

Nepal Electricity Authority (A Government of Nepal Undertaking) Finance Directorate INSTITUTIONAL STRENGTHENING PROJECT

Ref. No: 2078/79/ - 69#

Date: Monday, 18 April 2022

To:

All prospective bidders,

Subject: Issuance of Addendum - 2 to Bid Document

OCB No. and Title: ICB/FD/EGMPAF/RMS-078/79-02 Procurement of Information

Technology Products and Services "Supply and Installation of Revenue

Management System (RMS)"

Project Title:

Electricity Grid Modernization Project - Additional Financing

Dear Sir/Madam,

With reference to the bid published on 18 February 2022, we would like to inform all our prospective bidders about the issuance of Addendum to Bid Document-2 according to the ITB clause 8.2 of the bidding document.

Kindly acknowledge the receipt of the same at the project office.

Best regards,

Chandha Neupane, (Project Director)



Nepal Electricity Authority

(A Government of Nepal Undertaking)

Finance Directorate INSTITUTIONAL STRENGTHENING PROJECT

OCB No. and Title: ICB/FD/EGMPAF/RMS-078/79-02 Procurement of Information Technology Products and Services "Supply and Installation of Revenue Management System (RMS)" Electricity Grid Modernization Project - Additional Financing

Pursuant to ITB Clause number 8 addendum -2 has been issued. All the bidders are requested to collect its hard copy from the project office. This addendum -2 shall be a part of the bidding document and failure to collect the same shall be at the risk of the bidder. The addendum -2 consists of a) Section - 2: Bid Data Sheet, b) Section -3: Evaluation and Qualification Criteria, c) Section -4: Bidding Forms and d) Section -6: Schedule of Requirements.

Addendum -2 Friday, 15 April 2022

S/N	Reference	Existing Clause	Revised Clause
1.	Vol-I,	The Bidder shall submit with its Technical Bid the following	The Bidder shall submit with its Technical Bid the following additional documents: Business
	Section 2: Bid Data	additional documents:	Registration Certificate issued by the government of the country where the bidder or each Joint
	Sheet 11.2 (j)	None	Venture or Consortium partner is registered. Bidders shall notarize all the documents and in the
			case of Foreign Bidder: The foreign bidders shall submit all notarized documents notarized from
			bidder's home country and shall be in English. The notarial certificate shall be authenticated
			by the Nepal based Embassy of the bidder's country. The authentication of the documents
			must be done between the published date of bid and the submission date of bid. Failure to
			authenticate the notarial certificate from the concerned Embassy within the stipulated time frame
<u></u>	T. 1 T D 4 0		would lead to disqualification of the bidder.
2.	Vol-I, Page 4-9,	Schedule 1: Price Schedule for IT Products to be offered	Please refer to Annexure 1
	Section 4: Bidding	including Mandatory Spares to be supplied from abroad for	
	Forms	Data Center (DC)	
_	77 1 I D 4 16	Distribution/ToR Switches (Specifications)	DI C . A . 2
3.	Vol-I, Page 4-16,	Schedule 1(a): Price Schedule for IT Products	Please refer to Annexure 2
	Section 4: Bidding	to Be Offered including Mandatory Spares to be supplied	
1	Forms	from abroad for Disaster Recovery Center (DRC) Description of the Similarity in Accordance with 1.3 and 2.1	Please refer to Annexure 3
4.	Vol-I, Page 4-50, Section 4: Form	of Section 3 (Evaluation and Qualification Criteria)	Please refer to Annexure 3
	EXP - 1: Contractual	This form shall only be included if Criteria 2.3 and 1.1 of	
	Experience	Section 3 (Evaluation and Qualification Criteria) is applicable.	
5.	Vol-I, Page 3-8,	B. Experience of the RMS Product OEM	Please refer to Annexure 4
],	Section 3:	B1. (Title of the Columns)	1 icase refer to Affileatic 4
	Evaluation and	D1. (The of the Columns)	
	Qualification		
	Criteria		
6.	Vol-I, Page 4-25,	Workstations and PCs – 5 for each province – with soft	Workstations and PCs – 4 for each province – with soft calling and headphones (4 sets to be
	Section 4: Schedule	calling and headphones (4 sets to be deployed at 7 locations)	deployed at 7 locations)
	1 and Schedule 4(a)		



S/N	Reference	Existing Clause	Revised Clause
7.	Vol-II, Page 6-210,	8. Hyper Converged Solution Requirements: The HCI	8. Hyper Converged Solution Requirements: The HCI solution should include Hypervisor
	Section 6: 3.2.2.1.1	solution should include Hypervisor License and should	License and should support minimum 2 of the industry leading hypervisors.
		support minimum 3 of the industry leading hypervisors.	7 6 71
8.	Vol-II, Page 6-211,	9. Scalability: Proposed solution shall support unlimited	9. Scalability: Proposed solution shall support 150 nodes in a same cluster without any
	Section 6: 3.2.2.1.1	nodes in a same cluster without any federation	federation.
9.	Vol-II, Page 6-209,	2. Computing and RAM Pool	2. For DC Total useable cores:
	Section 6: 3.2.2.1.1	Total useable cores: Database compute (24 core, 3.0 GHz).	Database compute (32 core, 3.0 GHz).
	Hyperconverged	Latest Generation processor across Cluster, Web Application	Latest Generation processor across Cluster Web Application & others (176 core, 2.1 GHz)
	Infrastructure,	& others (144 core, 2.1 GHz) Total RAM: Database Compute	Total RAM: Database Compute with 24 GB per CPU Core and for Web, Application and
	Software Defined	with 24 GB per CPU Core and for Web, Application and	Other Compute with 8 GB per CPU Core DDR4 3200 MHz across Cluster
	Network and Cloud	Other Compute with 8 GB per CPU Core DDR4 3200 MHz	For DR Total useable cores: Database compute (24 core, 3.0 GHz). Latest Generation
	Orchestrator and	across Cluster	processor across Cluster Web Application & others (144 core, 2.1 GHz). Total RAM:
			Database Compute with 24 GB per CPU Core and for Web, Application and Other Compute
			with 8 GB per CPU Core DDR4 3200 MHz across Cluster
10.	Vol-II, Page 6-21,	e. System Integrator should create a backup site at the location	e. The Replication should be from Software defined storage to Software defined storage or
	Section 6: 2.3.5	specified by NEA. The location backup site will be finalized	hypervisor level. SI to maintain the requirement for Storage and host-based replication.
	Provisioning of Data	during the design discussion. The system integrator should	
	Center and Disaster	supply the necessary hardware and software for keeping entire	
	Recovery Center	SAN-to-SAN replication. System Integrator must ensure to	
	ř	take the backups as per backup policy prepared by System	
		Integrator and as finalized by NEA.	
11.	Vol-II, Page 6-219,	2. The device should be from a family of products that attains	2. The device should be from a family of products that attains ICSA or NSS Labs
	Section 6: 3.2.2.1.2	ICSA Labs Certifications for Antivirus, Corporate Firewall,	Certifications for Antivirus, Corporate Firewall, Ipsec and SSL VPN
	Internet Next	Ipsec and SSL VPN	
	Generation Firewall		
12.	Vol-II, Page 6-87,	3. Tariff updation 0.1 of the monthly payment for the	0.1% of the monthly payment for the reduction of the service level
	Section 6: 2.3.20.1.5	reduction of the service level	
1	RMS System – SLA		
1	Indicators Post		
1	implementation		
	2 Availability Service		
12	Levels		
13.	Vol-II, Page 6-18,	e. SI should arrive at the optimal technical specification,	e. SI should arrive at the optimal technical specification, sizing, license requirement,
1	Section 6: 2.3.4.1.1	sizing, license requirement, architecture, Bill of Material,	architecture, Bill of Material and SLA's.
1	Requirement	SLA's and should formulate the RFP for procurement of	
1.4	Gathering,	solutions accordingly.	
14.	Vol-II, Page 6-204,	2. SI shall provide system integration services along with supply,	2. SI shall provide system integration services along with supply, installation and
	Section 6: 3.2.1	installation and commissioning of the required hardware, software	commissioning of the required hardware, software etc. at the NEA Data Centre and Disaster
	Design	etc. at the NEA Data Centre and Disaster Recovery Centre to	Recovery Centre to deploy the COTS – RMS stack solution including the applications and
	Consideration for	deploy the Advanced Metering Infrastructure including the	integrate with the existing MDMS as specified in the functional scope. SI's scope would
	Proposed Solution	applications and integrate with both Legacy, Internal and external	include procurement of hardware and relevant software licenses, their installation and
		agencies as specified in the functional scope. SI's scope would	commissioning at NEA's DC and DRC.



S/N	Reference	Existing Clause	Revised Clause
		include procurement of hardware and relevant software licenses, additional licenses for existing RMS System, their installation and commissioning at NEA's DC and DRC.	
15.	Vol-II, Page 6-206, Section 6: 3.2.1.1.5 Scalability	Scalability is the most important aspect of DC and DRC. It is envisaged that the users and geographic locations may increase over the coming years with further enhancement. The system architecture and the network design should have the ability to handle the growth with respect to functions, users, load, and geographic sites. Also, applications must evolve to support new business requirements and make use of new technologies. SI must factor both vertical and horizontal scalability in the design and deployment of AMI solution.	Scalability is the most important aspect of DC and DRC. It is envisaged that the users and geographic locations may increase over the coming years with further enhancement. The system architecture and the network design should have the ability to handle the growth with respect to functions, users, load, and geographic sites. Also, applications must evolve to support new business requirements and make use of new technologies. SI must factor both vertical and horizontal scalability in the design and deployment of RMS. Bidder should ensure that IT infrastructure utilization should not cross the 70% utilization threshold during project lifecycle with the current scope of work.
16.	Vol-II, Page 6-12, Section 6: 2.2.7 Inspection and Testing	b) SI should set up a testing environment at the Disaster Recovery Center hosting facilities for testing requirements.	b) SI should set up a testing environment at the DC hosting facilities for testing requirements.
17.	Vol-II, Page 6-253, Section 6: 3.2.3.1.6 Firewall	26. The Firewall should support Static, Policy Base, Identity based, Multicast routing and Dynamic routing for RIP1 & 2, OSPF, OSPFv3, BGP4, ISIS, RIPing	26. The Firewall should support Static, Policy Base, Identity based, Multicast routing and Dynamic routing for RIP1 & 2, OSPF, OSPFv3, BGP4, RIPing
18.	Vol-II, Page 6-209, Section 6: 3.2.2 IT Equipment: Technical Specifications	Additional Clause added as part of scope of work	Bidder shall submit mandatory compliance (Yes/No) for all hardware technical specifications mentioned in the Bid Document. NEA reserves the right to treat bids with non-compliance to hardware technical specifications 'non-Responsive'
19.	Vol-I, Page 4-21, Section 4: Bidding Forms	Schedule 3: Design Services Additional Clause added as part of scope of work	Please refer to Annexure 2 (Software Change Control): During the contract duration, there will be instances where NEA will require the SI to implement functional requirements not envisaged in the bidding document. Instead of seeking an effort estimate for the envisaged change in software as it is normally NEA will pay the SI basis the agreed person month rates for the resources estimation on the change request. The SI will have to give a proposal to NEA regarding the utilization of the resources at the rate quoted as part of the Bid for a particular change request and NEA will evaluate the same. NEA will accept a functional requirement as a change when there is no reference to the functional requirement in the Bid Document. Any changes in page layouts, modifications of reports included in scope and page navigational requirements will not be constituted as a change. Bidders shall quote for manpower services category during implementation added in Annexure 2)

The amendments/clarifications/Addendum issued in this document shall be treated as a part of Bid Document from here and after and shall be read with the original Bid document and subsequently issued amendment documents. **Note:** All the relevant documents/declarations/certificates etc., which are required to be submitted along with the proposal shall be submitted in the required formats, wherever applicable as mentioned in the Bid Document.

For further details, please contact:

Project Director, Institutional Strengthening Project,
Finance Directorate, Nepal Electricity Authority, Durbar Marg, Kathmandu, Nepal Telephone: +977-1-4153201/4153310; e-mail: ispnea@gmail.com



Annexure 1

DC and DR Network Switching Specifications – New Sub-Section being added under Vol II – Section 3 Technical Specifications

S/N	Specifications for Distribution/ToR Switches	Compliance Yes/No
A	Solution Requirement	
	The Switch should support non-blocking Layer 2 switching and Layer 3 routing	
	There switch should not have any single point of failure like power supplies and fans etc. should have 1:1/N+1 inbuilt level of redundancy	
В	Hardware and Interface Requirement	
	Switch should have the 24 x 1/10/25G SFP and should have 4 x 40G/100G QSFP28 ports. The switch should be scalable to additional 50% of the asked above ports, switch should be populated with 16x10G Multimode SFP and 2x100G ports.	
	Switch should have 16GB DRAM and 32GB internal Flash/Storage	
	Switch should support Configuration roll-back	
	Switch should support for different logical interface types like loopback, VLAN, SVI/RVI, Port Channel, multi chassis port channel/LAG etc.	
	The switch should support 80,000 IPv4 unicast routes and 80,000 IPv6 unicast routes entries in the routing table including 40,000 multicast routes	
	The switch should support hardware-based load sharing at wire speed using LACP and multi chassis ether channel/LAG	
	Switch should support minimum 3 Tbps of switching capacity	
С	Layer2 Features	
	Spanning Tree Protocol (IEEE 8201.D, 802.1W, 802.1S)	
	Switch should support minimum 256,000 no. of MAC addresses	
	Switch should support 8 Nos. of link or more per Port channel (using LACP) and support 64 number of ports per Link Aggregation Group	
	Support for broadcast, multicast and unknown unicast storm control to prevent degradation of switch performance from storm due to network attacks and vulnerabilities	
D	Layer3 Features	
	Switch should support static and dynamic routing like Static, OSPF and BGP	
	Switch should support a datacentre Fabric build on mature standards and protocols such as BGP EVPN/VXLAN to normalize datacentre and fabric operations. No proprietary solutions are to be deployed for fabric	
	Should support BGP, MBGP, IS-IS for IPv4 and IPv6	
	Switch should support multicast traffic reachability using PIM-SM and SSM	
E	Availability	
	Switch should provide gateway level of redundancy in IPv4 and IPv6 using HSRP/ VRRP	



S/N	Specifications for Distribution/ToR Switches	Compliance Yes/No
	Switch should support for BFD For Fast Failure Detection	
F	Quality of Service	
	Switch system should support 802.1P classification and marking of packet CoS, DSCP etc.	
	Switch should support for different type of QoS features for real time traffic differential treatment using WRED and SP Queuing	
	Switch should support Flow control of Ethernet ports to control traffic rates during congestion by allowing congested nodes to pause link operation at the other end for receiving traffic as per IEEE 802.3x	
G	Security	
	Switch should support for deploying different security for each logical and physical interface using Port Based access control lists of Layer-2 to Layer-4 in IP V4 and IP V6 and logging for fault finding and audit trail	
	Switch should support control plane i.e., processor and memory Protection from unnecessary or DoS traffic by control plane protection policy	
	Switch should support AAA using TACACS+ / Radius	
	Switch should support for Role Based access control (RBAC) for restricting host level network access as per policy defined	
H	Manageability	
	Switch should support for RMON/RMON-II for central NMS management and monitoring	
	Switch should provide remote login for administration Telnet, SSHv2	
	Switch should support for management and monitoring status using different type of Industry standard NMS using SNMP V2 and V3	
	Switch should support for basic administrative tools like Ping and traceroute	
	Switch should support central time server synchronization using Network Time Protocol NTP V4	
	Switch should be IPv6 Certified (IPv6 Logo Ready or USGv6)	
	Switch should be EAL3/ NDPP /NDcPP or above Certified under common criteria	
G	Out of Band Management	
	The DC Switches should have the capabilities to be deployed and managed by a software solution installed on a ESXi or KVM Hypervisor as an Out of Band Management tool.	
	OOB Management Tool should provide full lifecycle management of the network including Design, Build, Deployment and Validation and support Zero Touch provisioning that takes a device from initial boot to a point where it is managed by the Fabric Manager.	
	OOB management Tool should support DC switching design with industry standard protocols like Ethernet, IP, BGP in the physical/underlay and EVPN-VXLAN in the overlay of the proposed architecture with visualizations for path analysis, heat maps and bandwidth	
	Should support Network Virtualization Overlays with VXLAN data plane, EVPN control plane, Edge-Routed Bridging Overlay and Proxy ARP and ND	



S/N	Specifications for Distribution/ToD Switches	
5/11	Specifications for Distribution/ToR Switches	Yes/No
	Should support deployment of 3-Stage and 5-Stage leaf-spine IP fabrics with Multihoming by using industry standard EVPN ESI with multi-tenancy and workload isolation at Layer-2 and Layer-3 using VLAN, VXLAN, EVPN, VRF (Routing Instance) and Group Based Policies	
	Should support anycast gateway that configures every SVI/IRB interface that participates in the stretched L2 service with the same IP/MAC address	
	Should provide full network-centric DC Switching Infra health view to operations and NOC teams using built-in Dashboards which presents contextualized information on a wide range of categories including BGP status, Physical Layer-1 Visualizations, Interface Expectations, Configuration compliance, Revenue facing Servers, Deployment Anomalies, Routing Anomalies, Hardware (CPU, TCAM, Memory, Power), Configuration Deviation	
	Solutions should provide Advanced telemetry that can collect streaming telemetry data from switches and monitor and get alerts on data transfers across a fabric	
	Should support creation of Service Level Agreements in one central location and alert anytime there is a deviation from defined properties. Should have ability to check the compliance of devices and services across the entire fabric.	
	Should support Role-based Access Control (RBAC) for logging into OOB Management tool. Should support LDAP, AD, TACACS+, and RADIUS for authenticating and authorizing users and should support Restful APIs for 3rd Party Integrations.	
Н	Warranty and Maintenance	
	The bidder should provide comprehensive warranty till end of contract period with 24 x 7 x 365 for all equipment and software included in the proposed solution.	



Annexure 2 Schedule 1: Price Schedule for IT Products to Be Offered including Mandatory Spares to be supplied from abroad for Data Center (DC)

Name of Bidder:	 IFB Number:	Page:	 of	
		-	 	

Reven	Revenue Management System (RMS) for Nepal Electricity Authority						FC: Foreign Cu	rrency	
Sched	ule No. 1: IT Products including Mandatory Spares to be supplied from ab	oroad for Data Centre					LC: Local Currency		
Item No.	Item description	Estimated		DPU Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Total Amount (Excluding Taxes and Duties)	Remarks	
110.		Unit	Quantity		FC		FC	LC	
		Unit	Quantity	Currency#	Unit Rate	Amount (in USD)			
1	2	3	4	5	6	$7 = (6) \times (4)$	8=7	9	
1	RMS Software Component								
1A	Software Licenses - Application								
1	RMS License	Nos	6000000	USD					
2	Mobile Device & Application Management System	Lot	1	USD					
3	Annual Technical Support for 2nd Year	Lot	1	USD					
	Annual Technical Support for Zita Tear	Lot	1	CSD					
	Sub -Total 1A - Software Licenses Application			USD					
1B	Software Licenses - IT Component								
1	Private Cloud Orchestrator Solution	Lot	1	USD					
2	Anti-Virus Software (For all the proposed virtual Machines and Desktops)	Lot	1	USD					
3	Virtualization Software	Lot	1	USD					
4	Database in High Availability (HA) for 6000000 consumers	Lot	1	USD					
5	Middleware in High Availability (HA) for 6000000 consumers	Lot	1	USD					
6	Server OS License (For all the proposed virtual Machines)	Lot	1	USD					
	Sub Total 1D Caferrare Licenses IT commonent			LICD					
	Sub -Total 1B - Software Licenses -IT component			USD					
2	RMS hardware Component								
2A	Hardware - Servers								
1	Database compute Nodes (Total 32 cores)	Lot	1	USD					
2	Web, Application and Other Compute Nodes (Total 176 cores)	Lot	1	USD					
3	Enterprise level NAS storage	TB	62	USD					



	ue Management System (RMS) for Nepal Electricity Authority						FC: Foreign Cu		
Sched	ule No. 1: IT Products including Mandatory Spares to be supplied from ab	road fo	r Data Cent				LC: Local Curr	ency	
Item No.	Item description	Estimated		DPU Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)			Total Amount (Excluding Taxes and Duties)	Remarks	
			Quantity		FC		FC	LC	
1	•	Unit	•	Currency#	Unit Rate	Amount (in USD)	0.7	0	
1	2	3	4	5	6	$7 = (6) \times (4)$	8=7	9	
4 D	Sub -Total 2A - Hardware-Servers			USD					
2B	Hardware - Security Devices								
1	I N O C II	3.7		Hab					
1	Internet Next Generation-Firewall	Nos.	2	USD					
2	Web Application firewall	Nos.	2	USD					
3	Internet Intrusion Prevention Solution	Nos.	2	USD					
4	Advance Persistence Threat (APT)	Nos.	2	USD					
5	Anti-DDoS Solution	Nos.	2	USD					
				7105					
	Sub -Total 2B - Hardware Security Devices		T	USD					
2C	Hardware - Network Devices								
1	Distribution/ToR Switches	Nos.	2	USD					
1	Sub -Total 2C- Hardware Network Devices	1103.		CSD					
	Sub-Total 2C-Hardwart Activory Devices								
2D	Hardware - Racks, Cables & Jacks								
1	CAT6 Cable, Patch cord, Jacks etc.	Lot	1	USD					
2	Fiber Optical Cable, Connectors, Patch Cord etc.	Lot	1	USD					
	Sub-Total 2D - Hardware Racks, Cables & Jacks			USD					
	Sub-Total 2D - Hai dwait Racks, Cabics & Jacks			СЗБ					
3	Customer Care Centre (CCC)								
3A	CCC-Software								
1	VM base License for ACD (2 licenses at one Location)	Nos.	2	USD					
2	IVR+ Dialer+ Recording+ reporting	Nos.	1	USD					
3	PRI- Gateway	Nos.	1	USD					
4	Agent License (3 licenses to be deployed at 7 locations)	Nos.	21	USD					
5	Supervisor License (1 License at 7 locations)	Nos.	7	USD					
	Sub-Total 3A- CCC Software		•	USD					
3B	CCC-Hardware								
1	Server with OS for ACD + IVR (2 Servers to be deployed at central location)	Nos.	2	USD					
2	Workstations and PCs – 4 for each province – with soft calling and headphones (4 sets to be deployed at 7 locations)	Nos.	28	USD					



Revenue Management System (RMS) for Nepal Electricity Authority						FC: Foreign Currency		
Sched	ule No. 1: IT Products including Mandatory Spares to be supplied from a	broad fo	r Data Cent	re			LC: Local Currency	
Item No.	Item description		Estimated		DPU Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)		Total Amount (Excluding Taxes and Duties)	Remarks
		Unit	Onantit		FC		FC	LC
		Unit	Quantity	Currency#	Unit Rate	Amount (in USD)		
1	2	3	4	5	6	$7 = (6) \times (4)$	8=7	9
3	Network devices (1 firewall and 1 Switch to be deployed at 7 locations)	Nos.	7	USD				
4	Multi-function printer (1 Printer to be deployed at 7 locations)	Nos.	7	USD				
5	Furniture (5 sets to be deployed at 7 locations)	Nos.	35	USD				
6	IP Phone (5 sets to be deployed at 7 locations)	Nos.	35	USD				
	Sub-Total 3B- CCC Hardware			USD				
4	Miscellaneous							
1	Scanner required for data digitization	Nos	150	USD				
	Sub-Total 4- Miscellaneous			USD				
		Å	Sub Total 1	Software Con	iponent App l	icense+ DC) in USD		
			,	Sub Total 2 (H	lardware Con	nponent DC) in USD		
			Sub Tot	al 3(Customer	Care Centre	Component) in USD		
	Total for Schedule 1 (Total	of colum	n 8 to be car	ried forward	to Schedule 5	5: Grand Summary)	All Amounts a	re in USD

Note:

- 1) Bidder may quote quantities of line items based on their sizing and proposed solution.
- 2) NEA reserves right to addition or deletion of any quantity and item provision under the BOQ.
- 3) BOQ given above is indicative only based on the scope of work as given in Employer's Requirements. The quantities mentioned above may undergo change during detailed engineering to meet the functional requirement and scope of work defined in Employer's Requirements.
- 4) Bidders is responsible for implementation of the complete solution any item/solution which is not covered in BOQ but still require for desired performance, the same shall be included by the bidder in the bid form/commercial. No change request will be accepted in this regard
- 5) Bidder shall quote the rates excluding taxes and duties applicable in Nepal like Custom, VAT etc., but shall include all taxes, duties outside Nepal and any applicable business taxes in Nepal like TDS (income tax) etc.

Specify currency in accordance with BDS ITB Clause 37.1 of the Bidding Documents. * Strike-out whichever is not applicable.

Name of Bidder:		Date:
Signature of Bidder	:	(Printed Name):
(Designation):		(Common Seal):



Schedule 1(a): Price Schedule for IT Products to Be Offered including Mandatory Spares to be supplied from abroad for Disaster Recovery Center (DRC)

Name of Bidder:	IFB Number:	Page:	. (of	

Revenue M	Revenue Management System (RMS) for Nepal Electricity Authority FC: Foreign Currency							
Schedule No. 1: IT Products to Be Offered including Mandatory Spares to be supplied from abroad for Disaster Recovery Center LC							LC: Local Curi	rency
Item No.	Item description	Es	timated DPU Project Site including insurance clearing, forwarding and transportation site (Excluding Taxes and Duties application Nepal)	l transportation to d Duties applicable	Total Amount (Excluding Taxes and Duties)	Remarks		
				FC			FC	LC
		Unit	Quantity	Currency#	Unit Rate	Amount (in USD)		
1	2	3	4	5	6	$7 = (6) \times (4)$	8=7	9
1	RMS Software and Hardware							
1B	Software Licenses - IT Component							
1	Private Cloud Orchestrator Solution	Lot	1	USD				
2	Anti-Virus Software (For all the proposed virtual Machines and Desktops)	Lot	1	USD				
3	Virtualization Software	Lot	1	USD				
4	Database in High Availability (HA) for 6000000 consumers	Lot	1	USD				
5	Middleware in High Availability (HA) for 6000000 consumers	Lot	1	USD				
6	Server OS License (For all the proposed virtual Machines)	Lot	1	USD				
	Sub -Total 1B - Software Licenses -IT component			USD				
2	RMS hardware Component							
2A	Hardware - Servers							
1	Database compute Nodes (Total 24 cores)	Lot	1	USD				
2	Web, Application and Other Compute Nodes (Total 144 cores)	Lot	1	USD				
3	Enterprise Level NAS Storage	TB	62	USD				
	Sub -Total 2A - Hardware-Servers			USD				
2B	Hardware - Security Devices							
1	Internet Next Generation-Firewall	Nos.	1	USD				
2	Web Application firewall	Nos	1	USD				
3	Internet Intrusion Prevention Solution	Nos.	1	USD				
4	Advance Persistence Threat (APT)	Nos.	1	USD				
5	Anti-DDoS Solution	Nos.	1	USD				



Revenue Management System (RMS) for Nepal Electricity Authority							FC: Foreign Cu	Foreign Currency
Schedule No. 1: IT Products to Be Offered including Mandatory Spares to be supplied from abroad for Disaster Recovery Center							LC: Local Curi	rency
Item No.	Item description	Estimated		DPU Project Site including insurance, clearing, forwarding and transportation to site (Excluding Taxes and Duties applicable in Nepal)		Total Amount (Excluding Taxes and Duties)	Remarks	
		Unit	Quantity		FC		FC	LC
		Omi	Quantity	Currency#	Unit Rate	Amount (in USD)		
1	2	3	4	5	6	$7 = (6) \times (4)$	8=7	9
	Sub -Total 2B - Hardware-Security Devices			USD				
2C	Hardware - Network Devices							
1	Distribution/ToR Switches	Nos.	2	USD				
	Sub -Total 2C- Hardware - Network Devices							
2D	Hardware - Racks, Cables & Jacks							
1	CAT6 Cable, Patch cord, Jacks etc.	Lot	1	USD				
2	Fiber Optical Cable, Connectors, Patch Cord etc.	Lot	1	USD				
	Sub-Total 2D - Hardware Racks, Cables & Jacks					Γ		
	Sub Total 1 (Software Component) In USD Sub Total 2 (Hardware Component) IN USD							
	Total for Schedule 1(a) (Total of column 8 to be carried forward to Schedule 5: Grand Summary)					All Amounts a	re in USD	

Note:

- 1) Bidder may quote quantities of line items based on their sizing and proposed solution.
- 2) NEA reserves right to addition or deletion of any quantity and item provision under the BOQ.
- 3) BOQ given above is indicative only based on the scope of work as given in Employer's Requirements. The quantities mentioned above may undergo change during detailed engineering to meet the functional requirement and scope of work defined in Employer's Requirements.
- 4) Bidders is responsible for implementation of the complete solution any item/solution which is not covered in BOQ but still require for desired performance, the same shall be included by the bidder in the bid form/commercial. No change request will be accepted in this regard
- 5) Bidder shall quote the rates excluding taxes and duties applicable in Nepal like Custom, VAT etc., but shall include all taxes, duties outside Nepal and any applicable business taxes in Nepal like TDS (income tax) etc.

Specify currency in accordance with BDS ITB Clause 37.1 of the Bidding Documents. * Strike-out whichever is not applicable.

Name of Bidder:		Date:=
Signature of Bidder	:	(Printed Name):
(Designation):		(Common Seal):



Schedule 3: Design Services

	Management System (RMS) for Nepal Electricity Authority 23: Design Services					FC: Fore	eign Currenc
	Item Description	Estimated		Unit	Total Prices		
Item No.		ESU	mateu	Local Currency Portion	Foreign Currency Portion		
110.		Quantity	Unit (NPR)	NRs	Currency	LC	FC
1	2	3	4	5	6	7=3x5	8=3x6
1	RMS Implementation Service	1	Lumpsum				
1a	Manpower of less than 7 years of experience	1.5	Years				
1b	Manpower of more than 7 years of experience	1.5	Years				
2	Data Digitisation Cost (2A + 2B)	1	Lumpsum				
2A	Scanning and barcoding cost (for existing consumer base)	1	Lumpsum				
2B	Data Entry cost (for existing consumer base)	1	Lumpsum				
3	Data Migration	1	Lumpsum				
4	Integration Services for Customer Care Centre	1	Lumpsum				
	Total for Schedule 3 (Total of column 7 & 8 to be carried forward to Schedule 5: Grand Summary)						
		To	tal for Schedul	e 3 (Total of column 7 & 8 t	o be carried forward to Sched	ule 5: Gra	nd Summar

Note:	1)	Bidder shall quote the rates excluding taxes and duties applicable in Nepal like Custom, VAT etc., but shall include all taxes, duties outside Nepal and any applicable business taxes
		in Nepal like TDS (income tax) etc.

* Strike-out whichever is not applicable.

Name of Bidder:	Date:=
Signature of Bidder:	(Printed Name):
(Designation):	(Common Seal):

Specify currency in accordance with BDS ITB Clause 37.1 of the Bidding Documents.



Annexure 3

Form EXP - 1: Contractual Experience

Fill out one (1) form per contract.

	Contractual Experience	
Contract No of	Contract Identification	
Award Date		Completion Date
Role in Contract	System Integrator/ JV/ Consortium Member	☐ Supplier ☐ Subcontractor
Total Contract Amount	S	
Total Consumer Base		
If partner in a joint venture or subcontractor, specify participation of total contract amount	Percent of Total	Amount
Purchaser's name		
Address		
Telephone/Fax Number		
E-mail		
Description of the Simile (Evalua	arity in Accordance with 2.3 and 1.1 of Section 3 tion and Qualification Criteria)	

- Note -

This form shall only be included if Criteria 2.3 and 1.1 of Section 3 (Evaluation and Qualification Criteria) is applicable.



Form EXP - 2: Technical Experience

Fill out one (1) form per contract.

	Technical Experience							
Name	Name of Product:							
Manufacturer:		Address and Nationality:						
		ordance with Criterion 2.3 and 1.1 of Section 3 ation and Qualification Criteria)						
(i)	Product has been in production for at least years.							
(ii)	Product (or equipment) has been sold a minimum of units of similar type and specification over the last three (3) years.							
(iii)	Product has been in operation for a minimum of years.							
(iv)	Product has been implemented RMS project for monthly consumer base of Million during last years as per the section 3							

- Note -

This form shall only be included if Criterion 2.3 and 1.1 of Section 3 (Evaluation and Qualification Criteria) is applicable. Add pages as necessary. The Purchaser reserves the right to verify authenticity of Bidder submissions.



Annexure: 4

Experience of the RMS Product OEM The experience of the RMS Product OEM in B.1 shall be evaluated on the basis of following sub evaluation criteria, and in accordance with the level of responsiveness and the corresponding percentages of scores, as defined below: Rating Description of rating of scores

	Rating	Description of rating of scores			
	Excellent Submission	The bidder has submitted 3 projects as per the requirements			
For B.1	Good submission	The bidder has submitted 2 projects as per the requirements			
	Acceptable submission	The bidder has submitted 1 project as per the requirements			
	Unacceptable submission	Bidder has not sufficiently demonstrated relevant experience			

S/N	Evaluation Criteria	Score	Excellent	Good	Acceptable	Unacceptable	Documentary evidence
			Submission	Submission	submission	submission	
B.1	The Offered COTS (Commercial Off-The Shelf) Based Revenue Management System (RMS) should have been successfully implemented in at least One (1) RMS projects for a monthly consumers base of at least 3 million during the last Seven (7) years on On-Premise/ Infrastructure as a service including supply, delivery, design, customization, integration, implementation, testing, commissioning of Hardware and Software Each such implementation should have covered at least Six (6) modules (Modules 1 to 5 are mandatory) out of the below listed modules: 1. Metering 2. Billing 3. Collection 4. New Connection, Disconnection & Reconnection 5. Energy Accounting or Customer Relationship Management 6. Web Portal and Mobile Application 7. Management Information System 8. Customer Care Centre	15	100%	80%	60%	0%	i. Form EXP-2 ii. Copy of Work Order / Purchase Order iii. Completion certificate where OEM is the SI/ completion certificate* obtained by the SI along with Self certification of work and contribution by the OEM. (*completion certificate stating the completion of at least Go-Live stage.) Relevant whitepapers of the product OEM.
	9. Document management system (DMS)						

