



**REPUBLIC OF MOZAMBIQUE
MINISTRY OF PUBLIC WORKS, HOUSING AND WATER RESOURCES**



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

IDA Grant D 110

**ACQUISITION AND INSTALLATION OF PROJECT MANAGEMENT
PLATFORM FOR FIPAG**

Contract Nr. FIPAG/WASIS II/CON-31 /20

TERMS OF REFERENCE

October 2020

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FOR

ACQUISITION AND INSTALLATION OF PROJECT MANAGEMENT PLATFORM FOR FIPAG

1 BACKGROUND

The Republic of Mozambique has received a grant from the International Development Association toward the cost of the **Water Services and Institutional Support II Project (WASIS II)**, and it intends to apply part of the proceeds of this grant for payments under the Contract for the Preparation of **Project Management Platform for FIPAG**.

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.

More specifically, the GoM has taken steps to provide for:

- Reduced operating costs and increased efficiency, particularly through involving private sector in operations for water supply services in 21 major cities; Maputo, Matola, Boane, Beira, Quelimane, Nampula, Pemba, Dondo, Chokwe, Xai-Xai, Inhambane, Maxixe, Tete, Moatize, Chimoio, Manica, Gondola, Lichinga, Cuamba, Angoche and Nacala;
- Tariff adjustments that support financial sustainability; and
- Establishment of a Regulatory Board for the sector, which considers both service quality and financial performance.

The program for urban water supply also includes investments in rehabilitation and extension of systems. The GoM's implementation agency for the new urban water program is Fundo de Investimento e Património do Abastecimento de Água– FIPAG (Investment Fund and Water Supply Asset Holder).

FIPAG is responsible for the fixed assets of 21 city water supplies and for the future investment in the systems. It has the mandate to ensure that the public receives an adequate and safe water supply that meets Mozambique standards for health and hygiene (the public service obligation), and is empowered to ensure these systems achieve autonomous, efficient and financially sustainable water supply operations.

The WASIS II Project, supported by the World Bank, has its objectives to improve the performance, sustainability and coverage of water supply services in the six cities of Beira, Dondo, Tete, Moatize, Nacala and Pemba.

For a better project management including WASIS-II, Great Maputo Water Supply and other institutional projects, FIPAG intends to hire consultancy services using funds under the financing agreement to improve its contract management processes and procedures, through the design and installation of a project management platform, including the implementation of a customized computer system.

Under WASIS II finance, FIPAG is currently in preparation of procedures manuals, aiming the standardization of quality control process of all projects being implemented in FIPAG, for all source of funds. The consultancy company shall familiarize themselves with these manuals, be informed and guided by the results and respective recommendations in order to ensure that the quality control issues are properly aligned with the FIPAG procedures.

The purpose of this Term of Reference is to provide competitors with information about the nature, size, complexity and all the details of the elements necessary for the preparation and submission of proposals.

2 GENERAL SCOPE OF SERVICES

2.1 Overview

The Consultant to be hired under this process will be responsible for the design, installation and implementation of a Contract management platform, including training of FIPAG staff.

The management platform to be designed shall be suitable for FIPAG and its subsidiaries needs and shall be based on the number, nature, size and complexity of projects being implemented or planned for future. The platform to be acquired and installed under this assignment is for FIPAG, however, it shall be designed considering potential use by any company managing or operating systems from FIPAG, under Delegated Management.

For the implementation of this assignment, the Consultant will be responsible for (i) streamlining the business process lifecycle and define a new management framework for project and contract management and (ii) designing a project and contract management platform according to the requirements of this ToR.

For the implementation of this assignment, the Consultant shall define the governance procedures and structures, assess, mapping and design project and contract management process and platform outputs, including identified risks, reports and information dashboards.

Furthermore, the consultant shall also define the background, platform interface, collect the required input information and design the software that will meet FIPAG needs and requirements pertaining the project management, this shall lead to the implantation and operation of the management tool, including training of FIPAG staff.

The management platform to be designed shall assist FIPAG in improving the efficiency and effectiveness of the Project and contract management throughout the entity's Project cycle, from the contracting process stage, works and consultancy contract signing, preparation of engineering designs, implementation of the contracts as well as their closure process.

Regarding the definition of the model, the consultant shall consider the standards, guidelines and best practices for project and contract management, with focus to those from the Project Management Institute (PMI), among other practices, mainly applied in the implementation of projects in FIPAG.

2.2 Objectives

The consultancy services aim creating a platform for improvement of the implementation of projects and contract management, covering the following:

- Organize, optimize and synchronize all ongoing projects in FIPAG.
- Ensure efficiency on the project management, namely, by:
 - Reducing the risk of failure;
 - Ensuring the best quality management;
 - Ensuring projects deliver, within the time and on budget;
 - Promote automation of tasks and reduce unnecessary repetition of tasks, toward more efficiency, to ensure completion of the projects within the costs and schedule;
- Propose a systematic decision-making process from the executive leadership team down to the technical specialist on the ground.
- Approval and clearance processes for different stages of technical work (draft documents, extensions and approval of activities, ToRs and reports) and procurement. This shall contribute to make the review and approval process more expedite, to improve FIPAG management system.
- Adapt project and contract management procedures, with focus on the operational capacity and procedures to oversee implementation, monitor performance and make available strategic metrics and data regarding the project’s timeline, risks and progress to senior management of FIPAG.
- Provide synchronized information, in real-time to accelerate and improve the decision making and implementation process.
- Allow monitoring of the project lifecycle management from design to construction, through the defect notification phase, within the same platform.
- Automatically generate standard progress reports for FIPAG Management, to be shared with donors and the GoM

3 DESCRIPTION OF THE ACTIVITIES AND OUTPUTS

3.1 General approach

The assignment aims the design and establishment of a project management platform to assist the implementation process towards achievement of the project planned outputs and indicators, and therefore, shall include, but not limited to the following:

- a) Request for Information and submittals

The project and contract management platform to be developed shall easily demonstrate the request for information process with a standardized workflow for the entire project team involved in each task, with different access level.

It shall also present the submittals packages workflow, tracking of the approval processes flow and manage all information in a single document library.

The platform shall also generate a tracking of the Brief Action Reports prepared for all project and contract management meetings, which shall clearly demonstrate all commitments made with deadlines and a systematized record history of all meeting.

The platform shall allow submittals and revision by third-party stakeholders such as Consultant and government institutions with a restricted level of access, to be determined by FIPAG.

The management platform shall allow for an appropriate degree of customization by the administrator from FIPAG to: (i) add and remove users; (ii) update submission and approval workflows; (iii) update standard messages and notification e-mails and reminders; etc. Therefore, the training program shall include the capacity building to the FIPAG Administrator, who at the end of the two-year technical assistance will be expected to undertake such customization without any assistance from the developer service provider.

b) Document management

The Consultant shall prepare a streamlined document management by using a single, cloud-based platform for organizing, distributing, and sharing files in order to ensure successful project outcomes.

During the design of the platform, the Consultant shall also make sure it allows backup for the dedicated local server (hosted in FIPAG). In this regard, users while in FIPAG premises must have the possibility to connect to the dedicated server and when outside FIPAG premises, they shall have the possibility to connect to the cloud database.

The document management shall be divided in two different workflows, one for document distribution with uploading functions and another one for document control.

c) Coordination

The platform shall allow that all team is well coordinated in order to accelerate reviews, identify and solve problems quickly by a multi discipline models in a single viewer and filter viewers on a dashboard. The platform shall allow engagement of third-party stakeholders for consultation and upload documents, if necessary. The third-party access to the platform shall be subject to FIPAG authorization.

d) Approval and clearances

The platform shall allow the users to review and approve or clear documents related to technical, financial, procurement and other fields of project management within FIPAG system. For this purpose, the users shall be granted different access level in the platform, suitable to their level of approval authority within FIPAG. The developer service provider shall, therefore, seek FIPAG input and instruction with regard to the level of access to be granted to each user.

e) Cost control

The platform shall allow report of the overall projects under FIPAG implementation, a summary cost control center, certified amounts, and paid amounts to various service providers, per contract.

f) Quality management

The platform shall include a quality management component through standard quality checklist templates. The Consultant proposed methodology shall clearly address this requirement, alternatives shall include a quality management component through standard quality checklist templates to be considered.

g) Project data and analysis

The main objective of the project data and analysis is to provide a high level access and report pertaining possible pending issues and allow the project team to have an understanding of the project performance, daily priorities and critical paths of the project in order to mitigate and reduce the risks on time, cost and quality. The data shall allow the platform to deliver information to the team through the dashboard, covering the entire lifecycle of the project.

A platform manual covering all workflows above listed shall be submitted for prior approval of the client within **5 months from the commencement of services**. A workshop for presentation, discussing toward the approval of the manual shall take place in Maputo, with participation of FIPAG staff. The workshop shall only be scheduled after FIPAG approval on the manual.

The services for the implementation of the assignment will be phased as follows:

- *Phase 1: Diagnosis, Analysis and Governance Model Proposal*
- *Phase 2: Design of Project Management Platform*
- *Phase 3: Installation, Training and Platform Operation*

3.2 Detailed Approach and Activities

3.2.1 Phase 1 – Diagnosis, Analysis and Governance Model Proposal

Task 1: Diagnosis and analysis

Under this phase, the Consultant shall:

- Undertake diagnosis of the current governance model, through the identification of gaps, weaknesses and potential of the current project and contract management model of FIPAG;
- Analyse the current governance model for project and contract management processes, especially with focus on the processes and human resources involved, including roles and responsibilities, processes and technological resources;
- Propose a new governance model for project and contract management processes, based on premises that aim to mitigate or reduce the gaps identified on the current governance model;
- The new governance model should also clearly include the role of the contract manager, showing the areas of influence, the competences, the different processes and areas of knowledge. The model should also propose the different techniques and tools that can be used during contract management.

PS: The governance model should be developed based on the Public Works Contracting Regulation, Supply of Goods and Provision of Services in the Government of Mozambique, the Procedure Manual for Public Procurement in Mozambique, the World Bank guidelines, Project Management Institute (PMI) standards as well as the FIPAG procedures manual. In addition to the above regulation, the Consultant may recommend others, which shall be in line with the current legislation in Mozambique.

Task 2: Definition of the background and platform interface

The Consultant shall define the background and interface that will set up the main goals, flexibility and limitations of the platform in order to guide the users for a proper operation.

3.2.2 PHASE 2 – Design of Project Management Platform

Under this phase, the Consultant shall undertake the following activities:

Task 3: Definition of new Governance Model

Based on Diagnosis and analysis undertaken in phase 1, the Consultant shall define and present the new Governance model proposal, including decision making structures and process.

Therefore, the consultant shall map, design and define procedures for activities related to contract management in line with the new governance model. The activity shall be developed taking into consideration the current project and contract management of FIPAG (as is), considering the main elements of a process, such as: the objective of the process, the inputs, outputs and its rules, controls and main events / results. This activity will include, but not limited to:

- Analyse and classify the processes that add value, incidental processes and processes that do not add value to the project and contract management, in order to guide the design of the processes;
- Design and optimize the project and contract management process (to be), including the modelling of an optimized work flow covering the main components of the business process;
- Document and support the communication of the optimized process to the teams directly involved in the project and contract management.

PS: The mapping and design of processes must be carried out in Business Process Modeler Notation (BPMN) and take into consideration the Guide to the Business Process Management Body of Knowledge (BPM CBOK).

Task 4: Design and development of project management platform

The platform must be designed and developed considering the business rules and procedures identified in phase 1. The developed platform shall include the following:

- (a) Register and monitoring of the procurement processes in line with all public procurement modalities governed by the Public Works Contracting Regulation, Supply of Goods and Provision of Services to the Government, World Bank guidelines and any other procedures manual in force in FIPAG;
- (b) Include all the phases of the procurement processes, control of deadlines, progress, allow notifications when complaints occur and add files / evidence in each phase;
- (c) Register and monitoring in detail, of the contracts related to each of the procurement processes registered or not in the computer system, including the monitoring of their physical and financial progress;

- (d) Have an interactive dashboard with the summary of the most relevant information for the project and contract management;
- (e) Register and monitoring of the deliverables of the contracts, also the deadlines, progress, product quality, financial execution and their respective attachments;
- (f) Control the financial execution of all contracts registered in the system. The system should also allow the calculation of the EVM (Earned Value Management) variance indices for productivity (Cost Performance Index - CPI) and speed (Schedule Performance Index - SPI) to be presented on the interactive dashboard;
- (g) Ensure user access control, having different profile options and access levels;
- (h) Have multiple alerts, an online notification centre and automatic triggering of e-mails with reminders about the most important events related to the contracts, such as contract expiration dates, bank guarantees expiration dates, time inputs and limits allocated to key consultants and disbursements;
- (i) Have online chat feature to facilitate communication between users of the system;

It should also allow quick access to the main documents, including procedures related to the Administrative Court (endorsed, noted, among others), invoices, payment orders, receipts, deliverables, addenda, guarantees and other relevant documents.

The platform must be hosted on the web, be responsive and accessible by smartphone and mobile internet.

During the use of the platform, FIPAG should be able to identify the need for incremental improvements and, therefore, the Consultant shall analyse, dimension the effort and, without prejudice to the contract execution schedule, develop or improve the system's functionalities, to respond to an eventual technological evolution in this area.

It is also important to include a link of all documents stored in the platform to be archived in the Cloud to be identified by the Consultant with easy access from users.

The system should contain the following modules:

- a. Annual project budget, including:
 - Budget lines, activities and actions
 - Procurement methods indicated for each of the activities and actions planned
 - Link of existing contracts to each budget lines
 - Planned and executed amounts for each budget activities and actions
 - Balance for each budget lines
 - Projects financial indicators linked to respective budget activities
 - Main responsible for the activities foreseen in budget plan.
- b. Procurement
 - Register and monitoring of all procurement processes including all modalities established in the Regulamento de Contratação de Empreitada de Obras Públicas, Fornecimento de Bens e Prestação de Serviços ao Estado, World Bank guidelines, World Bank procurement regulations and any other procurement manual in force at FIPAG.
 - Rapid access to key documents, including their status in the Administrative Court (Tribunal Administrativo – TA).
 - Enabling the procurement processes to be linked to the budget activities.

- Provide an interactive dashboard with the most relevant information for managing procurement processes.
- c. Project and contract management
- Register and manage in detail all contracts related to each procurement processes and activities of the budget line registered in the system, including: contract manager, contract description, contract signature date, supplier of goods, provider of works, services or consultancies, contract amount, scope, intended completion date, deliverables with planned and executed dates, contract validity, bank guarantees, physical and financial progress, variation orders, contract amendments, among others.
 - Follow up all the deliverables of the contracts, regarding deadlines, status, quality of the deliverables, financial execution and their respective electronic or scanned files. This should include any challenges that may be affecting the contract due to poor performance of any service provider.
 - Calculate the cost management indexes of the projects, such as variance (EVM - Earned Value Management), productivity (Cost Performance Index - CPI) and schedule efficiency (Schedule Performance Index - SPI).
 - Provide information on the status of deliverables during contract implementation.
 - Inform the most relevant deliverables of the contracts, register its milestones, potential risks, and actions to mitigate the risks on the implementation.
 - Provide an interactive dashboard with the most relevant information for project and contract management.
- d. Allow the storage of documents related to projects and contracts, especially those required for Internal and External Auditing processes
- Centralize all the necessary files for the audit procedures, such as: deliverables under contract, invoices, payment orders, receipts, amendments, bank guarantees, contract referred to by the Administrative Court (Tribunal Administrativo – TA), among others.
- e. Other functionalities, including:
- Ensuring access control of users through profiles with different access levels.
 - Have alerts and periodical automatic reminders with the most important events, such as contracts validity dates, bank guarantees, among others.
 - Online chat feature.

The software must be hosted on the web during this assignment and later installed on the FIPAG dedicated server. The software must also be responsive and accessible via mobile Internet. The developer service provider shall consult with FIPAG to agree on the minimum functionalities to be accessible via mobile internet. Throughout the use of the system, FIPAG may identify incremental improvements and, therefore, the Consultancy shall analyse the possibility of implementing them.

Relevant information expected to be presented on the dashboard is below presented, but not limited to:

Works: Contract description; contract signature; contractor's details; consultant's details; contract amount; scope of works; intended completion date; contract validity; bank guarantees

validity; physical progress (%); financial progress (%); variation orders (%); contract addenda; cost Performance Index (CPI) and Schedule Performance Index (SPI); risk analysis; and *stakeholders*.

Consultancy services: contract description; contract signature; consultant's details; contract amount; scope of works; completion date; contract validity; bank guarantees validity, if any; physical progress (%); financial progress (%); contract addenda; and risk analysis;

Goods: contract description; contract signature; supplier's details; expected delivery date; contract validity; bank guarantees validity, if any; physical progress (%); financial progress (%); contract addenda; and risk analysis;

PS: The platform must be developed taking into consideration the guidelines of the Security Development Lifecycle (SDL). Preferably it should be developed in Hypertext Pre-processor (PHP) and Java Script.

After development of the platform the consultant shall indicate all resources needed by FIPAG to operate and maintain the platform with the respective financial assessment.

3.2.3 Phase 3 – Installation, Training and PM Platform Operation

Task 5: Installation of the platform in FIPAG's server

The Consultant shall install the platform in FIPAG's server always assisted by FIPAG's staff to be indicated during this phase. Additionally, the Consultant shall design the platform considering an interface to be installed on the end users computers, in an estimated number of 150 installations, covering headquarters offices in Maputo, Regional Directorates and all Operational Areas.

Task 6: Training of project and contract managers of FIPAG and workshop

This activity will be carried out after the installation and operation of the platform and should include the following sub-activities:

- Conduct training for FIPAG staff based at the headquarters offices in Maputo, Regional Directorates and all Operational Areas, through in-person or virtual workshops. The training shall include the governance model, the optimized project and contract management process and the IT system for managing the contracts developed in previous activities.

It is estimated that 25 staff will be trained at FIPAG Headquarters, 5 in each of the 3 Regional Directorates and 5 in each of the Operational Areas. The training load will be proposed by each bidder, and in no case should be less than 20 hours for each training group.

After the completion of the training, the Consultant must issue a certificate of participation to all participants.

PS: The Consultant must prepare and share in advance all material to be used during the workshop for prior approval by FIPAG. This material must be submitted at least 15 calendar days before the scheduled training start date. In relation to the project and contract management

system, the Consultant must indicate the minimum requirements for the execution of the workshop, including minimum qualifications of the participants, and must include its respective cost in his/her financial proposal, with the Consultant being responsible for all training assistance, except the rooms that will be made available by FIPAG.

Task 7: Technical assistance to FIPAG after hand over of the platform

After installation and operation of the platform at FIPAG the consultant shall:

- Document and submit to FIPAG all necessary procedures for the implementation of the computer system in the local dedicated server;
- Hold meetings / trainings with the technical team, indicated by FIPAG responsible, for the migration of the system to the local dedicated server. The local dedicated server will be provided by the Consultant, within the scope of this consultancy, and should be considered in its financial proposal;
- Carry out the monitoring of the migration of the system to the local dedicated server of FIPAG.

After completing the transfer of the platform, the Consultant must remain available at FIPAG's office for 6 months in full time basis and until the end of the 24-month period in part time to provide support to FIPAG, especially in clarifying doubts regarding the interpretation, operationalization and manipulation of the source code, as well as support in resolution of any flaws that may be identified during the implementation of the platform. Support must always be in person, except when it is possible to do it remotely. For this purpose, the Consultant must indicate a responsible technician who must be based at FIPAG office in full time basis for the first 6 months and for the remaining period up to 24-month the responsible technician shall be available to respond to FIPAG's requests, making a minimum of 1 weekly visit to FIPAG, lasting 8 hours of work and can be extended whenever the need for assistance justify it.

A FIPAG technical team will be appointed to monitor this activity. The Consultant must propose the composition and profile of the technical team needed to be responsible for monitoring.

The consultant shall be responsible for the installation of the management system on FIPAG's dedicated server, with a minimum product warranty of 2 years and assist FIPAG whenever is needed during this period.

PS: The platform must be fully migrated and installed on the FIPAG local dedicated server. The source code must be passed on and the technical team to be appointed by FIPAG, trained to proper interpretation.

4 Form of Contract for the Consultancy Services

The consultancy service will be awarded as follows:

Ref	Consultancy Contract Nr	Description	Form of Contract
1	FIPAG/WASIS II/ CON-xx/20	Preparation of Project Management Platform for FIPAG	Lump Sum

The Consultant will be selected in accordance with the procedures set out in the World Bank's Guidelines: Selection and Employment of Consultant under IBRD Loans & IDA Credits & Grants by World Bank Borrowers, January 2011 and revised June 2014.

5 REPORTING AND REQUIREMENTS

5.1 Inception report

The inception report shall address the Consultant's understanding of the assignment, his updated methodology, resources allocated and updated work plan to implement the assignment. This report shall show the Consultant's preparedness following his review of the existing information related to the current management system in use at FIPAG.

The Inception report shall also address the challenges identified by the Consultant with regard to the implementation of the assignment and strategy that the Consultant will adopt to overcome these challenges.

This report shall be submitted **1 month after the commencement of the services.**

5.2 Project Management Manual

The platform manual is expected to rely on relevant literature, best practices and relevant knowledge areas in project management and contract management. The manual should contain principles and fundamentals of process management, methods for defining detailed workflows, methods for monitoring of operational performance, and methods for process improvement, among others. The manual shall be prepared with reference to FIPAG standardization and quality assurance manuals currently under finalization, and shall be submitted **5 months after the commencement of the services.**

5.3 Draft and final user's manual

The consultant shall submit for FIPAG's approval two draft of user's manual being the first one after installation, operation and training to FIPAG staff, the second draft manual after FIPAG's comments as per the work schedule. The final version of the manual shall be submitted following the second draft, with incorporation of the Consultants lessons learned during the training to FIPAG staff and operation of the platform, it shall also address the second round of FIPAG's comments

The first draft and second draft of the user's manual shall be submitted to FIPAG within **8 and 12 months after SD**, respectively. The final user's manual shall be submitted to FIPAG a week after comments on the second draft.

5.4 Other requirements

All documents, correspondence, instructions, communications, etc related to the assignment shall be in English, and final reports also in Portuguese.

The Consultant will report formally to FIPAG's Director General or his designated representative and liaise with the FIPAG's Project and Investments Director and his designated representative and counterpart.

All Reports shall first be submitted in draft form for review and comments and when all of the Client's comments have been attended to, to the Client's satisfaction, five hard copies of the final reports shall be delivered to the Client together with three complete electronic versions on a flash drive, one in the PDF format for possible reproduction to interested parties and two in the MS Word for text and MS Excel for tabular and financial data, if applicable.

All reports shall be submitted in English as one A4 size volume addressing an executive summary and main report, accompanied by separate volumes of Appendices if any and deemed adequate. The final versions of all reports shall be submitted in two languages, English and Portuguese.

All reports and communications will be in English. Portuguese will be considered as an advantage.

6 QUALIFICATIONS AND RESOURCES REQUIREMENTS

6.1. Consultant's qualification

The consulting firm shall have at least 10 years of experience in institutional reforms and development, particularly for public sector clients, in the fields of result-based management, project and portfolio management, business process management and automation, software development and implementation, organizational structure, and human resource management, among others. It must demonstrate at least 5 years of relevant experience in the development and implementation of software for project management, contract management and process automation. Preferably, the firm must have carried out assisted operation in similar assignments, with clear-defined strategies and tools for capacity building and knowledge transfer. The firm shall have the following specific qualifications and experience:

- At least 5 years experience in similar assignments in entities of reference (experience with standards and guidelines of World Bank or other donor-funded). The consultant must provide at least 3 letters of recommendation from institutions in which developed similar services.
- At least 5 assignments related to development and implementation of similar software for project and contract management.

6.2. Level of effort

The Consultant shall propose appropriate full time and part-time staff and time inputs for the assignment but it is anticipated that the following key personnel will be required. The professional inputs required for the assignment is estimated at **20 person months**, excluding support staff. The minimum requirements for key staff are as detailed below:

Position	Description	Person-month
Team Leader / Specialist in Project Management	Qualified specialist with diploma, with at least 15 yrs experience in design and contract management platforms. Master on project management will be advantageous. Minimum 15 years of experience as consultant, of which 10 years working for similar assignment in the context of a heterogeneous team composed of consultants, experts, and local staff. Working experience in sub-Saharan Africa, with public entities in Mozambique and Development Finance Institutions will be advantageous. Proven working knowledge of tools, methods, and concepts of quality assurance. Fluency in English speaking and Portuguese.	
Computer Engineer	Degree in Computer Science or Computer Engineering or any related subject such as Information Systems and Electronic Engineering. At least 10 years of relevant cumulative experience in project management, of which at least 5 years experience working as a senior IT Expert of a reputable consultancy firm as part of a multidisciplinary team. He/she must have at least 7 years in design of project management tools, with a minimum of 3 similar assignments. He/she must be fluent in English, Portuguese being an advantage.	
Project Manager and Quality Assurance Specialist	Degree in a relevant Engineering subject, with specialization in Project Management, at least 10 yrs cumulative experience in Project Management assignments. Certification by a Project Management Institute (PMI) will be an advantage. A minimum of 3 similar assignments on the position of Project Manager and Quality Assurance Specialist are required. Proven working knowledge of tools, methods, and concepts of quality assurance. Fluency in English speaking and Portuguese.	
Total		20.0

The above resource allocation is an indicative estimation of the key staff required and the consultant may propose other professional staff deemed necessary for the successful implementation of the assignment.

7 WORK SCHEDULE AND PAYMENTS

It is planned that the Contract will be signed, started and completed as per the dates set out in the table below.

The duration of the consultancy is anticipated to be 36 months, of which 12 months for design and installation of the Project Management Platform and 24 months for technical assistance period (6 months full time and 18 months partial). The deliverables are scheduled to be submitted and paid as follow:

Table 1 – Schedule of deliverables and payment

Item	Description	Time Schedule	Payment (%)
1	Inception report	1 month after Start Date (SD)	5
	Platform Governance Proposal	2 months after SD	10
2	PM Platform design manual	5 months after SD	10
3	Platform user’s manual draft and training of FIPAG staff	8 months after SD	5
	Project management platform (including installation)	8 months after SD	55
	Platform user’s manual final	12 months after SD	5
4	Technical assistance	From month 12 to month 36 after SD	10

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