

Section 3: Terms of Reference (TOR) for Consultancy services for the Design, Testing and Commissioning of a Management Information System (MIS) for the Mauritius Renewable Energy Agency (MARENA - Lot1) and Utility Regulatory Authority (URA - Lot2)

1. Project Background:

The Green Climate Fund (GCF), through the United Nations Development Programme (UNDP), is providing financial support and expertise to assist the Government of Mauritius in achieving their targets set in the Long-Term Energy Strategy and to empower the two entities, namely the MARENA and the URA for the development and regulation of RE respectively in Mauritius. In this context, the project – Accelerating the transformational shift to a low-carbon economy in the Republic of Mauritius - is being implemented at national level and is financed under the Green Climate Fund (GCF). The project is being implemented in 3 components whereby Component 1 is focused on the institutional strengthening of MARENA and URA in order to equip them accordingly for their respective mandates.

The MARENA has been set up in 2015 as per the Mauritius Renewable Energy Agency Act 2015 and has for main objective the promotion of the adoption and use of renewable energy in Mauritius. It will also serve as a one-stop shop for independent power producers (IPPs) to implement RE projects like solar and wind farms in Mauritius.

The Utility Regulatory Authority (URA) has been set up in 2016 in accordance with the Utility Regulatory Authority Act 2004 to regulate utility services, namely electricity, water and wastewater in Mauritius. The objectives of the URA are to:

- ensure the sustainability and viability of utility services;
- protect the interests of both existing and future customers;
- promote efficiency in both operations and capital investments in respect of utility services;
- promote competition to prevent unfair and anti-competitive practices in the utility services industry.

There are currently 5 and 10 staff respectively at each of these two institutions.

1.1 Current status

At present, the IT system at both MARENA and URA is a basic system with laptops, internet connection, and email and there is no specialist and adapted MIS software nor any appropriate server(s) for centrally managing the information requirements of these institutions. In line with the operationalization and institutional strengthening strategies of both institutions, a robust, up-to-date, fully-fledged and integrated (hardware and software) MIS system is required. It is therefore proposed to design and implement a **Management Information System (MIS)** at MARENA and URA so that the institutions are fully equipped, using paperless technologies, to meet the corporate objectives.

This TOR comprises two lots as follows:

- 1) **Lot 1** - Consultancy services for the Design, Testing and Commissioning of a Management Information System (MIS) for the **Mauritius Renewable Energy Agency (MARENA)**.
- 2) **Lot 2** - Consultancy services for the Design, Testing and Commissioning of a Management Information System (MIS) for the **Utility Regulatory Authority (URA)**.

2. Proposed Sequence for implementation of MIS

It is proposed that the Management Information System (MIS) for MARENA and URA be implemented using a phased approach. The following 4 phases would be considered:

- **Phase I – Gap Analysis & Requirements Documentation/BoQ**

- a) A thorough assessment of any existing MIS and/or IT system at the institution which shall entail a review of the current hardware and software capabilities of each site;
- b) Consultations, based on the minimum requirements defined in Tables 1 and 2 below, with the main stakeholder (i.e. MARENA and URA as well as secondary stakeholders involved with these institutions for RE including the Ministry of Energy and Public Utilities (MEPU), the Central Electricity Board (CEB), other Ministries and public and private authorities, as will be advised accordingly by each institution, followed by a detailed gap analysis;
- c) Submission of detailed hardware, software and electrical power requirements (sizing of UPS/Generators, if required) and specifications for the MIS in the form of a comprehensive requirements documentation/bill of quantities (BoQ), together with a template for the maintenance contract for the MIS hardware and software supplier(s)/contractor(s);
- d) Submission of a detailed list of requirements and specifications for the creation of a versatile, modular, user-friendly, upgradable and scalable (amongst others) website/portal for MARENA and URA;
- e) Submission of a detailed list of requirements for the creation of an electronic/web-based Document Repository and Management System (DRMS) as well as setting up of a proprietary File Coding System at MARENA and URA;
- f) Submission of a detailed list of requirements for the development of an e-certification platform for MARENA and a conventional licensing platform for URA (use of downloadable forms which will be filled in by potential licensees and submitted by email or post to URA - no e-licensing platform is required);
- g) Submission of a list of requirements to allow the installation and operation of the following software, as required by MARENA:
 - ArcGIS Pro/Enterprise
 - AutoCAD 2017
 - MapInfo
 - ER Mapper
 - Geoviewer
 - Mapviewer
 - Accounting software based on requirements of MARENA. Sage Evolution ERP is proposed (Other recommendations will be considered).

h) Submission of a list of requirements to allow the installation and operation of the following software, as required by URA:

- Accounting software – Sage Pastel is proposed. (Other recommendations will be considered).
- Adobe Acrobat Pro – To edit pdf files.

Note: Following the completion of Phase I, all procurement will be undertaken by UNDP.

- **Phase II –Procurement of Equipment and Services (To be undertaken by UNDP)**

Following recommendations from Phase I, the procurement of the equipment and services for the setting up of the MIS for MARENA and URA will be undertaken by UNDP. The MIS consultant will be involved as an observer in the selection process to ensure compatibility with requirements.

- **Phase III – Software development, website/portal development and Supervisory role**

- a) The MIS consultant will supervise the installation, testing and commissioning of all software and hardware, as carried out by any appointed sub-contractors under Phase II, to ensure adherence to all requirements and specifications in the BoQ/Terms of References.
- b) Creation of a versatile, modular, user-friendly, upgradable and scalable (amongst others) website/portal for MARENA and URA;
- c) Creation of an electronic/web-based Document Repository and Management System (DRMS) as well as setting up of a proprietary File Coding System at MARENA and URA;
- d) Creation of e-certification platform for MARENA;
- e) Creation of a conventional licencing facility for URA (use of downloadable forms and submission of filled-in forms by email or post);

The MIS consultant is expected to supervise the design, up-loading, testing and commissioning of the website/portal, DRMS and e-certification platform for MARENA.

Note:

- All software development, website/portal development, e-certification platform, licensing facility and set up of DRMS will be completed by the IT contractor.
- Supervision works will be carried out by the MIS consultant.

- **Phase IV – Operation Manual, UAT and Training**

- a) Following successful installation, commissioning and testing of the MIS, a User Acceptance Test (UAT) is to be carried out (either as part of the commissioning or after) and a UAT report submitted for review and approval by the clients;
- b) Submission of a comprehensive Operation and User - Maintenance Manual, Training/Capacity Building for the staff on the manual and MIS, followed by handing over of the completed MIS. The MIS consultant is expected to submit an Operation and Maintenance Manual for the operation of the overall MIS at each organisation – MARENA and URA.

Section 3a LOT 1 - Consultancy services for the Design, Testing and Commissioning of a Management Information System (MIS) for the Mauritius Renewable Energy Agency - MARENA

The main beneficiary of Lot 1 is MARENA. The MARENA office is currently located at the 4th Floor, The Celicourt Building, Sir Celicourt Antelme Street, Port Louis. As at June 2018, MARENA consisted of 5 staff.

2.1 Objectives

The main objective of this consultancy is to assess the existing MIS capacities of MARENA, which includes a review of the current IT system in place, submit a comprehensive design brief consisting of MIS architecture (process mapping, proposed software and hardware solutions, human resource capacity building, user manuals and any other related ancillary scope), scope and extent of the system, specifications (Bill of Quantities) as well as detailed costing and proposal for the supervision of the installation, commissioning and user acceptance testing, amongst others, for the successful Implementation of a Management Information System (MIS) for MARENA.

The specific objectives of the consultancy service are to:

- 1) Undertake an assessment of the current IT system and a gap analysis for the implementation of the MIS at MARENA. Provide a list of hardware and software requirements for the development and installation of the MIS, as outlined in Section 2 of the Terms of Reference.
- 2) Provide technical guidance to the UNDP for the procurement of the MIS.
- 3) Supervise the development of the website/portal, DRMS and e-certification platform to ensure adherence to requirements and specifications. Supervise the installation, testing and commissioning of the completed MIS and performance of the UAT.
- 4) Develop an operation and user-maintenance manual and train the staff of MARENA for the overall MIS.

2.2 Scope of works

The scope of works is as follows:

Phase I (Refer to item 1-3 of Payment Schedule)

- 1) Consultations with MARENA staff to understand all the key activities and deliverables to implement the MIS;
- 2) Assess the current IT system at the MARENA and make recommendations, including physical layout (floor plan) and space allocation within the MARENA office, on how a comprehensive, energy-efficient and cost-effective **Management Information System (MIS)** can be implemented, based on the requirements of the client. Consultations with other stakeholders like the MEPU, URA and CEB will be required as part of the assessment;
- 3) Evaluate and recommend latest technology and standards to adopt for IT equipment and infrastructure of the MIS to ensure reliability, interoperability, upgradability, scalability and sustainability of the system, amongst others, in the long term;
- 4) Assess the current IT staffing capacity to operate the proposed MIS at MARENA and recommend whether additional IT staff is required. The consultant is also expected to provide a training plan for the current staff;
- 5) Prepare the necessary technical specifications for the procurement of all hardware, software and ancillaries required for the MIS in the form of a detailed Requirements Document or Bill

of Quantities (BOQ) which will be used in the Tender Document for procuring the necessary IT Supplier(s)/Sub-Contractor(s). Any civil works for accommodating the server room or other facility, if required, shall be included in the submitted BOQ. Templates for the maintenance contracts for the software and hardware, and any other aspect of the MIS, with the relevant suppliers will also need to be submitted;

- 6) Provide cost estimates and time-frame for the implementation of the MIS using different technologies like Cloud Computing, Sharepoint, similar system to Drupal etc. Annual maintenance costs for the proposed technology should also be provided;
- 7) Evaluate and recommend choice of technology and standards to adopt for IT (hardware and software) infrastructure for implementing the MIS to ensure reliability, interoperability, upgradability, scalability and sustainability of the system, amongst others, in the long term;
- 8) Submit a detailed list of requirements and specifications for the creation of a versatile, modular, user-friendly, upgradable and scalable (amongst others) website/portal for MARENA;
- 9) Submit a detailed list of requirements for the creation of an electronic/web-based Document Repository and Management System (DRMS) as well as setting up of a proprietary File Coding System at MARENA;
- 10) Submit a detailed list of requirements for the development of an e-certification platform and application for the registration of stakeholders and RE experts for MARENA;
- 11) Submit a list of requirements to allow the installation and operation of a list of software, as required by MARENA (see Annex 2 in Appendix);
- 12) Prepare a Terms of Reference for the recruitment of the IT Contractor who will be responsible for the development of the website/portal, DRMS, e-certification platform and associated software.

Phase II (Refer to item 4 of Payment Schedule)

- 13) Provision of technical support to the UNDP for the procurement of the IT contractor/supplier and all hardware, software and ancillary applications relating to the MIS. This includes technical assistance to UNDP in the evaluation of bids for the selection of the IT contractor/supplier.

Phase III (Refer to items 7-8 of Payment Schedule)

- 14) Supervise the installations made by the IT contractor(s) to ensure that standards, installation procedures, equipment handling and other health and safety aspects and overall client requirements and specifications as determined by the MIS consultant in the preliminary phase of this consultancy are strictly adhered to. The MIS consultant shall submit to the Project Manager weekly progress reports as well as a final commissioning report which will be the basis for payment under this phase.
- 15) Supervise the development, uploading, testing and commissioning of the website/portal for MARENA by the IT contractor.
- 16) Supervise the development, installation, testing and commissioning of the electronic/web-based Document Repository and Management System (DRMS) as well as setting up by the IT contractor of a proprietary File Coding System at MARENA.
- 17) Supervise the development, installation, testing and commissioning of an e-certification platform and the application for the registration of stakeholders and RE experts online for MARENA.

Note:-

All software development, development of website/portal, e-certification platform and associated applications and DRMS will be carried out by the IT contractor/supplier. **The MIS consultant is required to provide supervision only.**

Phase IV (Refer to item 7-8 of Payment Schedule)

18) Provision of training/capacity building to staff of MARENA on use of new software installed for the operationalisation of the MIS. This will include firstly an operation and user-maintenance manual for the overall MIS and secondly, a training plan (including proposed schedule following commissioning of the MIS) as well as in-house workshops/ training sessions for MARENA staff. The final report on training will include both the training plan as well as contents of the in-house workshops/training sessions in PowerPoint format.

The MIS consultant(s) will work in close collaboration with MARENA during the assignment.

3.3 Requirements Matrix

The MIS shall comprise (but not limited to) of the following requirements, to be implemented as part of the MIS.

Table 4: Requirements Matrix for the implementation of the MIS at MARENA.

AREA	REQUIREMENT	DESCRIPTION	COMMENTS
General	R.1 The MIS should satisfy the following inherent features:		
	i) Paperless, electronic and web-based solution		
	ii) Cost-efficient	The MIS should be an efficient, comprehensive and cost efficient inter-connected system that provides the best IT and communication solutions to allow smooth running of the MARENA office. It should be user friendly, easily scalable and upgradable as well as incorporate a document repository and management system, amongst others.	The system should consist of all hardware and software systems, as well as any other ancillary equipment, services and applications where necessary, that make up a fully-integrated, functional and operational MIS to allow all staff to use the system efficiently, in line with paperless strategy. HRMIS to be set at the office.
	iii) High scalability		
	iv) Ease of upgrade		
	v) Modular (if deemed appropriate)		
	vi) High user-friendliness and operability		
	vii) Ease of user-maintenance		
	viii) Interconnection capability (future) with other institution's MIS		
	ix) Incorporate a Document Repository and Management System which allows for easy coding,		

	uploading, safekeeping, sharing, processing and retrieval amongst others, of data and information relating to the day-to-day operations		
Hardware	R.2 Physical layout	The physical layout, electrical, environmental (air conditioning) and maintenance requirements of all the equipment that includes workstations, accessories, servers, server room, switches, routers etc within the MIS should be clearly documented	The physical layout for setting up the MIS in the MARENA office is critical to allow optimum use of space. Provision for a server room with proper air conditioning to be determined and any civil works required and costing thereof.
	R.3 Network/Local Connectivity	A LAN shall be installed to allow a network to be created to connect users to the servers and other devices like printers etc	A network is essential to enhance connectivity within the MARENA office. The right topology needs to be determined.
	R.4 Video Conferencing facility	A fully-fledged and high-resolution video conferencing facility consisting of video, audio and internet connectivity (equipment, software, physical layout) is to be installed as per the needs of MARENA especially for communicating with IPPs from abroad.	A fully-fledged video conferencing facility tailor made to the requirements of the MARENA is to be proposed by the IT consultant, either as part of the MIS platform or separately.
	R.5 Data Management	The MIS should enable various types of documents such as text, spreadsheets and presentations to be managed (created, edited, updated, shared, emailed, transferred, deleted etc.) in a	A suitable database/file server with the appropriate user software on each client workstation shall be specified and procured. Server(s) should have enough storage capacity to store large amount of data . The OS for each server to

Software		paperless, integrated and user-friendly manner.	be determined. (Office 365 already installed on workstations). The possibility to use cloud computing or sharepoint for data storage and sharing will be assessed by IT Consultant. Suitable redundancy should be incorporated in the design for safeguard of data and information stored.
	R.6 Windows and Office Package	An up-to-date office package and OS to be installed at each workstation for daily office tasks.	Office package 365 is preferred while OS to be Windows 10.
	R.7 Geographical Information Systems (GIS) software/applications like ArcGIS Pro	GIS software to be procured off the shelf and integrated in MIS. Users should be able to capture, store, manipulate, analyze, manage, and present spatial or geographic data (e.g. solar maps, wind maps or other data pertaining to RE) efficiently using specialised software. The software should be compatible with GIS software used by other government institutions (e.g. CEB and Ministry of Housing)	This feature in the MIS is essential for MARENA. MIS should have sufficient storage/processing capacity at server and workstation levels to ensure data integrity and accuracy together with a complete set of tools for storing, editing, evaluating, and managing all kinds of spatial data—including real-time data. (See Annex 2 in the RFP)
	R.8 Carbon emission calculator	MIS to include a calculator for carbon emission of the equipment in the MIS	This feature will allow the assessment of the energy consumption and the carbon footprint/carbon emission at MARENA. All necessary technical information will be provided by MARENA.

	R.9 Procurement Software/Portal	MIS to include the design and development of a simple portal to allow procurement of equipment and recruitment of consultants.	An e-procurement platform is required with functions of advertising tenders online, online submission of tenders and bidders log in facility.
Communication	R.10 Access to Internet	All workstations shall have access to internet with reliable connection speed.	Connection to internet is essential for research and access to email.
	R.11 Email accounts	The MIS should allow the use of email as per the domain name MARENA. Selected users shall have unique email accounts for internal and external email communication.	A mail server should be included in the MIS to allow use of email by selected users. A contact database to be created.
	R.12 Webservices	The platform in the MIS should be capable of supporting web services protocols.	Capability to transparently interact with appropriate web services using standard protocols
	R.13 Remote Access	Users shall be able to access the platform away from the organisation.	The platform shall be accessible via a browser using internet protocols to allow key users to have access to documents on server at any time.
	R.14 Website/Portal for MARENA	A website shall be created to allow digital visibility of MARENA at local and international level, as a one stop shop for RE investment in Mauritius.	IT consultant to determine the best hosting solution for the website/portal following consultation with MARENA. A Platform similar to Drupal to be used for the website/portal. Drupal is currently being used by Governmental bodies and Parastatals. Intranet and an Extranet to be implemented as part of the MIS to allow registered stakeholders to have access to specific database and

			forms. User-managed and configurable access privilege control (by system's admin) should be an inherent aspect of the MIS and website intranet. MIS should also include functionality to allow other stakeholders like CEB, MEPU etc to have access to the platform.
	R.15 Telephone Communication	The MIS should be supported by a fully-fledged IP PBX telephony network with IP PBX server, SIP/VoIP handsets (at selected workstations) and VoIP gateway	A PBX system to be used to allow effective telephone service for internal and external line use.
Security	R.16 Confidentiality	The MIS shall provide sufficient security to keep all information provided by potential investors confidential and accessible to privileged users only as controlled and configured by the systems admin. In this respect, a suitable Information Security Management System (ISMS) (based for e.g. on ISO 27001 information security guideline) should therefore form integral part of the MIS and the solution proposed.	A secured system to be implemented within the MIS to keep confidentiality at all times and to give limited access to this information.
	R.17 Security	The MIS shall be effectively secured to prevent possible fraudulent access and software attack. Minimum physical protection should include surge protectors, UPS backup and	Security is essential at MARENA office to secure information and equipment.

		redundancies. Minimum software level protection should include latest Antivirus incorporating anti-spyware, ransomware and other malwares. The proposed Antivirus should be centrally served and managed by the systems administrator.	
	R.18 Disaster Recovery System	The MIS at MARENA should include a Disaster Recovery System, to allow sensitive and confidential data to be saved in case of technical failure of system or a fire	Stored information at MARENA needs to be able to be saved and retrieved even in case of major technical failure or a fire using a remotely located DRS and Backup solution with automatic switch-over when required.
	R.19 Backup system	As per R.18, a back up system complementary to the Disaster Recovery needs to be installed.	IT Consultant to recommend on location of the Disaster Recovery and Back Up system
Operational	R.20 Accounting/Finance software	Selected users should be able to use accounting /finance software like SAP	MIS should be able to support SAP-like software and keep all accounting/financial data securedly and give access only to selected users.
	R.21 Documentation unit	The MIS should be equipped with a searchable database of publications catalogue, including electronic references.	MARENA has set up a Documentation Unit (DU) which will aspire to be a national repository of all things pertaining to RE, including articles and publications by local authors, standards and norms, reports, thesis, etc.
	R.22 Document Repository & Management (filing) System with suitable coding system	The MIS should include a comprehensive and fully-fledged DRMS for files kept on server/cloud. A suitable coding system should also be designed,	The IT consultant should recommend, design and implementation of an electronic DRMS with proper codification of files on server/cloud.

		in consultation with the client.	
Capacity Building	R.23 Support/Training to users	<p>The MIS shall be equipped with a fully-fledged training kit that includes support information to assist users to use the system effectively. Training on the use of specific software like the GIS will be required.</p> <p>Furthermore, the MIS consultant should submit additional staffing requirement w.r.t the MIS and help in the drafting of TOR (roles and responsibilities) for any future recruited systems administrator(s), as required.</p>	IT consultant to submit a training plan for the current staff and recommend on additional staffing requirement.

3.4 Training/Capacity Building/Workshop

For the purposes of training/capacity building in lot 1, the MIS consultant is expected to provide training/capacity building to the staff of MARENA on the functionality of the overall MIS. All logistic arrangements for the training will be undertaken by the UNDP Project Management Team.

3.5 Deliverables

3.5.1 Description of Deliverables

The MIS consultant is expected to submit the following deliverables during the course of the project:

- 1) A detailed workplan for the setting up of the Management Information System at MARENA. The Workplan shall consist of the following:
 - a. A detailed Gantt chart showing milestones/major deliverables and activities and highlighting the critical path and version number as well as the duration for the assignment and expected start and completion dates;
 - b. Project Implementation Methodology;
 - c. Schedule, type and context of consultations with stakeholders (for approval by client);
 - d. Any other relevant sections, documents, procedures, processes, literature and references.
- 2) Following initial consultation rounds, a preliminary design report on the functionalities and hardware/software requirements and specifications for implementation of the MIS at

MARENA for approval of the client.

- 3) Upon approval of preliminary design, submission of a detailed design document which shall include the following (but not limited to):
 - a. Detailed process mapping for MARENA towards implementation of the MIS;
 - b. Detailed design (architecture, layout, content, modules, layers, functionalities etc.) of the proposed MIS;
 - c. Detailed design of ancillary services/applications such as Document Repository & Management System and File Coding System etc;
 - d. Cost estimates of proposed system and technology to be used;
 - e. Requirements documentation / Bill of quantities (BoQ) for hardware and software;
 - f. Terms of Reference for the recruitment of IT Contractor(s) for the development of the website/portal, DRMS, e-certification platform and associated software;
 - g. Templates for contractual services to be procured within the scope of this assignment as well as post-commissioning maintenance;
 - h. Procurement methodologies and timeline (Gantt Chart) (support to UNDP for procurement – technical assistance for evaluation of bids for procurement of IT equipment);
 - i. Licencing implications for all software (annual maintenance costs, etc);
 - j. Any other relevant information and details which are pertinent.
- 4) Supervision of installation, testing and commissioning and operationalization of the MIS till handing over. The issue of completion/signed commissioning certificates is required.
- 5) Supervision and advisory role during the development, installation, testing and commissioning of the website/portal, DRMS, e-certification, e-procurement portal and associated software for MARENA by the IT Contractor.
- 6) Development of a detailed user-maintenance and operational manual with as-made system layout/schematics and user-maintenance and troubleshooting procedures for the overall MIS.
- 7) A detailed training plan for MARENA staff with training modules on the MIS as an integrated system and on the different component of the system with focus on the hardware and software installed.
- 8) Future IT staffing requirements as well as roles & responsibility definition for future system administrator(s) of the MIS.

3.5.2 Submission procedure

All outputs/deliverables should be submitted to the Project Manager and copied to the Project Coordinator and the CEO of MARENA for review. The team will review all outputs/deliverables and their comments shall be communicated to the consultants within 14 days of submission of the output/deliverable. The consultants will then have to consider and incorporate the comments within a period of 2 weeks from the date of receipt of comments. The consultants will have to provide for justifications when comments are not incorporated in the output/deliverable.

3.6.1 Key Expert 1 – Team Leader (IT Engineer/Information System Specialist)

Education

- Post graduate degree in IT or any other related, with specialization in System Architecture field from a recognized university. Specializations in MIS, and/or Project Management, will be an advantage.

Experience

- Must have at least 8 years' relevant experience in terms of project planning, development and review, resource planning, role and responsibility definition, coordination across multiple teams, project risk analysis and mitigation techniques related to MIS/IT projects, among others.
- Must have at least 2 site references.
- Experience in developing MIS for Governmental Bodies or parastatals would be an advantage.

Skills and competencies:

- Strong leadership and planning skills.
- Strong understanding of needs and issues of non-profit companies.
- Strong analytical skills.

Language

- Excellent written and spoken French and English is required. Report writing skills is a must.

3.6.2 Key Expert 2 – IT Engineer/System Analyst

Education

- Degree in Information and Communication Technology or Information System from a recognized university.

Experience

- Must have at least 5 years' experience of successful system analysis and design for IT project implementation.
- Must have at least 2 site references.
- Experience in software development/programming for MIS for Governmental bodies or parastatals would be an advantage.

Skills and competencies

- Strong leadership and planning skills
- Strong understanding of IT needs and issues of institutions.
- Strong analytical skills

Language

- Excellent written and spoken French and English is required

3.7 Table 5 - Estimated Person Days for Lot 1

	Activity	Estimated person days input
1.	Preparation of workplan for consultancy services for setting up of MIS at MARENA.	3
2.	Undertaking a Preliminary design report on the functionalities and hardware/software requirements and specifications for implementation of the MIS. Different scenarios (e.g. dedicated servers, cloud computing or both must be presented with associated benefits, cost estimates, licensing implications, etc.)	15
3.	Undertaking a Detailed design report which includes refined costs estimates – hardware and software including costs associated with maintenance of software, timeframe and Bill of Quantities (BOQ) template for implementing the MIS and Terms for Reference for the recruitment of the IT contractor(s) for the development of the website/portal, DRMS, e-certification platform and associated software.	15
4.	Completion of Procurement	5
5	Preparation of report on supervision of installation and commissioning of hardware, development of website/portal, DRMS, e-certification and including all appropriate certificates	10
6	Operationalisation of the Management Information System	4
7a.	Development of Operation and maintenance manual for Overall MIS	4
7b.	Development of Training plan and training completion report by MIS for Overall MIS and completion of assignment	4
TOTAL		60

The expected duration of the assignment is 12 months from the starting date.

3.8 Reporting, Presentations and Language

All project implementation documents such as progress reports, draft project documents, templates (website, MIS), preliminary and intermediate designs, layouts, specification documents etc. shall be submitted in editable Microsoft Office Word Version and editable PDF Version, and in hard copies (4 copies) in a scale to be agreed with all stakeholders and in soft copy. The soft copy should not be secured with password(s) to allow printing or copy and paste of extract from the reports.

The language of the assignment shall be in English. All the outputs and deliverables shall be written in English language and should be presented in a format acceptable by MARENA. All the final versions of the reports and documentation should also be dispatched to the Project Manager electronically. There shall be no security restrictions on printing/editing in the deliverables.

The Consultant will have to submit all the deliverables where applicable, in draft form (in soft format -

MS Word) in the first instance, and should thereafter incorporate any comments MARENA may submit, prior to their finalization. Draft reports and documentation would have to be submitted at least 2 weeks before the final reports/documentation are due so that MARENA will have ample time for review. Payment will be made only on the final deliverables, and these final deliverables should be to the satisfaction of the MARENA and the UNDP Country Office.

3.9 Logistical Arrangements

All transportation costs and administrative costs related to the execution of the assignment are to be borne by the MIS consultant. In case workshops/ training sessions have to be organised, all costs will be borne by UNDP.

3.10 Delivery and Payment Schedule.

- Deliverables will be the basis for the payment schedule. All reports will be submitted in draft (for comments) and then final.
- The Deliverables shall be submitted in electronic format (MS Word, and Pdf versions) and by courier to the following recipients. The address for delivery is:

Mr Shakil Beedassy, Project Coordinator
Accelerating the Transformational Shift to a Low-Carbon Economy in the Republic of Mauritius
6th Floor, Anglo Mauritius Building
Intendance Street,
Port Louis
Email: shakil.beedassy@undp.org
Tel: +230 212 3726
Fax: +230 208 4871

Copied to:
Prof S. Rughooputh
CEO, Mauritius Renewable Energy Agency
4th Floor, Celicourt Building,
Sir Celicourt Antelme Street,
Port Louis
Email : ceo@marena.org
Tel: +230 212 8325
Fax: +230 212 8326

And

Manusen RAGGOO, Project Manager
MARENA, 4th Floor, Celicourt Building
Sir Celicourt Antelme Street,
Port Louis
Email: manusen.raggoo@undp.org
Tel: +230 5941 2955

3.11 Table 6 - Payment Schedule for Lot 1

SN	Deliverable/Milestone	Payment Schedule	Time Schedule
1	Approved Workplan	10%	5 October 2018
2	Approved preliminary design report on overall MIS requirements	15%	2 November 2018
3	Approved detailed design report on requirements of the MIS including BOQ and Terms of Reference	20%	7 December 2018
4	Completion of Procurement	5%	28 February 2019
5	Approved report on supervision of installation and commissioning of MIS, including development of website/portal, DRMS, e-certification etc	10%	Regular Monitoring of IT contractor in March – July 2019
6	Operationalisation of the Management Information System	10%	30 August 2019
7a	Approved Operation and maintenance manual for MIS	10%	13 September 2019
7b	Approved Training plan and training completion report	10%	27 September 2019
8	Completion of assignment	10%	27 September 2019
	TOTAL	100%	