### V. DELIVERABLES/TIMING

Total working time will be 12 (twelve) months.

The consultant will also visit all Operational Areas in the Regions (South, Centre, North, Maputo Metropolitan Areas and Others), perform the service and prepare workshops for presentation of most important deliverables.

#### **Deliverables / Reports**

# **Preparation and Project Planning:**

- Inception Report: (Scope Statement; Time Management; Execution Schedule; Methodology; Human Resources Management; Communication Management; Quality Management; Risk Management, etc);
- Project Preparation and Planning, including workshops for presentation of most important deliverables.

#### **Definition of Assets Management Procedures:**

- Asset Management Procedures Manual, which includes the provisional and final procedures.
- Final layout of integrated data management at FIPAG Head Office, Regional Companies and Operational Areas (Software and Hardware Equipment for Information and Maintenance Management) including Software and Hardware proposal.

# **Deliverables / Reports**

#### **Assets Inventory, Registration and Labelling:**

- Inventory, registration, labelling with tags containing Bar or QR codes, FIPAG's logo and number, asset evaluation, in order to embed the results into the accounting records.
- Delivery of technical equipment for inventory and electronic data collection (electronic readers, tablets and associated software).

#### **Accounting Reconciliation with Physical Inventory:**

 Database of Physical Inventory report, duly reconciled with the accounting system and updated.

#### **Evaluation of the Assets:**

- Report on the methodology for assessing the fair value of assets including established criteria;
- Valuation report of the assets following the legal framework including the relevant dates, the remaining life span of each valued assets and others.

#### **Data Integration:**

- Deliver the inventoried, labelled, evaluated and valued data file in a format compatible with existing electronic modules and platforms in use at FIPAG and Regional Commercial Companies;
- Integration of inventory sheets in such electronic format, able to upload into Public IT System "E-Património".
- Delivery of the full registry ("Cadastro Único").
- Software proposal for Asset Management and Preventive Maintenance;
- Terms of Reference and Tender Documents for the procurement of Software and Hardware.

# **Training:**

- Detailed training plan including program contents and methodology;
- Implementation of training, including on-the-job training;
- Report of the training carried out;

#### **Monitoring and Validation:**

- Interim reports of the follow-up and monitoring missions in all Operational Areas in the Regions of the work implemented and its validation.
- Final Project Report, with the description of all works carried out and the main conclusions obtained, formally signed by the authors, and then commented on and approved by FIPAG.

# VI. QUALIFICATIONS AND RESOURCE REQUIREMENTS

#### 6.1. Qualification of the Consultant Firm

Consultant must have the required financial and technical capacity to perform the service described in the present Terms of Reference. For this purpose, each technical proposal must present a "Profile of the Bidder", which will include at least:

- The Consultancy firm shall be a reputable firm with minimum of 15 years of proven experience in asset management and at least 10 years of cumulative experience in water supply asset management projects;
- Experience in development countries (preferably in Africa or Republic of Mozambique);
- Experience with international funded based contracts, including ADB, French Development Agency, Orio or World Bank;
- Technical and commercial organization of the company;
- Total revenues in the last three (3) fiscal years, in inventory, evaluation and asset valuation projects;
- Balance sheets and profit and loss statements for the last three (3) fiscal years;
- Summary description of supplies and services provided in at least five similar projects (proved with recommendation letters, Clients and contact references);
- Present at least three recommendation letters proving Consultants' competence in carrying out inventory and valuation services in the water sector;
- Certificates of non-debt to the Tax Authority;
- Certified copies of legal authorization for the activities;
- Proof of experience in asset valuation for NIRF, specifically in the water sector;
- Certified copy of professional liability insurance.

Therefore, it is mandatory to comply with the instructions, terms and specifications contained in this document. Failure to provide all required specifications may result in the exclusion of the Tender.

# 6.2. Team Composition

The Consultant shall propose appropriate full time and part-time staff (multidisciplinary technical team) and time inputs for the assignment. The professional inputs (man-months) required for the services is estimated at **36,5 person months**, excluding support staff. The minimum requirements for key staff are as detailed below:

#	Position	Description			
1	Project Team Leader	> Master's degree in Business Administration (MBA) or in Economics Studies; or in Engineering;			
		> Certification as an evaluator. RICS Certification "Royal Institution Chartered Surveyors" will be an advantage;			
		> In-depth knowledge of the Water Supply Sector and Consultancy in Asset Management;			
		PMP Certification - Project Management Profession, or other equivaled degree issued by a related entity;			
		> 10 years of proven experience as Project Manager in 5 (five) projects in utilities (including water), experience in developing countries and in Sub-Saharan countries, successfully completed.			
2	Specialist in Water Sector	> Degree or Master's Degree in Hydraulic, Civil or Mechanical Engineering, and Certification as Assets Evaluator;			
		> 10 years of proven experience in water sector, with experience in 5 (five) projects in utilities (including water), and experience in developing countries and in Sub-Saharan countries, successfully completed;			

#	Position	Description		
		> Proven experience in inventory, labelling, asset valuation in water supply infrastructures.		
3	Specialist in ICT - Information and Communication Technology	<ul> <li>Degree or Master's Degree in TIC's, or similar education;</li> <li>10 years of proven experience in the field of service;</li> <li>Proven experience in designing and implementing information systems strategies for the utilities sector and others.</li> </ul>		
4	Strategic Consulting Specialist	<ul> <li>Degree or Master's Degree in Systems Engineering or similar education;</li> <li>10 years of proven experience in developing countries in process consulting, functional analyses, organizational models and procedures in assets management.</li> </ul>		
5	Civil Construction Specialist	<ul> <li>Degree or Master's Degree in Civil Engineering with knowledge in investment projects management;</li> <li>10 years of proven experience in developing countries in assets management, in inventory, evaluation, valuation of construction works and technical installations.</li> </ul>		
6	Finance Specialist	<ul> <li>Degree or Master's Degree in Accounting and Auditing or Finance;</li> <li>10 years of proven experience in the management of technical and administrative fixed assets (registration, evaluation, valuation and monitoring of assets), with mastery of International Financial Reporting Standards, Corporate Accounting System, Depreciation Regime approved by Decree 72/2013 of Dec 23.</li> </ul>		

# VII. OTHER REQUIREMENTS AND CONSIDERATIONS FOR THE SERVICES

#### 7.1. Consultant Performance

- Ability to systematically analyze complex problems, draw relevant conclusions and implement appropriate solutions.
- Each member of the Technical Team must be explicitly identified;
- At least the Project Team Leader must have good knowledge of Portuguese plus a minimum of one expert.
- FIPAG may request the replacement of Technical Team professionals who do not perform as expected or who may behave inappropriately. This procedure shall be done by means of a written communication to the Consultant, which shall provide for the replacement of the professional within a maximum period of thirty (30) business days, as of the receipt of the notification, by a professional with training and equivalent or higher experience in relation to initially designated;
- The consecutive substitution of professionals of the Technical Team, due to inefficiency in the execution of the activities objectives of this Term of Reference, shall be considered partial execution of the contract, being the Contracted subject to the penalties provided therein.

# 7.2. General Reporting Requirements

- All documents, correspondence, instructions, communications, training, etc related to the project shall be in Portuguese and related submissions translated to English when required;
- The reports should be submitted via 3 hardcopies and one electronic copy through flash drives and the format should be discussed during initial meetings;
- The Consultant will report formally to FIPAG's Director General, Mr Victor Tauacale or his designated representative and liaise with the FIPAG's Operation Manager Director (Mr Abilio Murima Asset Management Team Leader and/or his designated representative and counterpart).

# 7.3. Payments

Payments shall be made on the basis of agreed Lump Sums for each completed milestone of the assignment. The relative milestone payments in proportion to the total sum for the assignment are given below:

Milestone (After Approval by the Client)	Percentage of Lump Sum	Milestone Date	
■ Advance Payment	10.0%	After the effectiveness of the contract and submission of the corresponding bank guarantee.	
<ul><li>Inception report;</li><li>Project preparation and planning</li></ul>	10.0%	0,5 month after the Start Date (SD)	
■ Assets management procedure manual			
<ul> <li>Final layout of integrated data management</li> </ul>	20.0%	1,5 months after SD	
<ul> <li>Inventory, registration and labelling;</li> <li>Reconciled and updated database report</li> </ul>	20.00/	10 months after SD	
Delivery of technical equipment for inventory and electronic data collection	30.0%		
■ Valuation report of the assets			
<ul> <li>Delivery of inventoried data file;</li> <li>Delivery of the full registration report ("Cadastro Único")</li> </ul>	10.0%	12 months after SD	
<ul> <li>Software proposal for Asset Management and Preventive Maintenance;</li> <li>Terms of Reference and Tender Documents for the procurement of Software and Hardware equipment</li> </ul>	5%	12 months after SD	
<ul><li>Detailed training plan;</li><li>Report on the training carried out</li></ul>	10%	12 months after SD	
■ Final report of the project			

Milestone (After Approval by the Client)	Percentage of Lump Sum	Milestone Date
<ul> <li>Interim reports of the follow-up and monitoring missions</li> </ul>	5%	After each mission
Total	100.0%	

#### VIII. GENERAL INFORMATION OF THE CONSULTANT

Some information shall be addressed in the preparation of proposals as described below:

# 8.1. Structure of the proposal

The proposal shall have the following structure, although not limited in its responses:

#### a) Introduction;

# b) Bidder Information:

- Company name;
- Date of creation of the company;
- Organizational structure;
- Head Office address, preferably in Mozambique, and other offices at international level;
- Contact persons: name, function, direct telephone, mobile phone, e-mail and fax;
- Any information relevant to FIPAG.

#### c) Location and Dimension:

- Geographic location;
- Number of employees per functional division (focusing on Africa and Mozambique in particular): consulting, development, training, maintenance and support;

#### d) Bidder Profile:

- Background and history of the Company;
- Vision, mission and strategic objectives of the Company;
- Portfolio of products, services and main areas of activity:
- The Consultant must have ISO9001 certification:

#### e) Competencies (Personnel Skills) (CV):

Availability of Consultants' internal Human Resources with high skills in similar services, in particular to ensure the management of the project in reference, proven by the presentation of:

- CVs of the Bidder's key professional team;
- CVs of potential project managers with proven experience in project management of similar size and complexity.

FIPAG will not accept the subcontracting of the services or part of the services requested, and the services must be performed exclusively by the Consultant's Staff or staff of approved consortium members.

# f) Consultant's Experience:

Implementation plan (summary description of the phases of implementation and respective schedules with the phases).

The consultant must include in his proposal the methodologies to be used in this provision of services, describing the different tasks to be carried out for each phase, the respective individualized financial values for each of them and the deadlines for completion. In addition, they must describe the quality control procedures they intend to implement in order to guarantee the reliability of the information.

The consultant must demonstrate his experience in this area and a solid working methodology that responds to FIPAG's needs.

#### g) References:

Organizations where the Consultant has implemented projects of similar size and functional characteristics and techniques.

- Description of services provided;
- Methodology used for elaboration of fixed asset management, as well as all interactions that may have an influence on fixed assets;
- Experience in asset management for water supply sector, must present a list of services performed in the last 5 years, with the respective amounts (to be proved with recommendation letters).

<b>T</b>		<b>D</b>	C	
Terms	$\alpha$ t	NO.	tarc	nca

IX. ANNEXES

		C 1	<b>D</b>	c		
1	Terms.	ot l	ᅛᅀ	ÞΔr	and	$\alpha$

 $ANNEX\ 1-Summary\ of\ FIPAG\ Water\ Supply\ Systems$ 

Item	Sistema	Localização da Fonte	Fontes	Tipo de ETAs (Classificação)	
	Região do Grande Maputo				
		Umbeluzi	Superficial - Barragem de Umbeluzi	Convencional, com pré cloração	
			Subterranea: 22 Furos em Maputo e Matola	Desinfecao com HTH	
1	Maputo	Intaka		Convencional comprocessos oxidativos	
		Corrumana	Suoerficial - Barragem de corrumana	avançados POA e carvão ativado	
		<b>va</b> . Contudo todas as Árec	Matola e Boane e é composta por <b>5 Áreas</b> is Operacionais recebem água da mesma font		
	16 P	SAA	18 furos	N/A	
2			e Matola e é composta por <b>8 PSAA em Ma</b> os de Ndlavela 1,2 e 3, 1° de Maio 1 e 2; Nkobe		
	I		Região Sul		
3	Xai-Xai	Furos de captacao subteranea dispersos pela cidade de xaixai	Subterânea -25 furos	Desinfecao com HTH	
4	Chóckwé (Incluindo Hókwè e Chilembene)	Furos de captacao subteranea dispersos pelo minicipio de chockwe e arredores	Subterânea -13 Furos superficial - Rio Limpopo	desinfecao com HTH e sistema de tratamento Convencional com Filtração sob Pressão	
5	Chibuto	Rio Jatingue Afluente do Rio Limpopo	Superficial:	Filtracao directa sob pressao e adsorcao em CAG	
6	Inhambane	Tofo e Inhambane sede	Superficial: Rio Guiua Subterrânea: 7 Furos (4Guiua+3 Tofo)	ETA de Filtros lentos e Fesinfeção com HTH	
7	Maxixe	Maxixe	Subterânea: 16 (Operacionais 6) Superficial: Rio Nhanombe	Convencional	
			Região Centro		
8	Beira-Dondo	Beira e Dondo	Captação superficial - Rio Púnguè (Captação de Dingue Dingue)	Convencional com pré oxidação	
9	Gorongosa	Gorongosa	Superficial, barragem de Gorongosa	Filtração directa	
10	Chimoio-Manica-Gondola	Chicamba	Captação superficial - Rio Revúe (Captação da Barragem de Chicamba e Manica)	Filtração directa -ETA de Chicamba Convencional - Manica	
11	Tete	Cidade de Tete	38 Furos em Nhartanda, Canongola, Rovubwe e Degue	Desinfecção	
12	Chitima	Chitima	Captação subteranea na Vila de Chitima	Desinfecção	
13	Moatize	Moatize	15 Furos em Chithatha e Vale	Desinfecção	
14	Quelimane	Licuar e Nicoadala	16 Furos em Licuar e Nicoadala	Aeração, filtração lenta e Desinfecção	
15	Mocuba	Mocuba	Captação superficial - Rio luguela	Convencional com Filtração sob Pressão	
		Barragem de monapo e	Região Norte		
16	Nampula	furos em Namiteka e Muatala	Captação superficial - Barrageme Captação subterranea (Namiteka e Muatala)	Convencional - Barragem de Monapo Desinfecção - Namiteka e Muatala	
17	Nacala	Barragem de Nacala, Campos de furos de Mutuzi 1 e 2, Mpaco	Captação Superficial - Barragem 21 Furos em Mutuzi e Mpaco	Convencional e Desinfecção para ao furos	
18	Angoche		6 Furos	N/A	
19	Ilha de Moçambique	Campo de furos de Entete	9 Furos	N/A	
20	Lichinga	Superficial barragem de Jatingue	Captação superficial	N/A	
21	Cuamba	Cuamba	Captação superficial	Filtração directa (Lenta)	
22	Pemba	Pemba, Metuge	39 Furos em Metuge, Chuiba e Murrebué	ETA de remoção de Ferro e Manganes	
23	Mueda	Chomba, Chudi e furos	Captacao Superficial (Nascentes) Captação subterranea ITHINO	Filtração sob pressao pra chomba e tratamento compacto em Chudi	