

**Terms of reference – INDIVIDUAL CONSULTANT  
PROCUREMENT NOTICE**



Empowered lives.  
Resilient nations.

Position: REDD+ Management Information Systems (MIS) Specialist  
(National, 1 post)

Closing date:

**GENERAL INFORMATION**

**Title:** REDD+ Management Information Systems (MIS) Specialist (National, 1 post)

**Project Name :** Support to the Establishment of Indonesia REDD+ Infrastructure and Capacity

**Reports to:** REDD+ Agency's Deputy for Technology, Systems and Monitoring

**Duty Station:** Jakarta

**Expected Places of Travel (if applicable):** NO

**Duration of Assignment:** January 2015 – May 2015

**REQUIRED DOCUMENT FROM HIRING UNIT**

X	TERMS OF REFERENCE
3	<b>CONFIRMATION OF CATEGORY OF LOCAL CONSULTANT , please select :</b>
	(1) Junior Consultant
	(2) Support Consultant
	<b>(3) Support Specialist</b>
	(4) Senior Specialist
	(5) Expert/ Advisor
	<b>CATEGORY OF INTERNATIONAL CONSULTANT , please select :</b>
	(6) Junior Specialist
(7) Specialist	
(8) Senior Specialist	
X	APPROVED e-requisition

**REQUIRED DOCUMENTATION FROM CONSULTANT**

X	CV
X	Copy of education certificate
X	Completed financial proposal
	Completed technical proposal

**Need for presence of IC consultant in office:**

intermittent (explain)

✓ full time/office based : Based on the nature of the consultant's works and deliverables, it is expected for the consultant to be present at the office on daily basis.

**Provision of Support Services:**

Office space: **Yes** No

Equipment (laptop etc): Yes **No**

Secretarial Services Yes **No**

If yes has been checked, indicate here who will be responsible for providing the support services:

Signature of the Budget Owner: Roy Rahendra

## I. BACKGROUND

### Context of the REDD+ initiative:

Indonesia is the third largest emitter of carbon dioxide (CO<sub>2</sub>) and the world's largest emitter from agriculture, forestry and other land use. Over the past five years, Indonesia's annual deforestation rate has averaged around 1 million hectares, which contributes to an estimated 87 percent of Indonesia's annual emissions. In response to this situation, in 2009, President Susilo Bambang Yudhoyono, made a voluntary commitment to the world to reduce emissions as much as 26 percent under a business-as-usual scenario or up to 41 percent with international support by 2020.

According to the Second National Communication from Indonesia to the UNFCCC, Indonesia is expected to emit around 2.9 million metric tons (gigatons) by 2020 under the business-as-usual scenario. A commitment to reduce that amount by 26 percent would mean a reduction of 0.8 gigatons, while 41 percent would amount to a reduction of 1.2 gigatons. A reduction from an expected 2.9 to 1.7 gigatons by 2020 is a challenging commitment for a country aiming to maintain its 7 percent annual growth rate. Nevertheless, this commitment has been translated into a comprehensive National Action Plan known as RAN-GRK (PP 61/2011).

The National Action Plan for the Reduction of Green-house Gas Emissions (RAN-GRK) estimates that 87 percent of the emission-reduction target - approximately 1 gigaton - relates directly to the forestry and peat land sectors and, to address this, the government has adopted an incentive mechanism to improve management of the country's vast forest resources while supporting climate-change mitigation. This mechanism, known as REDD+ (Reducing Emissions from Deforestation and Forest Degradation), has five primary objectives: (a) reduction of deforestation; (b) reduction of forest degradation; (c) conservation of carbon stocks; (d) sustainable forest management; and (e) enhancing carbon stocks.

On 26 May 2010 the Governments of Indonesia and Norway signed a Letter of Intent (LoI) to establish a REDD+ Partnership. The first phase of this REDD+ Partnership (Phase 1) was to establish an agency with the capacity to implement and manage REDD+ projects initially in the pilot province Central Kalimantan and progressively in other priority provinces across Indonesia. A Task Force (*Satuan Tugas*, Satgas) was appointed to support this initial phase and in August 2013 a National REDD+ Agency (*Badan Pengelola REDD+*) was established to coordinate the implementation of REDD+ objectives in Indonesia.

### Context of this TOR

With the establishment of the National REDD+ Agency and subsequent appointment of its deputies, Indonesia is now ready to enter Phase 2 of the REDD+ Partnership. The objective of this phase is to prepare Indonesia for a results-payment modality where contributions from the REDD+ Partnership will be made for verified-emissions reduction. As a part of this objective, the REDD+ Agency aims to expand its information technology capacity in an effort to provide more extensive decision support, operational transparency, and to facilitate the growing need for data and information sharing between ministries, institutions and provinces. It is in this context that the REDD+ Agency, through the support of UNDP, is seeking to engage a Management Information Systems Specialist.

### Objectives of this TOR:

The objective of this assignment is to provide general assistance in supporting the REDD+ MIS platform and to assist in the development of a range of applications using LAMP (Linux, Apache, MySQL, and PHP) solution stack. These applications will need to be designed and carefully structured to ensure their long-term relevance and scalability considering the dynamic nature of climate-change and REDD+ related information.

## **II. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK**

### **Scope of work:**

Conduct maintenance and development of the REDD+ Management Information Systems (MIS) infrastructure which includes, although not limited to, the following areas:

- Geospatial Information Systems, comprising REDD+ Measurement, Reporting (and Verification) related systems, and PostgreSQL geodatabase for managing and maintaining spatial datasets;
- Content Management Systems (Joomla 3), for the management and maintenance of the REDD+ Agency websites; and
- Hardware and Software, including LAMP applications and database development and hardware and software administration of the REDD+ Agency co-located servers.

Liaison with REDD+ Agency personnel and their respective work-streams to ascertain current and emerging MIS requirements focusing, particularly, on achieving the following results:

- Ensuring access and reporting mechanisms of the REDD+ Agency's MIS is providing the data and information required;
- Designing solutions for fulfilling information gaps identified by internal and external users of the REDD+ MIS; and
- Exploring innovative solutions for the delivery of data and information to enhance decision support mechanisms.

Develop technical working relations with government and non-government stakeholders with the aim to develop specialised capacities for the on-going development of national and sub-national REDD+ MIS in areas including, but not limited to, the following:

- Data and information sharing through automated retrieval and delivery mechanisms;
- Synchronisation of incoming and outgoing information from/to PostgreSQL through the development of automated scripts; and
- Supporting and developing ICT solutions for enhancing sub-national access to REDD+-related information.

Provides technical support to the on-going development of specialised applications including, but not limited to, the following:

- Karhutla Monitoring System, comprising Google Earth and Maps API and draws on datasets maintained in a PostgreSQL database; and
- REDD+ Portfolio Management Systems, currently under development using a LAMP platform.

## **III. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS**

### **Education:**

- Bachelor's degree in Information Communications Technology (ICT) or a closely related discipline.
- A minimum of ten (10) years of work experience mostly in planning and/or developing IT systems.

### **Experience:**

- Demonstrated ability to provide input to business processes re-engineering, elaboration and implementation of new systems.
- Detailed understanding of IT support services including IT hardware/infrastructure support, ERP support, other IT applications support, web design and maintenance.

- Demonstrated an experience in LAMP (Linux operating systems, Apache web-server, MySQL database and PHP Programming language)
- Knowledge and experience in web-server and system administration, authentication and encryption, logging and reporting, security configuration, and redundancy/disaster management planning.
- Ability to design system and application requirements based on users output requirements.
- Extensive experience with different types of digital media and content channels (video, images, audio, etc).
- Ability to multi-task, learn new material, and manage time effectively in a dynamic and fast-paced working environment.
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**Language:**

- Fluency in written and spoken Indonesian with a working ability in English.

**Corporate Competencies:**

- Demonstrates integrity by modelling the UN's values and ethical standards;
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability; and
- Treats all people fairly without favouritism.

**Functional Competencies:**

- Knowledge Management and Learning:
- Promotes knowledge management in UNDP and a learning environment in the office through leadership and personal example; and
- Actively works towards continuing personal learning and development in one or more practice Areas, acts on learning plans and applies newly acquired skills.
- Development and Operational Effectiveness:
- Ability to conceptualise issues and analyse data;
- Ability to coordinate the work of others; and
- Ability to implement new systems (business side), and affect staff behavioural/attitudinal change.
- Management and Leadership:
- Builds strong relationships with stakeholders, focuses on impact and results for the stakeholder and responds positively to feedback;
- Consistently approaches work with energy and a positive, constructive attitude;
- Demonstrates openness to change and ability to manage complexities;
- Leads teams effectively and shows mentoring as well as conflict resolution skills; and
- Demonstrates strong oral and written communication skills.

**Other Requirements:**

- In addition to the scope and output stated above, the incumbent will be required to undertake other *ad hoc* tasks that may arise during the contract period. These tasks will be delegated by the incumbent's supervisor who will ensure that these *ad hoc* tasks do not impede on the incumbent's ability to meet contractual obligations/deliverables.
- All materials and other intellectual property produced while working under contract including, but not limited to, documents, presentations, white papers, photographs and other media, will remain the property of UNDP and this material will be submitted to the incumbent's supervisor on a regular basis.

#### IV. EXPECTED RESULTS

The deliverables will be as follow:

No.	Deliverables	Working day	Due Date
1.	Report on current REDD+ Agency MIS architecture identifying gaps in the delivery of data and information for the purpose of decision support in areas including, but not limited to: Fire Prevention and Portfolio Management.	21 w/d	Jan-2015
2.	Recommendations of system administration at the REDD+ Agency project office and at the Data Centre for REDD+ Agency co-located servers focusing on integrity and sustainability of services.	22 w/d	Feb-2015
3.	<ul style="list-style-type: none"><li>- Report on the development and maintenance components of the REDD+ Agency's content-management system and conduct an audit on the current organisation of web components.</li><li>- Report on the development of specified features for the Karhutla Monitoring System and the Portfolio Management System.</li></ul>	23 w/d	Mar-2015
4.	Report on additional data and information sources for integration into the REDD+ Agency's MIS and include technical options for acquiring these sources automatically.	22 w/d	April-2015
5.	Implementation of maintenance and redundancy programme for all MIS development teams, including, but not limited to, computer maintenance, software authentication, file backup, and virus maintenance.	22 w/d	May-2015