

REQUEST FOR QUOTATION (RFQ) (Goods)

To: All Interested Bidders	DATE: August 18, 2020
	REFERENCE: RFQ/UNDP/DGPRU-HGI/111462/044/2020 - Public Cloud Hosting for e- Logistic Monitoring Information System of Immunization Program

Dear Sir / Madam:

We kindly request you to submit your quotation for RFQ/UNDP/DGPRU-HGI/111462/044/2020 -Public Cloud Hosting for e- Logistic Monitoring Information System of Immunization Program, as detailed in Annex 1 of this RFQ. When preparing your quotation, please be guided by the form attached hereto as Annex 2.

Quotations may be submitted on or before August 25, 2020, COB (GMT+7) and via $\boxtimes e$ -mail, to the address below:

United Nations Development Programme

Head of Procurement Unit Bids.id@undp.org

Quotations submitted by email must be limited to a maximum of 10 MB/transmission, virus-free and no more than 5 (five) email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Please take note of the following requirements and conditions pertaining to the supply of the abovementioned good/s:

	□ FCA					
Delivery Terms						
[INCOTERMS 2010]						
(Pls. link this to price						
schedule)	Other [pls. specify]					
Customs clearance ¹ , if						
needed, shall be done by:	⊠Supplier/Offeror					
	Freight Forwarder					
Exact Address/es of Delivery Location/s (identify all, if	Republic of Indonesia					
multiple)						
	N/A					
UNDP Preferred Freight Forwarder, if any ²						
	N/A					
Distribution of shipping						
documents (if using freight						
forwarder)						
	🛛 One (1) week from	the issuance of the Purchase Order/Contract				
Latest Expected Delivery		nedule attached [if delivery will be staggered]				
Date and Time <i>(if delivery</i>	Time : [pls. indicate]					
time exceeds this, quote may be rejected by UNDP)	Time Zone of Referer	nce : <i>[pls. indicate]</i>				
	⊠Required					
Delivery Schedule	□Not Required					
	N/A					
Packing Requirements						
	□ AIR					
Mode of Transport	□SEA	⊠OTHER as quoted by the bidder				
Preferred	⊠United States Dolla	rs				
Currency of Quotation ³	□Euro					
	⊠Local Currency : FO	R LOCAL BIDDER THIS IS MANDATORY				
Value Added Tax on Price	Must be inclusive a	of VAT and other applicable indirect taxes				
Quotation ⁴	Must be exclusive	of VAT and other applicable indirect taxes				
After-sales services required	□ Warranty on Parts	and Labor for minimum period of Click to type				
	⊠ Technical Support					
	□ Provision of Service Unit when pulled out for maintenance/ repair					
	\boxtimes Others Troubleshooting					
		-				

¹ Must be linked to INCO Terms chosen.

²Depends on INCO Terms. The suggestion to use a UNDP preferred courier is only for purposes of familiarity with procedures and documentary requirements applicable to the UNDP when clearing with customs.

³ Local vendors must comply with any applicable laws regarding doing business in other currencies. Conversion of currency into the UNDP preferred currency, if the offer is quoted differently from what is required, shall be based only on UN Operational Exchange Rate prevailing at the time of UNDP's issuance of Purchase Order.

⁴ This must be reconciled with the INCO Terms required by the RFQ. Furthermore, VAT exemption status varies from one country to another. Pls. tick whatever is applicable to the UNDP CO/BU requiring the goods.

Deadline for the Submission	COP Tuesday August 25, 2020 and COP (CMT+7)
of Quotation	COB, Tuesday, August 25, 2020 and COB (GMT+7)
All documentations, including	
catalogs, instructions and	⊠ English
operating manuals, shall be	French
in this language	□ Spanish
	☑ Others Local language for any supporting document issued by
	the local Government – Legal Certificates, Business registration
	certificate, etc.
	Duly Accomplished Form as provided in Annex 2, and in
Documents to be submitted ⁵	accordance with the list of requirements in Annex 1;
	\Box A statement whether any import or export licenses are required
	in respect of the goods to be purchased including any restrictions on
	the country of origin, use/dual use nature of goods or services,
	including and disposition to end users;
	\square Confirmation that licenses of this nature have been obtained in
	the past and an expectation of obtaining all the necessary licenses
	should the quotation be selected;
	☑ Quality Certificates (ISO, etc.);
	Latest Business Registration Certificate ;
	Latest Internal Revenue Certificate / Tax Clearance;
	□ Manufacturer's Authorization of the Company as a Sales Agent (if
	Supplier is not the manufacturer);
	Certificate of Exclusive Distributorship in the country (if
	applicable, and if Supplier is not the manufacturer);
	Evidence/Certification of Environmental Sustainability ("Green"
	Standards) of the Company or the Product being supplied ;
	□ Complete documentation, information and declaration of any
	goods classified or may be classified as "Dangerous Goods".
	Patent Registration Certificates (if any of technologies submitted
	in the quotation is patented by the Supplier);
	\boxtimes Written Self-Declaration of not being included in the UN Security
	Council 1267/1989 list, UN Procurement Division List or other UN
	Ineligibility List;
	Others [pls. specify as many as required]
Reriad of Validity of Quater	□ 60 days
Period of Validity of Quotes starting the Submission Date	\boxtimes 90 days
	□ 120 days
	In exceptional circumstances, UNDP may request the Vendor to
	extend the validity of the Quotation beyond what has been initially
	indicated in this RFQ. The Proposal shall then confirm the extension
	in writing, without any modification whatsoever on the Quotation.
Partial Quotes	⊠ Not permitted

⁵ First 2 items in this list are mandatory for the supply of imported goods

	□ Permitted [<i>pls. provide conditions for partial quotes, and ensure</i>
	that requirements are properly listed to allow partial quotes (e.g., in
	lots, etc.)]
	\Box 100% upon complete delivery of service
Payment Terms ⁶	Others as required in the TOR
Liquidated Damages	⊠ Will not be imposed
	Will be imposed under the following conditions :
	Percentage of contract price per day of delay :
	Max. no. of days of delay :
	After which UNDP may terminate the contract.
Evaluation Criteria	☐ Technical responsiveness/Full compliance to requirements and
	lowest price ⁷
	Comprehensiveness of after-sales services
	□ Full acceptance of the PO/Contract General Terms and Conditions
	[this is a mandatory criteria and cannot be deleted regardless of the
	nature of services required]
	\Box Earliest Delivery / Shortest Lead Time ⁸
	\boxtimes Others as required in ANNEX 1 – Terms of Reference
UNDP will award to:	☑ One and only one supplier
	 One or more Supplier, depending on the following factors:
Type of Contract to be Signed	Purchase Order
	Contract Face Sheet (Goods and-or Services) UNDP (this template
	is also utilised for Long-Term Agreement ⁹ and <i>if LTA will be signed</i> ,
	specify the document that will trigger the call-off. E.g., PO, etc.)
Contract General Terms and	□ Other Type/s of Contract [pls. specify] □ General Terms and Conditions for contracts (goods and/or
Conditions	General Terms and Conditions for contracts (goods and/or
Conditions	services)
	General Terms and Conditions for de minimis contracts
	(services only, less than \$50,000)
	Applicable Tennes and Conditions are a site black
	Applicable Terms and Conditions are available at

⁶ UNDP preference is not to pay advanced amount upon signing of contract. If vendor strictly requires advanced payment, it will be limited only up to 20% of the total price quoted. For any higher percentage, or advanced payment of \$30,000 or higher, UNDP shall require the vendor to submit a bank guarantee or bank checque payable to UNDP, in the same amount as the advanced payment made by UNDP to the vendor.

⁷ UNDP reserves the right not to award the contract to the lowest priced offer, if the second lowest price among the responsive offer is found to be significantly more superior, and the price is higher than the lowest priced compliant offer by not more than 10%, and the budget can sufficiently cover the price difference. The term "more superior" as used in this provision shall refer to offers that have exceeded the pre-determined requirements established in the specifications. ⁸ This shall be used for time-critical and/or exigent requirements (e.g., post-crisis emergencies, elections, etc.).

⁹ Minimum of one (1) year period and may be extended up to a maximum of three (3) years subject to satisfactory performance evaluation

	http://www.undp.org/content/undp/en/home/procurement/b usiness/how-we-buy.html
Special conditions of Contract	 □ Cancellation of PO/Contract if the delivery/completion is delayed by ☑ Others [pls. specify]
Conditions for Release of Payment	 Passing Inspection [specify method, if possible] ☑ Complete Installation □ Passing all Testing [specify standard, if possible] ☑ Completion of Training on Operation and Maintenance ☑ Written Acceptance of Service based on full compliance with RFQ requirements ☑ Others [pls. specify]
Annexes to this RFQ ¹⁰	 Specifications of the service Required (Annex 1) Form for Submission of Quotation (Annex 2) General Terms and Conditions / Special Conditions: <u>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</u> Others [pls. specify, if any] Non-acceptance of the terms of the General Terms and Conditions
	(GTC) shall be grounds for disqualification from this procurement process.
Contact Person for Inquiries (Written inquiries only) ¹¹	Armada Eras Pratama / Yusef Saiful Millah Armada.pratama@undp.org / yusef.millah@undp.org
	Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

Goods offered shall be reviewed based on completeness and compliance of the quotation with the minimum specifications described above and any other annexes providing details of UNDP requirements.

The quotation that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by UNDP. The unit price shall prevail and the total price shall be corrected. If

¹⁰ Where the information is available in the web, a URL for the information may simply be provided.

¹¹ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

the supplier does not accept the final price based on UNDP's re-computation and correction of errors, its quotation will be rejected.

After UNDP has identified the lowest price offer, UNDP reserves the right to award the contract based only on the prices of the goods in the event that the transportation cost (freight and insurance) is found to be higher than UNDP's own estimated cost if sourced from its own freight forwarder and insurance provider.

At any time during the validity of the quotation, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the quotation. At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Purchase Order that will be issued as a result of this RFQ shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a quotation implies that the vendor accepts without question the General Terms and Conditions of UNDP indicated above - <u>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</u>.

UNDP is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.

Please be advised that UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a purchase order or contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/

UNDP encourages every prospective Vendor to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its suppliers to adhere to the UN Supplier Code of Conduct found in this link : http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your quotation.

Sincerely yours,

Martin Stephanus Kurnia Head of Procurement Unit August 18, 2020

Terms of Reference

Public Cloud Hosting for e- Logistic Monitoring Information System of Immunization Program

I. Background

Health Governance Initiative (HGI) is an UNDP's project which concerned to address health inequality through an integrated innovative solution. HGI includes a wide range of steering and rule-making related functions carried out by governments/decisions maker as they seek to achieve national health policy objectives and action plan that are conducive to universal health coverage. HGI strategy is aimed to increase government capacity to address inequality in the health sector and stimulate other actors (e.g. private sector, other orders of government, civil society) to find innovative solutions to health information system challenges, including preventive health intervention and multi-sectoral approaches.

UNDP-Indonesia for the past 2 years has been working closely with the Ministry of Health to provide the right solution for digitizing the vaccine logistics and monitoring the temperature of vaccine storage remotely in real-time manner. The application, branded as SMILE, is the most likely to comply with the Global Funds and GAVI guidelines on Electronic-Logistic Management Information System (e-LMIS) software. In the five-year plan (2020-2024) of immunization program of the Ministry of Health (MoH), the e-LMIS will be scaled-up gradually in 10,000 health facilities across Indonesia. As part of initial scale-up plan of e-LMIS in year 2020 are to optimize supply-chain function at the national level and 34 provinces which will also cover selected districts and CHCs – that accumulates up to 600 cold chain points.

The Ministry of Communication and IT mandates all government data must be stored within the country, including e-LMIS data. In the pilot phase, e-LMIS application has been utilized at Software as a Service (SaaS), and stored its data in the public cloud located in Jakarta. In the scale-up phase, UNDP Indonesia will explore more options to another cloud service provider (CSP) that can provide a sustained competitive advantages for infrastructure as a service (IaaS). As the load increases, the company requires to analyze the current server performance and suggest as well as manage appropriate storage for the provision of scale-up setting that allows e-LMIS maintaining its high service level from the contract commencement to 31 March 2021.

The general purpose of the ToR is for engaging the partner of CSP in Indonesia that would allow also Data Center and UNDP sharing responsibilities for managing services provisioned using cloud computing facility. The company not only help UNDP and the MoH with architecture optimization but also migration and trouble shooting.

Data generated by the system stored in public cloud is owned by UNDP and the Government of Indonesia. Any other agency associated with them under this agreement cannot use the data for any purpose during or beyond the contract period.

II. Specific Objective

Assessing further states' inclusion plans and requirements, UNDP country office intends to have a contact with Information Technology (IT) company for a period of around 8 (eight) months to continue

the e-LMIS development and implementation in an efficient manner in the following areas:

- 1. Public Cloud Hosting Infrastructure/Hardware management support for e-LMIS system
- 2. Technical Assistance to ensure transfer of knowledge and technology to Ministry of Health for sustainability.
- III. Expected Outputs
 - e-LMIS secured in reliable infrastructure: At least Tier 3 data center specifications Tier 3 data center specifications are utilized by larger businesses and feature: 99.982% uptime (Tier 3 uptime) No more than 1.6 hours of downtime per year. N+1 fault tolerant providing at least 72-hour power outage protection.
 - 2. The MoH and UNDP could jointly prepare and operate scalable infrastructure for SMILE on the cloud platform
- IV. Scope of Work

UNDP would require assistance from the partner of Cloud Service Provider in the following areas:

A. Storing and Securing e-LMIS Data in Public Cloud

e-LMIS is currently running multiple services on a single virtual machine (VM). e-LMIS continuously require high service level that can be provided by the company with software backup and a latency of maximum 1 day, and 48 hours notification on planned downtime. Any urgent maintenance, bug fixing, or upgrade activities required by application should be analyzed and reported to UNDP within 48 hours after the downtime.

In order to migrate e-LMIS from SaaS to IaaS type of cloud service, the company will provide services on:

A. Designing, architecting, developing, delivering or managing cloud-based workloads, applications and services for e-LMIS. Servers requirement by purpose that should be provided by the company as follows : (design can be adjusted according to the needs of a project)

ILE Proc	luction Environment					
No Services		Capacity				
		Count (VPS/VM)	Core Processor	Memory (GB)	Storage (GB)	
1	Authentication Server	1	2	4	128	
2	Load Balancer	2	2	4	128	
3	Kubernetes Cluster (Master)	1	8	16	256	
4	Kubernetes Cluster Nodes (16 Micro Services)	4	8	16	256	
5	Databases Server (Maria DB)	4	4	16	2048	
6	Active Mq	1	4	16	128	
7	Redis	2	4	16	128	
8	Mongo DB	2	4	16	512	
9	Elastic Search	3	4	32	1024	
10	Application Management Server (Sensu, Uchiwa, Grafana, Prometheus)	1	4	16	256	
	Total	21	98	348	14592	

1. Server Requirement for e-LMIS Production Environment

Table 1. e-LMIS Production Environment

SMILE Pre-F	Production								
No	Services	Capacity				Туре			
		Count (VPS/VM)	Core Processor	Memory (GB)	Storage (GB)	OS	Programming Language	Database	Web Service
1	Authentication Server	1	2	4	128	Linux			
2	Load Balancer	1	2	4	128	Linux			
3	Kubernetes Cluster (Master)	1	8	16	128	Linux			
4	Kubernetes Cluster Nodes (16 Micro Services)	2	8	16	128	Linux			
5	Databases Server (Maria DB)	2	4	8	1024	Linux		Maria DB	
6	Active Mq	1	4	8	128	Linux			
7	Redis	2	4	8	128	Linux		Redis	
8	Mongo DB	2	2	8	256	Linux		Mongo DB	
9	Elastic Search	1	4	16	512	Linux			
10	Application Management Server (Sensu, Uchiwa, Grafana, Prometheus)	1	4	8	256	Linux			
	Total	14	60	136	4352				

CNALLE Netional Complex Chain Flow

No Services		Capacity			
		Count (VPS/VM)	Core Processor	Memory (GB)	Storage (GB)
1	Authentication Server	1	2	4	128
2	Load Balancer	1	2	4	128
3	Kubernetes Cluster (Master)	1	8	16	128
4	Kubernetes Cluster Nodes (6 Micro Services)	2	8	16	128
5	Databases Server (Maria DB)	2	4	16	1024
6	Redis	2	4	8	128
7	Mongo DB	2	2	8	256
8	Elastic Search	1	4	16	512
9	Application Management Server (Sensu, Uchiwa, Grafana, Prometheus)	1	4	8	256
	Total	13	56	144	4224

3. Server Requirement for e-LMIS National Supply Chain Flow Table 2. e-LMIS National Supply Chain Flow

The infrastructure should provide and manage reasonable usage limits of e-LMIS's growth that expectedly will meet:

- a limit of 1.000 facilities, and 1.000 RTM devices to monitor cold chain assets
- a maximum of 250 transactions each month per facility,
- a maximum of 60 commodities to be managed in each facility,
- Remote Temperature Monitoring (RTM) devices would record and transmit at a maximum of 8 times per hour, with a maximum of 1 sensor per device,
- SMS Gateway at the maximum of 3,000 SMS/month
- Pre-production environment for UNDP Indonesia for testing on national flow modules before its release and trainings purposes.

e-LMIS system employs several technologies such as:

- The system using Android Mobile Application for Healthcare Facilitator & Web Application for Back Office in DHO/PHO/MoH and expected to serve 600 Puskemas in 2020-2021.
- Scalable Virtual Data Centre, with their own Network Security, Load Balancing & Application Gateway for Production, Pre-production and National Flow.
- Kubernetes cluster which consist of at least 16 different services using various Java or Node JS Application.
- Hadoop Cluster for their big data processing system.
- Cassandra, MariaDB, Mongo DB & Redis for their database system.
- Nexus SMS Gateway to collect and sending IoT temperature logger data and ActiveMQ for queue messaging.
- ELK Stack for Search Engine & Application Logging.
- Application Monitoring System using either Sensu, Grafana or Prometheus
- Other Supporting Application such as Google Map & Fusion Chart
- B. <u>Technical Assistance to ensure transfer of knowledge and technology to Ministry of Health for</u>

sustainability

The Data Center is an important supporting element to the Ministry of Health in the management of health data and information. Over the last couple years has initiated an effort to introduce the use of a DHIS2 application for integrating the data of the various program data bases into a national health data warehouse and using the data through a flexible and comprehensive DHIS2 reporting system called a "dashboard". Effective use of information depends upon a good and solid design of indicators and other metadata, especially as requirements are bound to change over time, in order to ensure sustainability and interoperability.

The key purpose of the DHIS2 application is to integrate the data from the various program data bases, i.e Immunization, nutrition, maternal health, HIV, TB, Malaria, etc. The DHIS2 application key function is the process of extracting selected data from all the individual program data bases and placing this extracted data into a larger, single data warehouse (also called data integration). This is the process that links all program data bases including to e-LMIS. As a prominent system for immunization logistics, the Data Center will facilitate the process of interacting e-LMIS with other information systems for health in the MoH such as DHIS2, e-logistic, STBM, e-ppgbm, etc through adapter or application level integration.

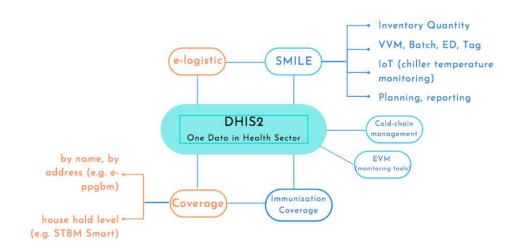


Figure 1. e-LMIS within One Data Architecture

Technical Assistance for e-LMIS from the company will be in the form of advisory for ultimately transitioning to preferred infrastructure and transferring knowledge to technically proficient team of UNDP Indonesia and the MoH. The knowledge includes configuration and support related to deployment and scale-up to UNDP Indonesia and the Data Center of MoH. The technical assistance will be billed on actuals and are estimated up to 50 man-days in the course of contract. UNDP will evaluate the technical proposal and verify the manpower and man-days proposed by the company to complete the tasks.

No	Task	Man Days
1	Infrastructure (capacity building, training, infrastructure design, migration & documentation)	20
2	Support to integrate e-LMIS with DHIS2 (analysis, develop and test API)	15
3	Support to integrate e-LMIS with "new" temperature logger device (RTM) & SMS Gateway	15

Table 3. Technical Assistance Tasks

- V. Work Assignment Mechanism
 - The company will submit the technical and financial proposals along with the company profile. The technical proposal would entail system architecture, software used, disaster recovery, detailed time schedule for delivery, installation, system integration, acceptance tests and commissioning along with resources required and justification and any other requirement whereas the financial proposal should be based on the unit rates agreed for each resources. The hosting packages will be tracked down in regular basis and it can be billed in certain period of time based on the most affordable options for e-LMIS needs and budgets.
 - UNDP will evaluate the technical proposal and verify the manpower and man-days proposed to complete the task.
 - UNDP will issue the NON-DISCLOSURE AGREEMENT including the rights of source code.
 - Payment will be linked to agreed deliverables.
- VI. Qualifications
 - The company should have experience and proven as the partner of recognized Public Cloud Service (supporting letter or Letter of Appointment should be provided as part of quotation)
 - Having the skills to build the cloud computing infrastructure that supports an ecosystem of mobile and website apps stored within a cloud server.
 - The company should have below mentioned resources with required experience and submit their detailed CVs.
 - Registered company with relevant business certificate

Source. No.	Type of Resource and experience
1.	Team Leader for the Project (Bachelor degree in relevant field with 6 years or working experience in the relevant field)
2.	Cloud Architect (Bachelor in any relevant field with 3 years working experience in the relevant field with certificate on cloud computing)

3.	Senior Infrastructure Engineer (Bachelor degree in the relevant field with 6 years in the relevant field)
4.	Development & Operations Engineer (Bachelor Degree with 3 years in the relevant field)

VII. Payment

Payment will be made after satisfactory acceptance by UNDP the services provided on the following schedule:

	Deliverables	Payment	Time
1	Storing and Securing e-LMIS Data in Public		
	Cloud		
	Quarterly report on service availability,	Quarterly, at cost	1 September 2020 –
	change and incident, performance		31 March 2021
2	Technical Assistance		
	1. Report on Infrastructure Design,	At Cost	1 September 2020 –
	Development, Migration &		31 March 2021
	Documentation		
	2. Report on Support to integrate e-LMIS	At Cost	31 March 2021
	with DHIS2		
	3. Report on Support to integrate e-LMIS	At Cost	31 March 2021
	with "new" temperature logger device		
	(RTM) & SMS Gateway		

Note:

Payment Terms

- The installation fees shall be paid after completion of installation/commissioning and certification by UNDP and the relevant Project.
- Monthly charges shall be paid within 30 calendar days of receipt of invoices by UNDP and the relevant Project
- UNDP and the relevant Project reserves the right to reduce the fees, should the service outage by the vendors be continuous and no more than1.6 hours of downtime per year. N+1 fault tolerant providing at least 72-hour power outage protection.

FORM FOR SUBMITTING SUPPLIER'S QUOTATION¹² (*This Form must be submitted only using the Supplier's Official Letterhead/Stationery*¹³)

We, the undersigned, hereby accept in full the UNDP General Terms and Conditions, and hereby offer to supply the items listed below in conformity with the specification and requirements of UNDP as per RFQ Reference No. RFQ/UNDP/DGPRU-HGI/111462/044/2020 - Public Cloud Hosting for e- Logistic Monitoring Information System of Immunization Program

TABLE 1 : Offer to Supply Goods & Services Compliant with Technical Specifications and Requirements

lte m No.	Description/Specification of Goods	QTY	Period	Unit of Measur ement (UOM)	Latest Delivery Date	Unit Price	Total Price per Item
	Production Server	а	b	С	d	e	F = a x b x e
1	Authentication Server 2 vCPU, 4 GB RAM, 128 GB Standard Disk	1		Month			
2	Load Balancer 2 vCPU, 4 GB RAM, 128 GB Standard Disk	2		Month			
3	Kubernetes Cluster (Master) 8 vCPU, 16 GB RAM, 256 GB Standard Disk	1		Month			
4	Kubernetes Cluster Nodes (16 Micro Services) 8 vCPU, 16 GB RAM, 256 GB Standard Disk	4		Month			
5	Databases Server (Maria DB) 4 vCPU, 16 GB RAM, 2048 GB Persistent Disk	4		Month			
6	Active Mq 4 vCPU, 16 GB RAM, 128 GB Standard Disk	1		Month			
7	Redis 4 vCPU, 16 GB RAM, 128 GB Standard Disk	2		Month			
8	Mongo DB 4 vCPU, 16 GB RAM, 512 GB Persistent Disk	2		Month			
9	Elastic Search 4 vCPU, 32 GB RAM, 1024 GB Standard Disk	3		Month			

¹² This serves as a guide to the Supplier in preparing the quotation and price schedule.

¹³ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

10	Application Management	1	Month	
10	Application Management	T	Month	
	Server (Sensu, Uchiwa, Grafana, Prometheus) 4 vCPU,			
	16 GB RAM, 256 GB Standard			
	Disk			
	Total Production	21	Month	
		21	WOIttii	
	Pre Production			
1	Authentication Server 2 vCPU,	1	Month	
-	4 GB RAM, 128 GB Standard	-		
	Disk			
2	Load Balancer 2 vCPU, 4 GB	1	Month	
	RAM, 128 GB Standard Disk			
3	Kubernetes Cluster (Master) 8	1	Month	
	vCPU, 16 GB RAM, 128 GB			
	Standard Disk			
4	Kubernetes Cluster Nodes (16	2	Month	
	Micro Services) 8 vCPU, 16 GB			
	RAM, 128 GB Standard Disk			
5	Databases Server (Maria DB) 4	2	Month	
	vCPU, 8 GB RAM, 1024 GB			
	Standard Disk			
6	Active Mq 4 vCPU, 8 GB RAM,	1	Month	
-	128 GB Standard Disk	2	NA	
7	Redis 4 vCPU, 8 GB RAM, 128	2	Month	
8	GB Standard Disk	2	Month	
0	Mongo DB 2 vCPU, 8 GB RAM, 256 GB Standard Disk	2	WOITH	
9	Elastic Search 4 vCPU, 16 GB	1	Month	
5	RAM, 512 GB Standard Disk		Worth	
10	Application Management	1	Month	
	Server (Sensu, Uchiwa,	-		
	Grafana, Prometheus) 4 vCPU,			
	8 GB RAM, 256 GB Standard			
	Disk			
	Total PreProduction	14		
	National Flow			
1	Authentication Server 2 vCPU,	1	Month	
	4 GB RAM, 128 GB Standard			
	Disk	<u>↓</u>		
2	Load Balancer 2 vCPU, 4 GB	1	Month	
	RAM, 128 GB Standard Disk			
3	Kubernetes Cluster (Master) 8	1	Month	
	vCPU, 16 GB RAM, 128 GB			
	Standard Disk			

4	Kubernetes Cluster Nodes (6	2		Month			
	Micro Services) 8 vCPU, 16 GB						
_	RAM, 128 GB Standard Disk						
5	Databases Server (Maria DB) 4	2		Month			
	vCPU, 16 GB RAM, 1024 GB						
	Persistent Disk						
6	Redis 4 vCPU, 8 GB RAM, 128	2		Month			
_	GB Standard Disk						
7	Mongo DB 2 vCPU, 8 GB RAM,	2		Month			
	256 GB Persistent Disk						
8	Elastic Search 4 vCPU, 16 GB	1		Month			
	RAM, 512 GB Standard Disk						
9	Application Management	1		Month			
	Server (Sensu, Uchiwa,						
	Grafana, Prometheus) 4 vCPU,						
	8 GB RAM, 256 GB Standard						
	Disk Tatal National Flow	12					
	Total National Flow	13					
	Technical Assistance						
1		1	20	Mar			
1	Infrastructure (capacity	1	20	Man			
	building, training, infrastructure design, migration			Days			
	& documentation)						
2	Support to integrate e-LMIS	1	15	Man			
2	with DHIS2 (analysis, develop	1	15	Days			
	and test API)			Days			
3	Support to integrate e-LMIS	1	15	Man			
5	with "new" temperature logger	1	15	Days			
	device (RTM) & SMS Gateway			Days			
	Total		50	Man			
				Days			
							1
							1
		Total Pric	es of Goo	ds ¹⁴		L	
		Add : Cost of Transportation					
		Add : Cost of Insurance					1
		Add : Other Charges (pls. specify)					1
							1
		Total Final and All-Inclusive Price Quotation					
L							1

¹⁴ Pricing of goods should be consistent with the INCO Terms indicated in the RFQ

List of Service Item/s	Qty	Period	Unit of Measure ment	Unit Price	Total Price per Item
Team Leader for the Project	1	1	Man days		
Cloud Architect	1	1	Man days		
Senior Infrastructure Engineer	1	1	Man days		
Development & Operations Engineer	1	1	Man days		

Other Information pertaining to our		Your Responses					
Quotation are as follows :	Yes, we will comply	No, we cannot comply	lf you cannot comply, pls. indicate counter proposal				
Delivery Lead Time 1 (one) week from the	e						
issuance of the Purchase Order/Contract							
Compliance to the requirement as specific in ANNEX 1	ed						
 a) Data Center (DC) resides in Indonesia & have different backu site for DRR Capabilities 	р						
 b) Data Center have at least tier 3 Standard According to Uptime Institute 							
c) The IT infrastructure should be hosted on public cloud. The cloud should have following capabilities There should be admin panel to create, delete, start, stop, copy virtual machines, resize and adding, removing storage volume	5:						
Warranty and After-Sales Requirements							
a) Technical Support as required in ANNEX 1							
b) Trouble Shooting							
c) Report on as required in ANNEX 1	L						
Validity of Quotation for 90 days							
All Provisions of the UNDP General Terms and Conditions	5						
Other requirements							
 Payment Terms The installation fees shall be paid after completion of 	er						
installation/commissioning and certification by UNDP and the relevan Project.	nt						
 Monthly charges shall be paid within 30 calendar days of receipt of invoice 							
 by UNDP and the relevant Project UNDP and the relevant Project 							
reserves the right to reduce the fees, should the service outage by the vendors be continuous and no more	,						

TABLE 3 : Offer to Comply with Other Conditions and Related Requirements

than1.6 hours of downtime per year.		
N+1 fault tolerant providing at least		
72-hour power outage protection.		

All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFQ.

[Name and Signature of the Supplier's Authorized Person] [Designation] [Date]