



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

Ref. No: 2078/79/ - 66

Date: Wednesday, 06 April 2022

To:

All prospective bidders,

Subject: Issuance of Clarification-3

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 Clarification-3 according to the ITB clause 7.1 of the bidding document.

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

Best regards,

Chandha Neupane

Chandha Neupane,
(Project Director)

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

Clarification -3

S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
1	Vol- I Schedule 1	4-10	Database :: Lot - 6000000	Please confirm database lot 6000000 means RMS account/transection or Database instance.	For 6000000 consumers
2	Vol- I Schedule 1	4-11	Middleware :: Lot - 6000000	Please confirm Middleware lot 6000000 means RMS account/transection or middleware instance.	For 6000000 consumers
3	Vol-II	6-209	Storage: 40 TB Useable across Cluster (20% should be SSD)	Whether the HCI 40TB storage is effective capacity or bare disk capacity. Consider that there are only 3 nodes, the data produces a mirrored copy at 1:1, which means the effective capacity ratio is 1:2. If you need the data capacity of 40TB, you need to configure 80TB disk, and each node needs about 27TB's hard disk.	The Usable Capacity requirement is 40TB across cluster (combining all 3 nodes), meaning the proposed solution should provide 40TB usable capacity after factoring 2 copies/RAID1. Without considering any storage efficiency technology like deduplication and compression.
4	Vol-II	6-212	Hypervisor should support container and openstack integration for cloud native application	Whether native K8S support are required? Whether container related product should be quoted in bidding quotation?	The bidder should propose the solution which support native container (K8S) and the same solution should be capable of integrating with Open Stack if there is any cloud native application. SI to propose the required licenses from day one, NEA will not pay any additional cost for licenses required during the project.
5	Vol-II	6-212	HCI solution must support two copies of data across cluster and should have capability for supporting three copies for critical data and it should be available on workload level.	If it is required for 3 data copies for some of business critical vm, it needs 5 nodes HCI at least.	The proposed solution should be capable of supporting 3 copies of data with minimum of 5 nodes configuration on the fly in future there should not be any limitation converting the 2 copies configuration to 3 copies configuration with addition of required nodes.
6	Vol-II	6-210	Proposed OEM should be a brand listed once or more than once in the Latest Gartner's magic quadrant's leaders, Visionaries and Challengers Quadrant (2019, 2020, 2021) for Hyperconverged Infrastructure.	This is a typical directional parameter. Generally speaking, HCI software is closely related to virtualization software. There should be only choice to meet all requirements of specific functions, and it will not show that any Hypervisor supports the same HCI and Hypervisor	No Change, to ensure the quality of the product, it should be listed in the Gartner reports.
7	Vol-II		F : Solution Technical Presentation	Do you need to explain the tender on site?	Yes
8	Vol-II 3.2.2.1.1. Microservices Architecture	6-205	Genral	Can we have remote access for first deployment through VPN?	Shall be finalised during design discussions.



S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
9	Vol-II 3.1 Functional Requirement Specification	6-97 6-207	2.3.20.1.6 RMS – SLAs for RTO/RPO & DC DR Drill	RPO and RTO are defined separately in 2 sections. Page no 100 Section 2.3.20.1.6 and page no 210 section 3.2.1.1.7. Request to maintain the RTO PRPO mentioned at page no 210.	Please read this clause as: Required RPO is 15 mins and required RTO is less than 1 hour in current scope. Also the proposed solution for RTO and RPO should be customizable in future i.e. RPO- 0 mins/5 mins/15 mins.
10	Vol-II 3.1 Functional Requirement Specification	6-11	2.2.3 Business Blueprinting b) SI should submit the Guaranteed technical parameters for each of the IT infrastructure components and obtain approval before manufacturing, design, and supply.	These are established by the OEM datasheets for respective products and should be submitted during the bidding as per RFP. Kindly confirm.	As per the Bid Document.
11	Vol-II Additional Queries		Additional Queries	Share details of the existing infrastructure for MDMS and other operations. Will the existing Infra / Other common services be shared across the environments. Customer has existing Datacentre which is hosting MDMS, GIS and other applications. The same will have a lot of Infrastructure in place. Does the new solution need to have completely isolated infrastructure or listing of common services along with equipment details must be provided.	As per the Bid Document. Further details will be shared with the successful bidder.
12	Vol-II Section 6: Schedule of Requirements	6-20	o. SI shall design the Document management system in such a manner that it should cater at least 10 custom workflows. The details of custom workflows shall be discussed during design discussions.	Need a custom process design tool?	As per the Bid Document.
13	Vol-II Section 6: Schedule of Requirements	6-252	24、 Should support automatic ISP failover as well as ISP load sharing.	Could you please illustrate the application scenario?	No Change, as this is call centre Firewall, to multiple links can be provisioned from different service providers to meet the High availability
14	Vol-II Section 6: Schedule of Requirements	6-253	25、 Firewall should have capability of intelligent routing and failover of traffic on ISP links based on Application Visibility and link Performance SLAs.	Could you please take an example of Intelligence Routing?	No Change, as this is call centre Firewall, to multiple links can be provisioned from different service providers to meet the High availability
15	Vol-II 3.1 Functional Requirement Specification Performance related SLA	6-95	a) Business Applications and Portals: Average response time for Utility Business Application (excluding Human Input time)	Response times are too stringent. This shall depend on the process customization, its content and the size of operations executed. Request you to change as "align as per real time scenarios of at-least <3ms".	As per the Bid Document.
16	Vol-II 2.1 Project Objective	6-8	General	Please, confirm that the prepaid supported is only STS or STS6	Prepaid should support STS6 or whichever most recently released standard issued by the Standard Transfer Specification (STS) association.
17	Vol-II 3.1.11. Document Management System (DMS.1 - Document Scanning Feature)	6-195	2. The mobile based document capture application and scanning solution should be from the same OEM.	As understood from the mentioned statement that the scanning solution should have the capability to upload the images that will be captured through mobile apart from scanner. Please confirm the understanding is correct.	Your understanding is correct. Confirmed
18	Vol-II 3.1.11. Document Management System	6-196	9. Should have the capability of scanning on Linux platform.	In respect to the mentioned statement, requesting NEA to confirm whether they want Desktop / Thick Client based Scanning Application or Web based Scanning Application.	As per the Bid Document.

S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
19	Vol-II 3.1.11. Document Management System (DMS.1 - Document Scanning Feature)	6-196	11. The software solution should include the Rubber band feature for the extraction of the data using OCR technology so that users can mark a zone on image at runtime during scanning stage & map the extracted data with the indexing field.	In respect to the mentioned statement, requesting NEA to clarify the requirement with proper use case scenario as this kind of facility is required for specific point solution in banking / insurance domain where Structured Documents with proper Printed English Content are there for digitization. In that respect, requesting NEA to exclude that mentioned specification.	As per the Bid Document.
20	Vol-II 3.1.11. Document Management System (DMS.1 - Document Scanning Feature)	6-196	12. The mobile capture should support image compression, B/W conversion from color images, G4 compression for B&W, JPEG for color and gray scale, multiple page document capture, auto cropping, auto orientation, perspective correction, noise removal and geo capture.	In respect to the mentioned statement, requesting NEA to consider the following statement as in any mobile capture facility, Compression, cropping, noise removal etc. are not there. These are generally the part of Scanning / Digitization Solution, "The scanning / digitization capture should support image compression, B/W conversion from color images, G4 compression for B&W, JPEG for color and gray scale, multiple page document capture, auto cropping, auto orientation, perspective correction, noise removal and geo capture."	As per the Bid Document.
21	Vol-II 3.1.6 New Connection, Disconnection, Dismantling and Reconnection	6-161	NC.30 Document Management 1. Integration with DMS for document handling	As understood from the RFP Statement that the proposed Document Management System should be integrated with the following applications for document upload & viewing purpose, 1. Revenue Management System (Document Upload & View) 2. Web Portal & Mobile Application (Document Upload & View) 3. ERP (Document Upload & View) 4. Active Directory (Single Sign-on Purpose) 5. E-Mail Service (User Intimation Purpose) 6. CRM (Document Upload & View) Please confirm if the above understanding is correct.	Integration aspects of DMS shall be discussed during business blueprinting
22	Vol-II 3.1.11. Document Management System	6-195	Request for Incorporation	As we understood that NEA intends to have Industry Standard Document Management System which is having the capability to cater billions of documents with secured access mechanism and proper scalability, in that respect, requesting NEA to incorporate the following specification in the mentioned statement, "The product for DMS should exist any of the leading analyst reports like Gartner or Forrester for Content Services Platform/Enterprise Content Management reports in any of the last 3 Years."	As per the Bid Document.

S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
23	Vol-II 3.1.11. Document Management System	6-195	Request for Incorporation	As understood from the RFP that required DMS application should be capable of archiving huge volume of documents for a longer period, it's expected that the proposed solution should have proper scalability. In that respect, requesting NEA to incorporate the following points in the DMS specification, "The proposed DMS system should have the proven scalability and should have at least one live implementation site in India with more than 20 Crore documents archived in enterprise document management repository as well as having user base of more than 1000 users."	As per the Bid Document.
24	Vol-II 2.3.8.1.5 Data Digitization	6-32	g) Any damage to the documents by SI may attract a penalty	We request you to kindly specify the penalty for such incident and also kindly limit for maximum penalty	As per the Bid Document.
25	Vol-II 2.3.20 Service Level Agreements	6-75	SI shall be responsible for 24*7*365 management of all systems during the implementation of overall RMS solution and Facility Management Service (FMS) period.	We request you to kindly define the minimum number of manpower to be considered to ensure 24*7 management during FMS period.	As per the Bid Document.
26	Vol-II 2.3.20 Service Level Agreements	6-75	System Integrator must supply and implement the Help Desk tools with RMS System. Also, the System Integrator shall be overall responsible for procurement of remaining. In case, if any of the Supporting Software Solutions & Diagnostic/monitoring tools required for implementation and operation of RMS are missing, then it will be the responsibility of the System Integrator to supply the same to NEA at no additional cost.	1. We request you to kindly define the tools to be procured other than helpdesk. Also request you to add the same in price schedule. 2. We request you to kindly add Supporting Software Solutions & Diagnostic/monitoring tools in Price schedule and also provide detailed specifications.	As per the Bid Document.
27	Vol-II 3.2.2.1.1	6-210	The proposed solution should come with preinstalled various software including SDS with management and associated hypervisor. It should include all hardware and software necessary to ensure high availability mode of operation. The proposed solution should have a Single Management Console to manage integrated Compute, Storage and Hypervisor. The solution must come with a bundle/customer license, which must be clearly mentioned in OEM's license portal. The platform and environment should be customizable as per the requirement of User. The proposed HCI solution should be able to leverage SSD not only for caching but for capacity also to optimized read IO's and there should not be any limitation on SSD overall caching on software defined storage. The proposed solution should be completely software defined and should not rely on any hardware RAID controller.	The SSD used for caching should only be used for caching. If used for application the overall performance of other applications will be affected. All HCI/SDS solution depend on RAID Controller in some ways for interfacing discs to the system. If you are referring to RAID based solution, it will be an added advantage as this will provide additional level of protection within the nodes	The asked requirement will fulfill the higher IOPS requirement of application running fulltime in SSD. Also the asked requirement of SSD is with redundancy.
28	Vol-II 3.2.2.1.1	6-211	Erasure Coding for archival data storage.	Data protection is handled differently by different SDS solutions and Erasure coding alone does not provide resiliency. This should be removed for fair participation of all vendors	This requirement is for archival DATA in which more capacity is required - Erasure coding increases the usable capacity on a cluster. Instead of replicating data, erasure coding uses a parity information to rebuild data in the event of a disk failure. The capacity savings of erasure coding is in addition to deduplication and compression savings.

S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
29	Vol-II 3.2.2.1.1	6-211	The proposed solution should support Hybrid and All Flash Nodes in the same cluster. Proposed SSD should be used for both storing Data and Caching. (If OEM uses SSD/NVMe dedicatedly for caching then additional SSD should be proposed). It should be possible to Pin IOPS hungry VMs on SSD only	The SSD used for caching should only be used for caching. If used for application the overall performance of other applications will be affected.	Clearly mentioned that the IOPS hungry application should run from SSD in the same system rather than more expensive All flash system.
30	Vol-II 3.2.2.1.1	6-211	HCI solutions are not meant to assign the capacity outside the HCI cluster as it impacts the performance of HCI cluster, similarly assigning capacity outside the cluster won't make any sense as that capacity cannot be managed using the HCI management console, adding or assigning external storage in HCI cluster increase the complexity in HCI environment	HCI solutions are not meant to assign the capacity outside the HCI cluster as it impacts the performance of HCI cluster, similarly assigning capacity outside the cluster won't make any sense as that capacity cannot be managed using the HCI management console, adding or assigning external storage in HCI cluster increase the complexity in HCI environment	SDS is the storage solution and asked requirement allows other infrastructure to consume the storage from HCI.
31	Vol-II 3.2.2.1.1	6-211	The solution should be able to scale by support of adding additional nodes to the cluster at a later point of time to handle compute, Memory & Storage requirements. Solution should support cluster expansion with zero down time. The proposed solution should support hybrid and all flash nodes in same cluster for future scalability. HCI solution must have capability to support HCI nodes with different models, different CPU Generations & Memory, Disks configurations in the same cluster without any impact on enterprise-class storage services/functionality	It is not at all recommended to mix nodes of different types and sizes as this will render the cluster unstable. It is not that other vendors do not support this feature, it is only not allowed to configure in the cluster for ensuring the performance.	As per the Bid Document., HCI solution must have capability to support HCI nodes with different models, different CPU Generations & Memory, Disks configurations in the same cluster for future scalability
32	Vol-II 3.2.2.1.1	6-212	Solution should be able to take App and database consistent snapshot and should be able to schedule the same.	When full VM's backups are available locally in the cluster then there is no need of point in time copy of VM's, using the full VM's backups complete VM can be recovered from any defined time instead of combining the multiple snapshots to complete the VM recovery	As per the Bid Document., For the critical application like Database it is recommended to have the App and DB consistent snapshot with this all the data in memory and all the transactions in process can be capture and recovered from the backup.
33	Vol-II 3.2.2.1.1	6-212	Remote Replication HCI solution must support two copies of data across cluster and should have capability for supporting three copies for critical data and it should be available on workload level.	For three copies of data, minimum 5 nodes are required and is not possible to achieve by any vendors as per the minimum node requirements of NEA.	The proposed solution should be capable of supporting 3 copies of data with minimum of 5 nodes configuration on the fly in future there should not be any limitation converting the 2 copies configuration to 3 copies configuration with addition of required nodes.
34	Vol II 2.2.7 c/d	6-12	Inspection and Testing	As most of the equipment's will be imported/ online (licenses etc), how NEA wants the FAT and pre-dispatch inspection to happen. Further, if no physical FAT/ pre-dispatch inspection required then what documents will be required by NEA to meet these criteria's Please clarify	As per the Bid Document.
35	Vol II 2.3.6.1.2	6-23	Integration Requirements	Whether XML/ JSON based secured (SFTP) file based integration can also be considered, wherever required Please clarify	This is to be finalised during business blueprinting design discussions.
36	Vol II 2.3.8.1.2	6-28	Data Migration	During Data migration from legacy systems to new system, 1. if instances where data is not available in old system but required by new system, 2. over the period of time, the data structures in various system under-gone changes how such issues will be handles as such scenarios may delay the implementation timelines. Please Clarify	As per the Bid Document.



S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
37	Vol-II	6-21	2 Scope of Work, 2.3.5 Provisioning of Data Center and Disaster Recovery Center, c. The IT Infrastructure at Data Center & Disaster Recovery Center utilization should not exceed the 70% utilization threshold level at any given point of time.	Kindly confirm 70% utilisation threshold level is applicable to CPU, RAM and Storage Components of DC.	As per the Bid Document.
38	Vol-II Section 6: Schedule of Requirements	6-120	3.1.3 Metering Module(M2-Data Validation) 5. System should be able to initiate a work queue for meter read validation & subsequent actions.	What you mean by work queue for meter read validation & subsequent actions?	A work queue to validate the meter reading, comparing with previous consumption, data and a report should be generated highlighting the abnormal cases (low or high consumption) and actions to be taken accordingly.
39	Vol-II 3.2.2.1.1	6-218	Private Cloud Database Life Cycle Management Tool The tool must provide automated provisioning of standalone or clustered databases.	Only a single vendor has this inbuilt to their solution, majority of other vendors will have to tailor third party solutions which will inflate their BOQ. For fair participation this should be generalized. If this is not a requirement of NEA this section should be removed or separated from the SDS package and should be included in a different package for equal participation of all vendors.	Read this clause as: Bidders are requested to propose the database lifecycle management tool as a part of solution. It can be native or 3rd party. As NEA is implementing their own on-premises private cloud solution, the proposed Cloud automation and orchestration tools should support seamless integration with the proposed infrastructure, Databases, Backup and Disaster recovery solutions. Bidder must comply to all the technical requirements either with single OEM or with multiple OEM solution, Bidder is responsible for the implementation, support and end to end integration of the proposed solution.
40	Vol-II 3.2.2.1.1	6-218	The tool must support all the leading databases, like Oracle, SAP HANA, MS SQL, My SQL, Postgress, Maria DB etc.		
41	Vol-II 3.2.2.1.1	6-218	The offered DB tool must support online copy data management, with a simplified snapshot and cloning process.		
42	Vol-II 3.2.2.1.1	6-218	The Database provisioning tool should be capable of handling Database schema deployment post /pre provisioning of Database.		
43	Vol-II 3.2.2.1.1	6-218	It must allow provisioning of customized images which are tailor- made as per organization need.		
44	Vol-II 3.2.2.1.1	6-218	The integrated copy data management must eliminate any wasteful copy data cost, as in automated deletion of old snapshots and clones as per retention policy.		
45	Vol-II 3.2.2.1.1	6-218	must provide customizable database profiles for software, compute, networking, and database parameters		
46	Vol-II 3.2.2.1.1	6-218	The tool must provide the ability to define recovery SLA's as per customizable RPO.		
47	Vol-II 3.2.2.1.1	6-218	The tool must be able to recover the DB copy from the past point-in- time to the granularity of any second, minute and hour of the day from the past. There must be daily, weekly and monthly point-in-time		
48	Vol-II 3.2.2.1.1	6-218	copies also available beyond this continuous "per-second" recovery as per the defined schedule.		
49	Vol-II 3.2.2.1.1	6-218	This point-in-time DB image must provide user the ability to restore the database on an existing DB server, or automatically create a new VM(s) and restore the DB. This must be an automated process, and user should not go through VM creation process manually.		
50	Vol-II 3.2.2.1.1	6-218	The user must be able to manage multiple DB engines, like Oracle, MS SQL, MySQL etc using the same interface and tool.		
51	Vol-II 3.2.2.1.1	6-218	The DB tool must alert the operator with any new DB patch availability, and provide an easy way to test and implement the patch on the production DB.		
52	Vol-II 3.2.2.1.1	6-218	The tool must maintain the event logs of any major activity and changes and auditing.		
53	Vol-II 3.2.2.1.1	6-218	The tool should have integration with AD/identity management.		
54	Vol-II 3.2.2.1.1	6-219	The tool must be able to integrate with the user preferred self-service tool using the API's.		



S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
55	Vol II Section 6 2.2 Table 1	6-10	RMS Modules	We need the following details for volumetric and DC/ DR sizing 1. Application wise data type, frequency and size of each data set/ type in KB/ MB 2. Period of live data in the system 3. Data retention and archival policy. Please provide	1. Bidder need to calculate sizing of their system, Indicative Compute is mentioned in the Bid Doc. 2. As per the Bid Document. clause No. 2.3.8.1.1 3. As per the Bid Document. clause No. 2.3.8.1.1
56	Vol-II Section 6: Schedule of Requirements	6-136	3.1.4 Billing Module(B23-Estimate billing) 4. A bill segment to be created for each service agreement linked to the account. The system generates bill segments in the order of the billing processing sequence on each service agreement's Service agreement type.	Detailed Explanation required for bill segment creation and service agreement type	This is to be finalised during business blueprinting design discussions.
57	Vol-II Section 6: Schedule of Requirements	6-141	3.1.4 Billing Module(B40-Auto Billing) 1. High performance yielding auto billing jobs to clear current upload & delayed uploads on same day without any spill over.	Kindly Elaborate the same	High performance billing system should be in place that should be capable to upload the billing data in the system on the same day it is extracted
58	Vol-II Section 6: Schedule of Requirements	6-84	2.3.20.1.5 RMS System – SLA Indicators Post implementation 1 Availability Service Levels	Check for Penalty min 15 penalty if server doent time is less than 1 % also	As per the Bid Document.
59	Vol-II Section 6: Schedule of Requirements	6-132	3.1.4 Billing Module(B14)) 1. To maintain the history of frozen and canceled bills. Should not be allowed to cancel in between the month's bill. If any of the past bills is to be canceled, it shall be ensured that all the bills in sequence up to the current month should be canceled. Then System to support rebill either individually or individual monthly bill duly incorporating the consumption and applying slabs and tariffs in force. Reversal of canceled bills of past months shall reflect in the DCB under relevant columns (Consumption, Rev, Tax, LPC etc).	If we canceled past bills all the month data which we have closed for accounting it will be changed.	This is to be finalised during business blueprinting design discussions.
60	Vol-II Chapter 3.2.2.1.1 Hyperconverged Infrastructure, Software Defined Network and Cloud Orchestrator	6-209	Total useable cores: Database compute (24 core, 3.0 GHz). Latest Generation processor across Cluster	If software part is compatatible with 2.9GHZ It would be no issue right?	Specifications mentioned in the Bid Document are minimum specifications, bidder can quote higher clock speed processors.
61	Vol-II 3.2.2.1.1 Hyperconverged Infrastructure, Software Defined Network and Cloud Orchestrator	6-209	Storage: 40 TB Useable across Cluster (20% should be SSD) Note: Should be hot swappable and field replaceable. NAS Storage: 62 TB	please specify the NAS capacity here is only partial information .	All storage is required inside HCI with redundancy, Specifications mentioned in the Bid Document are minimum specifications. Bidder has to design the solution in compliance with the Bid Document requirements.
62	Vol-II 3.2.2.1.2 Internet Next Generation Firewall	6-223	The proposed system shall support active-passive virtual clustering that uses virtual unit partitioning to send traffic for some virtual units to the primary cluster unit and traffic for other virtual units to the backup cluster units. If a failure occurs and only one cluster member continues to operate, all traffic fails over to that physical unit, like normal HA.	If there is Physical firewall deployment why we need Virtual clustering HA ?Physical firewall support all kinds of HA deployment ,also can setup virtual firewall, no meaning of this clause suggest to delete.	Read this clause as: Virtual partitioning or virtualization of NGFW is the Bid Document requirement, The proposed solution should support HA cluster for physical units or unit with virtual partition.

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63	Vol-II Chapter 3.2.2.1.5 Anti-DDoS	6-227	Bidder to propose a Dedicated Appliance for DDoS Solution (NOT a part of Router or Application Delivery Controller or Proxy based architecture or NGFW). It should be from different OEM than NGFW and IPS vendors	Please help to clarify what is different OEM then NGFW and IPS vendor.	Considering that DDoS is very critical device for security and should not be used as additional feature in same Appliance of ADC, NGFW and IPS. OEM provide dedicated DDoS solution not additional feature in appliance. DDoS being from different OEM means the Firewall, IPS and DDoS OEM vendor should be different so that same vulnerability should not be present at different security levels as per best cyber security practices.
64	Vol-II Chapter 3.2.2.1.5 Anti-DDoS	6-228	The proposed solution should have the capability to be configured in detect as well as protect mode. The proposed appliance should be hyperconverged network function appliance should have capability to install CentOS/ Ubuntu and other open source virtual network functions and have adequate resources to ensure complete DDoS protection	DDoS physical deployment which is more reliable and easy to maintain and manage install Centos/ubuntu virtually it will decrease the performance of DDOS. Suggest to use physical deployment , without virtual network, so can we use this without open source ?	The DDoS Appliance should be dedicated only and provide dedicated resources for guaranteed performance. How ever considering the Hyper convergence technology the appliance should support third party virtual function to be installed if required without compromising the security and performance.
65	Vol-II 3.2.2.1.5 Anti-DDoS	6-228	Devices should be proposed in high availability using standard VRRP Protocol. No proprietary protocol should be used	DDoS has it's own High availability we have our own bypass card for the High availability does it acceptable ?	Standard VRRP is open standard protocol and minimum requirement asked. Using open standards for HA avoid high dependency on particular vendor. Bidder may propose Bypass card base physical High Availability as well along with Standard VRRP support.
66	Vol-II 3.2.2.1.1 Hyperconverged Infrastructure	6-212	HCI solution should have license for three way DR for active-active configuration on MetroCluster, near sync, async replication with defined RPO, some of VM's are working from Primary (Site-A) and their DR at DR sites (Site-B) and Some of the VM's are working from Site-B and their DR's is at Site-A. It should have feature to change VM IP's on the fly without manual intervention in case the DR site has different subnet from DC Site. The Replication software should provide DR Orchestration and should be able to do VM power up sequencing. License should be provided for unlimited VMs	there is only 2 DC and DR requirement have 2 dc why need 3 ?	3rd DC is future requirement where the proposed solution should be able to cater the requirement of DC, NDC and DR without any financial implication in the current cluster.
67	Vol-I Schedule 5: Grand Summary	4-38	1. IT Products including Mandatory Spares to be supplied from abroad for Data Centre 2. IT Products including Mandatory Spares to be supplied from abroad for Disaster Recovery Centre	Please help to clarify about this Spares part , cause there is no any spares part Quotation over there	All the proposed hardware is required for DC and DR Site and both are critical infrastructure sites for NEA, SI should propose the highest OEM support for both the locations and appropriate spares to meet the required SLAs. Proposed spares will be the part of the technical evaluation.
68	Vol-II (RMS) - 3.1.3 Metering Module	6-120	Collecting meter, readings/meter, reading data in the metering database from remote meters M1. - • Spot billing machine (SBM) • Common Meter Reading Instrument (CMRI).	Please confirm what functions the SBM and CMRI equipment have other than meter reading function. Whether the corresponding functions need to be achieved in RMS?	As per the Bid Document.
69	Vol-II (RMS) - 3.1.3 Metering Module	6-121	AMR/AMI/Smart Meter Compatibility M4. - 1. The system should be able to interface with multiple AMR/AMI systems (on-going & upcoming projects) schedule and download meter readings.	Does RMS use unified standard interfaces in all internal and external systems in RMS project?	This is to be finalised during business blueprinting design discussions.



S/N	Volume/Section No.	Page No.	Reference Clause	Clarification Required	NEA Response
70	Vol-II (RMS) - 3.1.3 Metering Module	6-122	Support Meter Reading on Trust M8. - 4. Incorporation for billing.	What is incorporation for billing? Does incorporation for billing happen during metering stage or billing stage? Please provide an example.	This is to be finalised during business blueprinting design discussions.
71	Vol-II (RMS) - 3.1.4 Billing Module	6-126	Customer lifecycle management B2. - 9. It should provide a Central portal that increases productivity by providing a comprehensive view of the customer and their related account information so that most questions can be quickly answered without having to navigate through the system.	Is Central portal existing or needed to be provided?	Central portal need to be provided
72	Vol-II (RMS) - 3.1.4 Billing Module	6-130	Billing logic download B9. - System should be capable to download the billing logic to CMRI/ Smart Phones/SBM to facilitate spot billing at consumer premises using SBM/CMRI/Smart Phones as and when required.	Does the billing logic exist in the CMRI/ Smart Phones/SBM machin terminals or run on the server?	As per the Bid Document.
73	Vol-II (RMS) - 3.1.4 Billing Module	6-141	Dispute management B38. - 1. Capable to Handle Dispute Management with Court/Appellate Authorities/ Forums Etc.), To maintain life cycle of the case Ex:- admission, Pre-deposit, keep the dispute amount under hold, retrospective calculation of interest revisions, refunds, withdrawals, support accounts.	Is dispute management implemented separately by other systems? Does RMS only need to provide the necessary evidence support?	Dispute management should be part of the RMS and keep record of all the disputes, pending cases and decision against each case.
74	Vol-II (RMS) - 3.1.4 Billing Module	6-135,142	B.21 Initial security Deposit (ISD)/Advanced, security deposit/Security deposit applicable as per NEA tariff regime, New Connection charges as certain payments based on interest bearing and non-interest bearing /refundable and non refundable will be used to calculate additional charges during additional load cases Interest Calculation B45. - 1. Dynamic calculation of interest as per norms instead of adjustment through auto job.	Does the "interest" here refer to "interest" in 3.1.4. Billing Module B.21 Management of Security Deposit (SD)? Interest calculation should belong to the scope of financial management and should not be included in the RMS.	As per the Bid Document.
75	Vol-II (RMS) - 3.1.4 Billing Module	6-145	Additional Features B56. 1. A non-billed budget (NBB) is a payment plan used to level out a customer's payments over time. Non-billed budgets are typically used when your company bills on an infrequent basis and you want to provide your customers with a mechanism to make smaller payments more frequently. For example: Rather than receive a bill once a quarter, a customer could set up a non-billed budget to pay fortnightly. Rather than pay two large bills a year, the customer could set up a non-billed budget to pay 10 out of 12 months (sparing themselves during the holiday season) Non-billed budgets can cover one or more service agreements linked to the same account. You can have multiple active non-billed budgets for an account, but any given service agreement can only be covered by a single non-billed budget at any point in time.	What is non-billed budget (NBB)? Please give example for this sub-module.	As per the Bid Document.
76	Vol-II (RMS) - 3.1.6 New Connection, Disconnection, Dismantling	6-160	Route plan and monitoring of Meter installation NC23. - 1. Based on the allocation and the service levels defined, the system should be able to provide meter installation route plans. System should also monitor installation reports of the meters. 2. System should be able to interface with the crew management system.	Is the route plan to provide map navigation for meter installation? If it is navigation, it should be the function realized on the APP side. What is Crew management system? What information does Crew management system interact with RMS?	This is to be finalised during business blueprinting design discussions.



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77	Vol-II (RMS) - 3.1.8 Customer Relationship Management	6-170	CRM11. - 1. Should have an inbuilt web-based bot tool which uses Artificial intelligence to answer customer questions as they type	Do you need intelligent robot Q & A? If yes, it involves the procurement of intelligent robots.	As per the Bid Document.
78	Vol-II (RMS) - 3.1.9. Web portal and Mobile Application - Mobile Application	6-177,178	Mobile app for consumers MA11-Consumption history of the last 12 months are available in the App. 12.All the features of the consumer web self services shall be available on the mobile app. 13. Communication between Consumers and NEA using Messaging Utility to be provided for access to CRM for grievance redressal, Instant Messaging, Evidence sharing using Picture, Announcements, Promotional Schemes, Bill generated and Payment Due reminder, Tariff change update, Power Outage Schedules etc. 14. Mobile applications should have functionality to allow payments using the payment gateway or as agreed by the NEA.	What is the scope of all functions of consumer web service self-service, and there are no technical specifications?	This is to be finalised during business blueprinting design discussions.
79	Vol-II (RMS) - 3.1.9. Web portal and Mobile Application - Mobile Application	6-179	Mobile app for Field work force MA12 . - 1. Monitor billing progress, revenue realization, consumer billing history, payments and location on Google map.	Is it implemented in the following way? Display the user's coordinate points in the map, click the coordinate points to enter the business interface, and you can query the billing status, billing history and payment operation.	As per the Bid Document.
80	Vol-II (RMS) - 3.1.9. Web portal and Mobile Application - Mobile Application	6-179	Mobile app for Field work force MA12 . -3. For Feeder In charge & Meter Reader- • Data capturing (Feeder wise GPS location of DTC, Pole, Consumer & indexing with feeders). • Meter Reading directly from Meter through Optical Port and generation of billing and cash collection at spot. • On spot updating of activities such as Meter Change, Disconnection, Reconnection and photographs as proof of completion of activity.	What is DTC? There are tables in other chapters in the tender document. How to get data from DTC? Is DTC from AMI system?	DTC - Distribution Transformer Its only about capturing the geo location of the assets and tagging of the same with that particular feeder
81	Vol-II (RMS) - 3.1.9. Web portal and Mobile Application - Mobile Application	6-182	Mobile app for Field work force MA13 . - 9. Application should have facility to capture only meter readings and photographs without any requirement of bill processing. System should facilitate search by meter no and validate with back end application for any such meter changes in case there is variation in meter no at site and the data.	The backend application checks the electricity meter number entered by app. Are the instruments operated on site already existing in the system? Do the instrument operated on site math parameters in the system ?	As per the Bid Document.
82	Vol-II (RMS) - 3.1.9. Web portal and Mobile Application - Mobile Application	6-189	Mobile device management MA17 . - 1. Ability to find & track devices • Track the routes of employees to ensure they are using the most efficient routes when visiting the task locations and send them pinpointed locations via Maps. • In case a phone is lost or stolen, it can be located.	It is related to the function of the mobile phone itself. Please confirm that the mobile phone has this function.	As per the Bid Document.
83	Vol-II (RMS) - 3.1.10 Management Information System	6-191	Management Information System	Do we need to build a separate data extraction and analysis platform, or build a report statistical analysis module for management information system in RMS?	As per the Bid Document.
84	Vol-II (RMS) - 3.1.11 Document management System	6-202	Integration and Web Services DMS12. - 2. The System shall provide support to invocation of external programs to perform activities of a process like legacy application screen for data entry.	^What system or platform does an "external programs" refer to? ^Does that mean DMS system can work with modules other than DMS for workflow processing? ^What does "legacy application screen for data entry" mean?	The system should be integrated with the existing applications in such a way that the legacy application screen/page shall be invoked to perform activities. For e.g., data entry screen



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85	Vol-II (RMS) - 3.1.11 Document management System	6-203	Management System DMS13. - 1. The system should be certified to Record Management standard like DoD 5015.02 or equivalent standard. 2. Solution should include Records Management component to comply with regulatory and legal policies for long- term archival of content. 3. Solution should manage the lifecycle of documents through record retention, storage, retrieval and destruction policies. 4. Solution should support managing and tracking of physical location of documents. 5. Solution should have facility to export / import electronic record with metadata in XML format. 6. Solution should provide the configurable capability of record classification as per the record keeping structure (File Plan) of the department. 7.Solution should have a provision to define physical location of record management facility. 8. Solution should have a facility to define disposition schedule / policies for record. 9. Solution should provide the capability for only authorized individuals to view, create, edit, and delete disposition schedule components of record categories. The complete schedules would be as per the organizational policies. 10. Solution should have a provision to move & track a record among users within office/across locations. 11. When record is moved out of the facility, system should have a capability to capture the transport / courier detail. 12.Solution should provide report on the Records in the selected file plan component such as number of records present, number of record folder, Record creation date, etc. • Report on activities of the selected user. • Report on the Request/Return activities. • Report on overdue items. • Report on items borrowed. • Reports on records, whose retention period are getting over in specified time. • Reports on disposition schedule	Is the records management system an existing system? What business contents interact with other modules of RMS?	As per the Bid Document.
86	Vol-II 3.2.2.1.1 Hyperconverged Infrastructure	6-218	16. Private Cloud Database Life Cycle Management Tool	Can hyperconverged servers achieve the stability and performance of the physical servers?	Read this clause as: Bidders are requested to propose the database lifecycle management tool as a part of solution. It can be native or 3rd party.
87	Vol-II (RMS) - 3.2.3.1.1	6-240	Customer Care Contact center system Contact Centre Equipment should support minimum 200 agents without changing the contact center hardware.	What facilities / hardawre will not be changed in the Contact Centre? Does the voice platform include CIT, switch, transfer and other functions? Please provide the existing situation of voice platform needs to be provided.	As per the Bid Document.
88	Vol-II (RMS) - 3.2.3.1.1	6-240	Customer Care Contact center system Proposed System Should handle up to five simultaneous contacts like Voice, Email, Chat	Does the existing voice platform supports Chat function? Does it need to be purchased?	NEA doesnot have any existing system, Bidder need to consider this as new requirement
89	Vol-II (RMS) - 3.2.3.1.1	6-241	Customer Care Contact center system Support 400 or more video joining in multiple party when required	Does the existing voice platform supports Video conference and video chat functions? Does it need to be purchased?	NEA doesnot have any existing system, Bidder need to consider this as new requirement
90	Vol-II (RMS) - 3.2.3.1.2	6-245	TECHNICAL SPECIFICATIONS FOR IP PBX SYSTEM The system should be based on server-gateway architecture running on Windows/Linux OS supporting Analog, IP, SIP and Wireless Extensions.	As mentioned above, the hardware of the contact center will not be changed, but PBX (switch) needs to be built here, which is contradictory, please clarify.	NEA doesnot have any existing system, Bidder need to consider this as new requirement

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91	Vol-II Chapter 3.2.2.1.5 Anti-DDoS	: 6-227	Minimum Technical Specification 1. Bidder to propose a Dedicated Appliance for DDoS Solution (NOT a part of Router or Application Delivery Controller or Proxy based architecture or NGFW). It should be from different OEM than NGFW and IPS vendors	Please help to clarify what is different OEM then NGFW and IPS vendor.	Considering that DDoS is very critical device for security and should not be used as additional feature in same Appliance of ADC, NGFW and IPS. OEM provide dedicated DDoS solution not additional feature in appliance. DDoS being from different OEM means the Firewall, IPS and DDoS OEM vendor should be different so that same vulnerability should not be present at different security levels as per best cyber security practices.
92	Vol-II (RMS)	6-161	NC.25 1. Business process for Block wise service of Multi storied buildings/Multiple connections in phases shall be available. 2. Ability to handle MC/MSB scenarios from within the system covering parent child relationship with block wise energization.	Could you pls confirm what is the business MC/MSB scenarios refer to?	MC is multiple connection and MSB is Multi Story building. Detailed scenarios to be covered will be discussed and finalised during the Design discussions with the successful bidder.
93	Vol-II 3.2.2.1.1	6-211	The solution should be able to scale by support of adding additional nodes to the cluster at a later point of time to handle compute, Memory & Storage requirements. Solution should support cluster expansion with zero down time. The proposed solution should support hybrid and all flash nodes in same cluster for future scalability. HCI solution must have capability to support HCI nodes with different models, different CPU Generations & Memory, Disks configurations in the same cluster without any impact on enterprise-class storage services/functionalities	It is not at all recommended to mix nodes of different types and sizes as this will render the cluster unstable.It is not that other vendors donot support this feature,it is only not allowed to configure in the cluster for ensuring the permormance.	As per the Bid Document., HCI solution must have capability to support HCI nodes with different models, different CPU Generations & Memory, Disks configurations in the same cluster for future scalability
94	Vol-II 3.2.2.1.1	6-212	Data Protection 10.Solution should be able to take App and database consistent snapshot and should be able to schedule the same.	When full VM's backups are available locally in the cluster then there is no need of point in time copy of VM's, using the full VM's backups complete VM can be recovered from any defined time instead of combining the multiple snapshots to complete the VM recovery	As per the Bid Document., For the critical application like Database it is recommended to have the App and DB consistent snapshot with this all the data in memory and all the transactions in process can be capture and recovered from the backup.
95	Vol-II Additional Queries	General	Backup Solution Should be separately defined in BoQ as well technical specifications for hardware and software both	Request you to incorporate Backup Solution as a part of BOQ.	Bidder can meet the backup requirements with VM snapshots technology within HCI or with any third party backup solution.
96	Vol-II Additional Queries	General	Please suggest if the security device sizing is to be done for the new workloads or does this need to include any existing systems / applications	Request you to kindly confirm.	Security devices minimum specification are already given in the Bid Document.
97	Vol-II Mobile Application MA17 Mobile device ..	6-192	RFP also asks for Mobile Device Management for enforcing the security policies on the mobile / handheld devices. This is also not part of the BOQ	Request you to incorporate as a part of BOQ.	As per the Bid Document.

The amendments/clarifications/Addendum issued in this document shall be treated as a part of Bidding Document from here and after and shall be read with the original Bidding Document.

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